Review of Environmental Factors

New Melrose Park High School

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Acknowledgement of Country

The NSW Department of Education acknowledges the Wallumedegal clan of the Dharug People, the traditional custodians of the land on which the New Melrose Park High School is proposed.

We pay our respects to the Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of Australia.

The NSW Department of Education is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.

The NSW Department of Education recognises that by acknowledging our past, we are laying the groundwork for a future that embraces all Australians; a future based on mutual respect and shared responsibility.

Declaration

This Review of Environmental Factors (REF) has been prepared by Ethos Urban on behalf of the NSW Department of Education (department) and assesses the potential environmental impacts which could arise from the proposed new Melrose Park High School at 37 Hope Street, Melrose Park.

This REF has been prepared in accordance with the *Guidelines for Division 5.1 Assessments* and any relevant addendum (the Guidelines), and the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment and the information it contains is neither false nor misleading. It addresses to the fullest extent possible all the factors listed in Section 3 of the Guidelines, the EP&A Regulation and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In preparing the REF I have declared any possible conflict of interests (real, potential or perceived) and I do not consider I have any personal interests that would affect my professional judgement.

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Abbreviations

Abbreviation	Description		
AHD	Australian Height Datum		
AHIP	Aboriginal Heritage Impact Permit		
AHIMS	Aboriginal Heritage Information Management System		
BC Act 2016	Biodiversity Conservation Act 2016		
BAM	Biodiversity Assessment Method		
BCA	Building Code of Australia		
BDAR	Biodiversity Development Assessment Report		
СЕМР	Construction Environmental Management Plan		
СМС	Connecting with Country		
The department	NSW Department of Education		
DPHI	Department of Planning, Housing and Infrastructure		
EP&A Act	Environmental Planning and Assessment Act 1979		
EP&A Regulation	Environmental Planning and Assessment Regulation 2021		
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999		
EPI	Environmental Planning Instrument		
ESD	Ecologically Sustainable Development		
GBCA	Green Building Council of Australia		
Industry and Employment SEPP	State Environmental Planning Policy (Industry and Employment) 2021		
LEP	Local Environmental Plan		
LGA	Local Government Area		
Parramatta DCP	Parramatta Development Control Plan 2023		
Parramatta LEP	Parramatta Local Environmental Plan 2023		
РСМР	Preliminary Construction Management Plan		
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021		
Proponent	NSW Department of Education		
REF	Review of Environmental Factors		
Resilience and Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021		
Roads Act	Roads Act 1993		
SCPP DoE	Stakeholder and community participation plan, published by the NSW Department of Education October 2024		
SCPP DPHI	Stakeholder and community participation for new health services facilities and schools published by the Department of Planning, Housing and Infrastructure October 2024		
SDRP	State Design Review Panel		
SEPP	State Environmental Planning Policy		
TI SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021		

Executive Summary

The Proposal

The proposal relates to the staged construction and operation of the new Melrose Park High School, with associated landscaping, car parking, play space, infrastructure and public domain works.

The proposed Melrose Park High School is envisaged to accommodate 1,000 students but will be delivered in a staged approach.

The Stage 1 component of the new Melrose Park High School will accommodate up to 560 students and includes the construction and operation of a six-storey (with additional roof/plant level) school building known as Block A; a single storey hall, gymnasium, canteen and covered outdoor learning area (COLA) building known as Block B; and a single storey plant room known as Block C.

The Stage 2 component of the new Melrose Park High School will accommodate up to 1,000 students and includes the construction of a five-storey (with additional roof/plant level) school building containing staff rooms, general learning spaces and roof-top play space.

The proposal responds to growing demand for additional educational infrastructure in the broader Ryde secondary school catchment and within the Melrose Park North (6,000 dwellings in short-term development) and South (5,000 dwellings in long-term development) precincts. The site is identified for a new school under the Melrose Park North Masterplan under the *Parramatta Development Control Plan 2023* (the Parramatta DCP).

The proposed activity is located on a vacant and cleared parcel of land addressed 37 Hope Street, legally described as Lot 9 in DP 1310509, and bound by Hope Street to the south, the future Wharf Road Gardens to the east, the future North-South Road 4 to the west, and future playing field to the north. The site is rectangular in shape and has an area of 9,925m².

The site is located in close proximity to the Gore Bay Pipeline, which has influenced the siting and design of the proposed buildings. The site is located approximately 100m north of Melrose Park Public School which is intended to accommodate the majority of car parking demand generated by the proposed activity, and immediately south of a future playing field for which the department will enter into a joint-use agreement with City of Parramatta Council (Council) for use by the school students.

Planning Pathway

The proposal involves the development of a new government school by the Department of Education (the department) (a public authority) on land that does not contain an existing or approved school and is in a prescribed zone. Accordingly, pursuant to Section 3.37A of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP), the proposed works are classified as development which may be carried out without consent.

Therefore, the proposal is considered an 'activity' for the purposes of Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is subject to an environmental assessment. For the purposes of this proposal, the department is the proponent and the determining authority and the required environmental assessment is in the form of a Review of Environmental Factors (REF). The REF has been prepared in the accordance with the *Guidelines for Division 5.1 Assessments* (Department of Planning and Environment (DPE), June 2022) and the *Guidelines for*

Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum (Department of Planning, Housing and Infrastructure (DPHI), October 2024).

Consultation

Consultation will be undertaken in accordance with the statutory requirements under the TI SEPP and having regard to the *Stakeholder and community participation plan for new health services facilities and schools* (DPHI, October 2024) (SCPP DPHI) and the *Stakeholder and Community participation plan For new schools and major school upgrade projects undertaken under Division 5.1 of the EP&A Act 1979* (Department of Education, October 2024) (SCPP DoE).

Comments received will be carefully considered and responded to.

In addition, non-statutory consultation has been undertaken with a range of community and government stakeholders throughout the design process, including Aboriginal stakeholders, Council, City of Ryde Council, the State Design Review Panel (SDRP), and the community.

Environmental Impacts

The REF provides an assessment of the environmental impacts of the proposal. It considers, to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the proposed activity as is required under the EP&A Act. The REF also sets out the undertakings made by the department to manage and minimise potential impacts arising from the development.

The proposed activity will generally result in environmental impacts that are either negligible or low. The most notable potential environmental impacts relate to traffic, noise, and proximity to the Gore Bay Pipeline, the potential impacts of which will be mitigated and minimised. Other impacts have been considered as detailed in this REF. Key mitigation measures include the provision of staff car parking on the Melrose Park Public School site and a requirement that this parking will be available prior to the operation of the new school commencing. The requirement for the preparation of a detailed Construction Environmental Management Plan (CEMP) prior to construction to manage general construction, construction traffic and construction noise impacts, and the preparation of a Safety Management Study relating to the Gore Bay Pipeline prior to construction are also proposed as mitigation measures.

The proposed activity is consistent with the planned Melrose Park North Precinct development and is anticipated to be a positive outcome for the local community and will result in a long-term positive impact on educational services within the Melrose Park North community.

Justification and Conclusion

Based on the environmental assessment undertaken as part of this REF, it has been determined that the proposed activity will not result in any significant or long-term detrimental impacts. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

The environmental impacts of the proposal are not likely to be significant. Therefore, it is not necessary for an Environmental Impact Statement (EIS) to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Part 5.1 of the EP&A Act. The proposed activity will not have any effect on Matters of National Environmental Significance (MNES) and approval of the activity under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is not required.

On this basis, it is recommended that the department determine the proposed activity in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.

1. Introduction

The Department proposes the construction and use of a new high school in two stages for approximately 1,000 students (the activity) located at 37 Hope Street, Melrose Park (the site). The school is envisaged to accommodate 1,000 students but will be delivered in a staged approach. Stage 1 is proposed to be delivered immediately with a capacity of 560 students, while Stage 2 with a total capacity of 1,000 students is proposed to be delivered at a later date, in accordance with the demand of the local educational catchment. The site will be dedicated to the Minister for Planning and Public Spaces through State Planning Agreement (SVPA2021-41) associated with the broader Melrose Park North Planning Proposal (PP-2020-1983).

The construction of the new school in Melrose Park will provide additional educational infrastructure for the growing demand in the broader Ryde secondary school catchment and for the envisaged population growth within the Melrose Park North (6,000 dwellings in short-term development) and South (5,000 dwellings in long-term development) precincts. Moreover, the activity is a state government election commitment, and therefore has a high priority level of interest from several key state government stakeholders. The Stage 1 component for the Melrose Park High School is targeted to be completed in term 1 2027. A photomontage of the proposal is shown at **Figure 1**.



Figure 1 Photomontage of the proposed activity from future North-South Road 4

Source: NBRS

This REF has been prepared by Ethos Urban on behalf of the department to determine the environmental impacts of the proposed new high school at the site. For the purposes of the activity, the department is the proponent and the determining authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of this REF is to describe the proposal, examine and take into account all matters affecting or likely to affect the environment and to detail protective measures to be implemented to mitigate impacts.

The description of the proposed activity and associated environmental impacts has been undertaken in accordance with the *Guidelines for Division 5.1 Assessments* (DPE June 2022), *Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum* (DPHI October 2024), the EP&A Act, the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation), and the (EPBC Act).

