



Meadowbank Education and Employment Precinct Schools Project

State Significant Development
SSD 9343

May 2020

Published by the NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Meadowbank Education and Employment Precinct Schools Project

Subtitle: Meadowbank Schools Project

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Glossary

Abbreviation	Definition
AAR	Asbestos Assessment Report
ACHAR	Aboriginal Cultural Heritage Assessment Report
AHD	Australian Height Datum
AIA	Arboricultural Impact Assessment
ANIA	Acoustic Noise Impact Assessment
Applicant	NSW Department of Education
AAR	Asbestos Assessment Report
BAM	Biodiversity Assessment Method
CBD	Central Business District
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
CEEC	Critically Endangered Ecological Community
CIV	Capital Investment Value
Consent	Development Consent
Council	City of Ryde
CNVMP	Construction Noise Vibration Management Plan
Contributions Plan	City of Ryde Section 94 Development Contributions Plan 2007
CPTMP	Construction Pedestrian Traffic Management Plan
Crown Lands	Crown Lands, DPIE
dB	Decibels
DCP	Development Control Plan
Department / DPIE	Department of Planning, Industry and Environment
Draft UTCG	Draft Urban Tree Canopy Guide
DSI	Stage 2 Detailed Site Investigation
Education SEPP	State Environmental Planning Policy (Education Establishments and Child Care Facilities 2017)
EEC	Endangered Ecological Community
EESG	Environment, Energy and Science Group of DPIE
EFSG	Educational Facilities Standards Guideline (Department of Education)
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>

EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
EPOA	Employment Precinct Owners Association
ESD	Ecologically Sustainable Development
GANSW	NSW Government Architect
GFA	Gross floor area
GSC	Greater Sydney Commission
HAAR	Historical Archaeological Assessment Report.
Heritage NSW	Heritage NSW, Department of Premier and Cabinet
HIS	Heritage Impact Statement
HRV	Heavy Rigid Vehicles
HVAC	Heating, ventilation, air-conditioning and cooling
ICNG	Interim Construction Noise Guideline
IEC	Intensive English Centre
LEP	Local Environmental Plan
LGA	Local government area
LoS	Level of Service
Marsden HS	Marsden High School
Meadowbank Primary	Meadowbank Public (Primary) School
Master Plan	Meadowbank Education and Employment Precinct Preliminary Master Plan 2019
MEEP	Meadowbank Education and Employment Precinct
Minister	Minister for Planning and Public Spaces
NML	Noise Management Level
NPI	National Policy for Industry 2017
NSPCA	North Sydney District Council of Parents and Citizens Associations
NSW RNP	NSW Road Noise Policy, DECCW 2011
OOHEMP	Out of Hours Event Management Plan
OOSH	Out of school hours
OTAMP	Operational Traffic and Access Management Plan
PA	Public address
P&C	Parents and citizens
PCT	Plant community types
PMF	Probable Maximum Flood
PSI	Preliminary Site Investigation
Planning Secretary	Secretary of the Department of Planning, Industry and Environment

RAP	Remediation Action Plan
RDCP	Ryde Development Control Plan 2014
Remediation SEPP	Draft Remediation of Land State Environmental Planning Policy
RL	Reduced level
RLEP	Ryde Local Environmental Plan 2014
RMS	TfNSW Roads and Maritime Services
RRAI	Response to Request for Additional Information
RSA	Road safety audit
RtS	Response to Submissions
SDRP	State Design Review Panel
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 55	State Environmental Planning Policy No.55 – Remediation of Land
SHR	State Heritage Register
SII	Serious and Irreversible Impacts
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
STP	School Travel Plan
TAFE	Technical and Further Education
TAFE Hub	Multi-Trades and Digital Technology Hub (SSD 10349)
TAIA	Transport and Accessibility Impact Assessment
TEC	Threatened Ecological Communities
TfNSW	Transport for NSW
UFTM	The Council's Urban Forest Technical Manual 2012
WCSR	Wind Comfort and Safety Report
vph	Vehicle movements per hour

Executive Summary

This report provides an assessment of a State significant development (SSD) application for the development of the Meadowbank Education and Employment Precinct Schools Project located at 2 Rhodes Street, Meadowbank (SSD 9343). The application has been lodged by the NSW Department of Education (the Applicant) and the site is located within the City of Ryde local government area.

Introduction

The site is located within the Meadowbank Education and Employment Precinct (MEEP) on land that was formerly part of the NSW TAFE Meadowbank Campus (TAFE Campus). The site is bounded by Rhodes Street to the north, the TAFE Campus to the east and south and T9 Northern Railway Line railway corridor to the west.

This application seeks approval for the construction of a seven storey building including co-located primary and secondary schools and an Intensive English Centre (IEC), together with landscaping, flooding and drainage works and on-site car parking. The proposal would provide for 2,620 students, comprised of 1,000 primary, 1,500 secondary and 120 IEC students.

The proposal has a Capital Investment Value (CIV) of \$218,928,354 million and is predicted to generate up to 813 construction and 220 operational jobs. The proposal is SSD under clause 4.36 of the State and Environmental Planning Policy (State and Regional Development) 2011, as it is development for the purpose of a new school. Therefore, the Minister for Planning and Public Spaces is the consent authority.

Community engagement

The Environmental Impact Statement (EIS) were publicly exhibited between 24 October 2019 and 20 November 2019 (28 days). The Department of Planning, Industry and Environment (the Department) received a total of 28 submissions, including six submissions from public authorities in the form of comments and 20 from the public: four objections, 15 comments and one in support. Two submissions were also received from local interest groups. City of Ryde Council (Council) did not provide a submission. The Department representatives visited the site to facilitate an informed assessment of the development.

The key issues raised in the submissions included traffic and parking, pedestrian access, outdoor space and landscaping, noise impacts and internal design.

On 2 March 2020, the Applicant submitted its Response to Submissions (RtS), which was updated by supplementary information on 6 April 2020. The RtS was referred to public authorities and displayed on the Department's website. Three submissions were received from public authorities. No submissions were received from the public or Council.

Assessment

The Department identified traffic, parking and pedestrian access, noise impacts, built form, and tree removal and landscaping as the key issues for assessment.

The Department has considered the merits of the proposal in accordance with the relevant matters under section 4.15(1) and the objects of the *Environmental Planning and Assessment Act 1979*, the

principles of ecological sustainable development, and issues raised in submissions as well as the Applicant's response to these.

The Department's assessment concludes:

- the proposed travel mode share, which seeks to encourage sustainable travel modes (walking, cycling and public transport) and reduce car dependency, share is attainable and the recommended sustainable transport measures and conditions of consent ensure that the proposal would not have significant adverse impacts on the local traffic network.
- sufficient car parking, bus zones and drop-off/pick-up facilities would be provided subject to ongoing management and sustainable travel strategies.
- sufficient pedestrian access would be provided to the schools subject to recommended conditions that require public domain enhancements and installation of pedestrian crossings to provide appropriate and safe crossing points on nearby roads.
- mitigation measures have been proposed to minimise construction impacts on nearby residential properties.
- sufficient outdoor sport and play space has been provided for students.
- the removal of 126 trees is unavoidable and justified in this instance due to the constrained nature of the site and need to provide appropriate educational and outdoor play facilities to cater for the needs of students. The proposal includes an extensive landscaping and tree retention and planting strategy.
- the proposal would have acceptable amenity impacts regarding operational noise, views, overshadowing and privacy:
 - the height of the proposed building is appropriate within the site context and would not have a detrimental visual impact on the surrounding area.
 - design of the proposed building responds positively to the site and its context, while balancing the need to provide for the demand for new educational facilities.
- the site is suitable for the proposed development and would provide high standard, contemporary teaching and learning facilities onsite that would improve educational outcomes.

The Department is satisfied that the key issues have been appropriately addressed by the Applicant or have been taken into account through recommended conditions of consent. The Department concludes that the proposal is in the public interest and is approvable subject to conditions.

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1 Introduction

This report provides an assessment of a State significant development (SSD) application (SSD 9343) for development of the Meadowbank Education and Employment Precinct Schools project (the Proposal) at 2 Rhodes Street, Meadowbank.

The proposal seeks approval for the development of new co-located primary and secondary schools and an Intensive English Centre (IEC) on the site comprising:

- a multi-purpose school building with maximum height of approximately seven storeys (reduced level (RL) 39.85 metres (m)).
- overall capacity of 2,620 students, including:
 - 1,000 primary school students.
 - 1,500 secondary school students.
 - 120 IEC students.
- site landscaping, flooding and drainage works.
- on-site car park providing 60 spaces.

The application has been lodged by NSW Department of Education (the Applicant) under Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The site is located within the City of Ryde local government area (LGA).

1.1 The Meadowbank Education and Employment Precinct

The Meadowbank Education and Employment Precinct (MEEP) as defined by the Greater Sydney Commission is located in Ryde, approximately 15 kilometres (km) west of the Sydney Central Business District (CBD) and 10km east of the Parramatta CBD (**Figure 1**). The core of the precinct covers an area equal to approximately 31.5 hectares (ha) and currently contains the Technical and Further Education (TAFE) NSW Meadowbank Campus (TAFE Campus), Sydney Water and Ausgrid sites, Meadowbank Station, employment lands and retail. The proposal the subject of this application is located in the MEEP on land that was formerly part of the TAFE Campus (**Figure 2**).

The Greater Sydney Commission (GSC) prepared the MEEP Preliminary Master Plan 2019 (the Master Plan), the public exhibition of which ended on 20 November 2019. The Master Plan aims to optimise the benefits of the NSW Government investment in the MEEP by enhancing place making, supporting co-location of uses and delivering a community with vibrant amenity, high productivity and fine grained connectivity. Projects within the MEEP are anticipated to be developed in stages over the next 20 years.

As the Master Plan has completed its public exhibition, the Department considers it to be a valid planning consideration in the assessment of the application. The Department considered the proposal against the Master Plan in **Section 3.3**.

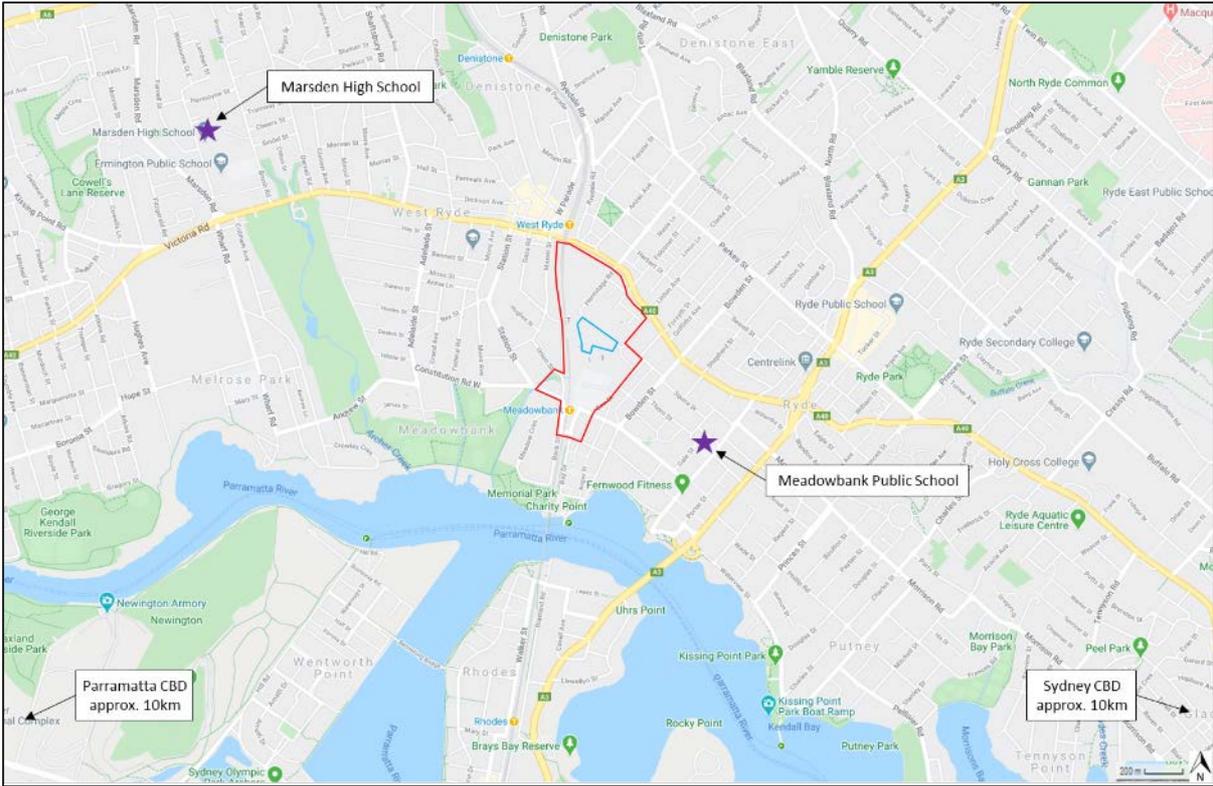


Figure 1 | The MEEP location (outlined in red), the site (outlined in blue) and location of Marsden High School and Meadowbank Public School (Base source: Google Maps 2020)



Figure 2 | The MEEP, existing uses and the site (Base source: MEEP Preliminary Master Plan 2019)

1.2 Site description

1.2.1 The site

The site occupies a 3.3ha parcel of land that previously formed part of the TAFE Campus. The site is irregular in shape and is bounded by a Sydney Water Pumping Station and Rhodes Street to the north and east, the remaining TAFE Campus to the south and east and the T9 Northern Railway Line railway corridor to the west (**Figure 3**).



Figure 3 | Aerial view of the site, the TAFE Campus and surrounding context (Base source: Nearmap 2020)

The site contains hard paved, dirt and grassed open areas interspersed with native and non-native vegetation, including 275 mature and semi-mature trees. A hoarding currently encloses the entire site and vehicular access is provided via a gated entrance off Rhodes Street. The site previously contained one to two storey TAFE Campus buildings and associated spaces. However, these have all been removed under a separate assessment process (**Figure 4**).

The topography of the site is varied and includes an 11m change in level. The lowest point is comprised of a natural depression that runs through the middle of the site (6m Australian height datum (AHD)). The highest points include the built-up railway embankment along the western boundary and the north-east corner of the site at the intersection of Rhodes Street and Mellor Street (both 17m AHD) (**Figure 5**).

The site is subject to flooding, with 1 in 100 year flood events channelled along the natural depression within the middle of the site and probable maximum flood (PMF) events affecting the majority of the site (**Figure 5**).

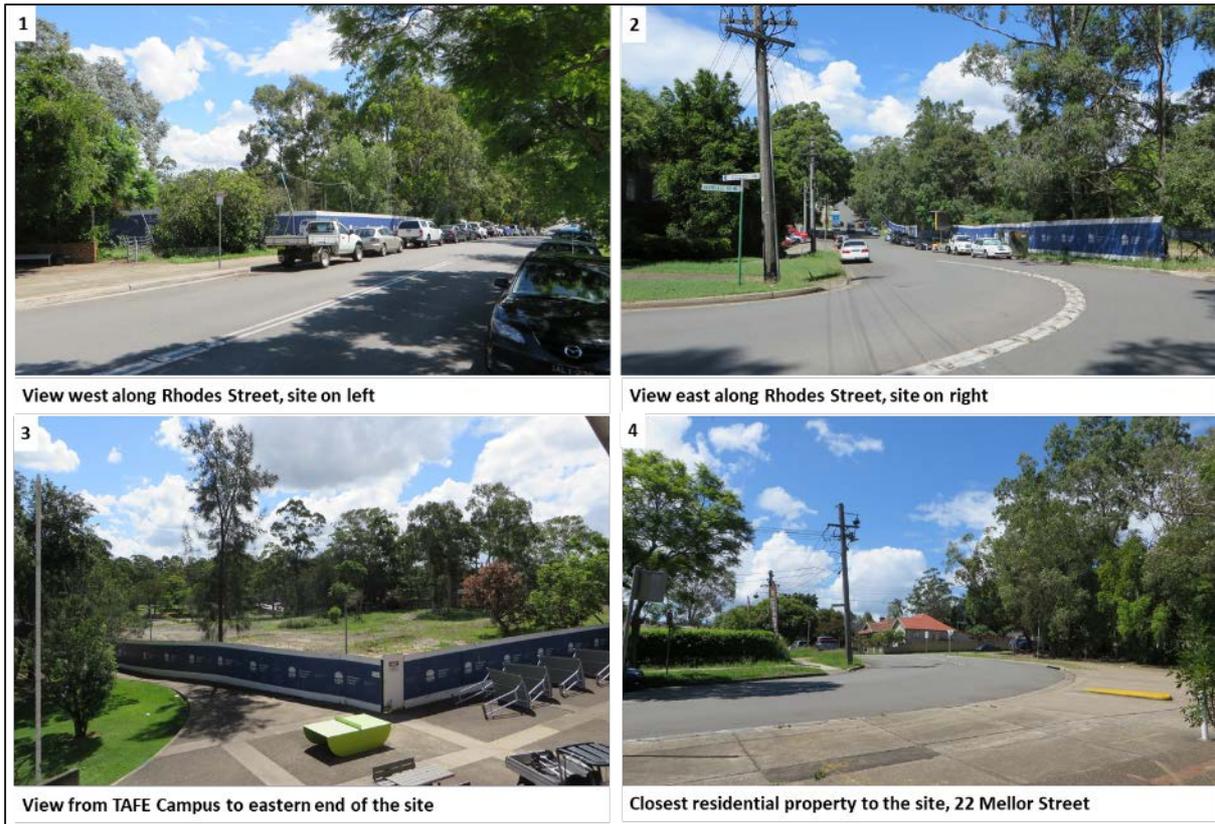


Figure 4 | Photographs of the site (Source: Department's site visit 11 March 2020)

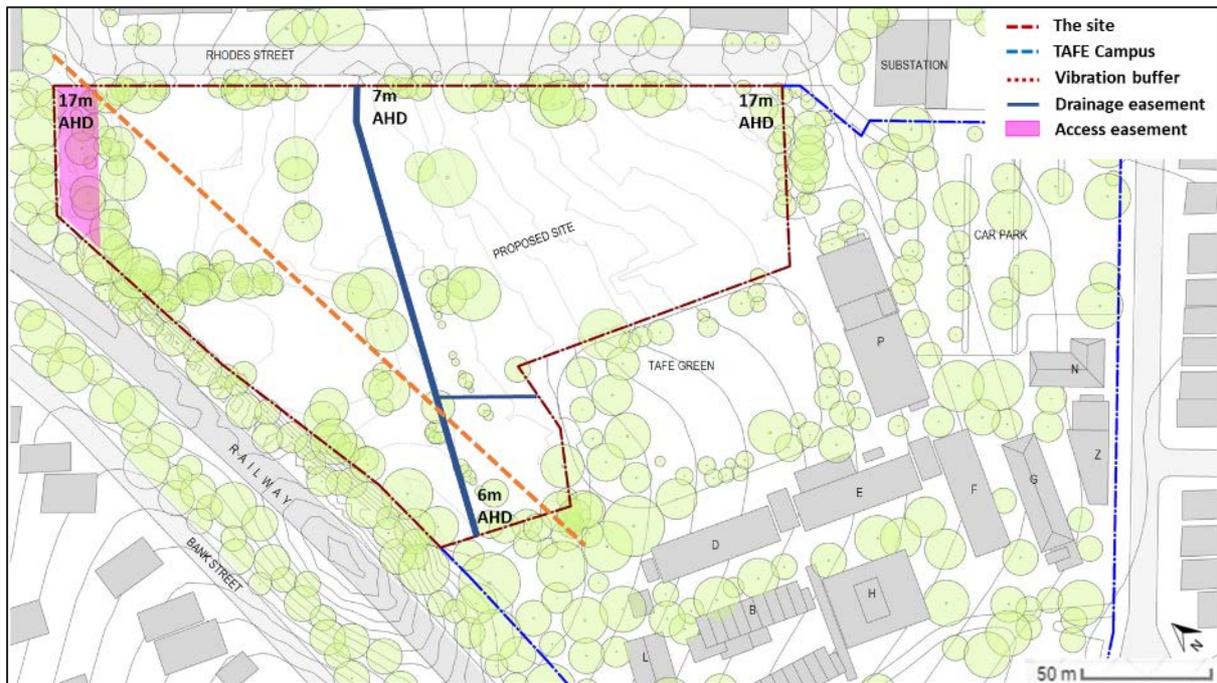


Figure 5 | Existing site topography, location of trees, easements and railway vibration area (Base source: Applicant's EIS October 2019)

The following easements and buffers apply to the site (**Figure 5**):

- a drainage easement located within the natural depression, which crosses the site from the north-east to the south-west.
- a Sydney Trains access easement to the railway embankment at the northern end of the site.

- a 60m wide train vibration building assessment zone along the entire western boundary.

The site does not contain any local or State listed heritage items under the Ryde Local Environmental Plan 2014 (RLEP) and the State Heritage Register (SHR).

1.3 Surrounding context

The site is located within an existing suburban setting. The surrounding area has a varied character including TAFE Campus to the east and south, low-scale residential dwelling houses further to the east and west, light industrial employment lands to the north and high-density mixed-use developments around Meadowbank and West Ryde stations.

The surrounding context includes (**Figure 6**):

- to the east and south of the site is the TAFE Campus, which includes a:
 - variety of education buildings of various ages and designs. The heights of buildings on the TAFE Campus site range between one and six storeys.
 - large open space known as TAFE Green, which adjoins the southern boundary of the site and includes a broad open grassed area framed by trees.
 - TAFE Campus pedestrian / vehicular entrance off Rhodes Street that adjoins the eastern boundary of the site. Beyond this, further to the east, is a TAFE surface car park accessed off See and Rhodes Streets (this car park is the subject of a concurrent SSD application, summarised at **Section 2.2.3**).
- adjoining the eastern boundary of the site, at the corner of the Rhodes/Macpherson/Mellor Street intersection is a large single storey substation building and open-aired power / transformer yard.
- to the west is the T9 Northern Railway Line railway corridor, which comprises a large railway embankment framed by trees, the embankment connects Meadowbank and West Ryde Stations.
- further to the east and west, beyond the substation and the railway embankment, is low density residential land that generally includes a mixture of one and two storey detached dwellings within the suburbs of Meadowbank and West Ryde. The closest residential property to the site is 22 Mellor Street, which is located approximately 90m east of the location of the proposed building on the site (**Figure 4**).
- to the north-east, on the opposite side of Rhodes Street, is a light industrial precinct that is bound by Victoria Road, Hermitage Road, Rhodes Street and Mellor Street. Buildings within this precinct comprise one and two storey warehouse and light industrial buildings constructed in the mid-twentieth century.
- to the north is 948 Victoria Road, which is a large triangular Sydney Water site that has frontages to Victoria and Hermitage Roads and contains buildings and infrastructure associated with water pumping/distribution.

The NSW Government has confirmed that two nearby schools, Marsden High School (Marsden HS) and Meadowbank Public School (Meadowbank Primary), are proposed to be closed upon opening of the proposed Meadowbank Education and Employment Precinct Schools. Both schools are located nearby the site as summarised below (**Figure 1**):

- Marsden HS is located is located approximately 2.2km north-west of the site.

- Meadowbank Primary is located approximately 750m south-east of the site.



Figure 6 | Photographs of the site's immediate surroundings (Source: Department's site visit 11 March 2020)

1.3.1 Transport and access

The site has excellent access to public transport services being located approximately 400m north of Meadowbank Station (**Figure 6**) and 700m south of West Ryde Station. High-frequency bus routes are located along Victoria Road and local bus routes are also provided along Bowden Street and Constitution Road. On-street cycleways pass along Rhodes and See Streets and other streets further away from the site.