The assessment contained within the REF has been prepared having regard to:

- Whether the proposed activity is likely to have a significant impact on the environment and therefore the necessity for an EIS to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act; and
- The potential for the proposal to significantly impact MNES on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

The REF addresses the requirements of Section 5.5 of the EP&A Act, which requires the department to examine, and take into account to the fullest extent possible, all matters affecting, or likely to affect, the environment by reason of the proposed activity.

2. Site Analysis and Description

2.1 Site Location and Context

2.1.1 Site Locality

The site is situated in Melrose Park in the Parramatta Local Government Area (LGA) within central Sydney and is located approximately 7.9km east of Parramatta and 17.2km west of the Sydney CBD (see **Figure 2**). The site is located within the recently rezoned Melrose Park North Precinct, which allows for a mix of high density residential and commercial land uses. The gazettal of the Melrose Park North Planning Proposal (PP-2020-1983), discussed further below, will result in significant changes to the future surrounding development context, involving higher density residential development with 6,800 dwellings, a new town centre, 27,000m² of retail/commercial floorspace and new parks and playing fields. The subject site is located immediately east of the future Melrose Park Town Centre.



Figure 2 Location Map

Source: Google Maps, edited by Ethos Urban

Melrose Park North Planning Proposal (PP-2020-1983)

On 24 June 2022, new planning controls for the Melrose Park North Precinct were gazetted following the finalisation of the Melrose Park Planning Proposal. It rezoned land and amended development standards to allow for a mix of high density residential and commercial land uses, as well as a school on the site. The new planning controls for Melrose Park North will facilitate delivery of approximately 5,500 additional dwellings and a new town centre providing

approximately 30,000m² of commercial and retail floor space supporting approximately 1,923 jobs, a school and 50,606m² of public open space.

The Planning Proposal envisaged that the new school would be a primary school with an adjacent playing field to be shared with the school and community. It also stated that the department were investigating locations that could potentially accommodate a secondary school to service the needs of the Melrose Park community. Ultimately, the site is proposed to accommodate a secondary school, with Melrose Park Public School to undergo its own redevelopment to expand its capacity.

Melrose Park Precinct Masterplan

The rezoning of the Melrose Park North Precinct included the formation of the Melrose Park North Masterplan which outlines the proposed internal street layout, open space, public domain, building platforms, heights and future land uses, and forms the basis of the site-specific controls for the Melrose Park Urban Renewal Precinct within the Parramatta DCP. It is shown in **Figure 3**, which identifies the site for a new high school, adjacent to a playing field.



Figure 3 Melrose Park Masterplan (site and adjacent open space indicated in blue)

Source: Parramatta Development Control Plan 2023

2.1.2 Site Description

The site is located at 37 Hope Street, Melrose Park. It has an area of 9,925m² and is a rectangular shaped lot. It is bounded by Hope Street to the south, the future Wharf Road Gardens to the east, the future North-South Road 4 of the Melrose Park North Precinct to the west, and future playing field to the north. The site is located at the southern boundary of the Melrose Park North Precinct. The site is currently cleared, vacant and unused, comprising of scattered vegetation in the form of grass and shrubs within the centre of the site.

The legal description of the site is summarised in **Table 1**. A broad and detailed aerial overview of the site is provided in **Figure 4** and **Figure 5** respectively.



Table 1: Legal description of the site

Figure 4 Melrose Park Precinct site aerial map

Source: Nearmap 2024, edited by Ethos Urban



The Site

Wharf Road Reserve (Part Lot 10 in DP 1310509)

Wharf Road Public Domain Work Extent

Figure 5 Melrose Park Precinct site aerial map

Source: Nearmap 2024, edited by Ethos Urban

2.1.3 Site Characteristics

Table 2: Site Characteristics

Site Element	Description
Transport and Accessibility	The site is currently accessible via Hope Street, with limited road infrastructure currently embellished throughout the broader Melrose Park North Precinct. The site has a frontage to Hope Street, with access also facilitated by existing footpaths along the southern and eastern property boundaries which provides good connections to the broader pedestrian network.
	The site is also located adjacent to Future North-South Road 4, which runs along its western boundary and is proposed to be delivered within DA1100/2021 by Sekisui House. The road will be complete before the opening of the new Melrose Park High School in early 2027.
	The Melrose Park area has access to bus services, with the key public bus route being the 524, which runs from Parramatta to Ryde through Melrose Park, with bus stops located along the site's southern and eastern frontages.
	The site is near the alignment of the Parramatta Stage 2 Light Rail which is expected to be operational by 2031 and connect the site to Parramatta, Rydalmere, Ermington, Wentworth Point and Sydney Olympic Park. Its alignment will include a stop at the Hope Street / Waratah Street intersection, approximately 100m west of the site.
Topography	The site is relatively flat in topography, sloping down to the north at a relative constant slope of 0.5-1%. The site's highest point is approximately 16.55 (m AHD) in the north-east corner, falling to approximately 15.25 (m AHD) in the north-west corner.

2.1.4 Site Constraints and Opportunities

Consideration of site constraints has been undertaken through a review of the Section 10.7 ((2) & (5)) Planning Certificate issued by Council dated 20 February 2024 (No. 2024/1331), mapping under *Parramatta Local Environmental Plan 2023* (the Parramatta LEP 2023), alongside a review of specialist consultant reports and other desktop assessments.

Key site constraints include:

- **Fuel and gas pipelines** the site is situated within the vicinity of two underground pipelines. These include:
 - **The Gore Bay Pipeline** a high-pressure dangerous goods pipeline operated by Viva Energy Australia.
 - Secondary Natural Gas Mains operated by Jemena.
- **Flooding** the land to the immediate north of the site is mapped as being affected by a 'Probable Maximum Flood' (PMF). The site itself is not mapped as being affected by any flooding events.
- **Contamination** the site was previously identified to contain localised contamination, which required remediation to enable the site to be made suitable for the purpose of a school. This remediation was approved under DA/1100/2021 and was completed on 1 December 2024 prior to the site's dedication to the department. A Site Audit Statement has also been issued as part of the Detailed Site Investigation (**Appendix 12**).
- Site size the small size of the site (approximately 9,925m²) due to its location within an emerging, high-density, mixed-use precinct limits the amount of area for services, car parking and unencumbered play space for students.
- Wharf Road Gardens ownership the future Wharf Road Gardens are currently owned by Sekisui House, to be dedicated to Council at a later date. Therefore, any works required within the reserve, for example to provide access to the school, cannot be undertaken as development without consent, and must therefore be undertaken under a separate planning pathway.

Consideration has also been given to opportunities identified in design development, including:

- **Aspect** The site has a northerly and easterly aspect providing morning and midday solar access to the site.
- Joint use arrangement the site's proximity to the future public open space playing field to the immediate north presents an opportunity for the open space within the school to maintain a visual and physical relationship with the adjacent public open space. This will also facilitate the potential for a joint use facility arrangement with the Council during school hours.
- **Melrose Park Public School** the concurrent redevelopment of Melrose Park Public School to the south presents an opportunity to utilise the public-school site to accommodate the majority of staff car parking requirements for the new high school.

2.2 Land Ownership

The proposed activities associated with the Melrose Park High School span across several landholdings which are owned by separate stakeholders. A summary of the land ownership of the site is provided in **Table 3** below.

Table	3:	Land	ownership
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Site	Land	Owner	Consent Obtained
The site	Lot 9 in DP 1310509 (37 Wharf Road, Melrose Park)	Minister for Education and Early Learning	Yes
Hope Street	Hope Street	City of Parramatta Council	N/A
Wharf Road	Wharf Road	City of Parramatta Council	N/A

2.3 Surrounding Development Context

2.3.1 Surrounding Development

The following summarises the surrounding development:

- North: Immediately north is a large tract of existing cleared land within the Melrose Park North Precinct. Further north is a series of buildings associated with the previous industrial usage of the broader northern precinct, which now act as a site office for the precinct's construction, as well as holding display suites. Further beyond is Appleroth Street which connects to a series of newly completed high density residential flat buildings in the northern most section of the precinct which front Victoria Road. The surrounding urban context to the north is shown in **Figure 6** and **Figure 7**.
- **East:** To the immediate east is a landscaped area adjacent to Wharf Road. Under the Melrose Park North Precinct master plan, it is envisaged to be a landscaped reserve known as Wharf Road Gardens. Low-density residential development is located on the eastern side of Wharf Road. The surrounding urban context to the east is shown in **Figure 8** and **Figure 9**.
- South: To the immediate south is Hope Street, with industrial developments on the southern side of Hope Street. Further south is Melrose Park Public School, and a series of existing industrial warehouse sites. It is noted this area is currently contained within the Melrose Park South Precinct, which is also subject to recently gazetted planning controls enabling redevelopment. Further beyond is a large, environmentally sensitive salt marsh ecosystem, which feeds into the broader Parramatta River further south. The surrounding urban context to the south is shown in Figure 10 and Figure 11.
- West: Immediately west is a large portion of land that has been cleared within the Melrose Park North precinct to accommodate the future Melrose Park North town centre. The town centre is currently under construction (approved under DA/764/2022). Further west are some industrial buildings, with low density residential development fronting Hughes Avenue. The surrounding urban context to the west is shown in **Figure 12** and **Figure 13**

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Figure 6 Remaining buildings associated with previous industrial usage to the north

Source: Google Maps



Figure 7 Intersection of Wharf Road and Appleroth Street to the north, with new high-density development further beyond

Source: Google Maps



Figure 8 Landscaped area adjacent to Wharf Road to the immediate east

Source: Google Maps



Figure 9 Typical low-density residential development on the opposite side of Wharf Road

Source: Google Maps



Figure 10 Existing lightindustrial areas on the opposite side of Hope Street



Figure 11 Existing Melrose Park Public School further south of the light industrial areas

Source: Google Maps

Source: Google Maps



Figure 12Under constructionmixed-use town centre to theimmediate west of the site

Source: Google Maps



Figure 13 Light industrial buildings located further west, with low-density residential development situated further beyond

Source: Google Maps

2.3.2 Surrounding Future Development and Development Applications

The surrounding context of the site is currently undergoing significant change since the rezoning of the Melrose Park North Precinct. While there are no development applications which apply to the site, there are a number of surrounding future developments summarised in **Table 4** that may influence the proposed activity.