The Victoria Road intersections with Hermitage Road and Bowden Street are both signalised. Currently, there are no zebra crossing points on the immediate surrounding streets. The surrounding streets provide for a mixture of unrestricted and two hour restricted on-street parking.

Pedestrian access to the site is principally from Rhodes Street, which is connected to the surrounding footpath network comprising of full width (approximately 1.2m) footpaths to adjoining and nearby streets (including Rhodes, See, Macpherson and Mellor Streets and Hermitage Road). Pedestrian access to the site is also possible from the TAFE Campus from a publicly accessible pedestrian route that runs through the TAFE Campus and connects the Rhodes/Mellor/Macpherson Street intersection in the north to Meadowbank Station in the south (**Figure 7** and **Figure 16**).

A pedestrian/cycle route previously connected Hermitage Road to Meadowbank Station along the western boundary of the TAFE Campus adjacent to the railway embankment. However, this route has been cut off following the erection of the site hoardings around the site.

The public transport, pedestrian and cycle routes and signalised intersections are shown at **Figure 7**.

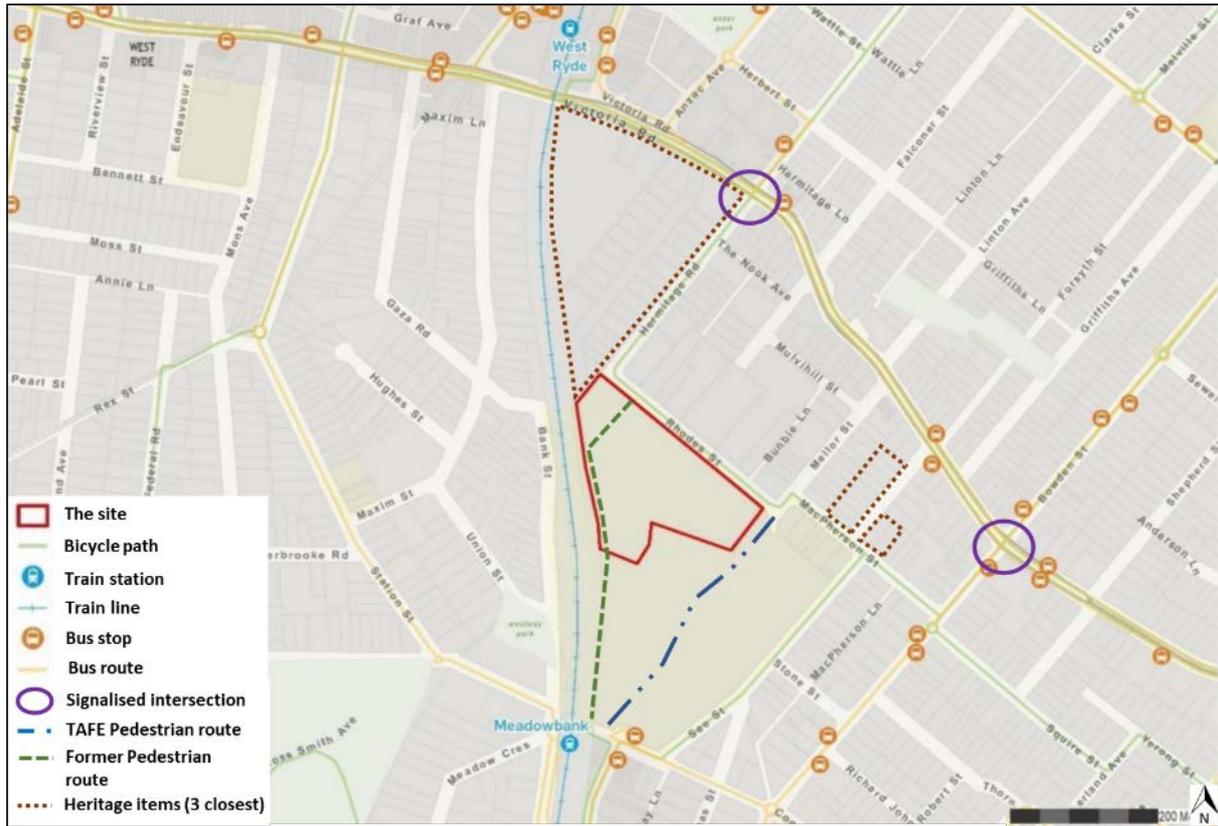


Figure 7 | Multi-mode transport routes, public transport stops and signalised intersections near to the site and the three closets heritage items (Base source: Applicant’s EIS October 2019)

1.3.2 Surrounding heritage

The entire Sydney Water site, which adjoins the northern boundary of the site, is listed as a State heritage item on the SHR. The State listing indicates that the No.2 Pumping Station Building fronting Victoria Road, Surge Tank/Reservoir, Valve and other buildings onsite together with landscaping and tree plantings are of particular heritage significance (**Figure 7** and **Figure 33**).

A number of buildings nearby the site are listed as local heritage items under the RLEP. The closest locally listed items are located approximately 150m to the east and include a group of nine detached dwellings and a church on Forsyth Street (**Figure 7**).

2 Project

2.1 Key components and features

2.1.1 Description of development

This SSD application seeks approval for the construction of a seven storey building including co-located primary and secondary schools and an IEC, together with site landscaping and public domain improvements and on-site car parking.

The key components and features of the proposal (as amended by the Response to Submissions (RtS) and Response to Request for Additional Information (RRAI)) are summarised at **Table 1**. A link to the Applicant's EIS, RtS and RRAI is provided at **Appendix A**.

Table 1 | Main components of the proposal

Component	Description
Site area	<ul style="list-style-type: none"> 3.3 ha.
Demolition	<ul style="list-style-type: none"> No demolition proposed (demolition of the previous TAFE buildings occurred as part of a separate assessment process).
Remediation	<ul style="list-style-type: none"> Remediation works (as necessary), including removal and off-site disposal of approximately 5,811 cubic metres (m³) of contaminated soil.
Built form	<ul style="list-style-type: none"> Construction of an up to seven storey (RL 39.85m) building divided into northern and southern wings and including: <ul style="list-style-type: none"> collaborative general and specialist learning hubs and adaptable classroom home bases. library, laboratories and workshops. staff workplaces. indoor gymnasium. canteens and multipurpose communal hall.
Gross floor area (GFA)	<ul style="list-style-type: none"> 23,895 square metres (m²) GFA including: <ul style="list-style-type: none"> 6,962m² primary school GFA. 16,933m² secondary school GFA.
Uses and student capacity	<ul style="list-style-type: none"> Educational establishment for a total of 2,260 students, including: <ul style="list-style-type: none"> primary school (1,000 students). secondary school (1,500 students). IEC (120 students). Out of hours (OOSH) care for 200 primary school students. Community use of the communal hall and gymnasium.
Access	<ul style="list-style-type: none"> One vehicular access point, located off Rhodes Street (opposite 7-9 Rhodes Street), providing access to a loading/parking level (located beneath the lower ground floor level). Four pedestrian access points, including: <ul style="list-style-type: none"> two primary school entrances, both off Rhodes Street. two secondary school entrances, one at the eastern boundary of the site and the other off TAFE Green.
Parking and pick-up/drop-off	<ul style="list-style-type: none"> 60 staff car parking spaces within the loading/parking level. Two bus drop-off zones, including a: <ul style="list-style-type: none"> primary school bus zone on the south side Rhodes Street. secondary school zone on the south side Macpherson Street. Parent pick-up/drop-off within the unrestricted on-street car parking spaces on Rhodes Street.

	<ul style="list-style-type: none"> • One servicing bay within the loading/parking level with space to accommodate up to a 12.5m long Heavy Rigid Vehicle. • Bicycle end of trip facilities and 273 bicycle parking spaces, comprising: <ul style="list-style-type: none"> ○ 100 primary school spaces. ○ 162 secondary school spaces. ○ 11 staff spaces.
Trees, landscaping and recreation areas	<ul style="list-style-type: none"> • Removal of 126 existing trees. • Provision of site-wide landscaping works, including: <ul style="list-style-type: none"> ○ retention of 149 existing trees and provision of 22 replacement trees. ○ 'ecological areas' containing retained trees and vegetation and set aside to provide natural habitat on site. ○ a central terraced landscaped area located between the building wings. ○ a grassed swale following the natural depression through the site. ○ general landscaping around the site and paved circulation areas. • outdoor and indoor sports facilities including: <ul style="list-style-type: none"> ○ three multi-purpose uncovered acrylic sports courts. ○ three multi-purpose uncovered astro-turf sports courts/fields. ○ two multi-purpose covered acrylic courts. ○ a multi-purpose covered acrylic half-court. ○ two informal turf ovals with running tracks. • outdoor informal recreational facilities including: <ul style="list-style-type: none"> ○ general open grassed and soft-fall play spaces. ○ vegetable garden and chicken pen. ○ amphitheatre seating and circulation spaces.
Hours of operation	<ul style="list-style-type: none"> • School operation hours, Monday to Friday 9am to 3:15pm, including staggered start times: <ul style="list-style-type: none"> ○ primary school – 9am to 3pm. ○ secondary school – 9:15am to 3:15pm. • OOSH care: <ul style="list-style-type: none"> ○ school days - Monday to Friday 6am to 8:30am / 3:00pm to 6pm. ○ holidays (12 weeks) - Monday to Friday 9am to 3pm. • Community use of the communal hall and gymnasium: <ul style="list-style-type: none"> ○ communal hall – two nights a week and at least 12 weekends a year 7am to 10pm. ○ gymnasium – two night a week 30 weeks per year 7am to 10pm.
Hours of construction	<ul style="list-style-type: none"> • Hours of construction in accordance with Council's standard hours: <ul style="list-style-type: none"> ○ Monday to Friday - 7am to 7pm. ○ Saturday - 8am to 4pm. ○ Sunday and public holidays - no work.
Staging	<ul style="list-style-type: none"> • The construction of the development would occur in a single stage.
Signage	<ul style="list-style-type: none"> • The proposal does not seek approval for signage.
Jobs	<ul style="list-style-type: none"> • 813 construction jobs. • 220 operational jobs.
Capital investment value (CIV)	<ul style="list-style-type: none"> • \$218,928,354.

The proposed development is shown in **Figure 8** to **Figure 15**.



Figure 8 | Proposed building, landscaping and play space layouts in context with the immediate surroundings of the site (Base source: Applicant's EIS October 2019)

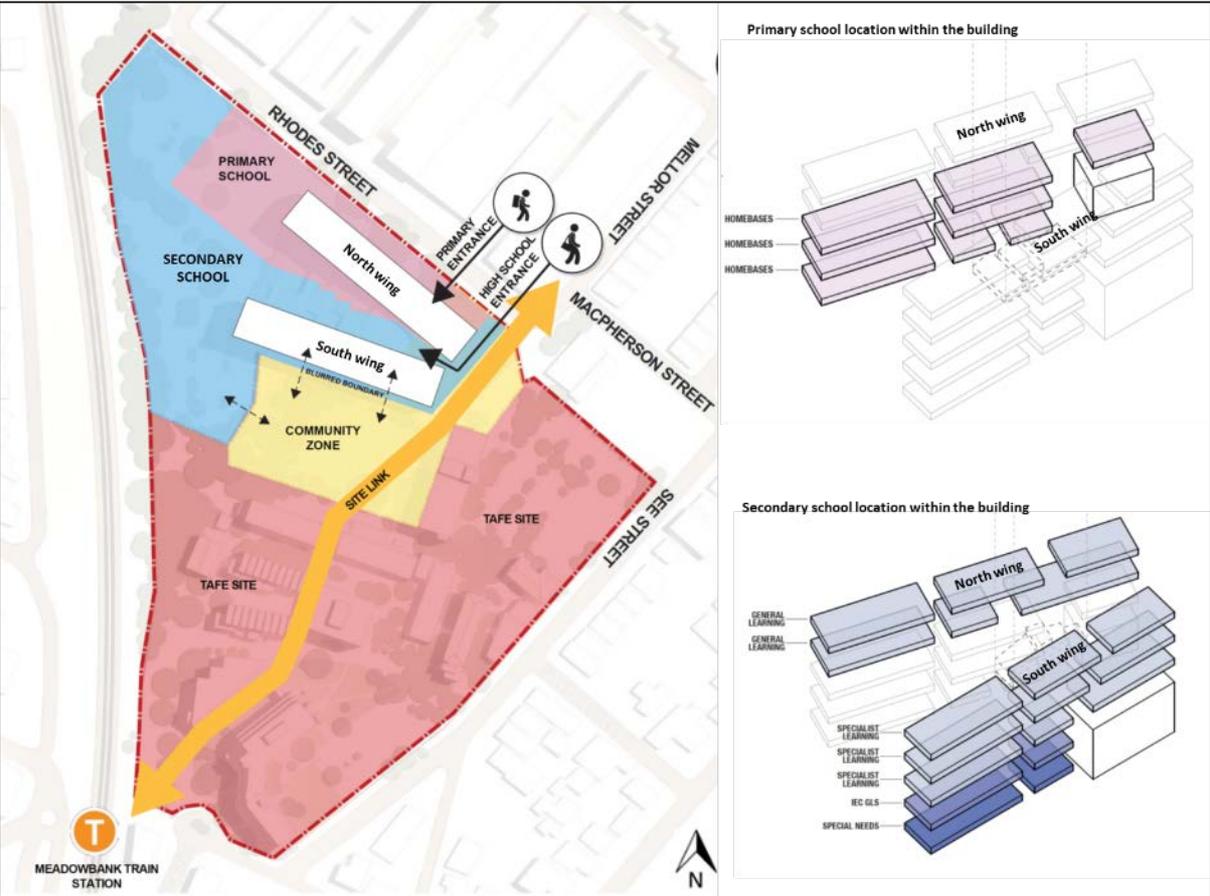


Figure 9 | Location of the primary (pink) and secondary (blue) schools within the site and the building and the potential future TAFE Campus site link (orange) (Base source: Applicant's EIS October 2019)

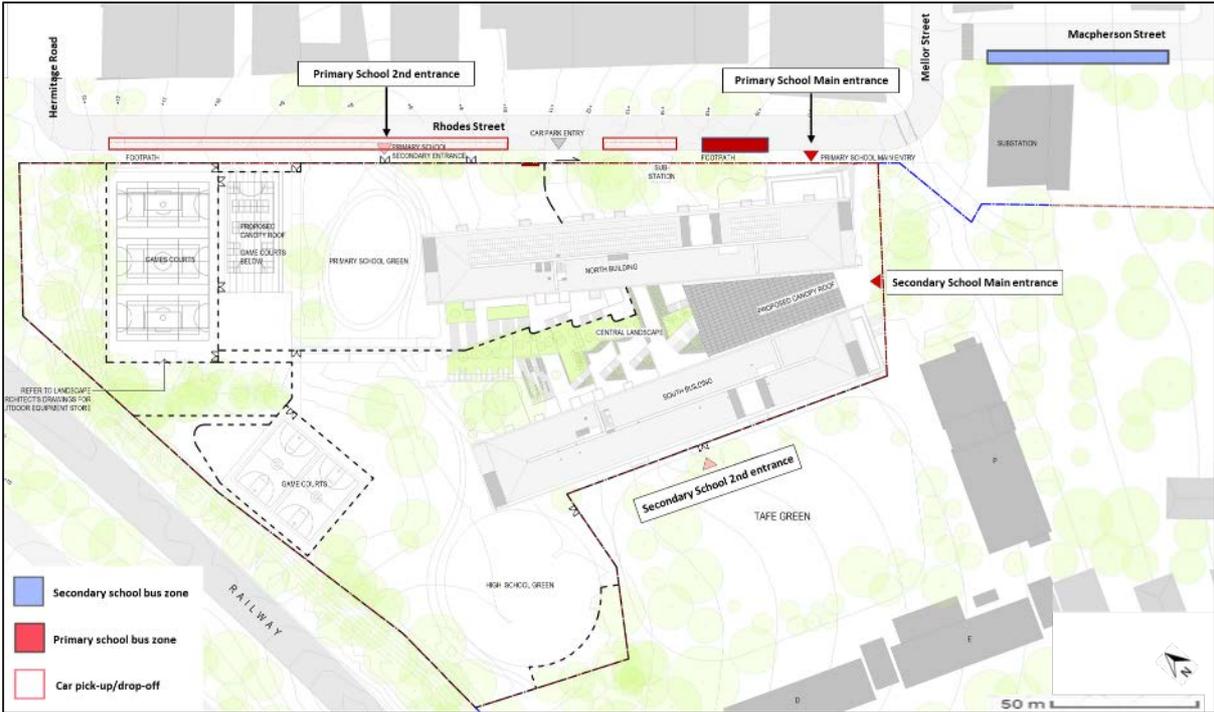


Figure 10 | Bus and car pick-up/drop-off and vehicular and pedestrian entrances to the site (Base source: Applicant's Rts 2020)

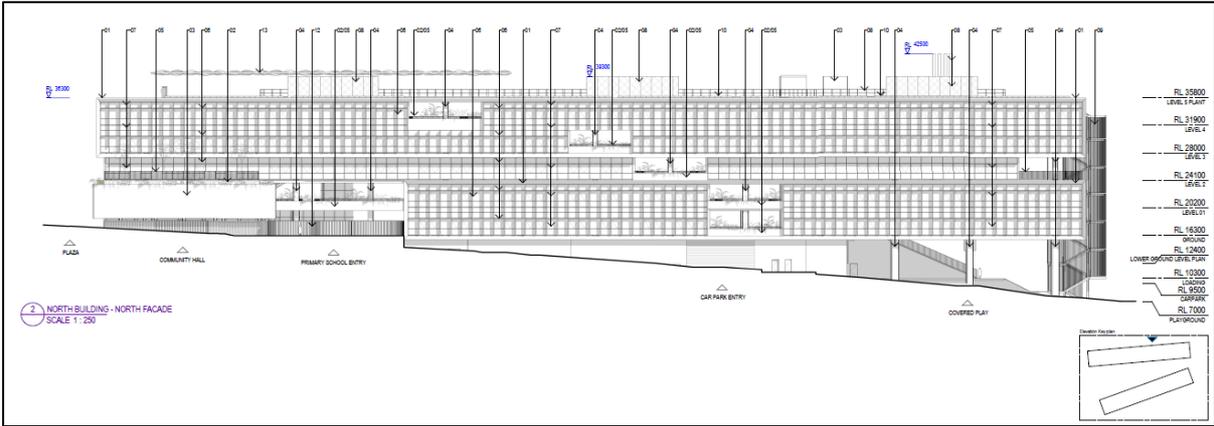


Figure 11 | Northern elevation of the building fronting Rhodes Street (Source: Applicant's RRAI 2020)

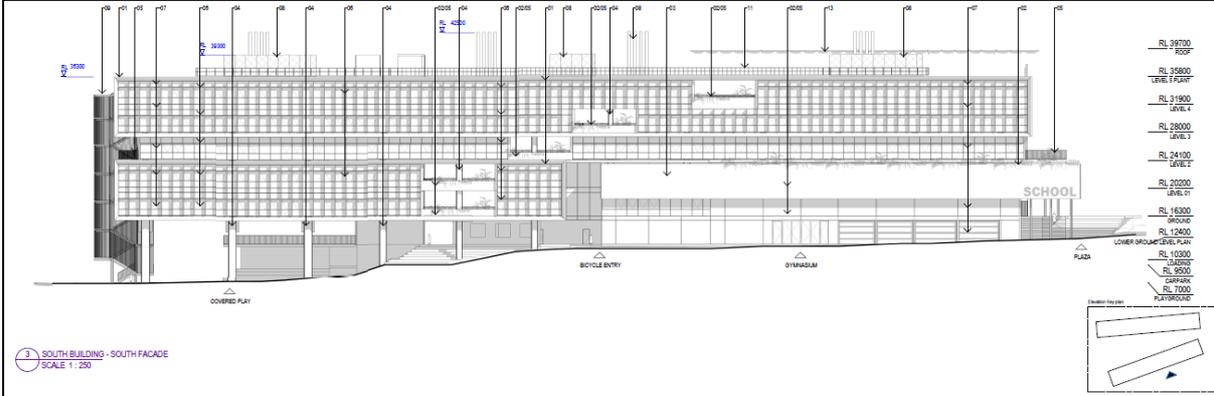


Figure 12 | Southern elevation of the building as seen from the TAFE Green (Source: Applicant's RRAI 2020)

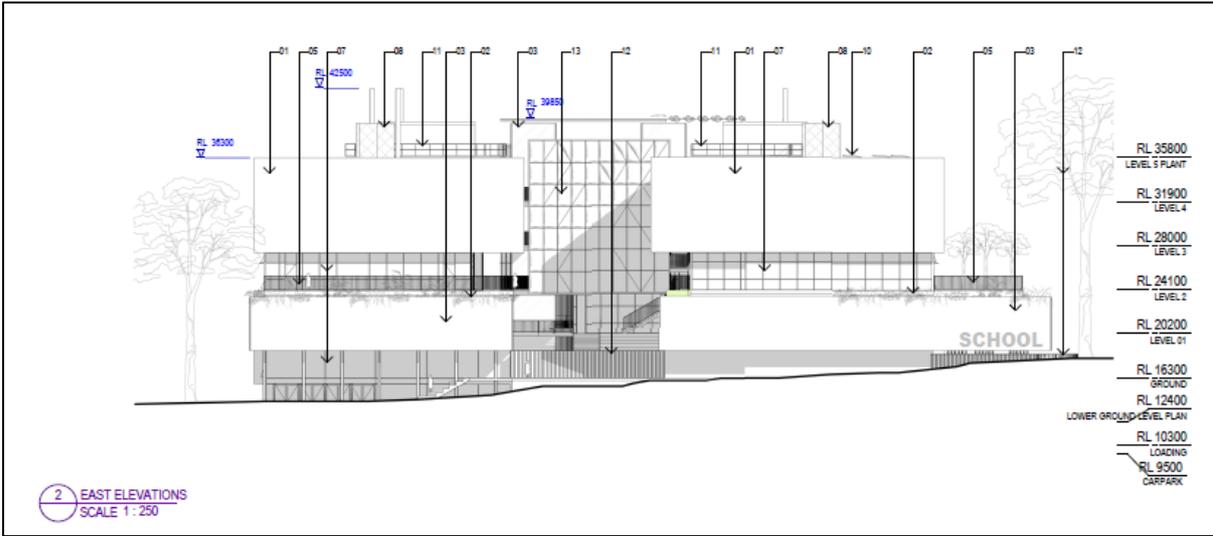


Figure 13 | Eastern elevation of the building facing onto the TAFE entrance off Rhodes Street (Source: Applicant's RRAI 2020)

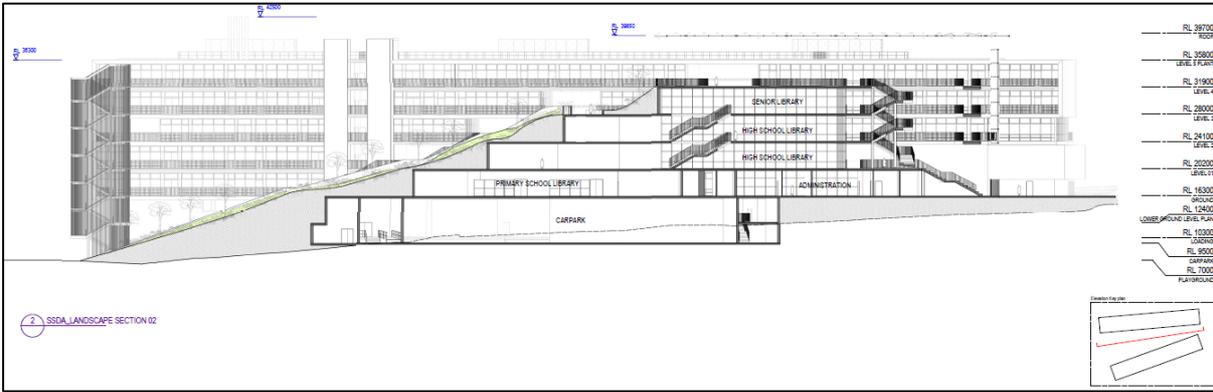


Figure 14 | Section through the central library of the building looking towards the northern wing (Source: Applicant's RRAI 2020)

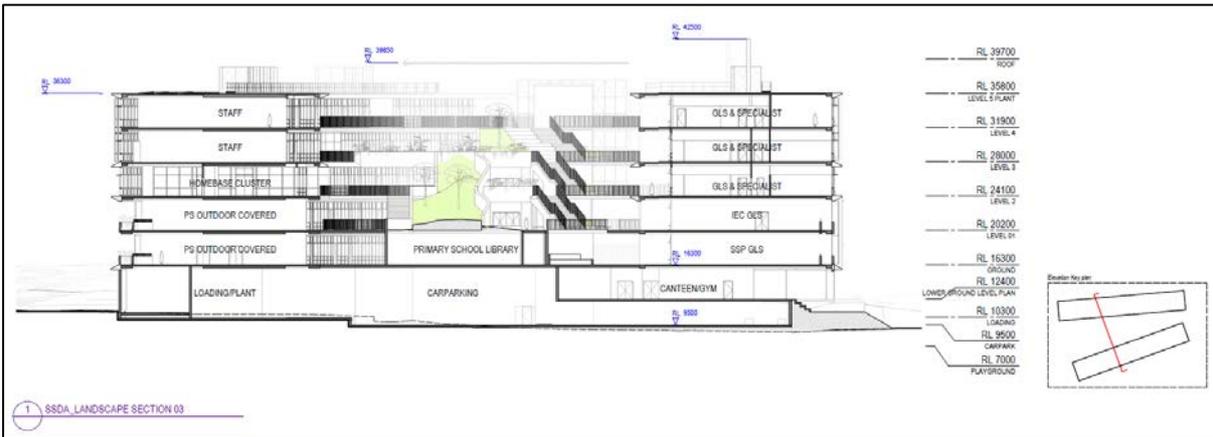


Figure 15 | Section looking eastward showing the northern and southern wings with central library and courtyard in between (Source: Applicant's RRAI 2020)

2.2 Layout and design

The proposal provides for new co-located primary and secondary schools within one building. Due to the slope of the land, the proposed building would have a maximum height of approximately five storeys at its eastern end and seven storeys at its western end (maximum RL 39.85m to roof level).

The building has a 'V' shaped footprint, creating northern and southern wings, which enclose a central stepped/terraced space located above the lower levels of the building. The terraced space would be landscaped, including tree planting (**Figure 13**).

The primary and secondary schools would be separated, with the primary school occupying the lower three levels of the northern wing of the building and the secondary school occupying the entire southern wing and the top two floors of the northern wing of the building. The communal hall, multi-purpose gymnasium and library are all located at the eastern end of the building (**Figure 15**).

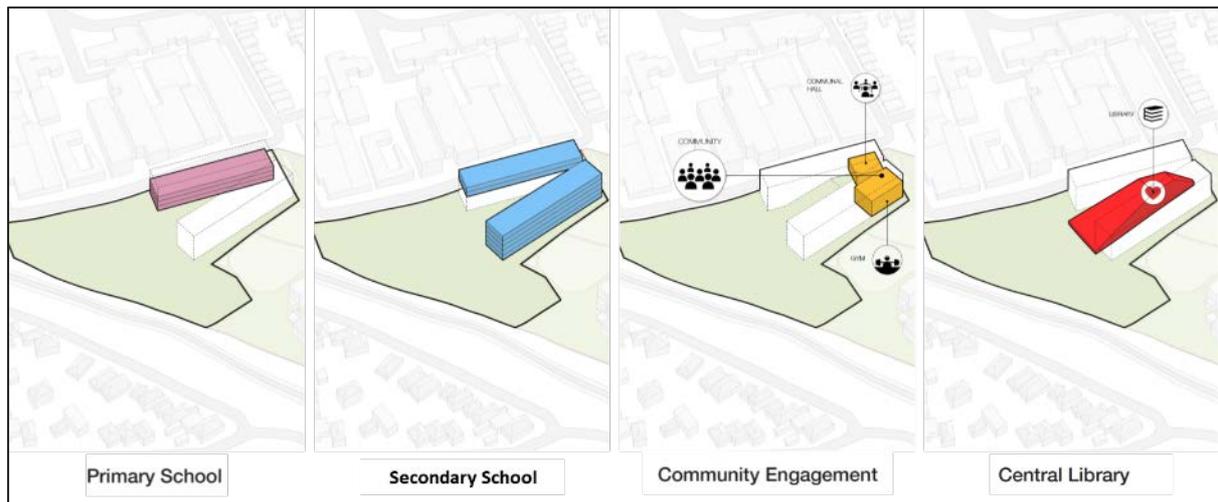


Figure 15 | School stacking and associated facilities (Base source: Applicant's EIS October 2019)

Indoor and outdoor student play spaces are also separated into primary and secondary school uses (**Figure 9**).

The building design is of a modern / contemporary design with external materials and finishes that complement the surrounding natural and built environment, as shown at **Figure 12**.

2.2.1 Site link through the TAFE Campus

As discussed at **Section 1.3.1**, there is a publicly accessible pedestrian route that runs through the middle of the TAFE Campus and connects Rhodes Street to Meadowbank Station. The proposal indicates that students and visitors arriving from the south of the site, including from Meadowbank Station, would be able to use this existing through site-link to access the schools, which is likely to be more direct than using surrounding streets (See and Macpherson Streets).

Preliminary Ideas M1 and P5 of the Master Plan indicate that the TAFE Campus through site-link could be upgraded in the future to a formalised pedestrian/cycle route including plazas and open spaces. The potential future upgrade of the TAFE Campus through site link does not form part of this application.

The existing and potential future TAFE Campus pedestrian through site links is shown at **Figure 16**.

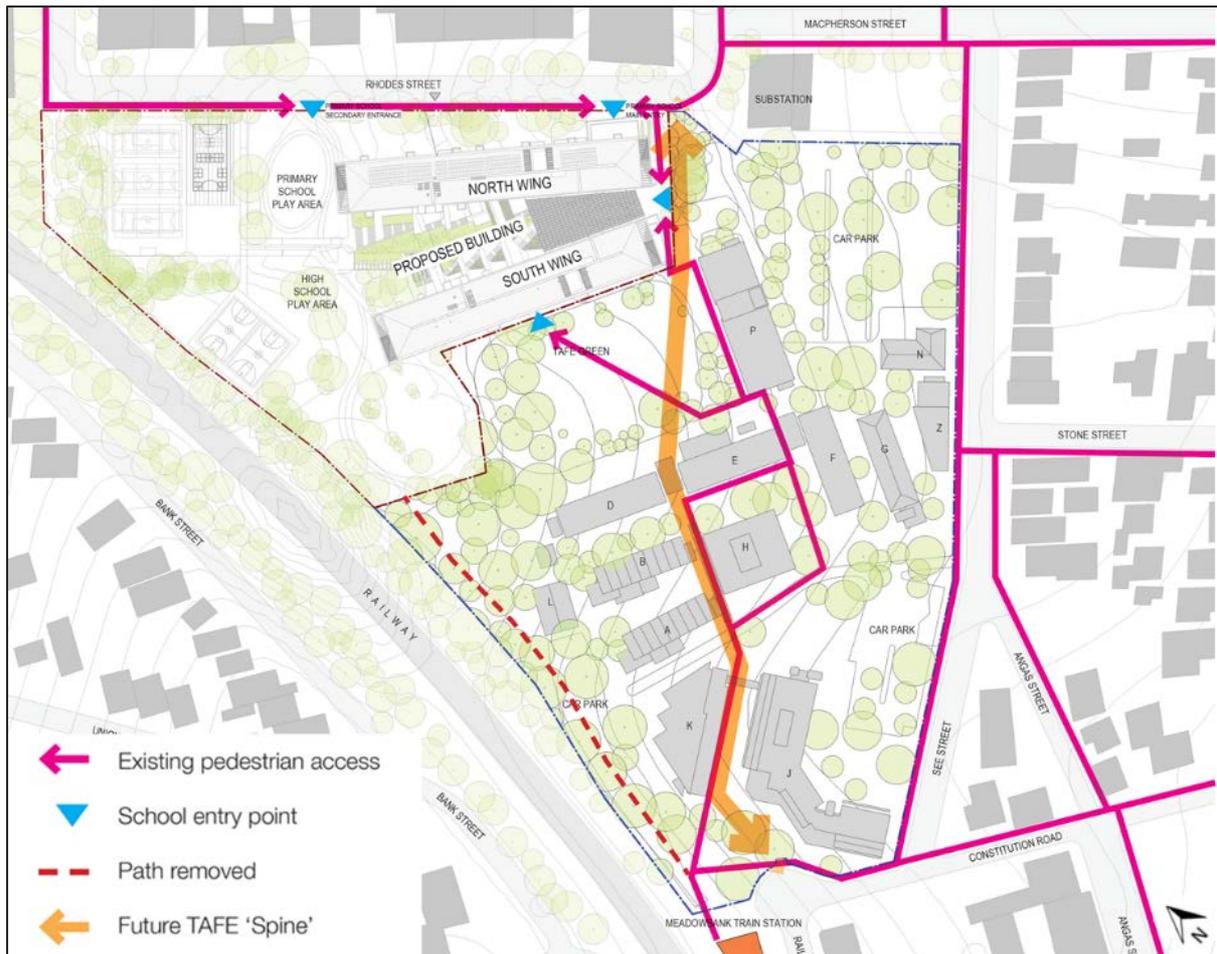


Figure 16 | Existing and potential future TAFE Campus pedestrian site link, surrounding pedestrian routes proposed and school entry points (Source: Applicant's RtS 2020)

2.2.2 Meadowbank Primary and Marsden HS

In March and June 2018, the NSW Government announced that Meadowbank Primary and Marsden HS (**Figure 1**) which currently accommodate 525 and 891 students respectively, would be moving to new co-located schools within the MEEP (subject to the approval of this SSD application), on land that was formerly part of the TAFE Campus.

The NSW's Government's confirmed the relocation was necessary as:

- Meadowbank Primary is located on a small site, the school is near capacity and it has insufficient space to cater for future growth.
- Marsden HS is predicted to experience significant growth in student numbers, and due to the aging condition of existing buildings it would be difficult to upgrade and extend the school to provide modern, flexible and future-focused learning.

Both schools would continue to operate on their existing sites until construction of the new schools are completed. Once students and staff have moved to the new schools, the existing Meadowbank Primary site would be redeveloped into a public open space and the Marsden HS site would be redeveloped to provide for new sporting/netball facilities.

2.2.3 Related development

Site Preparation and Remediation

The SSD application originally sought approval for site remediation works and mitigation measures to address site contamination.

On 12 December 2019, following the submission of the SSD application, the Applicant lodged a separate development application with Council for the early land remediation works associated with the SSD application. On 13 May 2020, Council granted development consent (LDA2019/0436) for early works – remediation of contaminated land to ready the site for the construction of the Meadowbank Education and Employment Precinct Schools project. The Applicant subsequently confirmed the removal of these works from the SSD application.

Remediation works include remediation of identified contaminants including lead, benzo(a)pyrene and asbestos in accordance with a Remediation Action Plan (**Figure 17**).



Figure 17 | Soil contamination remediation plan and tree removal (Source: Plans approved by Council under LDA2019/0436)

TAFE Meadowbank SSD Application

The Department is concurrently considering a SSD application (SSD 10349) for the redevelopment of the TAFE Campus surface car park adjoining the eastern boundary of the site. The proposal is for the construction of a Multi-Trades and Digital Technology Hub (TAFE Hub) (**Figure 18**) comprising:

- part two to six storey education building (maximum RL 27.4m) and basement car park.
- various learning spaces, workshop areas and digitally enabled spaces, seminar rooms and industry engagement spaces.
- landscaping and outdoor spaces.



Figure 18 | See Street perspective of the TAFE Hub (top), the TAFE Hub location outlined red and the site outlined blue (bottom) (Base source: TAFE Hub EIS 2019)

3 Strategic context

3.1 Project need and justification

Public school enrolments across NSW are anticipated to be 40,000 students higher in 2019-2020 than they were in 2015-16. In response to the need for additional public education infrastructure as a result of increased demand, the NSW Department of Education is investing \$6.7 billion to deliver new schools and upgrade existing schools.

The Applicant has indicated that Meadowbank and surrounding areas such as Rhodes and Ryde are experiencing significant population growth, which is placing substantial pressure on existing public schools, causing them to become overcrowded beyond capacity. The proposal will provide for new co-located modern facilities to accommodate the relocated Meadowbank Primary and Marsden HS and to meet expected future demand.

The proposal is necessary to meet the NSW Department of Education's need to provide suitable and sufficient teaching spaces that meet the increased demand in the area and future projected growth within the City of Ryde LGA.

3.2 Strategic context

The Department considers that the proposal is appropriate for the site as:

- it is consistent with The Greater Sydney Plan: A Metropolis of Three Cities, as it proposes new school facilities to meet the growing needs of Sydney.
- it is consistent with the State Infrastructure Strategy 2018 – 2038: Building the Momentum, as it provides direct investment to address increased enrolment demands, would provide access to modern digitally enabled learning environments for all students and would enable facilities to be co-shared with the local community.
- it is consistent with the NSW Future Transport Strategy 2056, as it would provide new educational facilities in an accessible location and provides access to new employment opportunities close to public transport.
- it is consistent with the vision outlined in the GSC's Central City District Plan, as it would support the provision of services and social infrastructure to meet people's changing needs
- it is consistent with Sydney's Cycling Future 2013, as it would promote a cater for bicycle use through the provision of bicycle parking and end-of-trip facilities.
- the Concept Proposal has a CIV of approximately \$219 million and is predicted to generate approximately 813 construction jobs and approximately 220 operational jobs.

3.3 Master Plan

The Master Plan builds upon a number of planned / envisaged projects within the MEEP, which include (**Figure 2**):

- a new TAFE Hub on the TAFE Campus (**Section 2.2.3**).
- new primary and high schools (the subject of this application), which would absorb existing students from Meadowbank Primary and Marsden HS and new students from within the surrounding catchment.

- potential redevelopment of other sites within the MEEP core (Sydney Water, Ausgrid and employment and retail land sites).
- consideration of the general locality that borders the core component of the MEEP.

The Master Plan establishes a precinct-wide vision for the MEEP including six guiding principles and ten preliminary ideas (i.e. potential projects that are subject to further investigation and funding decisions) (**Figure 19**). The proposal is consistent with the Master Plan as summarised at **Table 2**.

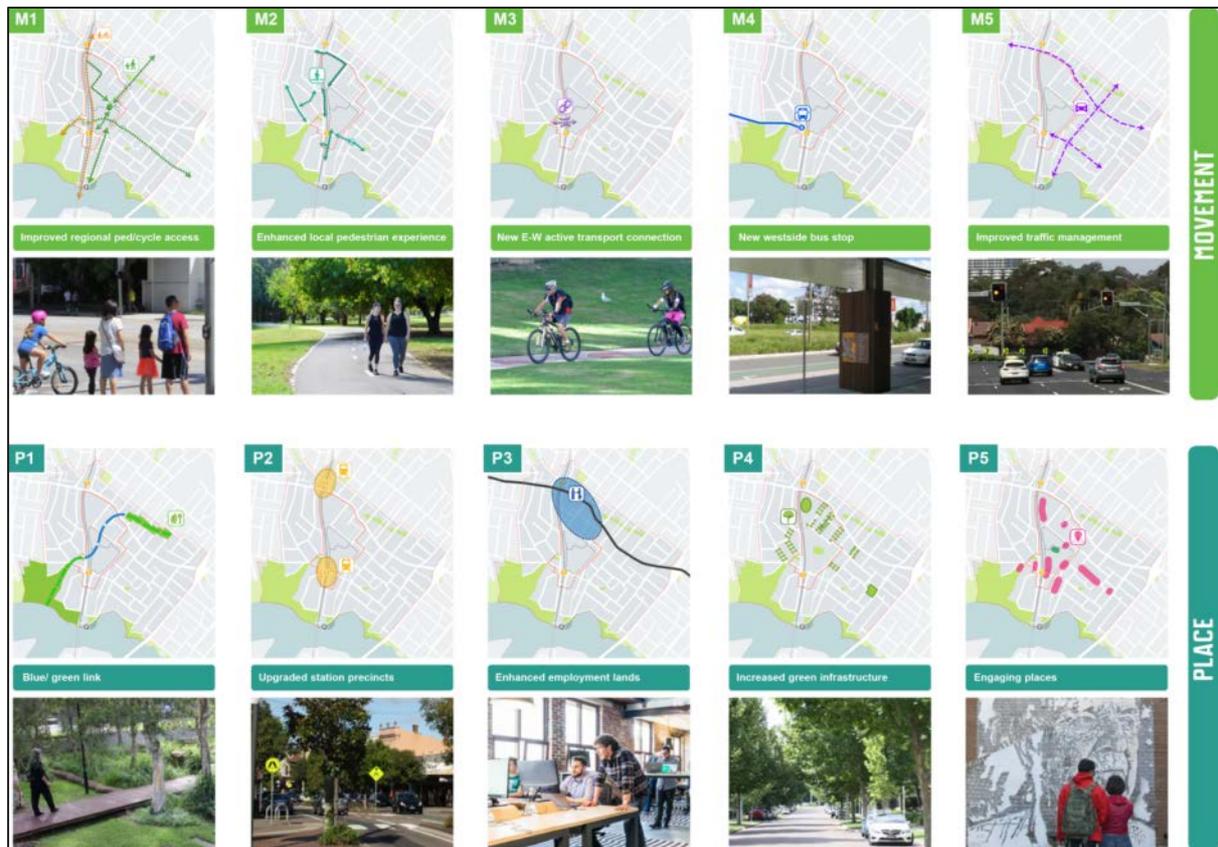


Figure 19 | The Master Plan ten preliminary ideas (Source: the Master Plan 2019)

Table 2 | Proposal's response to the 10 Master Plan Preliminary Ideas

Preliminary Idea	Proposal's response
<p>M1. Improved regional pedestrian / cycle access</p> <p>Prioritise active transport in order to reduce the reliance on private vehicles and increase overall connectivity across the wider Precinct.</p>	<p>The proposal includes mode-shift to walking, cycling and public transport and includes a School Travel Plan to encourage sustainable modes of travel (Section 6.1).</p>
<p>M2. Enhanced local pedestrian experience</p> <p>Improve the local pedestrian network in order to create a more pedestrian-friendly environment.</p>	<p>The proposal recommends the provision of a new pedestrian crossings at Rhodes and Macpherson Streets and encourages the use of the TAFE Campus pedestrian route to the site (Section 6.1).</p>
<p>M3. New East-west active transport connection</p>	<p>Not applicable.</p>

M4. New westside bus stop	Not applicable.
<p>M5. Improved traffic management</p> <p>Identify pressure points in order to address the through traffic permeating the Precinct.</p>	<p>The Applicant has committed to continue to work with TfNSW and complete post-opening road network monitoring in order to identify any operational issues and potential management solutions (in the absence of any strategic corridor upgrade proposals).</p>
<p>P1. Blue/green link</p> <p>Increase the recognition of the Charity Creek line as an integral part of the Precinct's blue grid and strengthen the image and identity of the local area.</p>	<p>The proposed stormwater system would discharge into Charity Creek culvert drainage. The combination of vegetated buffer, bioretention swales, vegetated swales, and filtration devices would improve water quality before discharging stormwater (Section 6.5).</p>
<p>P2. Upgraded station precincts</p> <p>Improve the safety, accessibility and amenity of the areas around Meadowbank and West Ryde Stations to increase public transport usage and provide social opportunities and activation of the Precinct.</p>	<p>The proposal would activate the MEEP and create approximately 813 construction and 220 ongoing operational jobs.</p>
<p>P3. Enhanced employment lands</p> <p>Strengthen the employment lands and the adjoining Sydney Water site as a mixed-use precinct to support jobs and contribute to activation of the area.</p>	<p>The proposal strengthens the employment lands by providing jobs and people that contribute to the activation of the area.</p>
<p>P4. Increased green infrastructure</p> <p>'Green' the area with new street trees along key pedestrian routes and new and upgraded open spaces to provide increased amenity for the local community.</p>	<p>The proposal includes extensive green and open spaces, retains 149 mature trees and includes 22 replacement trees. The design of the building integrates into the surrounding landscaped environment. The proposal intends to open the communal hall and gymnasium for community use (Sections 6.3, 6.4 and 6.5).</p>
<p>P5. Engaging places</p> <p>Encourage social interaction and cohesion within the community through new public art, plazas, spaces and 'living streets' to activate the Precinct.</p>	<p>Refer to response to P4 above.</p>

4 Statutory Context

4.1 State significance

The proposal is SSD under section 4.36 EP&A Act (development declared SSD) as the development is for the purpose of a new school under clause 15(1) of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

4.2 Consent Authority

The Minister for Planning and Public Spaces (the Minister) is the consent authority under section 4.5 of the Act.

In accordance with the Minister's delegation to determine SSD applications, signed on 9 March 2020, the Executive Director, Infrastructure Assessments may determine this application as:

- the relevant Council has not made an objection.
- there are less than 50 public submissions in the nature of objection.
- a political disclosure statement has not been made.

4.3 Permissibility

The RLEP identifies the site as being located within the SP2 Education Establishment zone. An educational establishment is permissible with consent within the zone.

The site is not subject to any building height, floor space ratio or lot size development standards under the RLEP. Consideration of the proposal against the other requirements of the RLEP is provided at **Appendix B**.

4.4 Secretary's Environmental Assessment Requirements

On 7 June 2018, the Department notified the Applicant of the Planning Secretary's Environmental Assessment Requirements (SEARs). The Department is satisfied that the EIS and RtS adequately address the requirements of the SEARs to enable the assessment and determination of the application.

4.5 Biodiversity Conservation Act 2016

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are 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.

The application included a BDAR, which provides an assessment of the biodiversity on the site in accordance with the BC Act. The BDAR identified that there are two principal plant community types (PCT) in varying conditions present on the subject site. They have been mapped as:

- PCT 1237 - *Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion.*
- PCT 1281 - *Turpentine - Grey Ironbark open forest on shale in the lower Blue Mountains, Sydney Basin Bioregion.*

The BDAR states that the above identified PCTs are listed as candidates for Serious and Irreversible Impacts (SII) as defined by the BDAR.

The BDAR notes that Blue Gum High Forest and Sydney Turpentine-Ironbark Forest can also be listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as Critically Endangered Ecological Communities (CEECs). However, the condition of the vegetation representing the PCTs within the study area did not meet the minimum condition thresholds for the CEEC listing criteria under the EPBC Act. In addition, two threatened flora species *Eucalyptus nicholii* (Narrow-leaved Peppermint) and *Syzygium paniculatum* (Magenta Lilly Pilly) were recorded within and in close proximity to the site. However, as these specimens are cultivated / planted they are not listed entities under the BC and EPBC Acts. No other threatened flora or fauna species were recorded within the study area.

The proposed development would result in direct impacts by removing 0.59ha of PCT 1237 and 0.03ha of PCT 1281. The proposal would have indirect impacts on 0.02ha of PCT 1281, which include trimming of branches. The BDAR includes an assessment of the direct and indirect impacts using the Biodiversity Assessment Method (BAM). The BAM determined that a total of nine ecosystem credits are required to offset the direct impact of the removal of 0.59ha PCT 1237. Due to the small indirect impact on PCT 1281 and PCT 1237 the BDAR concluded the development would not result in SII.