Development Application #	Description	Date Determined
DA/764/2022	Mixed-use 'town centre' development DA/764/2022 was approved by the Sydney Central City Planning Panel for a development comprising a 5 storey commercial podium and 6 x 6- 24 storey shop-top housing towers, consisting of approximately 30,000m ² sqm non-residential floor space (retail, business, office, medical centre, centre-based child care centre, and an indoor recreation facility), 494 residential apartments, 1,412 commercial and residential car parking spaces; 2 basement levels; business identification signage zones; to be constructed in 2 stages; 6 lot stratum subdivision, strata subdivision; and public domain works. The development will be the Town Centre of the Melrose Park North Precinct, and is located immediately west of the site. The development will partially overshadow the site. It is currently under construction, and is expected to be completed in 2028, thus, overlapping with the construction of Stage 1 of the activity.	Approved on 13 December 2023
DA/459/2024	Melrose Park North 'Playing Field' and 'Wharf Road Gardens' Recreation Areas DA/459/2024 was approved by Council for the embellishment of the	Approved on 20 December 2024

Table 4: Development consents for fut	ure development surrounding the site
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Development Application #	Description	Date Determined
	future public reserve being the 'Wharf Road Gardens', the adjacent public playing field 'Playing Field' and 'Wetlands' located further north within the Melrose Park North Precinct.	
	The development relates to Contribution Items 2 and 4 within Schedule 1 of the Local Planning Agreement prepared to accompany the Melrose Park Planning Proposal (PP-2020-1983) detailed further in Section 2.4 , being the Wharf Road Gardens and Playing Field, respectively.	
	A southern portion of Wharf Road Gardens is located adjacent to the eastern boundary of the site. Works to Wharf Road Gardens will be required to integrate into access points to the school's eastern boundary and provide access from Hope Street and Wharf Road, including hard-stand and related landscaping on the corner of Hope Street and Wharf Road to provide access from Hope Street to the south-eastern Hall entry and an east-west path through the Wharf Road Gardens connecting the school's eastern gate to Wharf Road. To facilitate this, Condition 10 of the DA/459/2024 provides a planning pathway for these works to be approved as a post-determination action without requiring a modification application to DA/459/2024:	
	"In the event that an agreement is entered into between the owner of the site and Schools Infrastructure NSW for the provision of hard-stand and related landscaping on the corner of Hope Street and Wharf Road, then detailed drawings (including all relevant details) shall be submitted to and approved by Council's DTSU Manager prior to the issue of the relevant Construction Certificate. The landscaping is to be constructed in accordance with the approved drawings.	
	In addition, should an agreement be entered into between the owner of the site and Schools Infrastructure NSW for the provision of an additional east-west pathway from Melrose Park High School to Wharf Road across the approved park, then detailed drawings (including all relevant details) shall be submitted to and approved by Council's DTSU Manager prior to the issue of the relevant Construction Certificate. The pathway is to be constructed in accordance with the approved drawings."	
	The Playing Field (8,032m ²) is required under State Planning Agreement (SVPA2021-41), which requires the field to be completed and dedicated to Council by 1 December 2025.	
DA/1100/2021	Melrose Park North Street network (roads, footways, street trees, landscaping, drainage, services, and associated infrastructure); including tree removal, remediation and bulk earthworks; and Torrens subdivision.	Approved on 13 December 2023
	DA/1100/2021 was approved by the Sydney Central City Planning Panel for the site preparation works across three stages throughout the Melrose Park North Precinct:	

Development	Description	Date Determined
Development Application #	 Demolition of existing structures on site; Site remediation; Bulk earthworks; Infrastructure and servicing to enable the future development of the site; Public domain works including landscaping and facilitation of a street tree masterplan; Construction of roads; and Torrens Subdivision. Of relevance to the activity, the approved works include remediation, bulk earthworks and services infrastructure for the site, which have now been completed. The approved works also include the construction of Future North-South Road 4, which will be completed prior to 2027 in one of the first stages of the approved infrastructure works and dedicated to Council in due course. As such, the activity does not require further remediation, and limited bulk earthworks are required. A modification application, DA/1100/2021/B, has been lodged with 	Date Determined
	Council which proposes to delete a proposed roundabout along Hope Street due to the future Stage 2 Parramatta Light Rail. Construction is anticipated to be completed by early 2026.	
SSI-10035	Parramatta Light Rail Stage 2 – Main Works Stage 2 of the Parramatta Light Rail has been approved. Within Melrose Park, it will run from Atkins Road to Hughes Avenue in an off- road corridor running parallel to, and south of Hope Street, and then continuing along the northern side of Hope Street, between Hughes Avenue and Waratah Street. As such it will be near the site. Construction is likely to commence in 2028, which would be after completion of Stage 1 of the proposed activity.	Approved March 2024
Melrose Park Public School Redevelopment	 <u>Melrose Park Public School Redevelopment REF</u> The department is in the process of preparing a REF for the redevelopment of Melrose Park Public School which will provide new classrooms and core facilities to meet anticipated enrolment growth in the Melrose Park area. The project is currently in the planning phase and will include: new classrooms and support learning classrooms new staff administration facilities a new library a new hall and covered outdoor learning area (COLA) staff car parking for the proposed Melrose Park High School It has a target completion date of Day 1, Term 1, 2027, which is aligned with the proposed activity. 	TBC

2.4 Planning Agreements

Two Planning Agreements related to the activity were prepared to accompany the Melrose Park North Planning Proposal (PP-2020-1983). These included:

• Local Planning Agreement between SH Melrose PP Land Pty Ltd, SH Melrose Land Pty Ltd, Deicorp Projects (MPTC) Pty Ltd and the City of Parramatta Council (Local Planning Agreement).

• State Planning Agreement between SH Melrose PP Land Pty Ltd, SH Melrose Land Pty Ltd, Deicorp Projects (MPTC) Pty Ltd and the Minister for Planning and Public Spaces (State Planning Agreement).

Local Planning Agreement

A Local Planning Agreement was executed on 21 July 2023 between Council and both Sekisui House and Deicorp in connection with the Melrose Park North Planning Proposal (PP-2020-1983). Of relevance to the proposed school, the Local Planning Agreement requires the construction, embellishment, remediation and dedication of the adjacent 7,888sqm of open space directly to the north of the site as a playing field to Council. Specifically, the Local Planning Agreement anticipates that this space will be subject to a joint shared use agreement between Council and the department, providing the future school access to the playing field.

State Planning Agreement

A State Planning Agreement (SVPA2021-41) has been executed between the Minister for Planning and Public Spaces and both Sekisui House and Deicorp in connection with the Melrose Park North Planning Proposal (PP-2020-1983). It requires the following which are relevant to the proposed school on the site:

- Dedication of approximately 9,916m² of land for a future school prior to 1 December 2024 on the corner of Hope and Wharf Roads to the department, with works including remediation and base embellishment.
- The early delivery of a playing field (adjacent to the site) to be completed and dedicated to Council by 1 December 2025.

3. Proposed Activity

The proposed activity is for the construction and use of a new high school known as the Melrose Park High School, which is envisaged to accommodate 1,000 students, delivered in a staged approach.

Stage 1 of the new Melrose Park High School proposes to accommodate a maximum capacity of 560 students, and involves the following:

- Block A:
 - Construction of a six-storey (with additional roof/plant level) school building in the south-western portion of the site, comprising:
 - General learning spaces.
 - Common learning areas.

- Specialised learning spaces such as for visual arts, wood and metalwork, food technology, science, performing arts, health and physical education.
- Support learning unit.
- Reception, administrative and staff facilities.
- A library.
- Small terrace areas.
- Stairs, lifts and circulation.

Block B:

- Construction of a single storey hall, gymnasium, canteen and covered outdoor learning area (COLA) building in the south-eastern portion of the site.
- Block C:
 - Construction of single storey storage, bicycle storage and toilets in the northeastern portion of the site.
- Other works included within the Stage 1 component of the new Melrose Park High School are:
 - Construction of a temporary waste storage room, staff bicycle storage room and student bicycle storage facility.
 - Construction of an outdoor equipment store.
 - Construction of two outdoor sports courts.
 - Construction of 5 car parking spaces, loading and waste collection area.
 - Associated landscaping.
 - Provision and augmentation of services infrastructure.
 - Associated off-site public domain infrastructure works to support the school, including (but not limited to):
 - Line marking of 10 drop off and pick up spaces on Wharf Road and associated widening of the footpath on the western side of Wharf Road to provide access to those drop off and pick up facilities.
 - Provision of a new bus zone on the southern side of Hope Street.
 - Provision of a new loading zone on the northern side of Hope Street.
 - Construction of a raised pedestrian crossing on Wharf Road and a raised pedestrian crossing on Hope Street.

Stage 2 of the new Melrose Park High School proposes to accommodate an additional 440 students, resulting in a total capacity of 1,000 students, and involves the following:

- Block D:
 - Construction of a five-storey (with additional roof/plant level) school building containing staff rooms, general learning spaces and a permanent student bicycle storage facility.
- Block A Changes
 - Expansion of the level 2 library replacing several multipurpose rooms.
 - Repurposing a level 3 learning common as a science lab.
- Demolition of temporary waste storage room, staff bicycle storage room and student bicycle storage facility.
- Associated landscaping.

A photomontage of the consolidated Stage 1 and 2 components of the Melrose Park High School is provided in **Figure 14** and **Figure 15**. The delineation of Stage 1 and Stage 2 components is shown in the staging plan at **Figure 16**. A summary of the proposed activity is provided in **Table 5**.



Figure 14 Photomontage of the Block A and Block D viewed from corner of Hope Street and Future North-South Road 4

Source: NBRS



Figure 15 Photomontage of the hall entrance from Hope Street

Source: NBRS

LEGEND EXTENT OF WORKS		
I STAGE 1_	3 STAGE 2.	1:400 @ A1

Figure 16 Proposed staging plan

Source: NBRS

Table 5: Summary of the activity

Project Element	Description
Site Area	9,925m ²
Project Name	New Melrose Park High School
Project Summary	Construction and operation of the Stage 1 component of the new Melrose Park High school, accommodating a maximum of 560 students.
	Future construction and operation of the Stage 2 component of the new Melrose Park High school, accommodating the remaining 440 students within the site's 1,000 student maximum.
Use	Educational establishment
Student and Staff Numbers	Stage 1: 560 students, 64 staff Stage 2: 1,000 students, 79 staff
Car Parking Spaces	 Stage 1: 5 staff car parking spaces (including 1 accessible space). 24 staff car parking spaces are intended to be provided concurrently on the Melrose Park Public School (250m walk to the south) site under a separate planning process for the redevelopment of the public school. This is stipulated in mitigation measure OT-2 (refer to Appendix 1). No student car parking. Stage 2: Stage 2 will not provide any additional staff car parking on the site. An additional 15 staff car parking spaces will be provided on the

Project Element	Description
	 Melrose Park Public School site under a separate planning process, totalling 39 staff car parking spaces provided on the Melrose Park Public School site This is stipulated in mitigation measure OT-3 (refer to Appendix 1). No student car parking.
Bicycle Parking Spaces	 Stage 1: 6 staff bicycle parking spaces. 56 student bicycle parking spaces. Stage 2: Total 8 staff bicycle parking spaces Total 100 student bicycle parking spaces.
Maximum Height	27.3m (six storeys in height + roof level)
GFA and FSR	 GFA: 10,688m² FSR: 1.078:1
Unencumbered play area per student on the site including gymnasium (Educational Facilities Standards and Guidelines (EFSG) minimum is 10m ² per student)	Stage 1: 10.15m ² per student Stage 2: 6.29m ² per student
Unencumbered play area per student on the site including gymnasium, rooftop play space and adjacent playing field (EFSG minimum is 10m ² per student)	Stage 1: 14.29m ² per student Stage 2: 10.29m ² per student
Shade Coverage	3,658m ² , equating to 36% of the total site
Tree Canopy Cover	2,037m ² , equating to 20.5% of the total site
Off Site Public Domain Works	 Line marking of 10 drop off and pick up spaces along Wharf Road. Widening of footpath on Wharf Road adjacent to proposed drop off and pick up spaces on Wharf Road. Provision of loading zone on Hope Street. Construction of raised pedestrian crossing on Wharf Road. Construction of raised pedestrian crossing on Hope Street.

3.1 Site Preparation

3.1.1 Demolition

No demolition of any structure is included in the proposed activity.

3.1.2 Earthworks

Bulk earthworks are required and range up into 2.0m in cut and 2.0m in fill. In total, the proposed earthworks will require a cut of 207.430m³ and a fill of 5,879.127m³, with a balance of 5,671.697m³ in fill. An extract of the cut and fill plan is shown in **Appendix 7** and replicated in **Figure 17** below.



Figure 17 Bulk Earthworks Layout

Source: Enstruct

3.1.3 Remediation

There are no remediation works proposed as part of this REF. The Detailed Site Investigation (refer to **Appendix 12**) confirms remediation works have been completed and that the site is suitable for the use as a secondary school. It confirmed that no further remediation works are required for the site.

3.2 Design and Built Form

3.2.1 Design Principles

This REF is accompanied by an Architectural Design Report (**Appendix 4**) that outlines the design approach to the proposal. This approach was guided by four categories of design principles that responded to the site's constraints and opportunities, including the size of the site, transition between high and low density-built form, visual connection to the future town centre, as well as project requirements for the usage of the site for a secondary educational use. The four categories of design principles are summarised below.



Environmental Response:

- Good solar access.
- Protection from western winds.
- Capturing cooling northeastern summer breezes.
- Maximising outdoor space to favourable north-east aspect

Density Response:

- Respecting the adjacencies.
- Acknowledging lower density in the east.
- Acknowledging future high density and scale in the west.



EXISTING LOW DENSITY RESIDENTIALS

Urban Response:

- Acknowledging connection to future town centre.
- Creation of main entry plaza centred on crosssuburb link.
- Good pedestrian
 navigation principles.
- Good visual and physical connection to communal playing field.



Staging Response:

- Ensuring the high school remains operational during Stage 2 construction.
- Buildability and safety.
- Proximity to existing Melrose Park Public School.

Figure 18 Design Principles

Source: NBRS

3.2.2 Design Quality Principles in Schools

The proposed activity is consistent with the design principles within Schedule 8 of the TI SEPP, which relates to design quality principles in schools. The Architectural Design Report prepared by NRBS (**Appendix 4**) provides a detailed assessment against Schedule 8.

3.2.3 Connecting with Country

The design scheme has evolved with consideration of core Connecting with Country themes, which have been identified and integrated through historical research, site analysis, and walk on country, as detailed within the Architectural Design Report (**Appendix 4**). The following Connecting with Country principles were informed by this process:

- **Cultural Integration:** The school's design includes cultural narratives such as eel, fish, crabs, and mangrove symbolism, yarning circles, and the representation of local flora and fauna.
- **Connection to Country:** Use of natural pathways, dual naming, and colours inspired by the environment.
- **Community Spaces:** Creation of culturally significant areas like outdoor learning environments and community gathering spaces.
- Vegetation and Landscape: Incorporation of native plants and trees to reflect the Cumberland Plains, promoting sustainability and educational engagement with the natural environment.
- Water, Land, and Sky: Design elements reflect the interconnectedness of water, land, and sky in Dharug culture, integrating these themes into building elements, landscape design, and wayfinding strategies.
- **Storytelling and Wayfinding:** Integration of Dharug stories and symbols in the design elements, including artwork, wayfinding paths, and signage.

3.2.4 Built Form and Layout

Stage 1

The key proposed Stage 1 activities include the construction of a six-storey school building in the south-western portion of the site, construction of a single storey hall, gymnasium and COLA in the south-eastern portion of the site, as well as the construction of a single storey storage building in the north-eastern portion of the site. These works are supplemented by the embellishment of a range of outdoor spaces, vehicular access, augmented services infrastructure and off-site infrastructure works.

The proposed buildings are set back from the site boundaries in accordance with the controls in the Parramatta DCP for the Melrose Park Urban Renewal Precinct. Specifically, the proposal incorporates a 6m setback to the western and southern boundaries, a 3m setback to the communal sports field to the immediate north and a 0m setback to the future Wharf Road gardens. The areas within the setback are proposed to be fenced and landscaped with large trees planted every 8-10m, ensuring there is an appropriate transition between the built environment and natural elements.

As highlighted in **Figure 19** below, the proposed Stage 1 built form includes Blocks A, B and C, which are described in more detail in the following sections.





Source: NBRS

Block A

Block A contains a six-storey building with a maximum building height of 27.3m and gross floor area (GFA) of 6,458m². It will accommodate educational and administrative uses. It also

comprises an external, covered walkway on the ground level, which is connected with the hall and COLA of Block B. The main access point to Block A is from the school's main entrance through the canopy cover, with access to the upper levels provided through two (2) lift cores and two (2) stairwells within the central layout. This ground floor treatment is visualised within **Figure 20** below.



Figure 20 Block A ground floor treatment depicting undercover walkways

Source: NBRS

Figure 21 provides a stacking diagram for the Block A component of the proposed activity.

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Figure 21 Stacking diagram

Source: NBRS

Block B

Block B contains a single-storey, double height building which includes a hall/gymnasium and canteen, with a GFA of 845.2m² and a connection to the COLA of approximately 200m² in area. The gymnasium accommodates equipment storage areas as well as boys and girls changerooms (including one accessible changeroom). The double height-built form arrangement of the hall will align with approximately level 2 of the Block A building, and in doing so, it will continue to connect with the existing undercover walkway treatment.

The gymnasium includes four access points, two leading to the external covered walkway and two leading into the COLA, where the canteen is located. Block B also contains an additional access point into the school from Hope Street. As Hope Street is set at a higher level than the hall entrance, an approximately 29m² area of Wharf Road Gardens adjacent to the hall entry and Hope Street needs to be re-graded and paved as hardstand to provide compliant access to Hope Street via a separate planning pathway associated with DA/459/2024 (refer to **Figure 22** below for design intent on Wharf Road Gardens).