The Department has given further consideration to tree removal at **Section 6.3.1**.

4.6 Mandatory Matters for Consideration

The following are the relevant mandatory matters for consideration:

- the matters in section 4.15(1) of the EP&A Act.
- relevant Environmental Planning Instruments (EPIs).
- objects of the EP&A Act.
- Ecological Sustainable Development (ESD).
- Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

4.6.1 Section 4.15(1) matters for consideration

Table 3 identifies the matters for consideration under section 4.15(1) that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in **Section 6** and relevant appendices or other sections of this report and the application, referenced in the table.

Table 3 | Section 4.15(1) matters for consideration

<i>Section 4.15(1) Evaluation</i>	<i>Consideration</i>
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided below and in Appendix B of this report.
(a)(ii) any proposed instrument	Not applicable.
(a)(iii) any development control plan	Under clause 11 of the SRD SEPP development control plans (DCPs) do not apply to SSD. Notwithstanding this, consideration

<i>Section 4.15(1) Evaluation</i>	<i>Consideration</i>
	has been given to the controls under the Ryde Development Control Plan 2014 (RDCP), were relevant, at Section 6 .
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations Refer Division 8 of the EP&A Regulation	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	No coastal zone management plan applies to the site.
(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 impacts of the proposal have been appropriately mitigated or conditioned as outlined at Section 6 of this report.
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Sections 6 of this report.
(d) any submissions	Consideration has been given to the submissions received during the exhibition of the proposal. Refer to Sections 3 and 6 of this report.
(e) the public interest	The proposal is in the public interest. Refer to Section 6 of this report.

4.6.2 Environmental Planning Instruments

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any EPI relevant to the development that is the subject of a development application. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPI(s) that substantially govern the project and that have been taken into account in the assessment of the project.

The Department has undertaken a detailed assessment of these EPIs in **Appendix B** and is satisfied the application is consistent with the requirements of the EPIs.

4.6.3 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects as set out in section 1.3 of that Act. 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 / approval) 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.

The Department has considered the proposal to be satisfactory with regard to the objects of the EP&A Act as detailed in **Table 4**.

Table 4 | Consideration of the proposal against the objects of section 1.3 the EP&A Act

4.6.4 Objects of the EP&A Act	4.6.5 Consideration
<p>(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources</p>	<p>The proposal involves the construction of a new primary school for up to 1,000 students, secondary school for up to 1,500 students and IEC for 120 students.</p> <p>The proposal is estimated to generate approximately 813 construction and 220 operational jobs.</p> <p>The site is located within an existing urban area and its redevelopment would have a positive impact the economic welfare of the community and impacts on the natural environment can be mitigated.</p>
<p>(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</p>	<p>The proposal includes measures to deliver ESD (Section 4.6.6).</p>
<p>(c) to promote the orderly and economic use and development of land,</p>	<p>The proposal would be an orderly and economic use and development of land as it provides for new schools that constitute modern, fit-for-purpose educational facilities located on a site owned by the Applicant. The merits of the proposal are considered in Section 6.</p>
<p>(d) to promote the delivery and maintenance of affordable housing,</p>	<p>Not applicable.</p>
<p>(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</p>	<p>A BDAR was submitted with the application. The Department's consideration of impacts is outlined in Sections 4.5 and 6.3.1 of this report.</p>
<p>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</p>	<p>The proposal would not impact on the significance of (including any heritage items or Aboriginal cultural heritage).</p>
<p>(g) to promote good design and amenity of the built environment,</p>	<p>The proposal is considered to achieve a high standard of design as discussed at Section 6.4. The Department has recommended built form conditions.</p>
<p>(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,</p>	<p>The proposal has a modern functional design and would integrate with the surrounding built form, landscaping and public domain.</p>
<p>(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,</p>	<p>The Department publicly exhibited the proposed development as outlined in Section 5, which included consultation with Council and other public authorities and consideration of their responses.</p>

4.6.4 Objects of the EP&A Act	4.6.5 Consideration
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the application (Section 5.1), which included notifying adjoining landowners, placing a notice in newspapers and displaying the proposal on the Department's website and at Council's office during the exhibition period.

4.6.6 Ecologically Sustainable Development

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.

The development proposes ESD initiatives and sustainability measures, including:

- high performance building fabric using passive design principles (i.e. insulation, glazing, shading).
- rooftop photovoltaic array (99 kWp) and solar hot water.
- metering and monitoring strategies.
- energy efficient lighting, zoning and controls.
- mixed mode ventilation strategy for improved indoor air-quality.
- high efficiency heating, ventilation, air-conditioning and cooling (HVAC).
- water efficient fixtures and fittings and rainwater collection and re-use in irrigation of landscaping and toilet flushing.
- sustainable construction material selection such as sustainable timber, recycled concrete and high recycled content (or recyclability) of furniture.

In accordance with the Educational Facilities Standards Guideline (EFSG), the proposed school is targeting a minimum 4-star Green Star Rating.

The Department has considered the project in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision making process by a thorough assessment of the environmental impacts of the development. The proposed development is consistent with ESD principles as described in the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation.

The Department has recommended conditions that require:

- the Applicant to obtain evidence from a suitably qualified Green Star Accredited professional demonstrating that the development achieves all the ESD measures set out in the EIS, including achieving a minimum 4-star Green Star rating with the Green Building Council Australia, prior to the commencement of buildings works (excluding earthworks).
- development of a rainwater reuse/harvesting system for the site.

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.

4.6.7 Environmental Planning and Assessment Regulation 2000

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.

5 Engagement

5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act and Part 6, Division 6 of the EP&A Regulation, the Department publicly exhibited the application from 24 October until 20 November 2019 (28 days). The application was made publicly available on the Department's website, at the NSW Service Centre and at Council's office.

The Department placed a public exhibition notice in the Weekly Times (Gladesville-Ryde) and the Northern District Times on 23 October 2019 and notified landholders, Council and relevant public authorities in writing. On 13 March 2020, the Department representatives visited the site to provide an informed assessment of the development.

In response to the submissions received by the Department in response to the exhibition of the application the Applicant submitted a RtS. A copy of the RtS was placed on the Department's website.

The Department has considered the comments raised in public authority and public submissions during the assessment of the application (**Section 6**) and/or by way of recommended conditions in the instrument of consent at **Appendix D**.

The submissions are summarised in **Section 5.2** and **Section 5.3**.

5.2 Summary of submissions

In response to the exhibition of the EIS the Department received a total of 28 submissions, comprising six submissions from public authorities, 22 from the public (including two from special interest groups). Of the public submissions, four raised objections, 15 provided comments and one supported the proposal. Council did not provide a submission on the proposal.

A summary of the submissions is provided at **Table 5** and a summary of the issues raised in the submissions is provided at **Section 5.3**. Copies of the submissions may be viewed at **Appendix A**.

Table 5 | Summary of public authority, Council, community and special interest group submissions

Submitters	Number	Position
Public Authority	6	
<ul style="list-style-type: none">Transport of New South Wales (TfNSW), including Roads and Maritime Services (RMS) and Sydney Trains	1	Comment
<ul style="list-style-type: none">Environment Protection Authority (EPA)	1	
<ul style="list-style-type: none">Environment, Energy and Science Group of the Department of Planning, Industry and Environment (EESG)	1	
<ul style="list-style-type: none">Heritage NSW, Department of Premier and Cabinet (Heritage NSW)	1	
<ul style="list-style-type: none">Sydney Water	1	
<ul style="list-style-type: none">Ausgrid	1	

Submitters	Number	Position
Community	20	
	4	Object
• < 5 km	15	Comment
	1	Support
Special Interest Groups	2	
• North Sydney District Council of Parents and Citizens Associations (NSPCA)	1	Comment
• Employment Precinct Owners Association (EPOA)	1	
TOTAL Submissions	28	

5.3 Submissions

5.3.1 Public authority submission

A summary of the issues raised in public authority submissions is provided at **Table 6**.

Table 6 | Summary of Government authority submissions to the exhibition of the proposal

TfNSW (including RMS and Sydney Trains)

TfNSW requested the following matters be addressed in the Applicant's RtS:

- provide swept path analysis for buses on all streets between Victoria Road and the proposed bus zone.
- the proposal to stagger school start/finish times is supported. However, a quantitative assessment of pick-up/drop-off demand on the proposed facilities should be provided.
- a signage and lane marking plan relating to the pick-up/drop-off arrangement is required.
- further evidence of staff mode-share changes is required. In addition, further sustainable travel incentives should be considered and additional staff parking should be provided to meet any unmet demand.
- additional measures should be considered to improve safe and efficient paths of travel for students.
- the high-school student travel analysis should be reviewed to more clearly demonstrate the existing mode-share for active transport will be maintained.
- the primary school travel assumptions, especially bicycle mode, should be further justified.
- undertake an assessment of how to improve travel options between the school population and the site.
- consider providing e-transportation charging facilities.
- the school travel plan should investigate alternatives to encourage the use of public transport.
- conduct an independent Detailed Design Road Safety Audit (bus and pedestrian).
- traffic, intersection and pedestrian modelling should be reviewed, updated and further justified.

TfNSW recommended conditions relating to the protection of rail assets and preparation of a School Travel Plan (STP).

EPA

EPA provided the following comments:

- operational traffic noise complies with the NSW Road Noise Policy, DECCW 2011 (NSW RNP).
- construction hours should be limited to the Interim Construction Noise Guideline (ICNG) standard hours.
- the Applicant should review / update site contamination technical reports to demonstrate the site is suitable for the proposed use.

TfNSW (including RMS and Sydney Trains)

- a Site Auditor should be engaged to verify the Remediation Action Plan is appropriate.
- the Asbestos Assessment Report should be updated to confirm the site asbestos history and location mapping.

EPA recommended conditions requiring:

- public address and school bell should not exceed background noise + 10 decibels (dB).
- mechanical plant should be designed to not exceed background noise + 5dB and also include the design requirements set out in the Acoustic Noise Impact Assessment (ANIA).
- compliance with appropriate contaminated land legislation and guidance and the engagement of a Site Auditor.
- compliance with standard requirements regarding waste, water and site management during construction.

EESG

EESG provided the following comments:

- the BDAR maps, threatened species and assessment impacts should be reviewed and updated and a table of credit classes/profile should be provided.
- the Civil Report should be updated to address flood risk. The flood assessment should also address floodplain risk management including exposure of users to flood risk and emergency services planning.

EESG recommended the Aboriginal archaeology mitigation and management conditions contained in the Aboriginal Cultural Heritage Assessment Report (ACHAR) be included as conditions of consent.

Heritage NSW

Heritage NSW advised that it did not have any comments to make in relation to the proposal noting the:

- site is not listed on the SHR or contain any significant non-aboriginal archaeological deposits.
- proposal would have no impact on the State significant heritage values of the Sydney Water site (a SHR item), located to the north of the site.

Sydney Water

Sydney Water provided general information on water, recycled water and wastewater servicing. Sydney Water recommended the Applicant apply for a Section 73 application under the *Sydney Water Act 1994*.

Ausgrid

Ausgrid confirmed it did not wish to provide comments.

5.3.2 Community submissions

A total of 22 public submissions (including special interest groups) were received in response to the public exhibition of the proposal. Submissions comprised four objections, 17 comments and one in submission in support. All public submissions were received from people living within 5km or the immediate vicinity of the site. The key issues raised by the community are summarised in **Table 7**.

Table 7 | Cumulative summary of the public submissions as a proportion of the total submissions made

Issue	Proportion of total (22) submissions
• Road/pedestrian upgrades required to provide safe routes to the site	64%
• Inadequate staff car parking provision	36%

Issue	Proportion of total (22) submissions
• Adverse increase in traffic	32%
• Alternative bus stop location and a bus turn around area are required	23%
• Forsyth St should be turned into a cul-de-sac	23%
• Inadequate school pick-up/drop-off facilities	18%
• Site too small / no room for school expansion	18%
• Inadequate outdoor space	14%
• Additional parking pressure on surrounding (non-parking restricted) roads	14%
• A safe pedestrian route is needed through the TAFE Campus from Meadowbank Station	9%
• Inadequate / unclear public consultation	9%
• The existing primary and high school should be retained and upgraded	9%
• More toilets should be provided for students and visitors	9%

Other issues raised in public submissions (5% or less) included:

- operational noise impacts.
- more before and after school care places are needed.
- inappropriate co-location of schools with the TAFE Campus.
- the site is not centrally located within the school catchment.
- schools should have separate entry points.
- biodiversity impacts.
- landscaping should be appropriately irrigated.
- concerns about the Master Plan vision for sites surrounding the application site.
- no facilities provided for P&C and General Assistant.
- the multi-purpose gymnasium is inappropriate as an exam centre.
- the school should be designed to not require staggered lunch breaks.
- the schools should be accessible.
- the gymnasium changerooms are too narrow.
- the primary school staff room should have a better access point.
- the schools should cater for hearing impaired students.

5.4 Response to submissions

Following the exhibition of the proposal, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions and matters raised following the Department's preliminary review of the EIS.

On 2 March 2020, the Applicant submitted its Response to Submissions (RtS) (**Appendix A**). The RtS provides additional information and clarification in response to the issues raised in submissions. The RtS did not include any physical amendments to the proposal.

The RtS was made publicly available on the Department website and was referred to Council and the relevant public authorities. An additional three submissions were received from public authorities. No

submissions were received from Council or the public. A summary of the issues raised in the submissions is provided at **Table 8** and copies of the submissions may be viewed at **Appendix A**.

Table 8 | Summary public authority submissions to the notification of the RtS

TfNSW

TfNSW reviewed the RtS and noted the Applicant's commitments to implement mitigation measures. TfNSW recommended conditions relating to School Zone signs and associated markings and the preparation of a STP.

EPA

The EPA reviewed the RtS and noted:

- the EPA supports the Applicant's extended construction hours (in accordance with the RDCP), subject to construction hours beyond the ICNG standard hours being limited to background +5dB(A) and mitigation measures in accordance with the ANIA.

The EPA recommended updated contamination conditions regarding the Site Auditor and reiterated its previous conditions relating to compliance with appropriate contaminated land legislation and guidance, public address and school bell, mechanical plant, waste, water and site management during construction.

EESG

EESG reviewed the RtS and confirmed it is satisfied with the details provided for flooding and biodiversity and has no further comments. EESG reiterated its recommended Aboriginal archaeological conditions.

On 6 April 2020, the Applicant submitted its RRAI in response to the Department's request for additional information regarding flooding, noise impact, trees and other minor matters (**Appendix A**). The RRAI provides additional information and clarification in response to the Department's further information request. The RRAI did not include any amendments to the proposal.

On 29 April 2020, the Applicant updated the RRAI by submitting amended plans of the proposed building that incorporated changes resulting from its detailed design work. The changes included:

- removal of the protruding boxes from the northern and southern building façades.
- change façade material from concrete to ceramic/masonry.
- depth of solar shading reduced, number of vertical solar shading elements increased.
- removal of façade planter boxes.
- change façade louvres to awning windows.
- reduction of building mass at the western end of the buildings
- relocate the outdoor play area at Level 2 to the western end of the northern wing.
- relocate/remove egress stairs at the eastern and western ends of the buildings.
- structural column rationalisation throughout buildings.
- alignment of COLAs to landscape at every level.
- replanning of internal layout.

As overview of the design revisions is depicted in **Figure 20**.

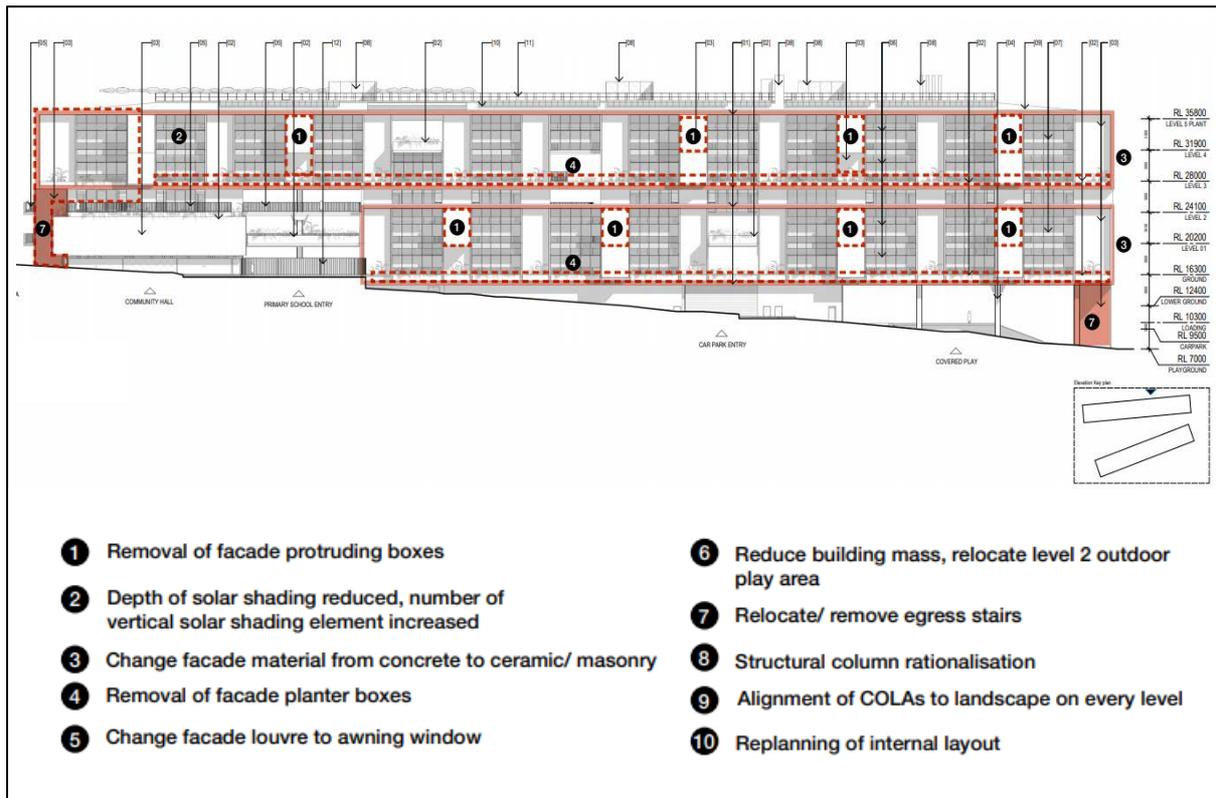


Figure 20 | Summary of building design revisions (Source: Applicant's RRAI 2020)

6 Assessment

The Department has considered the Applicant's EIS, RtS and RRAI and the issues raised in submissions in its assessment of the proposal. The Department considers the key assessment issues associated with the proposal are:

- traffic, parking and pedestrian access.
- noise impacts.
- tree removal and landscaping
- built form.

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment are discussed at **Section 6.5**.

6.1 Traffic, parking and pedestrian access

The site is located within a low-density area surrounded by residential, educational and light industrial uses. As summarised at **Section 1.3.1**, the closest classified road to the site is Victoria Road, with access to the site provided along collector and local roads including Bowden, Macpherson, Mellor and Rhodes Streets and Hermitage Road. The site has excellent access to existing public transport, including high frequency bus routes along Victoria Road and train services stopping at Meadowbank and West Ryde stations.

The application includes a Transport and Accessibility Impact Assessment (TAIA), a Construction, Pedestrian Traffic Management Plan (CPTMP) and a School Travel Plan (STP), which consider the existing road and pedestrian conditions, construction and operational impacts, transport mode share and sustainable transport measures.

In response to the exhibition of the EIS, public authorities and the public raised concerns about the operational traffic impacts of the proposal. In response to these concerns, the RtS included an updated TAIA to provide further clarification of impacts and mitigation measures.

The key assessment issues include:

- mode share and school travel plan.
- traffic generation.
- car parking.
- bus zones and pick-up/drop-off facilities.
- pedestrian access.
- construction traffic.

6.1.1 Mode share and school travel plan (STP)

The MEEP Master Plan encourages a mode shift away from private car use and notes that Victoria Road is operating close to capacity for existing traffic conditions and is expected to operate at capacity in the future.

To inform the preparation of a STP for the site, the TAIA included surveys to determine travel modes of students and staff at Marsden HS and Meadowbank Primary. The results of the surveys are summarised in **Table 9**.

Table 9 | Existing mode share Marsden HS and Meadowbank Primary (Source Applicant's RtS 2020)

Mode	Staff mode share	High school student mode share	Primary school mode share
Car	75%	33%	40%
School bus	0%	26%	0%
Public bus	0%	2%	0%
Train	10%	3%	0%
Walk	15%	22%	60%
Cycling	0%	14%	0%
Total	100%	100%	100%

The surveys found that the greatest share of primary school students walk to school (60%) with the remaining students travelling by car. The travel modes of high school students were more evenly spread with a greater share of students travelling to school by public transport (31%) and cycling (14%). Private vehicle was found to be the most popular travel mode for staff travelling to both schools (75%).

The TAIA then undertook a catchment analysis (**Figure 21**) for the proposed primary and secondary schools having regard to the location of students and staff of the existing schools living in the catchment. This identified the walking, cycling and public transport catchment to consider potential for mode shift at the new schools. The analysis indicates:

- 20% of staff, 28% of secondary school students and 64% of primary school students could potentially walk or cycle to school.
- 27.8% of staff and 52.6% of students live within an 800-metre catchment of a bus route servicing proposed schools and would potentially catch a bus to school.
- 10.4% of staff and 16.9% of students live within an 800-metre catchment of a train station and could potentially catch a train to school.

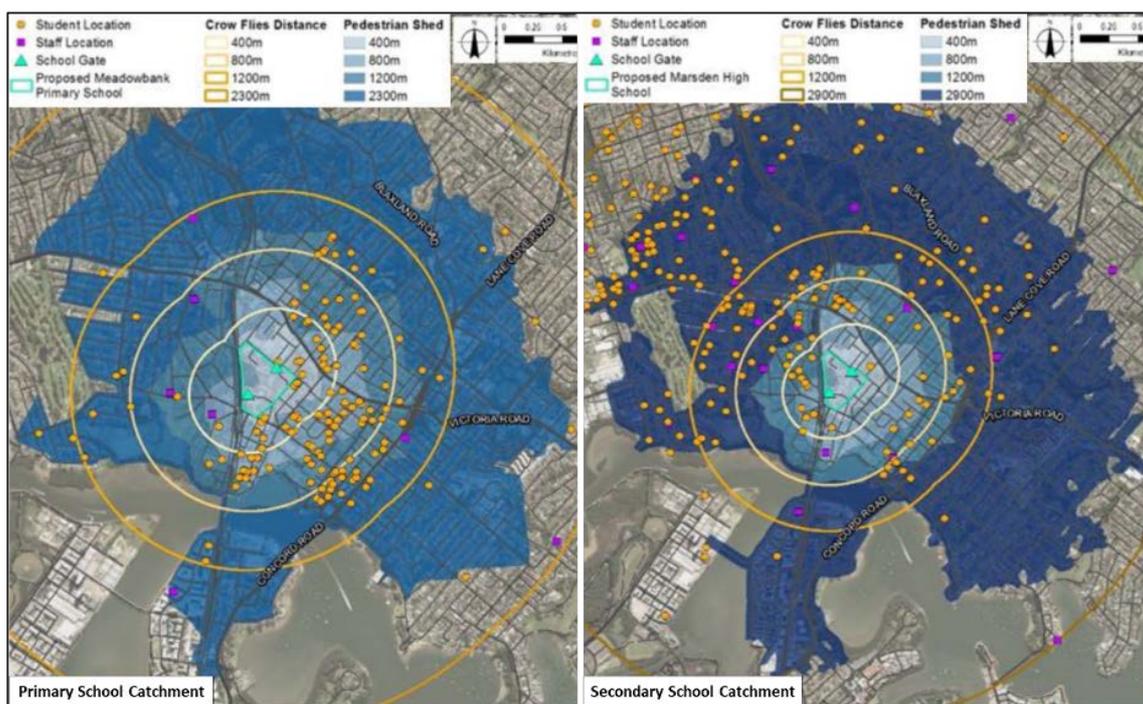


Figure 21 | Primary (left) and secondary (right) school catchments (Base source: Applicant's RtS 2020)

Noting the Master Plan mode-shift ambition and based on data from the Australian Bureau of Statistics, existing Meadowbank Primary and Marsden HS walking mode-share, proposed school catchments and travel distances and walking, cycling and public transport availability, the TAIA anticipates the schools could achieve mode share for students and staff as summarised at **Table 10** and **Table 10**.