Figure 22 Proposed Block B floor plan (entranceway indicated in blue)

Source: NBRS

Block C

Block C is situated within the north-western portion of the site. It contains storage rooms and plant rooms housing services infrastructure required for the operation of the school.

Other Structures

Other structures proposed in Stage 1 include:

- Temporary staff bicycle storage and waste storage room structure.
- Temporary student bicycle storage facility.
- Outdoor equipment store.

The temporary structures ae proposed to be removed as part of the Stage 2 works to facilitate the construction of the 5-storey Block D building above. They will be replaced with permanent staff bicycle storage, student bicycle storage and waste storage rooms on the ground floor of Block D.

Stage 2

Demolition

The temporary structures mentioned above are proposed to be removed as part of the Stage 2 works to facilitate the construction of the 5-storey Block D building above. They will be replaced
with permanent staff bicycle storage, student bicycle storage and waste storage rooms on the ground floor of Block D.

Block D

Block D is situated in the north-western corner of the site. It is proposed to be a five-storey building with a maximum building height of 27.3m. Block D will include pedestrian connections to Block A on each level, creating a consolidated part 5 and 6-storey built form (as seen in **Figure 23**). Block D will have a GFA of 3,145m². The upper levels will contain a range of learning and administrative spaces, to accommodate the increased capacity of 1,000 students, including general learning spaces, a health & PE learning hub, amenities/services, learning commons, an administration/staff hub and suitable vertical circulation (refer to the stacking diagram in **Figure 21** above).

Block D will create a ground floor under croft area (with connections to the undercover areas within Block A). The main access point to Block D will be from the now consolidated undercover entranceway from the future north-south road to the west, with access to the upper levels provided through a consolidated stairwell and lift core located in the northern section of the Block. Furthermore, Block D will contain an 830m² communal terrace area on level 5, which will have a direct connection to Block A that will support the provision of unencumbered play space within the new high school underneath a shade structure. A photomontage of the Block D treatment with Block A in a consolidated part 5 and 6-storey built form is provided in **Figure 23**.



Consolidated main entry perspective



Consolidated high school-built form

Figure 23 Block D photomontages

Source: NBRS

Works to Block A

Stage 2 will also involve minor works within Block A, this includes:

- Conversion of one learning common room on level 3 into a science lab; and
- Consolidation of the multipurpose rooms into the library area on level 1.

3.2.5 Materiality and Colours

The proposed materiality and colours of the proposed built form have been informed by the Connecting with Country process as follows:

- Eucalypt green to emulate the character of the Cumberland Plain.
- Dark brown/charcoal to emulate the muddy waters of the Parramatta River.
- Blue from the sky.
- Bright green to emulate mangrove sprouts.

The selected materials have been considered as robust and pragmatic options for the purpose of a high school, with the following building material selection.

- Face brick external wall cladding along the ground floor and first floor.
- Compressed fibre cement (CFC) utilised along the upper floors in moderate transient spaces.
- Metal cladding with up to three different corrugation profiles is proposed along the street facing facades that have no pedestrian traffic.
- Powder coated aluminium window framing and glazing throughout the Block A and B buildings.
- Powder coated steel balustrade posts with powder coated aluminium metal infill.



An illustration of the proposed material and colour selection is provided in **Figure 24** below.



Source: NBRS

3.3 Sustainability and Climate Change

Building performance has been considered in the design of the proposal to reduce resource consumption and carbon emissions, and impact on climate change. Sustainability aspirations for the project are aligned with good design practice, including designing to reduce energy and water use, reducing waste and considering locally sourced, recycled materials within the design. The proposed activity is targeting a Green Star Five Star rating.

The proposed design has been informed by four (4) principles – responsible, healthy, resilient and positive – to achieve high levels of environmental sustainability. The sustainability measures associated with each principle include (but are not limited to):

Responsible

- Minimum of 90% of the waste generated from the construction of the high school will be reused or recycled, limiting the amount of waste being diverted to landfill.
- The construction and operation of the high school will be guided by strict environmental targets which seek a 20% reduction in energy use and upfront carbon emissions when compared to the original reference building.
- Internal building finishes products will have the applicable GBCA recognised sustainability certification or similar.

Healthy

- The building's acoustic design aims to deliver acoustic comfort through achieving maximum internal noise levels, providing acoustic separation, and controlling reverberation.
- Internal air pollutants have been reduced via selection of materials with low or no volatile organic compound (VOC) levels and low formaldehyde concentrations.
- High levels of daylight and external views are provided to regularly occupied learning and administration areas, to support high levels of visual comfort for building occupants.

Resilient

- A climate adaptation risk register has been developed for the building to address specific climate risks of the design and how they might be mitigated to reduce risk.
- Strategies to minimise the urban heat island effect including light-coloured roofing and external finishes, as well as maximising the extent of landscaping elements have been implemented throughout the design development process.

Positive

- Passive design principles, including high-performance building envelope, effective shading and building orientation, and natural ventilation openings have been implemented to support comfortable and low-energy indoor environment quality.
- The future school will be serviced by 100% electric services (including heat pumps for heating and domestic hot water) and will not have any piped gas connections. It will also be a fully electric building, with gas used in lab/workshops equipment or emergency power to be offset in the first five years of operation.
- Effective shading devices have been implemented to reduce solar heat gains to conditioned spaces coupled with energy efficient lighting and high efficiency heating and cooling.

Refer to the ESD report (Appendix 25) for further information.

3.4 Landscaping

The proposed landscape design has been directly informed by the Connecting with Country consultation. It includes an open play area enclosed by the school buildings along the western and southern sides of the site. The site will be secured with perimeter palisade fencing as required by the School Security Unit. The fencing strategy is further described in the Architectural Design Report at **Appendix 4**. The proposed landscape design to be constructed in Stage 1 is provided in **Figure 25** with a summary of each element provided further below.



Figure 25 Proposed landscape concept plan – Stage 1

Source: NBRS

- Entry plaza (1): The main school entrance is proposed to be located on the axis of the pedestrian link to the new town centre, providing a clear visual linkage through the school. It will include an under-croft entry canopy that will provide seating areas, gathering points and access to student bicycle parking.
- Lawn (2): An open grass area is proposed in front of Block B.
- **Gardens (3):** A range of raised planters and trees are proposed. They will contain a mix of indigenous and sensory plants. A shade sail is also proposed throughout this space.
- **Multipurpose courts (4):** There are two multipurpose courts proposed on the northern side of the school.
- **Courtyard (5):** The courtyard space enclosed between Blocks A and B will support a variety of learning activities ranging from structured group lessons to informal creative exploration.
- **Tree planting (6):** A total of 66 new trees are proposed to be planted throughout the site, with larger native trees planted within the 6m setback along Hope Street and the proposed

north/south road along the western boundary. Small-medium trees are proposed to be planted throughout the site providing shaded areas. The proposed tree planting plan is provided in **Figure 26** below.

Stage 2 is proposed to include a rooftop terrace above Block D with a shade structure.

Refer to the Architectural Design Report (**Appendix 4**) for further detail on the landscape design and species selection.



Figure 26 Proposed tree masterplan

Source: NBRS

Open play space

The EFSG requires a minimum of 10m² of unencumbered play area per student.

In Stage 1, 10.15m² of unencumbered play area per student is provided, inclusive of external landscaped areas and the gymnasium.

In Stage 2, 6.29m² of unencumbered play area per student is provided, inclusive of external landscaped areas, the gymnasium and rooftop play space above Block D.

Stage 2 is proposed to rely on an additional 4m² of play space per student from the adjacent playing field to the north (subject to a joint-use agreement with Council). This results in a total unencumbered play area per student of 10.29m². In Stage 1, inclusion of the playing field results in an unencumbered play area per student of 14.15m².

3.5 Access and Parking

3.5.1 Pedestrian Access

Pedestrian Entrances

The primary entry to the school is proposed to be via the main entry plaza accessed from the Future North-South Road 4 immediately west of the site. One (1) additional secondary entrance is provided in the south-eastern corner of the site (providing access to the hall), with two (2) additional entry points provided along the northern edge of the site (connecting the school to the adjacent playing fields). It is noted that the pedestrian entry to the hall, and entrances along the eastern boundary, rely upon the regrading and re-paving throughout the Wharf Road Gardens. These works are subject to a separate planning application in DA/459/2024, which was approved on 20 December 2024. It is noted that Condition 10 of DA/459/2024 will enable the repaving works to be completed subject to detailed plans being submitted to Council. Subsequently, this arrangement will enable the department to collaborate with Sekisui House to ensure the paving works are completed, facilitating a suitable entranceway into the hall.

3.5.2 Public Domain Works Outside of the School Site

Pedestrian Crossings and Wharf Road Footpath Widening

To improve safety for pedestrians throughout the existing and future surrounding road network, a total of two (2) new raised pedestrian crossings are proposed on Wharf Road and Hope Street. It is noted that an additional raised pedestrian crossing will be provided by Sekisui House on the adjacent Future North-South Road 4 (see **Figure 27**). The proposed activity also seeks to widen the Wharf Road footpath to provide access to the proposed drop off and pick up spaces on Wharf Road. Refer to the Civil Engineering Drawings for further detail on proposed public domain works (**Appendix 7**).

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Figure 27 Proposed pedestrian entrances, raised pedestrian crossings (indicated in red), footpath widening (indicated in blue) and drop off and pick up areas (indicated in orange)

Source: NBRS

3.5.3 Bicycle Access and Parking

Bicycle access is proposed at the main entrance (for student bicycle parking) and the vehicular access driveway (for staff bicycle parking). Enclosed student and staff bicycle parking facilities will be separated, with the following bicycle parking quanta provided within each stage:

- Stage 1:
 - Student bicycle parking spaces 56
 - Staff bicycle parking spaces 6
- Stage 2:
 - Student bicycle parking spaces 100
 - Staff bicycle parking spaces 8
- Total:
 - Student bicycle parking spaces 100
 - Staff bicycle parking spaces 8

In Stage 1, these bicycle parking spaces will be located within temporary bicycle storage structures which will be replaced in Stage 2 on the ground floor of Block D, directly accessible from the undercover under croft.

3.5.4 Vehicular Access and Parking

On-site parking

Vehicles will access the car park for the school via the new crossover on the proposed north-south road along the site's immediate western boundary. The new car park is proposed to contain five (5) parking spaces (including one accessible space) for staff. No car parking is proposed for students.

Off-site parking subject to separate planning process

Prior to the opening of Stage 1, it is intended that 24 staff car parking spaces will be provided on the redevelopment Melrose Park Public School site, approximately a 250m walk south of the site. Prior to opening Stage 2, an additional 15 staff car parking spaces is intended to be provided on the redevelopment Melrose Park Public School site, resulting in a total of 39 staff car parking spaces on the public-school site. These car parks are not subject to this REF, rather, they are intended to be subject to a separate application associated with the redevelopment of the existing public-school site. This is stipulated in mitigation measure OT-2 (refer to **Appendix 1**).

Drop off and pick up

The proposed activity includes provision of 10 drop off and pick up spaces on Wharf Road through new line marking and signage.

As part of the Future North-South Road 4 to be completed under D/1100/2021, 11 drop off and pick up spaces and two accessible spaces to facilitate ease of access to the main entry and special education learning units, will be constructed by Sekisui House.

Loading and servicing

Waste collection and loading is proposed to be undertaken from the at-grade hardstand within the on-site car park accessed from Future North-South Road 4. This car park can accommodate a medium rigid vehicle.

Signage changes for an additional 12m loading zone is also proposed on the northern side of Hope Street to the east of the existing bus zone near Block B.

Bus zones

A new 63m bus zone is proposed on the southern side of Hope Street, comprising signage changes and minor public domain works. Existing bus zones on the northern side of Hope Street and western side of Wharf Road will also be utilised.

3.6 Signage

Three (3) building identification signs and wayfinding signage at each pedestrian entrance is proposed. Further details on each of the proposed signs is provided in **Table 6** below.

The Design Report identifies the indicative locations of the future building identification signage, as well as suitable wayfinding signage. Schedule 5 within *State Environmental Planning Policy* (*Industry and Employment*) 2021 (Industry and Employment SEPP) is addressed at **Section 5.5.1**.

Location	Sign Type	Dimensions	Content	Illumination / Materiality
Main entry	Building identification signage	250mm (W) 50mm (D) Length of main entry awning	'Melrose Park High School'	No. Will consist of composite aluminium individual 3D lettering that is securely fixed to the awning.
Main entry	LED Building identification signage	2,400mm (W) 2,200mm (L)	Variable digital content	Yes.
Hall entry	Building identification signage	700mm (W) 3,000mm (L)	'Melrose Park High School'	No. Will consist of composite 3D aluminium lettering that is 200mm (H) x 20mm (D) that is fixed to the brick wall.
Car park entry	Wayfinding signage	400mm (W) 250mm (H)	'Melrose Park High School' 'Staff Car Park'	No. Will consist of aluminium base with screen printed text.
Playing field entry	Wayfinding signage secured to fence	600mm (W) 450mm (H)	'Melrose Park High School' Wayfinding map of the school	No. Will consist of aluminium base with screen printed text.
Accessible playing field entry	Wayfinding signage secured to fence	600mm (W) 450mm (H)	'Melrose Park High School' Wayfinding map of the school	No. Will consist of aluminium base with screen printed text.
Wharf Road Gardens entry	Wayfinding signage secured to fence	600mm (W) 450mm (H)	'Melrose Park High School' Wayfinding map of the school	No. Will consist of aluminium base with screen printed text.

3.7 Utilities and Services

The following inputs have been prepared describing how the new high school will be connected to utilities and services:

- Electrical Services Design Statement (Appendix 30).
- Hydraulic Services Design Statement (Appendix 31)

Table 7: Proposed Infrastructure and Services

Infrastructure/Service	Comment
Stormwater	The new high school is proposed to be drained by a gravity system primarily consistent of eaves gutters and downpipes throughout the roof levels and conveyed into an in-ground pipe system. Surface stormwater will be collected in pipes, which will be designed to capture and convey all runoff to the civil stormwater system.

Infrastructure/Service	Comment	
Electrical	The site does not contain any existing electrical services, with the nearest high voltage connection located at the corner of Hope Street and Wharf Road. The new high school will be provided with the following electrical infrastructure:	
	• A 1000kVA kiosk substation on the south side of the site, supporting both Stage 1 and future Stage 2 demands.	
	• A new main switchboard located adjacent to the substation, supplying power to distribution boards.	
	• Vertical risers within Block A for efficient cable reticulation.	
	 Initial 70kW solar PV system installation on Block A, expandable to 100kW in Stage 2. 	
Communications	The site requires a new Telstra connection, with existing NBN services present on Hope Street. The new high school is proposing the following communications infrastructure services:	
	• Provision of a main communications room located in Block A, acting as the campus distributor.	
	• Allocation of building communications rooms throughout the school,	
	placed to ensure compliance with a 75m cable radius.	
	NBN and Telstra conduits will be extended to the site.	
	 Wireless access points will be distributed throughout indoor and covered outdoor areas for seamless connectivity. 	
Water	The site has access to one Sydney Water Main on Wharf Road, which is expected to be able to support the water demand for the new High School. Other supporting water infrastructure in the new high school will consist of:	
	 Domestic cold-water connection 100mm diameter pipe with an authority water meter. 	
	• Fire hydrant system water connection 150mm diameter pipe.	
	• Domestic cold-water pumps for boosting the water pressure within the site.	
	Connection to future utility recycled water main.	
Sewer	The site has access to the sewer mains along Wharf Road, which are expected to be able to support the sewer demand for the new high school Supporting sewerage infrastructure throughout the new high school will consist of:	
	Gravity sewer mains serving all buildings.	
	 Sewer access chambers located on main lines and at changes of direction. 	
	 Trade waste grease arrestor serving trade waste drainage from kitchens. 	
	• Dilutions pit serving science lab trade waste drainage.	

3.8 Construction

3.8.1 Construction Activities

The works are expected to be completed over a medium-long term period. A summary of the project timeframes and construction activity in further detail is provided below.

Construction Hours

The proposed hours of construction align with the Standard Interim Construction Noise Guideline construction hours and are as follows:

- 7:00am to 6:00pm, Monday to Friday
- 8:00am to 1:00pm, Saturday
- No work without prior approval on Sundays and Public Holidays

Construction Waste Management

A Construction Waste Management Plan (CWMP) has been prepared by the waste management consultant (**Appendix 19**). It details that approximately 98.1% of the construction waste generated on the site during the Stage 1 works will be capable of being diverted from landfill.

It also details that a sufficient quantity of skip bins will be provided for the separate storage of each type of material on site, with bin sizes ranging from 2.4m³ to 7.2m³ in size. It is intended for the wastage within these bins to be sorted offsite, with a single skip bin considered sufficient for the proposed construction works.

The proposed bin storage area will be located at the north-eastern portion of the site. This will enable waste vehicles to enter and exit the site from Future North-South Road 4 in a manner that does not disrupt the traffic volume throughout the surrounding road network.

Staging

The proposed activity will be constructed in two stages:

- Stage 1: Construction targeting completion by December 2026.
- Stage 2: To be constructed at a later date to meet evolving demand. Construction timeframe is likely to be approximately 8-12 months.

During Stage 2 construction, Stage 1 will continue operation. A staging plan for Stage 2 construction is appended to the Preliminary CMP (**Appendix 18**) and shown below in **Figure 28**. Key construction arrangements for Stage 2 include:

- Installation of Class A hoarding separating the future Block D area and sports courts from the remainder of the site (indicated in the green lining in **Figure 28** below).
- Erection of scaffolding around the Stage 2 site (indicated in red in Figure 28 below).
- Maintenance of driveway access from the Future North South Road 4 for construction heavy vehicles and waste collection vehicles only (indicated in pink arrows in Figure 28 below).
- Access to the waste storage room maintained via a hoarding for authorised school personnel (indicated in orange in **Figure 28** below).
- Use of the sports courts for site accommodation, material set-down and vehicle manoeuvring (indicated in dark green and purple boxes in **Figure 28** below).

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Figure 28 General Arrangement Plan – Stage 1

Source: NBRS

3.9 Operation

3.9.1 Capacity and School Hours

The new Melrose Park High School will provide publicly accessible educational facilities for all capabilities with a maximum capacity of 560 students and 64 staff members in Stage 1 and 1,000 students and 79 staff members in Stage 2. The school will operate between 8:00am to 4:00pm Monday to Friday, but specific bell times are yet to be determined. They are proposed to be between 8:00am to 9:30am and 2:30pm to 4:00pm, with bell times staggered with a 20-minute variation to Melrose Park Public School to reduce cumulative traffic impacts.