Table 10 | Anticipated travel mode of primary and secondary students (Source Applicant's RtS 2020)

Travel mode	No. primary school students		Mode Share and % change from existing)	No. secondary school students		Mode Share and % change from existing)
	2022	2032		2022	2032	
Car	195	300	30% (-10%)	230	373	23% (-10%)
School bus	0	0	0% (same)	260	421	26% (same)
Public bus	0	0	0% (same)	30	49	3% (+1%)
Train	0	0	0% (same)	130	211	13% (+10%)
Walk	390	600	60% (same)	220	356	22% (same)
Cycle	65	100	10% (+10%)	130	210	13% (-1%)
Total	650	1,000	100%	1,000	1,620	100%

Table 11 | Anticipated travel mode of school staff (Source Applicant's RtS 2020)

Travel Mode	No. School staff		Mode Share and % change from existing)
	2022	2032	
Car	58	86	40% (-35%)
School bus	0	0	0% (same)
Public bus	40	60	28% (+28%)
Train	14	22	10% (same)
Walk	22	32	15% (same)
Cycle	10	15	7% (+7%)
Total	144	215	100%

To achieve the above mode share and to generally encourage the use of sustainable transport the TAIA includes a STP. The STP sets out a sustainable transport management strategy for future students and staff to assist in reducing private vehicle use, car parking demand and traffic congestion. Key measures include:

- carpooling and the use of rideshare facilities.
- public transport use.
- establish a bicycle users group, provide bicycle and motorcycle parking and end-of-trip facilities.
- maps with walking / cycling routes and information.

The Applicant has acknowledged that the target travel mode share is ambitious. However, it has stated that this reflects the new, comprehensive approach by the Applicant to reduce car dependency

and the Applicant will be responsible for the implementation of the STP and identifying additional initiatives (if necessary) in order to meet the target mode share.

TfNSW did not object to the proposed mode share targets and recommended that the STP be updated to include training courses for students on safe walking, riding and public transport; install public transport 'next service departure' screens in the schools' lobby; and develop and deliver a robust communications strategy for the STP. The Applicant has agreed to TfNSW's changes to the STP.

The Department has carefully considered the TAIA and STP contained within the EIS and RtS, the concerns raised in the public submissions about traffic impact and TfNSW's comments. The Department notes that the:

- proposed mode share indicates:
 - a 10% reduction in car use for students and 35% for staff, achieved through increased uptake of public transport and cycling options, when compared with the existing Meadowbank Primary and Marsden HS.
 - maintenance of existing share of students walking, including the 60% primary school students at Meadowbank Primary.
- proposed mode share is ambitious taking into consideration the relocation of the two schools and associated change in travel patterns of students and staff.
- surrounding roads currently experience existing traffic and parking pressures, which necessitates an ambitious approach to the schools' travel mode-share and a move away from private car use.

The Department supports the preparation and implementation of the STP and considers this is an effective tool to guide the mode share ambition and encourage sustainable modes of transport. However, noting the above assessment, the Department considers it important that the schools' travel mode share continues to evolve and improve over time to further reduce the number of trips made by private vehicles. Consequently, the Department recommends the STP should be monitored and reviewed annually to drive improvements.

In addition, as discussed at **Section 6.1.5**, the Department has recommended conditions that require the Applicant undertake pedestrian infrastructure improvements (footways and crossings), which would also form an essential component to foster sustainable transport and encourage active transport (walking and cycling) options for students and staff.

The Department is satisfied that the Applicant's proposed approach is consistent with the car reduction aspirations of the MEEP Masterplan and that the mode share is attainable subject to the implementation and annual monitoring and review of the STP.

The Department considers the provision of bicycle spaces and the implementation of the STP would assist in encouraging active transport modes from the outset of the operation of the schools. Over time, the STP would likely further reduce private vehicle use to the site and reduce the pressure on the operation of the surrounding road network and the proposed drop-off and pick-up zones on Rhodes Street (**Section 6.1.4**).

The Department concludes that the implementation of the proposed behavioural and travel strategies in a site specific STP would likely achieve the desired mode share and effectively address congestion

on the surrounding road network, and has recommended conditions requiring the preparation and implementation of the STP prior to occupation and the ongoing monitoring and annual review of the STP to ensure it improves over time.

6.1.2 Traffic generation

The TAIA included a survey of the existing traffic conditions on the roads surrounding the site and predicts future travel modes and trips generated by the proposal based on the projected number of students and staff. The TAIA confirmed that the anticipated traffic generation of the proposed schools has been derived from the future mode share analysis summarised at **Table 10** and **Table 10**. In addition, modelling has made the following key assumptions:

- the majority of traffic would arrive/depart via Bowden Street and Hermitage Road as the two closest key signalised intersections to/from Victoria Road.
- an AM peak hour between 8am to 9am and PM peak hour between 2:30pm to 3:30pm, which corresponds with the school peak hours.

The TAIA has calculated the peak hour trip generation (**Table 12**) and includes an assessment of the performance of 11 signalised and non-signalised intersections around the site as at the time of school opening (2022) and as predicted at 10 years into operation (2032) (**Table 13**). In addition, the future TAIA scenarios include the potential cumulative traffic impacts associated with the TAFE Hub.

Table 12 | Peak hour additional school vehicle trip generation (Source: Applicant's RtS 2020)

Travel Mode	Vehicle movements per hour (vph)		
	In	Out	Total
AM Peak	236	194	430
PM Peak	174	189	363

Table 13 | Intersection performance Level of Service (LoS) (Source: Applicant's RtS 2020)

Intersection	Control	Base (2022)		Schools opening (2022)		Future base (2032)		Future with schools (2032)	
		AM	PM	AM	PM	AM	PM	AM	PM
Macpherson / Mellor Streets	Priority	A	A	A	A	A	A	A	A
Macpherson / See Streets	Priority	A	A	A	A	A	A	A	A
Macpherson / Bowden Streets	Priority	B	A	B	A	B	A	B	B
Bowden / Squire Streets	Roundabout	A	A	A	A	A	A	B	A
Constitution Road / Bowden Street	Signals	A	B	B	B	A	B	A	B
Victoria Road / Bowden Street	Signals	D	B	D	B	E	C	F	C
Victoria Road / Hermitage Road	Signals	D	D	E	D	F	F	F	F
Bowden / Stone Streets	Priority	B	A	A	A	B	A	A	A
Constitution Road / Belmore Street	Signals	B	C	B	C	B	C	B	D
Church Street / Morrison Road	Signals	A	B	B	B	A	B	B	B
Banks Street / Bay Drive / Railway Road	Roundabout	A	A	A	A	A	A	A	A

The assessment found that all intersections would operate at satisfactory levels (below or at capacity (LoS A to E)) at opening (2022) and in ten years (2032), except for the intersections of Victoria Road

and Bowden Street and Hermitage Road which would operate at unsatisfactory levels (LoS F) in 2032.

Concern was raised in the public submissions about the potential traffic impacts of the development and that Forsyth Street should be closed to stop through-traffic. Following consideration of the Applicant's RtS, TfNSW did not raise any concern regarding traffic generation or intersection performances near the site.

The Applicant has stated that there are no simple intersection upgrades that could deliver additional capacity at the Victoria Road / Bowden and Victoria Road / Hermitage Road intersections and recommends TfNSW consider revised traffic signal phasing and upgrades works to the Victoria Road corridor.

The Applicant has stated that Forsyth Street is not expected to experience any significant increase in traffic from the proposed schools given the function of the road and existing left-in/left-out restrictions at Victoria Road.

Based on the information provided within the TAIA, the Department considers that the proposal would not have a significant adverse impact on the operation of the surrounding road network and intersections when it opens (approximately 2022). The Department notes that after 10 years of operation the intersections at Victoria Road / Bowden Street and Victoria Road / Heritage Road are predicted to experience additional delays. However, this is unavoidable given that at present, Victoria Road has little spare capacity and noting those intersections would also experience delays in a scenario where the schools were not built.

In addition, the Department notes that Victoria Road is a major arterial road, and a principal route for high volumes of through-traffic. In this regard, TfNSW monitors, reviews and upgrades key road infrastructure over time to ensure the efficient movement of traffic. The Department therefore considers that improvements/future upgrades to Victoria Road are best addressed through the implementation of the Master Plan vision for the upgrade of road infrastructure and via TfNSW road corridor improvement programs.

The Department recommends the Applicant work with TfNSW to monitor post-construction road network conditions, to identify any operational issues and potential management solutions.

The Department notes the TAIA indicates that the proposal would not have an adverse traffic impact on Forsyth Street and does not consider it necessary or appropriate to require that road to be converted into a cul-de-sac.

The Department concludes that the traffic generated by the development is acceptable and, subject to the implementation of the STP and TfNSW's future review of Victoria Road as outlined in the MEEP masterplan, the traffic impacts of the proposal can be managed and potentially mitigated over time.

6.1.3 Car parking

The proposal includes the provision of 60 car parking spaces and a loading/unloading dock for a 12.5m long vehicle within a lower-ground floor level car parking area (**Figure 22**). The car parking requirements for the site under the RDCP are summarised at **Table 14**.

Table 14 | RDCP car parking rate and proposed parking (Source: Applicant's RtS 2020)

demand. However, the Department considers the proposed staff parking provision is acceptable, noting that:

- the site has excellent access to public transport including high-frequency bus services along Victoria Road and convenient walking distance to both Meadowbank and West Ryde train stations.
- the mode share targets for the site are ambitious and these targets have been determined on the basis of the detailed catchment analysis for the schools (**Figure 21**). In addition, the catchment analysis demonstrates that the majority of staff and students are within convenient walking, cycling or public transport trip from the site.
- limiting on-site car parking would influence / limit demand and would therefore encourage staff to find other modes of transport to/from the schools.
- the STP includes travel initiatives to make non-private vehicles a more attractive and accessible option for commuting to and from the school (**Section 6.1.1**)
- the Department has recommended:
 - the STP be monitored and reviewed annually to ensure the mode share improves over time and trips by car are reduced over time and thereby further reduce demand for car parking.
 - pedestrian infrastructure upgrades to encourage walking and provision of end of trip facilities to encourage cycling.

Given the above, the Department considers that the impact of providing less staff car parking than what is recommended by the RDCP can be managed and/or mitigated through the implementation of the STP, which would ensure there are no significant detrimental impacts on the locality in terms of traffic generation or the use of existing on-street car parking spaces. In addition, the Department concludes that strict compliance with the car parking requirements of the RDCP in this instance is undesirable as further expansion of the proposed car parking area would come at the cost of the reduction of key school facilities on the site (e.g. open space, classrooms and/or other supporting facilities).

6.1.4 Bus zones and pick-up/drop-off facilities

The Application proposes the following pick-up/drop-off facilities (**Figure 10** and **Figure 23**):

- a primary school bus zone (20m in length / max two buses) on Rhodes Street.
- a secondary school bus zone (60m in length / max four buses) on Macpherson Street.
- 29 on-street student pick-up/drop-off car parking spaces on the southern side of Rhodes Street.

The proposed bus zones, pick-up/drop-off facilities, new pedestrian crossing facilities and the lengthening of Bowden Street right turn bay (discussed below) would result in the:

- permanent removal of 9 existing on-street parking spaces comprising:
 - two car parking spaces and one loading space on Rhodes Street.
 - two car parking spaces on Mellor Street.
 - three car parking spaces on Macpherson Street.
 - two car parking spaces on Bowden Street.
- displacement of 42 car parking spaces during school AM and PM peaks comprising:
 - 33 on Rhodes Street.
 - nine on Macpherson Street.

Concern was raised in the public submissions about the proposed location of the Macpherson Street bus zone, the ability for adequate bus manoeuvrability within surrounding streets and that insufficient on-street spaces have been provided for student pick-up/drop-off.

TfNSW supports the offset/staggered school start and finishing times to ease congestion and recommended conditions requiring:

- approval of the installation of School Zone signs and associated markings and/or remove or relocated and existing Speed Limit Signs.
- an independent road safety audit (RSA) of the proposed pedestrian facility improvements and bus zone arrangements on Rhodes Street and Macpherson Street should be conducted, prior to issue of construction certificate.



Figure 23 | Existing (top) and proposed (bottom) on-street parking arrangement (Base source: Applicant's RtS 2020)

In response to concerns raised, the Applicant provided sight-line and swept path analysis for a 12.5m long bus on approach (via Bowden, Macpherson and Rhodes Streets) and departure (via Hermitage Road), which demonstrates that buses can manoeuvre safely on approach and departure throughout the surrounding streets subject to road infrastructure improvements, including:

- widen both Rhodes and Macpherson Streets to allow for bus access and kerbside stops.
- widen the horizontal curve between Rhodes Street and Hermitage Road to allow for the required bus swept path envelope.
- lengthen the Bowden Street right turn bay into Macpherson Street to store a bus adequately.
- delineate parking lanes along Rhodes Street to define allocation and minimise the risk of collisions.

Based on the provision of 29 on-street pick-up/drop-off spaces and an average dwell time of two minutes per vehicle, the TAIA predicts a capacity of 870vph. However, as both schools operating at full capacity is anticipated to only generate up to 485vph (385 vph less than the maximum capacity of 870 vph)), there would be ample space capacity for pick-up/drop-off during peak periods.

The TAIA included a number of broad enforcement measures to ensure the efficient function of the bus and pick-up/drop-off facilities, including:

- imposition of 'no parking' restrictions during school peak periods, between 8-9:30am and 2:30-4pm on school days.
- the offset/staggering of start and finish times for the primary and secondary schools to assist in minimising the impact on surrounding local roads during peak arrival and departure times.
- kerb-side management by schools during peak periods to ensure appropriate use of designated areas and management of student movements.
- the preparation and implementation of a STP to encourage a mode-shift away from private vehicles together with regular road safety education for school users.

The Department notes that following consideration of the RtS, TfNSW raised no concerns with the proposed bus zones and pick-up/drop-off arrangements.

The Department acknowledges that the proposal would result in the reduction in existing unrestricted on-street car parking. However, it considers this to be acceptable on-balance, as the:

- majority of the affected parking is adjacent to the TAFE Campus and light industrial developments, which have their own on-site car parking and would not reduce parking on adjoining residential streets.
- 42 on-street Rhodes and Macpherson Streets car parking spaces would remain available for short-term parking outside school peak AM and PM periods.
- employees of the light industrial lands could seek alternative modes of transport, noting the site's excellent access to public transport and mode shift ambitions for the MEEP.
- the implementation of the STP and mode shift away from private car use would ensure school staff would not need to rely on on-street car parking.

The Department supports the proposed provision of bus zones and considers the location of the primary school bus zone on Rhodes Street is appropriate given its closeness to the school entry, and the Macpherson Street bus zone is appropriate and would not interfere with substation driveways. Both bus zones include sufficient setback from the Mellor Street intersection and proposed pedestrian crossings.

The Department recommends conditions requiring the Applicant:

- prepare and implement an Operational Traffic and Access Management Plan (OTAMP) for all relevant sections of the roads utilised for buses and nominated for pick-up/drop-off spaces within the first three months of the operation of the schools.
- undertake a RSA with all appropriate road safety / traffic management measures to be implemented based on the outcomes of the RSA, in consultation with Council.
- seek TfNSW's approval for all School Zone signage, line making and Speed Sign alterations and Council's approval for alterations to existing on-street parking restrictions to facilitate the bus zones and 29 pick-up/drop-off car parking spaces.
- implement the road infrastructure upgrades required to accommodate bus movements identified in the TAIA to the satisfaction of Council.

On the above basis, the Department is satisfied that the proposal provides suitable bus zones and pick-up/drop-off facilities and on-balance would not result in adverse impact on the local road network and parking provision, subject to the implementation of the Applicant's management and mitigation measures and Department's recommended conditions.

6.1.5 Pedestrian access

Existing pedestrian infrastructure surrounding the site includes footpaths along both sides of Rhodes, Mellor, See and Bowden Streets and a footpath along the southern side of Macpherson Street and eastern side of Heritage Road. These footpaths provide pedestrian connections between the proposed schools and bus stops along Victoria Road and into the surrounding catchment (**Figure 24**). As discussed at **Section 2.2.1**, there is a publicly accessible pedestrian route through the adjoining TAFE Campus connecting the site to Meadowbank station and the MEEP Master Plan advocates for this to be upgraded in future to a formal pedestrian/cyclist route.

Based on the catchment analysis of the pedestrian trips, the TAIA predicts that the highest pedestrian volumes will be along the southern side of Macpherson Street with a total of 1,120 pedestrians expected before and after school.

To facilitate safe connections for pedestrians travelling north to/from the site, the proposal has identified two potential zebra pedestrian crossing locations. One crossing on Rhodes Street adjacent to the main primary school entrance and the other on Macpherson Street where it connects to the 'T' intersection with Rhodes and Mellor Streets (**Figure 25**).

Concerns were raised in the public submissions that safe pedestrian routes should be provided to the site, including road/footpath upgrades and a dedicated route through the TAFE Campus between the schools and Meadowbank Station. TfNSW recommended that a RSA for the proposed pedestrian crossings be conducted prior to the commencement of construction, and the final design should address the outcome(s) of the RSA.



Figure 24 | Key pedestrian routes to the site (Base source: Applicant's RtS 2020)

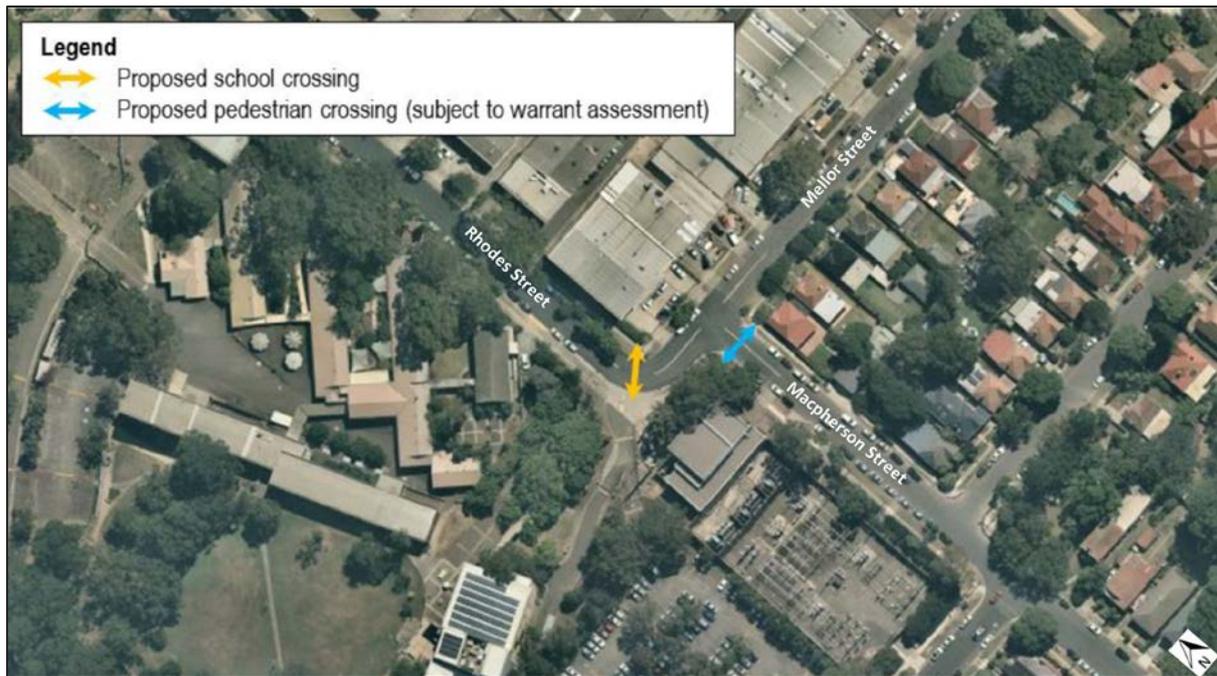


Figure 25 | Proposed school crossing locations (Base source: Applicant's RtS 2020)

The TAIA has stated that the two proposed pedestrian crossings are the best available location taking into account pedestrian desire lines and also sight lines. In addition, the sight line analysis demonstrates that adequate sight lines are available for a 40km per hour School Zone design speed. The Applicant confirmed it would consult with Council and TfNSW during the detailed design phase with respect to all elements within the road reserve.

The TAIA submitted as part of the RtS included a pedestrian LoS assessment to determine whether there was sufficient footpath capacity to accommodate the predicted pedestrian movements. To assess the impact, the TAIA has applied the:

- Fruin LoS criteria range (A to F), where the lowest impact is LoS A (8 pedestrians per minute or less) and the highest impact is LoS F (98 pedestrians per minute or more).
- worst case scenario, being all 1,120 walking trips occurring along the 1.2m wide Macpherson Street footpath within a one hour period.

The assessment found that in the worst case scenario Macpherson Street would experience a maximum of 19 pedestrians per minute (or a LoS B), which is well within satisfactory limits. The Applicant concludes that the proposal does not warrant upgrades of existing footpaths.

In addition, the TAIA also submitted consideration of the appropriateness of providing additional pedestrian crossings at points further away from the site. The TAIA noted that pedestrian volumes would be more distributed between local roads. Notwithstanding this, TAIA indicated that pedestrian volumes could meet the TfNSW trigger to require a zebra pedestrian crossing on Bowden Street (south of Squire Street). However, this would require the relocation of an existing bus stop and the removal of existing car parking spaces. The Applicant recommended this potential additional crossing be reviewed following the opening of the school.

The Department notes that students that arrive by bus along Victoria Road from the west would have to cross that road, which is a busy arterial road. However, the Department notes that two sets of

signalised traffic lights currently exist (Victoria / Hermitage Roads and Victoria Road / Bowden Street) and that this would afford adequate safety for students needed to cross the road.

The Department notes that there is no timeline for the potential upgrade of the existing publicly accessible pedestrian route through the TAFE Campus from Meadowbank station. Department representatives visited the site and walked the existing pedestrian route through the TAFE Campus. The Department is satisfied that the existing route is open, well lit, has adequate levels of passive surveillance and includes a variety of possible pathways between the schools and the station. The Department is satisfied that for the interim period until the pedestrian route is upgraded, the route provides for an acceptable and safe alternative pedestrian route than the longer route via existing footpaths (along Constitution Road and See and Macpherson Streets).

The Department acknowledges the road, car parking and pedestrian environment around the site is varied and in this context it is essential that careful consideration is given to the safe and efficient movement of pedestrians along routes to and from the site. In light of this, a whole-of-government approach has been taken to the development of the site, which has included preparation of the MEEP Master Plan and detailed involvement of Applicant, TfNSW and Council.

The Department has reviewed the application and considers that appropriate measures and additional infrastructure would be provided to ensure that pedestrian routes to the site are generally convenient, safe and efficient. However, the Department also acknowledges the mode share target for the development and the likely demands pedestrian movements may place on surrounding existing infrastructure.

The Department notes the importance of the footpaths that provide the key pedestrian connections between the proposed schools and bus stops along Victoria Road and into the surrounding catchment (**Figure 24**). In addition, the Department notes:

- there are three key intersections on routes to the schools where students would be required to cross roads, being See Street, Bowden Street and Mellor Street.
- there is no western footpath along Hermitage Road and the public domain along Macpherson Street, Bowden Street and Squire Street require upgrades.
- the Applicant's proposed pedestrian crossing at Rhodes Street would encourage students to walk along the western side of Mellor Street which would result in the mixing of students and industrial vehicles.

Noting the above, the Department considers the following additional upgrades are essential to supporting the schools, provide safe pedestrian routes to/from the site and encourage active transport (**Figure 26**):

- provision of a pedestrian crossing on See Street where it intersects with Macpherson Street.
- upgrade of the existing pedestrian refuge to a pedestrian crossing at the Bowden Street roundabout.
- relocation of the proposed Rhodes Street pedestrian crossing or other pedestrian infrastructure upgrades at the northern end of Mellor Street, near/at the intersection with Victoria Road, subject to consultation with Council and TfNSW to prevent potential conflicts due to the mixing of students and industrial vehicles on the western side of Mellor Street.

- the preparation of a public domain enhancement strategy to encourage walking and cycling to/from the school relating to the western side of Hermitage Road, southern side of Macpherson Street, Bowden Street and southern side of Squire Street.
- the Applicant to consult with TfNSW and Council and any road/infrastructure design be required to obtain approval from the relevant Traffic Committee.

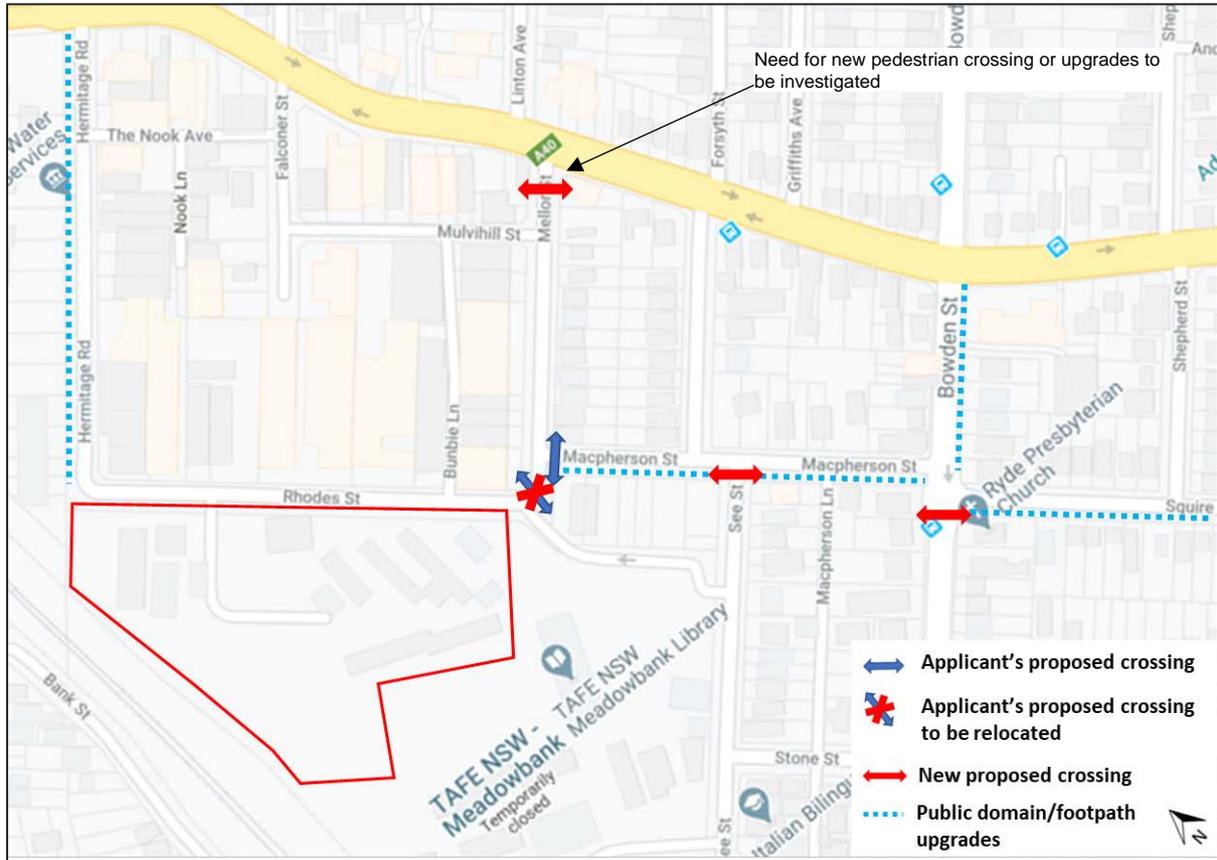


Figure 26 | Location of Department's recommended pedestrian infrastructure upgrades (Base source: Nearmap)

6.1.6 Construction traffic

The TAIA includes a CTPMP, which details construction vehicle movements, routes of travel, parking and access arrangements, pedestrian management and measures to address potential impacts. The proposal is expected to generate a maximum of 100 truck movements per day (11 trucks per hour) and the TAIA confirms that as these vehicle movements are less than the operational vehicle movements assessed in the TAIA (see **Section 6.1.2**), they would not have an adverse impact on the surrounding road network or intersection performance.

Construction vehicles are predicted to come from the north and west of the site and vehicle routes would be selected to minimise the use of local roads and use arterial roads where possible. The primary construction vehicle entry point is proposed at Rhodes Street (Mellor Street end) with two secondary access points at Rhodes Street (Hermitage Road end). 12.5m heavy rigid vehicles and 19m articulated vehicles are proposed to service the construction site with all loading/unloading to occur within the site. The CTPMP predicts the peak number of workers during the construction works would be between 400-500 workers per day and a total of 200 on-site construction car parking spaces would be made available.

The construction works are not proposed to be staged and the TAIA predicts construction works would take approximately 23 months (assuming commencement in September 2020).

The Department accepts the conclusions of the Applicant’s assessment of construction traffic and notes that local traffic network and Victoria Road would be able to accommodate the heavy vehicle movements expected to be generated during construction works. The Department notes that the on-site provision of parking for construction workers, and the closeness of public transport options, is likely to reduce pressure on available on-street parking spaces during the construction phase.

Based on the above assessment, the Department has recommended a condition requiring the implementation of a final CTPMP to ensure the following are addressed: truck access routes; measures to encourage alternate mode of transport for construction workers; and establishment of work zones.

The Department has reviewed the information provided in the EIS and RtS and considers that subject to the implementation of the recommended conditions, construction traffic impacts can be appropriately managed.

6.2 Noise impact

Noise associated with the construction and operation of the schools has the potential to impact on the amenity of adjoining properties. In response to this, the application includes an Acoustic Noise Impact Assessment (ANIA), which assessed the potential construction noise / vibration impacts and operational noise on the nearest sensitive receivers.

Attended and unattended noise monitoring was undertaken to quantify the existing acoustic environment at the site and nearby sensitive receivers. The ANIA identifies the nearest sensitive receivers as the residential properties on Bank Street (to the west of the railway corridor), Macpherson Street and See Street. The ANIA also notes educational receivers are located within the TAFE Campus to the south and industrial receivers are located on the employment lands to the north (Figure 27).



Figure 27 | Nearest receivers identified in the Noise Report (Base source: Applicant’s EIS October 2019)

The predominant noise sources impacting the site is rail noise from the adjacent rail corridor and noise from traffic movements along Rhodes Street and surrounding roads. Noise is also generated from the light industrial development to the north, however, this is to a lesser degree than the predominant noise sources.

The closest residential receiver is located approximately 90m east and at an oblique angle to the closest part of the proposed building (**Figure 4**).

The Department has considered construction and operational noise impacts in the following sections.

6.2.1 Operational noise

The National Policy for Industry 2017 (NPI) provides a framework and criteria for assessment and control of operational noise from major development proposals. The ANIA considers the operational noise arising from the use of the development would be associated with noise from the outdoor play space, internal classrooms, vehicular noise, traffic generation, mechanical plant and public address (PA) system / school bells.

The ANIA confirms that:

- the operational noise associated with the use of playgrounds would result in exceedances of the emissions goal for the Banks Street residential properties between 1-6dB(A) (**Table 15**).
- existing traffic noise at Macpherson and See Street receivers is 61dB(A) and the predicted traffic generation would result in a minor cumulative increase of 2dB(A) (to 63dB(A)).
- internal classroom use and operation of mechanical plant would comply with the NPI's operational noise requirement of 'background +5dB(A)' at nearby sensitive receivers.

Table 15 | Predicted noise from playgrounds (Source: ANIA)

Activity	Receiver	Background + 10dB(A), emission goal	Predicted Noise (dB(A))	Complies
General playing Activities (Recess & Lunch)	Receiver 1 – Bank St properties generally	52	51	Yes
	Receiver 1 – 54 Bank Street	52	56	+4dB(A)
	Receiver 2 & 3 – Macpherson & See Streets	52	50	Yes
Competitive Activities (Active Sports)	Receiver 1 – Bank Street residences generally	52	53	+1dB(A)
	Receiver 1 – 54 Bank Street	52	58	+6dB(A)
	Receiver 2 & 3 – Macpherson & See Streets	52	52	Yes

To address operational noise, the ANIA recommends the following mitigation measures:

- the detailed design of School PA / bell system is carried out at construction certificate stage. This should include consideration of speaker location, directionality and noise limiter.
- buses waiting in local roads should turn engines off.

- detailed acoustic review of all external mechanical plant items should be undertaken following equipment selection and duct layout design.
- no use of outdoor courts for community competitive sports or use of those facilities at night time.
- no use of on-site car parking as public parking.
- for community use during the evening, close windows or use rooms in southern wing of the building where community use gives rise to greater noise than usual (e.g. music, singing or powered music).

Concerns were raised in a public submission from a resident on Forsyth Street about the potential operational noise impact. The EPA stated traffic noise impacts comply with the NSW Road Noise Policy (NSW RNP) and recommended conditions requiring the implementation of the ANIA's operational noise mitigation measures and conditions limiting the impact of mechanical plant and PA system / school bells.

The Department considers that the school would generate some level of noise from its operation, and notes that the use of the playgrounds would exceed the noise emission goal at Bank Street properties by up to 6dB(A). However, the Department considers that the noise generate from outdoor activities is acceptable, noting that the:

- noise would not be excessive or sustained over prolonged periods during the day.
- application does not propose OOSH community use of the outdoor facilities.
- Bank Street properties are already noise affected due to their location adjacent to the railway corridor and those properties are also located approximately 75m away from the playground spaces (on the opposite side of the railway corridor).

The Department considers the noise impacts from the PA system / bell, internal classrooms and mechanical plant would be reasonable as noise levels would not exceed the background + 5dB(A) levels. The Department considers the noise impact of additional traffic to be minor and notes the EPA confirms traffic noise complies with the NSW RNP.

The Department considers the ANIA includes satisfactory measures to reduce adverse noise impacts on nearby sensitive receivers. The Department recommends conditions requiring that the:

- ANIA and EPA noise management and mitigation measures be implemented and adhered to.
- Out of Hours Event Management Plan (OOHEMP) be prepared for the events involving over 100 patrons, to ensure the potential noise impact of the community use of indoor school facilities is minimised as much as possible.

The Department concludes, subject to the above, the proposal would not have an adverse operational noise impact on nearby sensitive receivers.

6.2.2 Construction noise

The Interim Construction Noise Guideline 2009 (ICNG) includes noise management level (NML) guidelines and standard hours of construction which apply to NSW. The ICNG confirms that as local Councils are the regulatory authority for noise from construction in their area, they are able to establish their own noise policy. In this instance, Council has its own recommended hours of construction for sites (contained within the RDCP). The ICNG and Council's recommended hours of construction are summarised at (Table 16).

The ICNG specifies the NML above existing rating background level (RBL) at sensitive receivers during construction as:

- within ICNG standard hours: RBL +10dB(A).
- outside ICNG standard hours: RBL + 5dB(A).

The ANIA confirms that monitoring was undertaken to determine the existing relevant RBLs. The RBLs and NMLs for surrounding sensitive receivers are summarised at **Table 17**. The ANIA's assessment recognised the potential cumulative construction noise impacts associated with the proposed TAFE Hub.

The ICNG also confirms impacts above 75dB(A) represents a point where sensitive receivers are likely to be 'highly noise affected'. The NML for industrial establishments is 75dB(A) and educational establishments (i.e. the TAFE Campus classrooms) is 45dB(A).

The proposal seeks approval for hours of construction work in accordance with Council's recommended hours, which exceed the ICNG standard hours (**Table 16**).

Table 16 | Comparison between the Council and ICNG hours of construction

Day	ICNG Hours of Construction	Council's Hours of construction	Difference +/-
Monday to Friday	7am to 6pm	7am to 7pm	+1hr (pm)
Saturday	8am to 1pm	8am to 4pm	+3hr (pm)
Sunday and Public Holidays	No work	No work	No change

The ANIA initially did not include an assessment of predicted noise impacts or noise exceedances (beyond the relevant NML) at the nearby sensitive receivers, TAFE Campus or light industrial properties. However, in response to the Department's request for further information the RRAI confirmed the predicted impacts for 'typical construction' works (**Table 17**).

Table 17 | RBL and NML at sensitive (residential) receivers (Source: ANIA and the RRAI)

Residential Receiver	RBL (dBA)	NML (dBA)	Typical Construction Impact (dBA)
Receiver 1 – Bank Street	42	52	55
Receiver 2 – Macpherson Street	52	62	55
Receiver 3 – See Street	50	60	50

The ANIA confirms that:

- approximately 581 truck movements are anticipated during the ground remediation phase.
- exceedance of the NML noise goal would be unavoidable at times given the proximity to the nearby residential properties.
- acoustic treatments such as noise screens around work areas would provide no material benefit, as nearby development is multi-storey and would overlook any screening.

- the TAFE Meadowbank campus would be operating during the period of construction activities.

The ANIA states that precise identification of activities that may exceed either the NML or 75dB(A) noise limit would be undertaken once construction methods are known. Noting the above, the ANIA recommends the preparation of a Construction Noise and Vibration Management Plan (CVNMP) including the following construction noise mitigation measures to protect the amenity of nearby receivers:

- notification of the noisy works (excavation, concrete pours) to nearby residential properties.
- loading/unloading of waste material away from nearby residential properties.
- location of concrete pumps away nearby residential properties.
- if practicable, use of electric cranes as opposed to diesel cranes.
- trucks to turn off engines if queuing outside the site or if they arrive at the site prior to 7am.

The EPA initially recommended that the proposed hours of construction should not extend beyond the ICNG standard hours of construction. The EPA recommended the ANIA mitigation measures form a condition of consent. No objections were raised in the public submissions about potential construction impacts.

In response to the EPA's concern about hours of construction, the Applicant stated it would accept a condition requiring construction work occurring beyond the ICNG hours (i.e. between 6pm-7pm weekdays and 1pm-4pm on Saturdays) to be subject to the ICNG noise trigger level of 'background +5dB(A)'. The EPA considered the Applicant's response and confirmed it supports the Applicant's revised approach (above).

The Department has considered the EPA's comments and the information provided by the Applicant including the ANIA. The Department notes that the closest residential receiver is located approximately 90m away from the site at an oblique angle to the proposed building and many of the other affected residential properties are located on the opposite side of the railway corridor. Notwithstanding, the Department acknowledges that the development is located in an established urban environment and would result in construction noise impacts, and considers that all reasonable measures should be implemented to minimise these impacts.

The Department considers that the Applicant's recommendations for the preparation of a CVNMP to set out proposed mitigation measures and for works would assist in mitigating the impacts of the proposed works.

The Department agrees with the EPA that the proposed extended hours of construction (i.e. Council's recommended hours) are acceptable, subject to noise emissions outside the ICNG standard being limited and the implementation of the ANIA recommended mitigation measures. The Department has recommended conditions accordingly.

To further mitigate impacts, the Department recommends the following additional measures to minimise and manage impacts:

- a requirement to comply with the ICNG NMLs where feasible and reasonable.
- implementation of respite periods for excavation and construction works where works generate particularly annoying or intrusive noise.

- all construction vehicles only to arrive to the work site within the permitted hours of construction.
- all construction activities comply with best practice vibration management criteria to ensure no adverse impact to existing buildings or structures.
- any noise generated during construction should not be 'offensive noise' within the meaning of the *Protection of the Environment Operations Act 1997*.

The Department acknowledges the proposed remediation and construction works may have additional impacts in terms of traffic, waste, sediment, erosion, and air and water quality. To address these potential impacts, the Department has recommended the preparation of a Construction Environmental Management Plan, together with other environmental management and mitigation measures.

6.3 Tree removal and landscaping

6.3.1 Biodiversity and tree strategy

The EIS included an Arboricultural Impact Assessment (AIA), which surveyed the 275 existing trees on the site and identified that 126 of the 275 trees would need to be removed to facilitate the proposed development. Of the 126 trees for removal, 22 have been identified as having high retention value and 104 as having very low to moderate value retention. A total of 149 trees would be retained.

The AIA indicates that one of the high retention value trees to be removed (Sydney Blue Gum) is a remnant of the original forest. However, this is an isolated specimen, with the other high retention value trees (other than having good health and making a positive amenity contribution) do not have specific ecological or heritage significance. The AIA concludes that there is no feasible option to retain the trees given their position within the site and the extent of the development proposed. The AIA recommended 22 new trees, capable of reaching at least 10m, be planted to compensate for those removed.

The EIS also included a BDAR, which concludes the removal of identified PCT should be offset by nine ecosystem credits (**Figure 28**).

The Council's Urban Forest Technical Manual 2012 (UFTM) suggests a site tree canopy coverage target of 40%. The NSW Government's draft Urban Tree Canopy Guide (draft UTCG) suggests a tree coverage target of 25% in urban residential areas (medium to high density and light commercial).

Concerns were raised in a public submission about biodiversity impacts. EESG stated it was satisfied with the detail provided within the BDAR and did not raise any objection to the proposed tree removal or impact on biodiversity.

The Applicant's RRAI included a tree canopy assessment that identifies that the site currently has a tree canopy coverage of 14,416m² (44%) and the proposed tree removal would reduce the on-site tree canopy cover by 5,362m² (16%). However, this would be partly offset by the proposed planting of 22 new trees, which would result in an overall tree canopy coverage of 10,112m² (31%) when the replacement trees are mature.

The Department notes the proposal includes mitigation measures to protect biodiversity, retain and replace trees, which are summarised below:

- the BDAR recommends the direct impact of the removal of 0.59ha of PCT 1237 be offset by nine ecosystem credits.
- the BDAR indicates possible options to address the credit include a Biodiversity Stewardship Agreement (offset) on land owned by Applicant, purchasing matching credits on the open market, making a payment to the Biodiversity Conservation Trust or funding biodiversity actions for individual species or communities.
- the AIA confirms 149 trees, which are located at the western and south-eastern parts of the site and along Rhodes Street frontage, would be retained.
- the BDAR confirms the trees to be retained include PCTs of the highest ecological value (**Figure 28**).
- the proposal includes the provision of an additional 22 replacement trees of local provenance within the site.

The Department has taken into consideration the submissions by the public and EESG and the information contained within the Applicant’s EIS, RtS, RRAI, including the BDAR and AIA. The Department notes that due to the constrained nature of the available developable area within the site and the need to increase overall student population, tree removal to facilitate the built form and outdoor sports and play spaces is unavoidable.

The Department notes the proposed site tree coverage (31%) would be less than the Council’s 40% target, but more than the draft UTCG target (25%).

The Department supports the Applicant’s mitigation measures, including biodiversity protection, tree retention and replacement, and recommends conditions to secure these commitments accordingly. The Department has also recommended conditions requiring the protection of all trees proposed to be retained on and adjoining the site, together with other management and mitigation measures contained within the AIA. The Department’s recommended conditions would ensure that there is no further tree loss as a result of construction works to facilitate the proposal.

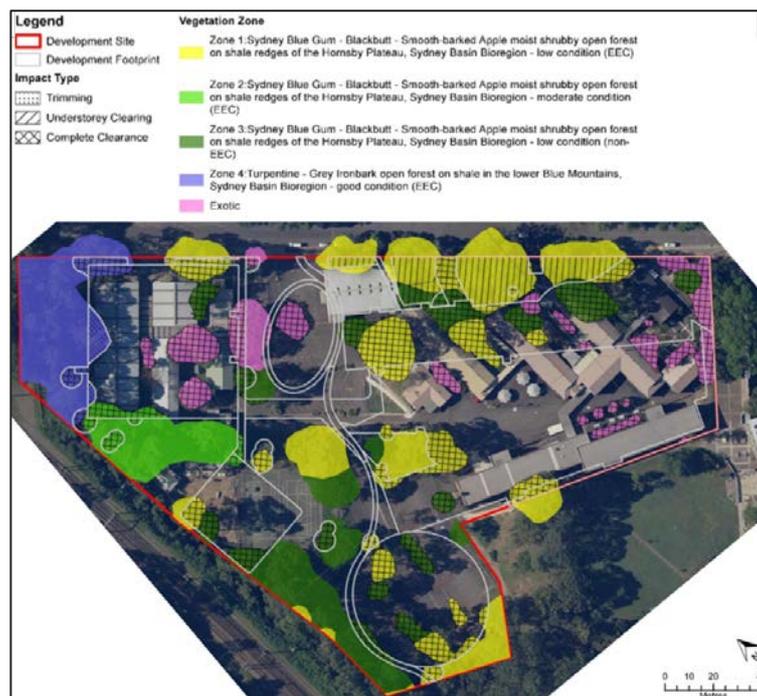


Figure 28 | Different vegetation clearance types identified by the BDAR (Base source: Applicant’s EIS October 2019)

- general open grassed and soft-fall play spaces.
- vegetable garden and chicken pen.
- amphitheatre seating and circulation spaces.

Primary and secondary school outdoor sports and play spaces have been separated as summarised at **Section 2.2**.

Concern was raised in the public submissions that insufficient outdoor play space has been provided and that landscaped areas should be irrigated. The Government Architect NSW (GANSW) stated that due to the close and careful integration of landscape and architecture on this project, a condition should be imposed relating to the concurrent delivery of landscaping with the buildings and on-going maintenance to ensure planting and trees are established.

The Applicant has stated that the landscaping and outdoor spaces achieve a high standard of design. In addition, the proposal complies with the EFSG and would achieve the minimum required 10m² outdoor play space per student. The Department notes that the proposal provides for a range of outdoor (active, passive, covered and uncovered) sports and play space and that the Applicant confirms the proposal meets the EFSG minimum outdoor play space requirement.

The Department considers the new building is appropriately integrated into its landscaped setting and would provide for a seamless transition between indoors and outdoors. The proposal includes high quality outdoor learning areas, sports and play spaces that are flexible and customisable, safe and secure, and would maximise outdoor learning opportunities.

The Department agrees with GANSW that the building and landscaping should be provided concurrently, and ongoing maintenance be provided and recommends a condition requiring the Applicant to prepare an Operational Landscape Management Plan to manage proposed landscaping.

6.4 Built form

6.4.1 Building height

The proposed building would have a maximum height of approximately seven storeys (RL 39.85m). The site is not subject to a building height development standard under the RLEP (**Figure 30**).

Due to the fall of the land from the eastern site boundary down to the central depression on the site, the building would appear as a five storey building at its eastern elevation and would graduate to an approximately seven storey building (including double height undercroft) at its western end (**Figure 31**).

As summarised at **Section 1.2.1**, the site is currently vacant (the previously contained buildings were between one and two storeys) and the surrounding light industrial and residential areas generally comprise one and two storey buildings. The adjoining TAFE Campus contains buildings that range in height from one to six storeys.