3.9.2 Joint Use Agreement

It is intended that the department will enter into a joint use agreement with Council for the use of the future playing fields situated along the immediate northern boundary of the site by students during school hours. Two (2) pedestrian entrances along the north boundary of the school site are proposed to provide direct and accessible access to the adjacent playing field.

Opportunities for shared use and weekend community access to the multipurpose courts and hall will be considered in due course. It is noted that such arrangements may be exempt development, pursuant to section 3.39(1)(i) of the TI SEPP. As such, no further details of shared use arrangements are provided in this REF.

3.9.3 Operational Waste Management

An Operational Waste Management Plan (OWMP) has been prepared (**Appendix 20**). A total of four (4) 1,100L general waste bins and three (3) 1,100L recycling bins will be required to accommodate the operational waste demand for the school (accounting for 1,000 students), which equates to approximately 21m² of required waste storage space.

Accordingly, Stage 1 includes a 28.1m² waste room with adequate access to the car park set down area for medium-rigid service vehicles.

Waste is proposed be collected by a private waste contractor.

Figure 29 and **Figure 30** below provide an excerpt of the waste room location and proximity of the set down area for medium-rigid vehicles in Stage 1 and Stage 2.



Figure 29 Proposed Stage 1 waste room location (waste room set-down area indicated in red)

Source: NBRS

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Figure 30 Proposed Stage 2 waste room location (waste room set-down area indicated in red)

Source: NBRS

4. Proposal Need and Alternatives

4.1 Proposal Need

The Central City District Plan notes that the Parramatta LGA student population is forecast to increase by 28,595 students by 2036. Moreover, the Melrose Park Precinct redevelopment is estimated to accommodate approximately 11,000 new dwellings. The proposed activity responds to this anticipated population and dwelling growth by delivering additional, contemporary school facilities and a critical piece of social infrastructure within the newly established Melrose Park Precinct.

The construction of the new school in Melrose Park will provide additional educational infrastructure for the growing demand in the broader Ryde secondary school catchment and for the envisaged population growth within the Melrose Park North (6,000 dwellings in short-term development) and South (5,000 dwellings in long-term development) precincts. Moreover, the development of the new school represents a state government election commitment, and therefore has a high priority level of interest from several key state government stakeholders. The Stage 1 component for the Melrose Park High School is targeted to be completed prior to Term 1 Day 1 2027 and will accommodate 560 students and approximately 79 staff members.

Informed by the above-described need, the objectives of the proposed activity are as follows:

- Meet the growth in educational demand in Melrose Park and the broader Parramatta LGA in an effective and sustainable manner;
- Advance the capability of public high schools in the Parramatta LGA and Central River City to provide authentic and personalised learning pathways from high school to life after school;
- Maximise the opportunities provided by the school's siting in proximity to the existing Melrose Park Public School, enabling pathways to be established between both educational establishments;
- Minimise the activity's environmental impacts through appropriate design and mitigation measures;
- Enable the school to become a central place in the community by acting as a hub and conduit for services that will support their education;
- Enable greater efficiency in the use of human and physical resources through collaborative use of assets and partnerships; and
- Incorporate ecologically sustainable development (ESD) principles in the school's design and operation.

4.2 Alternatives

A number of options and alternatives were considered by the proponent. An assessment of the options to address the need identified above is provided within the table below.

Option	Discussion	Preferred Option
Option 1: Do Nothing	Under the 'Do Nothing' scenario, the existing school facilities in the Parramatta LGA would need to continue to provide services to cater to	Option 1 is not preferred as it would not adequately respond to population growth and contemporary educational

Option	Discussion	Preferred Option
	the region's increasing education needs.	demand, potentially leading to declining education. The approach would also represent a missed opportunity to align the future of the site with the State and Local Governments' strategic visions for Parramatta LGA and the Melrose Park North Precinct.
Option 2: Alternative design	<text><text><text><text><text></text></text></text></text></text>	Option 2 is not preferred due to the consolidation of the car parking on the site restricting the Stage 1 and Stage 2 building components to be condensed into a smaller area. This resulted in an unfavourable built form outcome which disrupted the clear visual connection to the town centre and residential development to the west.

Option	Discussion	Preferred Option
Option 3: The proposed activity	The preferred option consolidates the teaching spaces within the Stage 1 building and relocated the hall to the south-eastern corner, which provides an improved solar access outcome to the play areas during winter months and allows a separate after-hours hall entry from Hope Street.	Option 3 is preferred as it acknowledges the site's connection to the future town centre and addresses each of the surrounding street frontages/adjacent open space effectively. Furthermore, the siting of the proposed 6-storey building in Stage 1 and 5-storey building in Stage
	Furthermore, the reduction in the car parking area enables a 12m separation between the 6- storey building proposed in Stage 1 and 5-storey building proposed in Stage 2. This design move significantly improves the visual connection within the site to surrounding interfaces, specially creating a clear sightline to the	2 effectively acknowledges the future high-density development and scale in the west, while the separation between Blocks A and D provide a visual corridor through the site as desired by Council.
	adjacent town centre. Pedestrian entries to the school were also consolidated to be co-located with pick-up and drop-off locations.	Option 3 provides the most favourable solar access outcome to play areas by siting the outdoor spaces with a north- eastern aspect.
	Moreover, the relocation of both multipurpose courts to the northern edge of the school has created a stronger relationship to the playing fields, which is also supported by two secondary entrances to the school along the northern boundary.	Overall, option 3 provides a highly considered urban design response that enables the most favourable built form treatments to the emerging high- density developments to the west, communal open space to the north, low-density development to the east and Hope Street to the south. More importantly, the relocation of on-site
	However, this approach reduces the on-site car parking provision to five (5) spaces, though the redevelopment of Melrose Park Public School provides an opportunity to locate the required car parking on the public-school site.	car parking enables adequate play areas to be provided on the school site without compromising the available floor area for each building.

5. Statutory and Strategic Framework

This section of the REF identifies the relationship between the proposed activity and the planning framework.

5.1 Permissibility and Planning Approval Pathway

The TI SEPP aims to facilitate the effective delivery of infrastructure and educational establishments across the state and provides that development for the purposes of a government school is permitted without consent. The proposed activity is development permitted without consent as outlined at **Table 9** will be consistent with design considerations for educational establishments while minimising impacts on surrounding areas:

- Delivers efficient development of government owned land and provides an educational establishment for the growing Melrose Park North Precinct;
- Will be consistent with consultation requirements with relevant public authorities during the assessment process or prior to development commencing; and
- Considers joint and shared use of the facilities of educational establishments with the community through the appropriate design.

The activity is consistent with the aims of Chapter 3 of the TI SEPP for educational establishments and child care facilities, as set out at Section 3.1 in that it:

- Will be consistent with design considerations for educational establishments while minimising impacts on surrounding areas;
- Delivers efficient development of government owned land and provides an educational establishment for the growing Melrose Park North Precinct;
- Will be consistent with consultation requirements with relevant public authorities during the assessment process or prior to development commencing; and
- Considers joint and shared use of the facilities of educational establishments with the community through appropriate design.

Division and Section within TI SEPP	Description of Works
Chapter 3 – Educational esta	blishments and child care facilities
Part 3.4 Schools – specific de	evelopment controls
Section 3.37A – New	New Government Schools
government schools— development permitted without consent	The proposed activity comprises development for the purposes of a government school carried out by a public authority on land on which there is no existing or approved school and is in Zone SP2 Infrastructure (Educational Establishment), which is a prescribed zone under the TI SEPP.
	The proposed activity involves the construction of building(s) with a maximum height of 6 storeys (27.3m), which is less than the height limit of 36.5m applying to the site under the Parramatta LEP.
	Appropriate consultation having regard to the SCPP DPHI—new health services facilities and schools, and the stakeholder and community participation plan will be carried out, refer to Section 6 .
	The Design Quality Principles set out in Schedule 8 of the TI SEPP and the Design Principles set out in the Design Guide for Schools have been