The Department notes that no objections to the proposed building height were raised by the public or GANSW. In addition, the proposal underwent several reviews by the State Design Review Panel (SDRP), convened by GANSW, where it confirmed it supported the direction of the design development of the proposal.

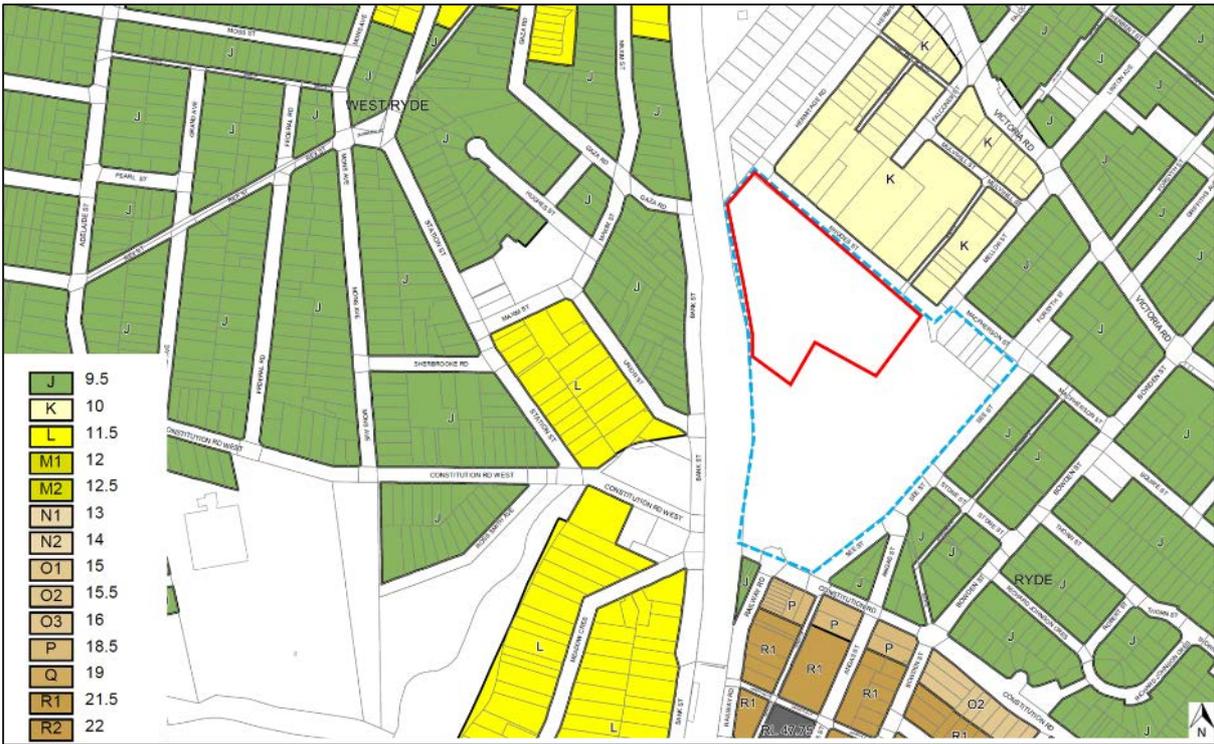


Figure 30 | RLEP Height of Buildings Map. Site outlined in red, TAFE Campus outlined in blue (Base source: RLEP)

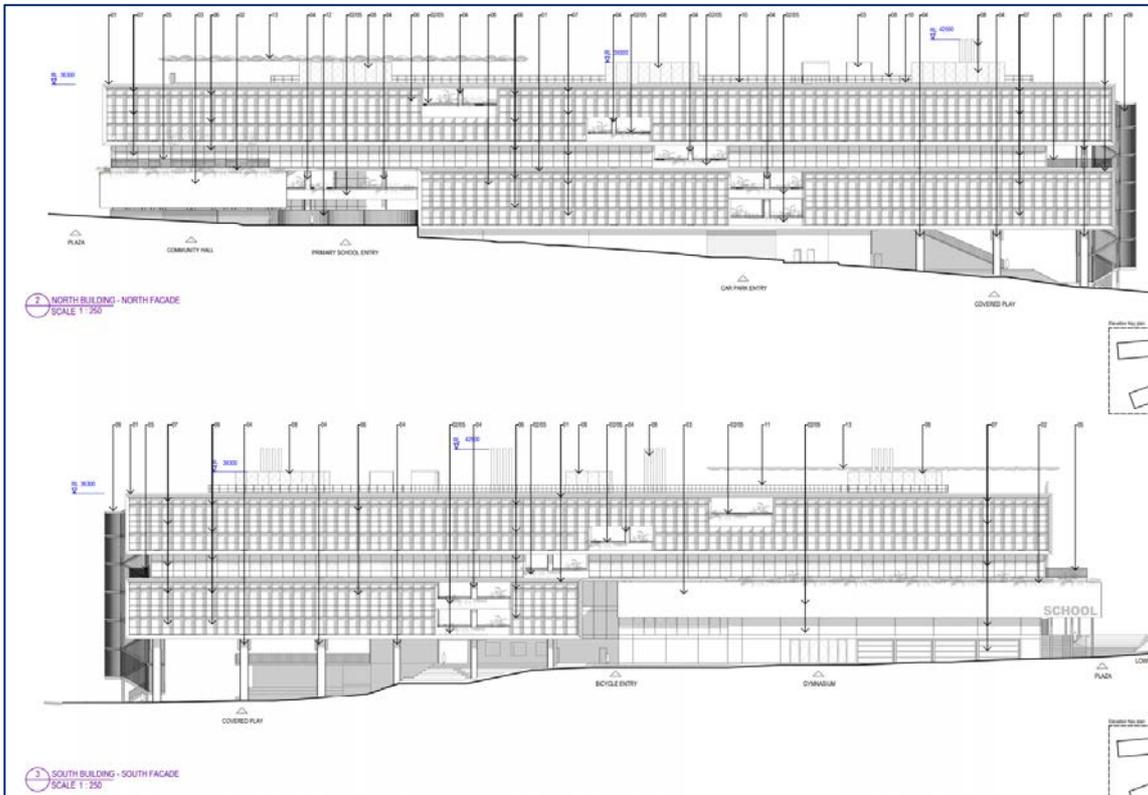


Figure 31 | Northern elevation of the north wing, fronting Rhodes Street (top), and southern elevation of the south wing, fronting the TAFE Green (bottom) (Source: Applicant's RtS 2020)

The Department has considered the proposed building height against the objectives outlined in clause 4.3 of the RLEP and is satisfied that the proposed building height would not have a detrimental impact as the:

- building is similar in height to buildings within the TAFE Campus and therefore fits within the evolving regeneration of the education component of the broader MEEP.
- developable area on the site is highly constrained because of site topography, the majority of the site being subject to flooding and the railway embankment and vibration buffer. In this context, the Department considers the proposal has balanced the reasonable developable potential of the site and the need to cater for the increasing demand for student enrolments in the area.
- tallest component of the development is located furthest way from existing residential properties and as discussed at **Section 6.5**, the proposal would not have any adverse amenity impacts.
- building roofscape includes plant, plant enclosures, roof access stairs, photovoltaic panels and safety railings up to a maximum height of RL 39.85m. Although these elements would extend above the roof parapet level RL 36.3m, they are located away from the southern and northernmost elevations of the building and would not be readily visible from surrounding streets.

The Department concludes that the proposed building height is appropriate within the site context and would not have a detrimental visual impact on the surrounding area. The Department therefore supports the height of the building.

6.4.2 Building design

The proposed building has a 'V' shaped layout comprising a northern and a southern wing that are connected at lower levels by a library and car parking / services area. Above the library and services is a centralised stepped landscape terrace, which cascades down to outdoor open, sport and play spaces. Within the building, the schools and associated facilities have been stacked (and separated) as summarised at **Section 2.2**.

The outward facing facades of the building are highly articulated including window bays punctuated by large double height openings and window awnings. The eastern elevation of the building has a dynamic and colourful rectilinear appearance that announces the main entrances to the site and establishes an appropriate arrival point for the development (**Figure 13**).

The building has been designed to connect with the surrounding natural environment by opening out onto landscaped areas and play spaces. It has maximised natural ventilation and solar access to classrooms and school facilities and integrated landscaping. These measures seek to achieve a sustainable built form while maximising occupant amenity.

Proposed materials include concrete, metal cladding, metal screens, clear and coloured glazing. The material colour palette combines both natural colours derived from the surrounding landscape together, with bolder colours to instil a greater sense of personality to the building.

The Department notes that no objections were received in regard to the proposed building design from the public or GANSW. In addition, GANSW has confirmed the proposal illustrates the resolution of GANSW's various comments raised during the SDRP design review sessions for this project.

The Department has considered the design of the building and, noting the above design approach, considers the proposal would make a positive contribution to the Rhodes Street streetscape and to views towards the site from surrounding streets. The Department also considers the building setbacks provided to Rhodes Street (between approximately 10m and 20m) ensure that the proposal would not

have an overbearing impact on the street frontage. Further, the proposed materials, colour palette and design of the proposal are considered to be contextually appropriate.

The Department concludes that the proposed development has been designed to respond appropriately and positively to the site and its context, while balancing the need to provide for the demand for additional improved educational facilities.

6.5 Other issues

The Department's consideration of other issues is provided at **Table 18**.

Table 18 | Department's consideration of other issues

Issue	Consideration	Recommended condition(s)
Community use	<ul style="list-style-type: none"> • The Applicant proposes that the communal hall and multi-purpose gymnasium may be used by the community outside normal school operating hours. It is anticipated the facilities would be used between 7am to 10pm and as follows: <ul style="list-style-type: none"> ○ the communal hall may be available for hire by local sporting and community groups and the Australian Electoral Commission (capacity 300 persons). It is anticipated the space would be used two nights during the week and at least one weekend each month. ○ the gymnasium may be used for after hours competitions, which could run for 30 weeks per year (excluding exam periods). It is anticipated the space would be used an average of two nights per week. • Concern was raised in a public submission that the proposal should include more than 200 OOSH care places. No objections were received from the public in relation to the community use of the communal hall or gymnasium. • The Applicant stated that the availability of these amenities and services on the site would reduce the demand on public amenities outside the school site. The Applicant has stated that the school has been designed in accordance with EFSG, and the number of OOSH care places is appropriate. • The Department notes the Applicant's response that the proposal has been designed in accordance with the EFSG and considers that the schools could seek to increase the number of OOSH care places in the future, should there be greater demand than currently anticipated. • The Department notes that community use is limited to indoor facilities only and it is therefore unlikely the proposed community use would give rise to any significant noise impacts. The Department has recommended operational noise conditions as discussed at Section 6.2. • To ensure the impact of the community use of school facilities on amenity and/or traffic is minimised as much as possible, the Department recommends the Applicant prepare an Out of Hours Event Management Plan (OOHEMP) for school and 	<p>The Department has recommended a condition requiring the preparation of a OOHEMP.</p>

Issue	Consideration	Recommended condition(s)
	<p>community use be prepared for the events involving over 100 patrons.</p>	
<p>Flooding</p>	<ul style="list-style-type: none"> • The site is affected by significant overland flows including a 1 in 100 year (+8.2m AHD) and PMF (+16.16m AHD) flood level events. The central part of the site, along the line of the natural depression, is identified as being at most risk (Figure 32).  <p>Figure 32 1 in 100 year flood event (left) and PMF (right) (Source: Applicant's EIS October 2019)</p> <ul style="list-style-type: none"> • The EIS includes a Civil Report, which considers existing and proposed flood and drainage management, it indicates: <ul style="list-style-type: none"> ○ sensitive uses within the building (classrooms, offices, and libraries) would have a ground floor level of 16.3m AHD, which is above the PMF level. ○ parts of the development below the PMF level include car parking, plant and storage, open, outdoor play spaces. ○ the project design is not anticipated to increase flooding impacts (or levels) on private property external to the site. • In addition to providing a finish floor level of 16.3m AHD, the Applicant's RtS identifies the following recommendations to ensure that there are no detrimental flood related impacts and that the proposed development can withstand flood related impacts: <ul style="list-style-type: none"> ○ provision of car parking entry at 8.33m AHD, above the 1 in 100 year floor event level. ○ the site drainage system for the new development to be designed in accordance with requirement of the RDCP – Stormwater and Floodplain Management Technical Manual. ○ flood risk management procedures, including closing open space and sports fields during overland flow events and evacuation to classrooms in severe overland flow events. ○ preparation of a Flood Risk and Emergency Response Plan. • The Applicant's RRAI provides additional consideration of flooding and confirms: <ul style="list-style-type: none"> ○ The PMF, by definition, is not likely. The PMF is an extreme event with an annual probability of between 1 in 1,000,000 and 1 in 100,000,000 for the catchment area. ○ The carpark has been designed such that any water 	<p>The Department has recommended conditions requiring compliance with the Civil Report management and mitigation measures and implementation of a Flood Risk and Emergency Response Plan.</p>

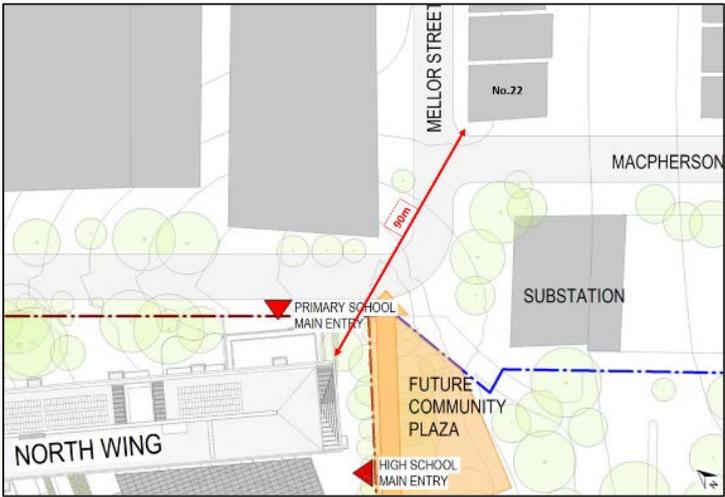
Issue	Consideration	Recommended condition(s)
	<p>entering the basement can flow out of the basement as flood waters recede. Unlike a basement, water will not pond in the car park following and extreme flood event</p> <ul style="list-style-type: none"> ○ Should an extreme flood event occur, it is expected that the site would be evacuated (and/or school cancelled), which minimises the risk to site occupants. ● EESG confirmed it was satisfied the Applicant has provided sufficient details on flooding impacts and management. No concerns were raised in public submissions about flooding or drainage impacts. ● The Department notes that the topography of the site and location of the proposed building ensure the natural overland flows is carried to the south, rather than back towards the building. In addition, an appropriate freeboard (16.3m AHD) has been provided for the ground floor level of the building with all sensitive facilities located above this level. ● The Department notes the car park entry is 8.33m AHD, which is 7.83m below the PMF level (16.16m AHD). ● The Department supports the implementation of the Civil Report flooding management and mitigation measures and the preparation of a FRERP. ● The Department considers these measures will ensure that flood impacts will not pose a risk to the safety of the occupants of the schools. The Department considers the impact of rare flood events on the car park can be managed and mitigated subject to the FRERP. 	
Stormwater	<ul style="list-style-type: none"> ● Stormwater runoff from roof and hardscape areas would be collected by building hydraulic systems and conveyed into local stormwater infrastructure. The proposal also includes a system of pits and pipes to collect runoff from surface level. ● Prior to any stormwater being discharged, the flows would pass through a silt arrestor and gross pollutant trap systems. ● The Department considers that the proposed stormwater provisions would be sufficient for the proposed development. 	The Department has recommended conditions requiring the development comply with the stormwater design and be compliance with relevant Australian Standards and industry best practice guidelines.
Site contamination	<ul style="list-style-type: none"> ● As set out in Section 2.2.3, Council granted development consent (LDA2019/0436) on 13 May 2020 for site preparation and remediation works on the site. ● Notwithstanding Council's determination and the Applicant's withdrawal of remediation works from the SSD, the Department considered contamination identified on the site and proposed remediation, noting: <ul style="list-style-type: none"> ○ a Stage 1 Preliminary Site Investigation (PSI), Stage 2 Detailed Site Investigation (DSI) including supplementary Contamination Assessment, Asbestos Assessments Report (AAR) and a Remediation Action Plan were included with the EIS. 	The Department has recommended a condition that a Site Audit Report be issued prior to operation to verify the suitability of the site.

Issue	Consideration	Recommended condition(s)
	<ul style="list-style-type: none"> ○ the PSI indicates that since 1890, the site has been subject to uncontrolled demolition and filling, chemical storage, manufacturing of railway rolling-stock and agricultural items and more recently workshop uses and uses associated with the TAFE operation. ○ the PSI and DSI included a review of historical data, aerial imagery, previous site investigations, site walkover and undertook soil sampling investigations on soils and bedrock. The DSI included a review of available background information, field investigation of soil samples and geotechnical boreholes along with laboratory testing and data analysis and reporting. ○ the contamination assessments indicate that soil contaminants are present on-site include lead, benzo(a)pyrene, fibrous asbestos and asbestos fines. ○ to address the potential risks associated with contaminants, the RAP recommends a remediation strategy (Figure 17) consisting of: <ul style="list-style-type: none"> ▪ excavation and offsite disposal of most areas of lead, benzo(a)pyrene and all asbestos impacted soils. ▪ areas of lead impacted soil be capped with 500mm of clean fill, planted with native grasses and fenced off / made inaccessible. ▪ areas of benzo(a)pyrene be contained onsite by being sealed over with a decking structure. ▪ prepare and implement unexpected finds protocol. ▪ materials survey and a waste classification. ▪ monitoring and validation of remedial works by a suitably experienced environmental consultant. ● The EPA considered the EIS and required further consideration be given to demonstrating the site can be made suitable for its intended use. The EPA recommended conditions requiring: <ul style="list-style-type: none"> ○ the Applicant engage an EPA accredited Site Auditor throughout the duration of works, to verify the RAP is appropriate and to confirm satisfactory completion of each stage of work. ○ the Applicant adhere to the remediation and management measures accepted by the Site Auditor. ○ the Applicant is to ensure the proposal does not result in a change in risk to any pre-existing site contamination. ○ SEPP 55 processes be followed, the EPA is to be notified where contamination meets relevant triggers and certified consultants are engaged. 	

Issue	Consideration	Recommended condition(s)
	<ul style="list-style-type: none"> • In response to the EPA's comments, the Applicant agreed to engage a Site Auditor and the EPA's recommended conditions. • The Department is satisfied that Council's approval addresses site preparation and remediation works. The Department has recommended a condition requiring a Site Audit Report be issued prior to operation to verify the suitability of the site. 	
Wind impact	<ul style="list-style-type: none"> • The application includes a Wind Comfort and Safety Report (WCSR). The WCSR study includes wind tunnel tests of the proposal to determine the existing and potential wind impact on the surrounding pedestrian and school environments. • The WCSR concludes that the wind conditions to the trafficable areas within and around the site would be comfortable for their intended use, subject to the retention of the existing trees around the building as proposed by the landscaping strategy (Section 6.3). • To further improve the wind environment, the WCSR recommends additional mitigation measures of inclusion of an: <ul style="list-style-type: none"> ○ awning at the south-eastern corner of the building with a width of at least 2-3m. ○ 1.2m high planter box, with densely foliating planting located along the perimeter of Level 1 southern terraces. • The Applicant has confirmed that the WCSR mitigation measures would be implemented in the final design of the development. • The Department considers that wind impacts have been appropriately considered and can be managed and/or mitigated in accordance with the WCSR recommendations. 	The Department has recommended a condition requiring the WCSR mitigation measures be implemented.
Archaeology	<ul style="list-style-type: none"> • The application includes an ACHAR and a Historical Archaeological Assessment Report (HAAR). These reports consider the site's potential to contain archaeological remains. • The ACHAR and HAAR conclude that due to the amount of site disturbance since 1930, the site has a low potential for intact in-situ Aboriginal and non-Aboriginal archaeological deposits. The ACHAR includes recommendations to manage any unexpected archaeological finds and provides a framework for monitoring activities. • EESG has recommended the ACHAR Aboriginal archaeology management recommendations be included as conditions of consent. Heritage NSW did not object to the proposal or recommend conditions of consent. • Although both reports indicate the potential for archaeological finds is limited, the Department considers it appropriate to recommend conditions requiring unexpected archaeological finds and the ACHAR framework for monitoring. 	The Department has recommended conditions requiring an archaeological unexpected finds protocol and monitoring.

Issue	Consideration	Recommended condition(s)
Rail infrastructure	<ul style="list-style-type: none"> The site adjoins the T9 Northern Railway Line railway corridor. TfNSW recommended the Applicant consult with Sydney Trains, and provided conditions to protect the operation and infrastructure of the railway corridor. The Department considers the conditions are relevant and necessary and has recommended them accordingly. 	The Department has recommended conditions to ensure the railway corridor is not adversely affected during the schools construction and operational phases.
Bicycle and end of trip facilities	<ul style="list-style-type: none"> The proposal includes 273 bicycle parking spaces, two showers and change rooms within the basement for staff. Students would be able to use the gym shower and changeroom facilities for end-of-trip purposes. The Department supports the provision of bicycle parking spaces, noting their provision forms part of the sustainable transport measures facilitating the mode share shift away from private car use. The Department notes the gymnasium has eight showers for students, which is considered sufficient. The architectural drawings indicate only a small area (7m²) for staff end of trip facilities, which may not be sufficient for the provision of two showers and changing area. The Department therefore recommends a condition requiring the provision of sufficient staff end of trip facilities. 	The Department has recommended a condition requiring the appropriate provision of staff end of trip facilities.
Heritage	<ul style="list-style-type: none"> The site adjoins the southern tip of the Sydney Water site (Figure 33) listed on the SHR. The site is also approximately 150m west of a group of heritage items on the RLEP local list. The application includes an Heritage Impact Statement (HIS), which concludes the proposal would have no impact on the setting, views or vistas surrounding heritage items. Heritage NSW has confirmed that the proposal would not have an adverse impact on the heritage significance of the Sydney Water site. The Department notes the distance of the proposal from the locally listed items and that there are numerous existing buildings and trees between them. Consequently, the Department concludes the proposal is unlikely to be visible within the setting of those heritage items. The Department notes that the proposed new building is located at the opposite end of the site to the Sydney Water site and that existing mature trees where the two sites meet would be retained and protected. In addition, the most significant heritage buildings on the Sydney Water site are located at the north-western end of that site and away from the application site. The Department concludes the proposal would not have an adverse impact on the heritage significance of the SHR listed 	No additional conditions or amendments are necessary.

Issue	Consideration	Recommended condition(s)
	<p>Sydney Water site or the group of heritage items on the RLEP local list.</p>  <p>Figure 33 Heritage significance of buildings/landscape on the Sydney Water site (Base source: MEEP Master Plan)</p>	
<p>Development contributions</p>	<ul style="list-style-type: none"> The Applicant does not propose to pay development contributions stating that contributions are not applicable to works undertaken on behalf of the Crown. The City of Ryde Section 94 Development Contributions Plan 2007 (Contributions Plan) applies to development within the City of Ryde LGA. The purpose of the Contributions Plan is to raise funds for public facilities and infrastructure. The Contributions Plan does not specifically exclude Crown Developments or educational establishments from the payment of section 94A contributions. The Applicant seeks an exemption from the Contributions Plan as levying a development contribution would divert public funds away from the provision of the new schools and that is contrary to the public interest. The Department notes that the provision of two new schools is a significant public benefit. In addition, the provision of schools is a type of infrastructure that Council typically would seek a levy for. Noting the purpose of the Contributions Plan, the Department considers that the proposed development does not require the payment of developer contributions under section 7.12 of the EP&A Act. 	<p>No additional conditions or amendments are necessary.</p>

Issue	Consideration	Recommended condition(s)
Residential amenity	<ul style="list-style-type: none"> The closest residential property to the site is 22 Mellor Street, which is located approximately 90m east of the proposed building (Figure 34).  <p>Figure 34 Closest residential property to the site, 22 Mellor Street (Base source: Applicant's RtS 2020)</p> <ul style="list-style-type: none"> No objections were received from the public relating to overshadowing, overlooking or loss of private views. The Department considers that the proposal would not have an adverse impact on neighbouring residential amenity, in terms of overshadowing, overlooking and private views, as: <ul style="list-style-type: none"> the proposed building is located to the south of 22 Mellor Street and therefore would not result in any additional overshadowing the building is located at an oblique angle to 22 Mellor Street and as windows are directed away from that property it would not result in any additional overlooking no nearby residential properties have significant private views across the site. 	No additional conditions or amendments are necessary.
Site selection	<ul style="list-style-type: none"> Concerns were raised in the public submissions about the appropriateness of the site for the proposal. In particular, that it may be too small and that the proposal should not be located next to the TAFE Campus. The Applicant has confirmed that the site is appropriate for the intended use stating: <ul style="list-style-type: none"> the proposal has been designed in accordance with the EFSG and in consultation with the GANSW and Applicant, and that the site is capable of comfortably accommodating both schools when operating at maximum capacity. the location of the proposal next to the TAFE Campus creates an 'Education Precinct' in which future students will be able to access various educational pathways and have a greater understanding of their potential educational options. The Department has considered the merits of the proposal in detailed at Section 6 and concludes the site is appropriate for 	No additional conditions or amendments are necessary.

Issue	Consideration	Recommended condition(s)
	<p>its intended use, the building achieves a high standard of design and that landscaping and outdoor play space is appropriate.</p> <ul style="list-style-type: none"> The Department agrees with the Applicant that the co-location of educational establishments will be of benefit to future students and the local community. 	
Existing school sites	<ul style="list-style-type: none"> Concern was raised in the public submissions that the existing schools (Meadowbank Primary and Marsden HS) should be retained and upgraded. As discussed at Section 2.2.2, the NSW Government considered the retention of the existing school sites and concluded that the Meadowbank Primary site is too small to allow for future growth and the existing buildings at Marsden HS cannot be easily upgraded to modern standards. The Department has considered the merits of the proposal (Section 6) and concludes that the proposed new schools would achieve a high standard of design and provide appropriate modern and flexible learning spaces. 	No additional conditions or amendments are necessary.
Proposed school access and accessibility	<ul style="list-style-type: none"> Concerns were raised in the public submissions that the schools should have separate entries, be accessible, cater for students with hearing impairment and the primary school staff room should have a clearer access point. In response to the concern raised the Applicant has stated that: <ul style="list-style-type: none"> there are four separate pedestrian school entry points, two for the primary school and two for the secondary school (Figure 10). the proposal included an Accessibility Assessment which concludes the proposal will be <i>Disability Discrimination Act 1992</i> compliant. All paths are accessible and BCA compliant. Disabled toilets and lifts are provided. hearing impaired students have been considered in the design of the proposal, including acoustic separation to homebases, hearing loops and IR Transmitter systems. the primary school staff room would be designed further during the detailed design phase of the development and in consultation with users. The Department is satisfied the proposal has separated access points, would be accessible, has considered the hearing impaired and staff room design. 	No additional conditions or amendments are necessary.
Operational use of internal facilities	<ul style="list-style-type: none"> Concerns were raised in the public submissions that insufficient/inadequate toilet and water drinking facilities have been provided, the gymnasium changerooms are too narrow, the gymnasium would be inappropriate for exams, and facilities should be provided for P&C and General Assistant. The Applicant considered these concerns in its RtS stating that: <ul style="list-style-type: none"> the number of proposed toilets complies with the EFSG and 	No additional conditions or amendments are necessary.

Issue	Consideration	Recommended condition(s)
	<p>each bank of toilets includes a unisex accessible toilet.</p> <ul style="list-style-type: none"> ○ the exact location and design of toilet facilities, drinking water stations and gym changerooms would be developed further in the design development phase and would be EFSG compliant. ○ the use of the gymnasium and provision of P&C and General Assistant facilities are operational matters that would be resolved during the detailed design phase and as part of the schools' ongoing operations. <ul style="list-style-type: none"> ● The Department is satisfied that sufficient toilet facilities have been provided and that further refinements at the detailed development phase will ensure toilet, drinking water and gym changeroom facilities are fit for purpose. ● The Department agrees with the Applicant that the exact use of internal spaces is an operational matter that can be resolved during the detailed design phase of the proposal. 	
Signage	<ul style="list-style-type: none"> ● The architectural drawings show two indicative building identification signs (with lettering stating 'School') on the north-east and south-east façades of the building. ● In response to the Department's request for further information about signage, the Applicant confirmed in its RRAI that detailed signage does not form part of this application and any signage would form part of a future separate approval(s). 	No additional conditions or amendments are necessary.
The Master Plan	<ul style="list-style-type: none"> ● Concern was raised in one public submission about the proposed MEEP Master Plan vision for sites surrounding the application site. However, this concern does not relate to the proposal and has not formed part of the Department's assessment of the application. 	No additional conditions or amendments are necessary.
Public consultation	<ul style="list-style-type: none"> ● Concern was raised in the public submissions about the extent of community consultation undertaken. ● The Applicant confirmed prior to lodging the application, it consulted with key stakeholders (including school communities and community groups, TAFE, education peak groups, NSW Government agencies, local Council and utility providers) from March 2018 and commenced engagement with the local and existing school communities from July 2018, including: <ul style="list-style-type: none"> ○ consultation with key stakeholders, including government agencies, TAFE NSW, Council, Aboriginal stakeholders commencing March 2018. ○ consultation and workshops with the SDRP between May 2018 and May 2019. ○ community drop in sessions and digital research survey. ○ dedicated information sessions for Meadowbank Primary and Marsden HS P&C committees. ○ engagement and Q&A sessions with Meadowbank Primary and Marsden HS staff. ○ community update newsletters distributed to 35,000 residents and businesses. 	No additional conditions or amendments are necessary.

Issue	Consideration	Recommended condition(s)
	<ul style="list-style-type: none"> <li data-bbox="395 304 1110 365">• The Department appropriately exhibited the EIS in accordance with the requirements of the EP&A Act (Section 5). <li data-bbox="395 389 1066 483">• The Department is satisfied that sufficient consultation has been undertaken to allow for the assessment and determination of the application. 	

6.6 Public interest

The Department is satisfied that the proposal would be in the public interest. The proposal would benefit the community as it would provide for new primary and secondary schools and an IEC including contemporary teaching and learning facilities with adaptable and collaborative learning spaces that would improve educational outcomes. The proposal would result in direct investment in the area of \$218,928,354 and is predicted to generate 812 construction and 220 operational job opportunities. Overall, it is considered that the proposal would have acceptable environmental impacts subject to the recommended conditions of consent.

7 Evaluation

The Department has reviewed the EIS, RtS and RRAI and assessed the merits of the proposal, taking into consideration advice from the public authorities. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been assessed.

The Department considers that the proposal should be approved as it is in the public interest, would provide benefit for the community by delivering contemporary teaching and learning facilities with adaptable and collaborative learning spaces, and is predicted to generate 813 construction and 220 operational jobs. Overall, the Department concludes the impacts of the development are acceptable and can be appropriately managed or mitigated through the implementation of the recommended conditions of consent.

The Department considers the key issues to be traffic, parking and pedestrian access, noise impact, built form and tree removal and landscaping.

Overall the proposal would not have a significant adverse impact on the local traffic network or surrounding key intersections when it opens (approximately 2022). Delays may be experienced in the future, however, road infrastructure would be subject to TfNSW's review in accordance with its improvement programs and as discussed in the MEEP Masterplan. The Application has demonstrated that the proposed travel mode share is attainable subject to the implementation of the recommended sustainable transport measures and the Department's recommended conditions.

Noting the ambitious mode share shift away from private car use, and subject to the STP, sufficient staff car parking is provided on the site. Appropriate bus zones and pick-up/drop-off facilities would be provided and subject to ongoing management and sustainable travel strategies. The Applicant's pedestrian crossing at Macpherson Street is supported, additional pedestrian crossings are proposed at Mellor, See and Bowden Streets to ensure pedestrian routes to the site are of an appropriate standards and safe. The Department has also recommended the preparation of a public domain enhancement strategy to surrounding streets to further encourage walking and cycling to/from the schools.

The operation of the schools would have minimal noise impacts on nearby residential properties, and the Department supports the OOSH community use of the communal hall and gymnasium school facilities. The Department has recommended operational noise conditions requiring the Applicant's noise management and mitigation measures be implemented and an OOHEMP be prepared for events involving more than 100 patrons. The proposal would not have any other amenity impacts in term of overshadowing, overlooking or loss of views.

The Department considers that the proposed extended hours of construction (in accordance with Council's recommended hours) are acceptable subject to a condition limiting noise emissions. The proposal includes appropriate management and mitigation measures that would ensure construction impacts on surrounding residential properties and the TAFE Campus are minimised.

The proposal demonstrated that the removal of 126 trees is unavoidable and justified in this instance. In addition, the Department concluded, subject to conditions regarding tree retention, replacement and protection, the overall proposal's biodiversity and tree strategy for the site is, on-balance, acceptable. The proposal includes a high quality outdoor learning areas, sports and play spaces that are flexible, customisable, safe and secure, and would maximise outdoor learning opportunities.

Subject to the implementation of the Applicant's flood risk management and mitigation measures, the Department is satisfied that flood impacts would not pose a risk to the safety of the occupants of the schools. The proposal includes appropriate stormwater and drainage infrastructure.

8 Recommendation

It is recommended that the Executive Director, Infrastructure Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report.
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application.
- **agrees** with the key reasons for approval listed in the notice of decision.
- **grants consent** for the application in respect of the Meadowbank Education and Employment Precinct School Project SSD 9343 subject to the conditions in the attached development consent.
- **signs** the attached development consent (see attachment).

Recommended by:



Jason Maslen

Team Leader

School Infrastructure Assessments

9 Determination

The recommendation is **Adopted** by:

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

21/5/2020

David Gainsford
Executive Director
Infrastructure Assessments

Appendices

Appendix A – Relevant Supporting Information

Appendix B – Consideration of Environmental Planning Instruments

Appendix C – Community Views for Draft Notice of Decision

Appendix D – Recommended Conditions of Consent

Appendix A – Relevant Supporting Information

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows.

1. Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/10581>

2. Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10581>

3. Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10581>

4. Response to Request for Additional Information

<https://www.planningportal.nsw.gov.au/major-projects/project/10581>

Appendix B – Consideration of 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 project 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 (Educational Establishments and Child Care Facilities) 2017 (Education SEPP)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- Ryde Local Environmental Plan 2014 (RLEP).

State Environmental Planning Policy (State and Regional Development) 2011

The aims of the SRD SEPP are to identify SSD, State significant infrastructure (SSI), critical SSI and to confer functions on regional planning panels to determine development applications.

The proposal is SSD as summarised at **Table B1**.

Table B1 | SRD SEPP compliance table

Relevant Sections	Department’s consideration	Compliance
3 Aims of Policy 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 SSD under section 4.36 (development declared SSD) of the EP&A Act as the development is for the purpose of a new school under clause 15(1) of Schedule 1 of the SRD SEPP.	Yes

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

The Education SEPP aims to simplify and standardise the approval process for schools, TAFEs, universities and child care centres, while minimising impacts on surrounding areas and improving the quality of 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.

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 of the Education SEPP. An assessment of the development against the design principles is provided at Table B2.

Table B2 | Consideration of the Education SEPP Design Quality Principles (clause 35(6)(a))

Design Principles	Department's consideration
<p>Principle 1</p> <p>Context, built form and landscape</p>	<p>The configuration and siting of the new building on the site has regard to the constraints of the site, particularly topography, flooding and the surrounding development.</p> <p>The design of the building enables the retention of trees at periphery of the site and includes the provision of extensive new landscaping (including tree planting), which would contribute to the landscaped setting of the locality.</p> <p>The proposed layout maximises solar access and ventilation to the classrooms and the outdoor learning areas. The proposal also has a negligible impacts on nearby residential properties, which are some distance from the development.</p> <p>The design responds appropriately to its context and would result in a positive impact on the streetscape via the proposed materials / finishes and additional streetscape planting.</p>
<p>Principle 2</p> <p>Sustainable, efficient and durable</p>	<p>The proposal includes an ESD report which commits to several sustainable strategies that would be sufficient to achieve 4-star Green Star rating. The materials chosen for the new building are durable and require low maintenance.</p> <p>The application includes a STP which encourages sustainable travel modes and is included in the conditions.</p> <p>Water sensitive urban design measures are proposed for site to ensure rainwater harvesting, reuse and maintenance of stormwater quality.</p>
<p>Principle 3</p> <p>Accessible and inclusive</p>	<p>Accessible travel paths are provided in all sections of the site and lifts are included to provide barrier free connections between levels.</p> <p>The communal hall and gymnasium may be utilised for community activities after school and during the weekends at the discretion of the school. The development is considered to be inclusive in this regard.</p>
<p>Principle 4</p> <p>Health and safety</p>	<p>The proposal has considered the Crime Prevention through Environmental Design principles in its design including clear demarcation and separation of pedestrian and vehicle areas, maximising clear sightlines and external lighting for improved surveillance.</p> <p>The new building maximises access to natural light and ventilation, includes appropriate sport and playing courts/fields and is provides for a landscaped environment to benefit the health and well-being of occupants.</p>
<p>Principle 5</p> <p>Amenity</p>	<p>As discussed in Sections 6.2 and 6.5, the proposal would not unreasonably impact upon the amenity of adjoining residents by way of overshadowing, noise, overlooking or view loss. The Department has recommended conditions regarding the operation of the schools.</p>
<p>Principle 6</p> <p>Whole of life, flexible and adaptive</p>	<p>The proposed primary and secondary school facilities are flexible and provide open plan and a variety of spaces that can be adapted to suit a wide range of uses and changing needs over the long term.</p>

Design Principles	Department's consideration
Principle 7 Aesthetics	<p>The development achieves a high standard of design and appearance, the proposed design and materiality of the building is appropriate and would not have an adverse impact on the character of the locality.</p> <p>The modern design approach and use of materials is supported, the proposal provides a coherent overall architectural composition and makes a positive contribution to the evolving character of the MEEP and the surrounding area.</p> <p>The building has been designed and articulated to appropriately fit within its urban context without having an adverse impact on the character of the locality.</p> <p>The proposal retains 149 existing trees, includes additional tree planting and includes extensive site landscaping that maximises the efficiency of open spaces and includes appropriate hard and soft landscaping treatments.</p>

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.

As detailed at **Section 6.5**, the Department is satisfied that the Applicant has adequately demonstrated that the site is suitable, subject to remediation, for the use as an educational establishment as required by SEPP 55.

Draft Remediation of Land State Environmental Planning Policy

The Department is reviewing all State Environmental Planning Policies to ensure they remain effective and relevant and SEPP 55 has been reviewed as part of that program. The Department has published the draft Remediation of Land State Environmental Planning Policy (Remediation SEPP), which was exhibited until April 2018.

Once adopted, the Remediation SEPP will retain elements of SEPP 55, and add the following provisions to establish a modern approach to the management of contaminated land:

- require all remediation work that is to be 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
- require environmental management plans relating to post-remediation management or ongoing management of on-site to be provided to Council.

The new SEPP will not include any strategic planning objectives or provisions. Strategic planning matters will instead be dealt with through a direction under section 117 of the EP&A Act.

As detailed at **Section 6.5**, the Department is satisfied that the Applicant has adequately demonstrated that the site is suitable, subject to remediation, for the use as an educational establishment as required by SEPP 55

Ryde Local Environmental Plan 2014

The RLEP aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of existing and future residents of the City of Ryde LGA. The

RLEP also aims to foster economic, environmental and social well-being and promote development that is appropriate to its context and enhances the amenity of the Ryde community and environment.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the RLEP. The Department concludes that the development is consistent with the relevant provisions of the RLEP. Consideration of the relevant clauses of the RLEP is provided at **Table B4**.

Table B4 | Consideration of the RLEP

RLEP clause	Department's consideration
Clause 2.3 - Zone objectives and Land Use Table	The proposed Educational Establishment uses are permissible with development consent in the SP2 Educational Establishment zone.
Clause 4.3 - Height of buildings	There is no height of building development standard that applies to the site.
Clause 4.4 – Floor space ratio	There is no floor space ratio development standard that applies to the site.
Clause 5.10 Heritage conservation	The site does not contain any State or locally listed heritage items and there is only a low potential to impact on Aboriginal and non-Aboriginal archaeological relics (Section 6.5). The Department has considered the proposal's impact on nearby heritage items at Section 6.5 and concludes the proposal would not have an adverse impact on the heritage significance of nearby heritage items.
Clause 6.1 – Acid sulfate soils	The site is located on land classified as Class 5 Acid Sulfate Soil. The site is located more than 500m from the closest adjacent Class 2 land (west of the site) and therefore does not trigger the requirement of planning consent for the carrying out of works under this clause.
Clause 6.2 – Flood planning	The site is identified as flood-prone land. The Department has considered flooding at Section 6.5 and concludes flooding and flooding risk can be appropriately managed and mitigated, subject to conditions.
Clause 6.3 – Stormwater management	The Department has considered drainage at Section 6.5 and concludes the proposal has been designed to minimise the impacts on urban stormwater infrastructure and flows and that stormwater can be appropriately managed and mitigated, subject to conditions.

Development control plans

In accordance with Clause 11 of the SRD SEPP, development control plans do not apply to SSD. Notwithstanding this, the objectives of relevant controls under the RDCP, where relevant, have been considered in **Section 6** of this report.

Appendix C – Community Views for Draft Notice of Decision

The Department’s reasons for the determination (decision) and consideration of how community views were considered during the assessment of the case is provided at **Table C1**.

Table C1 | Department’s reasons for determination and consideration of community views

Issue	Consideration
Pedestrian access and road/pedestrian upgrades required	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The proposal includes the construction of two pedestrian zebra crossing adjacent to the site and also includes road upgrades to accommodate bus movements. The Department has recommended additional pedestrian infrastructure upgrades including new crossings on Mellor, See and Bowden Streets and public domain enhancement on Hermitage Road, Macpherson, Bowden and Squire Streets. Subject to the above changes the Department considers the surrounding pedestrian network would have sufficient capacity to accommodate the pedestrian movements generated by the schools. The existing publicly accessible pedestrian route through the TAFE Campus provides an appropriate pedestrian connection to Meadowbank station and maybe subject to future improvements/upgrades <p><i>Recommended Conditions</i></p> <ul style="list-style-type: none"> Construction of pedestrian crossings on Macpherson, See, Mellor and Bowden Streets and before schools are operational. Within six months of the commencement of construction the Applicant to prepare a public domain enhancement strategy relating to Heritage Road, Macpherson, Bowden and Squire Streets. The Applicant is to undertake an Road Safety Audit (RSA) and final design of pedestrian and bus zones are to reflect the outcomes of the RSA.
Traffic and car parking	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The proposed travel mode share to reduce trips to/from the school by private car use is ambitious and would be facilitated by the School Travel Plan (STP). The Department recommends the STP be monitored and reviewed annually to ensure the mode share improves over time. The proposal would not have an adverse impact on the road network or intersection performance when it opens (approximately 2022). It is recommended TfNSW review the performance of Victoria Road as part of its road corridor improvement program in the future. Subject to the implementation of the sustainable strategies within the STP the provision of 60 staff car parking spaces is considered acceptable. <p><i>Recommended Condition</i></p> <ul style="list-style-type: none"> The Applicant shall work with TfNSW and Council to monitor the surrounding road network and identify any operational issues and potential management solutions. Preparation and implementation of the STP, which would be monitored and reviewed annually.
Pick-up/drop-off facilities	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The Applicant has demonstrated that the 29 pick-up/drop-off spaces have sufficient capacity to accommodate vehicle movements during school peak times. The bus zones are located in the most appropriate/convenient locations and subject to the proposed road upgrades the surrounding streets will be able to accommodate bus movements. The proposal includes a number of enforcement and management measures to ensure the safe and efficient operation of the bus zones and the 29 pick-up/drop-off spaces. <p><i>Recommended Conditions</i></p> <ul style="list-style-type: none"> Preparation and implementation of a Operational Transport and Pedestrian Management Plan.

Issue	Consideration
	<ul style="list-style-type: none"> The Applicant must obtain approval for the School Zone signage and associated markings.
Biodiversity, landscaping and outdoor space	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The proposal includes mitigation measures to address the removal of 126 trees, including addressing nine ecosystem offset credits, provision of replacement trees, extensive landscaping throughout the site and retention of 149 existing trees. The proposal provides for high quality outdoor learning areas, sports and play spaces that are flexible and customisable, safe and secure, and would maximise outdoor learning opportunities. The quantum of outdoor play space meets Education Facilities Standards and Guidelines requirements. <p><i>Recommended Condition</i></p> <ul style="list-style-type: none"> Protection of retained trees on the site and trees adjoining the site during construction phase. Implementation of the AIA management and mitigation measures. Offset tree removal via nine ecosystem credits. Provision of outdoor space and landscaping in accordance with the landscaping drawings.
Site selection	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The NSW Government considered the retention of the existing Meadowbank Primary and Marsden High School sites and concluded: <ul style="list-style-type: none"> Meadowbank Primary is located on a small site, the school is near capacity and has insufficient space to cater for future growth. Marsden HS is predicted to experience significant growth in student numbers and due to the aging condition of existing buildings it would be difficult to upgrade the school to provide modern, flexible and future-focused learning. The Department has considered the merits of the proposal and concludes the site is appropriate for its intended use, the building achieves a high standard of design and landscaping and outdoor play space area are appropriate. Existing contaminants on the site can be remediated. <p><i>Recommended Conditions</i></p> <ul style="list-style-type: none"> Site Audit Report issued prior to occupation to verify the suitability of the site.
Operational noise impact	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The use of outdoor play spaces would generate some level of noise. However, this is acceptable given it would not be sustained over prolonged periods and as the area is already noise affected by the railway corridor. The PA system / bell, internal classrooms and mechanical plant would not exceed the background + 5dB(A) levels. <p><i>Recommended Conditions</i></p> <ul style="list-style-type: none"> Noise report and EPA noise mitigation and management conditions. Applicant to prepare a Out of Hours Event Management Plan for events involving more than 100 patrons.
Internal design	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The internal design of the building provides for high quality, modern and flexible educational facilities. The precise internal use and layout of the spaces is an operational matter that will be determined as part of the detailed design of the building. <p><i>Recommended Conditions/Response</i></p> <ul style="list-style-type: none"> Detailed operational matters will be considered as part of the detailed design of the building and in consultation with stakeholders and future users.
Adequacy of public consultation	<p><i>Assessment</i></p> <ul style="list-style-type: none"> The Applicant consulted with stakeholders, local residents and existing school communities prior to lodging the application. The Department appropriately exhibited the application in accordance with the EP&A Act.

Issue	Consideration
	<p data-bbox="432 264 834 293"><i>Recommended Conditions/Response</i></p> <ul data-bbox="432 309 1437 362" style="list-style-type: none"><li data-bbox="432 309 1437 362">• The Department is satisfied that sufficient consultation has been undertaken to allow for the assessment and determination of the application.

Appendix D – Recommended Instrument of Consent

The recommended instrument of consent can be found on the Department’s website as follows.

<https://www.planningportal.nsw.gov.au/major-projects/project/10581>