Table 9: Description of Proposed Activities under the TI SEPP

Division and Section within TI SEPP	Description of Works	
	considered as set out in the Architectural Design Report at Appendix 4.	
Chapter 2 – Infrastructure		
Part 2.3 Development controls		
Division 17 Roads and traffic Section 2.109 Development permitted without consent – general	Roads and Road Infrastructure Facilities Section 2.109(1) permits work for the purpose of a road and road infrastructure facilities to be undertaken without consent by or on behalf of a public authority. The proposed activity comprises the following road- related works undertaken by the department within the Wharf Road and Hope Street Road reserves:	
	 Line marking of 10 drop off and pick up spaces on Wharf Road and associated widening of the footpath on the western side of Wharf Road to provide access to those drop off and pick up facilities. Provision of a new bus zone on the southern side of Hope Street. Provision of a new loading zone on the northern side of Hope Street. Construction of a raised pedestrian crossing on Wharf Road and a raised pedestrian crossing on Hope Street. 	
Division 4 Electricity generating works or solar energy systems Section 2.38(4) Solar Energy Systems	Solar Energy Systems Section 2.38 of the TI SEPP allows for development for the purpose of a solar energy system may be carried out by or on behalf of a public authority without consent on any land if it is ancillary to an educational establishment. By definition, the new high school is identified as an educational establishment and therefore the proposed PV panels at roof level, to be carried out by the Department, may be carried out without consent.	
Division 1 Electricity Transmissions or Distribution Networks Section 2.44 - Development permitted without consent	Electricity Transmission or Distribution Services Section 2.44 of the TI SEPP allows for development for the purpose of an electricity transmission or distribution network to be carried out by or on behalf of an electricity supply authority or public authority (such as the department). This includes electrical services augmentation associated with the activity whether within or beyond the school site. Furthermore, the works may be carried out as they do not include development on land reserved under the National Parks and Wildlife Act 1974.	
Division 18 Sewerage	Sewerage Systems	
Systems Section 2.126 Development permitted with or without consent	Section 2.126 of the TI SEPP allows for development for the purpose of a sewage reticulation system to be carried out without consent on any land, if it is done in a 'prescribed circumstance'. Section 2.126(1) identifies that development is carried out in a 'prescribed circumstance' when it is carried out by or on behalf of a public authority, including the department. Therefore, any sewerage works required for the activity may be undertaken without consent, whether within or beyond the site.	
Division 20 Stormwater Management Systems Section 2.137 – Development permitted without consent	Stormwater Management Systems Section 2.137 of the TI SEPP allows for development for the purpose of a stormwater management system (including a water reticulation system) to be carried out by or on behalf of a public authority, including the department, without consent on any land. Therefore, any stormwater management works required for the activity may be undertaken without consent, whether within or beyond the site.	

Division and Section within TI SEPP	Description of Works
Division 21 Telecommunications and other communication facilities Section 2.141 - Development permitted without consent	Telecommunication Services Section 2.141 allows for development for the purpose of telecommunications facilities to be carried out without development consent on any land by or on behalf of a public authority, including the department. Therefore, any augmentation of telecommunications services required for the activity may be undertaken without consent, whether within or beyond the site.
Division 24 Water Supply Systems Section 2.159 – Development permitted without consent	Water Services Section 2.159 allows for the development of water reticulation systems without consent if it is carried out by or on behalf of a public authority on any land by or on behalf of a public authority, including the department. Therefore, any augmentation of water reticulation systems required for the activity may be undertaken without consent, whether within or beyond the site.

Activities permissible without consent require environmental impact assessment in accordance with Division 5.1 of the EP&A Act and are assessed and determined by a public authority, referred to as the determining authority. The department is the proponent and determining authority for the proposed works.

Additionally, section 5.7 of the EP&A Act states that an activity that is likely to significantly affect the environment must be subject of an Environmental Impact Statement rather than an REF. The effects of the activity on the environment are considered in Section 7 and have been assessed as having a less than significant impact (due to the activity already being envisioned within the Melrose Park North Precinct) and can therefore proceed under an REF assessment.

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The Guidelines for Division 5.1 Assessments (DPE June 2022) and the Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools Addendum (DPHI, October 2024) provide a list of environmental factors that must be taken into account for an environmental assessment of the activity under Division 5.1 of the EP&A Act. These factors are considered in detail at Section 7.

The activity is not within or nearby to a wilderness area (within the meaning of the *Wilderness Act 1987*) and therefore will not have an effect on any wilderness area. Therefore, assessment under section 5.5(3) of the EP&A Act is not required.

5.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the proposal as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency or development on Commonwealth land, nor does the proposed development affect any MNES. An assessment against the EPBC Act checklist is provided at **Table 10**.

Table 10: EPBC Act Checklist

Consideration	Yes/No
Will the activity have, or likely to have, a significant impact on a declared World Heritage Property?	No
Will the activity have, or likely to have, a significant impact on a National Heritage place?	No
Will the activity have, or likely to have, a significant impact on a declared Ramsar wetland?	No
Will the activity have, or likely to have, a significant impact on Commonwealth listed threatened species or endangered community?	No
Will the activity have, or likely to have, a significant impact on listed migratory species?	No
Will the activity involve any nuclear actions?	No
Will the activity have, or likely to have, a significant impact on Commonwealth marine areas?	No
Will the activity have any significant impact on Commonwealth land?	No
Would the activity affect a water resource, with respect to a coal seam gas development or large coal mining development?	No

5.3 Other Approvals and Legislation

Table 11 identifies any additional approvals that may be required for the proposed activity.

Legislation	Relevant?	Approval Required?	Applicability
State Legislati	State Legislation		
National Parks and Wildlife Act 1974	Yes	No	Aboriginal objects and Aboriginal places are protected under this Act. Aboriginal Cultural Heritage Due Diligence Assessment should determine if there are Aboriginal objects or places present and an Aboriginal Cultural Heritage Assessment Report (ACHAR), in support of an Aboriginal Heritage Impact Permit (AHIP), is required to impact these sites. The Aboriginal Cultural Heritage Assessment Report (ACHAR)
			(Appendix 13) confirmed that no Aboriginal sites, objects or areas of Archaeological potential were identified on the site. Therefore, the proposed activity is recommended to proceed with caution, conditional with the continued consultation with registered Aboriginal stakeholders and the discovery of unanticipated Aboriginal objects. An AHIP is not required and further assessment/approval under the <i>National Parks and</i> <i>Wildlife Act 1974</i> is not required.
Biodiversity Conservation Act 2016	No	No	The site in its current condition is completely cleared and does not contain any critical habitat, threatened species, nor any ecological populations or communities.
			This is confirmed within the Flora and Fauna Assessment (Appendix 21), which states that the proposed activities will not affect any threatened flora or fauna, nor any critical habitats.
Roads Act 1993	Yes	Yes	The following works will require Section 138 approval under the <i>Roads Act 1993:</i>
			Construction of raised pedestrian crossings on Hope

Table 11: Consideration of other approvals and legislation

Legislation	Relevant?	Approval Required?	Applicability
			 Street and Wharf Road; Widening of the Wharf Road footpath; Line marking 10 drop off and pick up spaces along Wharf Road; and Establishing a new bus zone on Hope Street. Whilst these activities will result in temporary closure of both local roads, they will facilitate an improved traffic outcome that is commensurate to the emerging high-density character of the area.
Local Government Act 1993	No	No	Various activities (e.g. water, sewer, stormwater connections, amongst other things) generally require the approval of Council under Section 68 of the <i>Local Government Act 1993</i> . However, pursuant to Section 69 (Crown exemption from approval to do things incidental to erection or demolition of building) of the <i>Local Government Act 1993</i> , Section 68 does not require the Crown, or a person prescribed by the regulations to obtain the approval of Council to do anything that is incidental to the erection or demolition of a building.
EP&A Regulation (Section 171A)	Yes	No	The site is located within the Sydney Harbour Catchment which is one of the prescribed regulated catchments in section 171A of the EP&A Regulation. Consideration of the likely impact of an activity on the environment in a regulated catchment is detailed in Section 7.13.
State Legislati	on – State Er	nvironmental	Planning Policies
State Environmental Planning Policy (Sustainable Buildings) 2022	Yes	No	Chapter 3 of this SEPP applies to non-residential development that involves erection of a new building with capital investment value over \$5 million or alterations, enlargement, or extension of an existing building if the development has a capital investment value of \$10 million or more. As such, Chapter 3 applies to the activity. However, this SEPP does not apply to development under Part 5 of the EP&A Act. Notwithstanding, the provisions of the SEPP should be considered as part of the environmental impact assessment for the project. An ESD Report (Appendix 25) and Net Zero Statement (Appendix 26) have been prepared by the ESD consultant and include an assessment of the environmentally sustainable development measures incorporated into the development design, as per Chapter 3 of the SEPP, and ability of the activity to meet the NSW Government's 2050 net zero targets. Preparation of a NABERS Embodied Emissions assessment prior to construction is included as mitigation measure ESD-5 at Appendix 1 .
State Environmental Planning Policy (Resilience and Hazards) 2021	Yes	Yes	A Detailed Site Investigation (Appendix 12) confirms the site is suitable for the proposed school and with no identified soil contamination and no further remediation required.
State Environmental	Yes	Yes	Chapter 3 of <i>State Environmental Planning Policy (Industry and Employment) 2021</i> (Industry and Employment SEPP) relates to

Legislation	Relevant?	Approval Required?	Applicability
Planning Policy (Industry and Employment) 2021			advertising and signage. Any new signage installed as part of the activity should be consistent with the objectives of Chapter 3 as set out in section 3.1(1)(a), and should also satisfy the assessment criteria specified in Schedule 5. An assessment of the proposed signage against the above provisions is provided in Section 5.3.1 of this REF.
State Environmental Planning Policy (Transport and Infrastructure) 2021	Yes	No	Land is in a pipeline corridor if it is located within 20m of the centreline (measured radially) of a relevant pipeline, or within 20m of land subject of an easement of a relevant pipeline. The proposed built form within the south-western corner of the site is located approximately 116m from the Clyde to Gore Bay pipeline which is identified as a relevant pipeline in section 2.77 of the TI SEPP. Accordingly, it is not located within 20m of the centreline (measured radially) or easement of the Clyde to Gore Bay pipeline.
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Yes	No	The site is located within the Sydney Harbour Catchment which is one of the prescribed regulated catchments. Consideration of controls relating to water quality and quantity (Section 6.6), aquatic ecology (Section 6.7), flooding (Section 6.8), and recreation and public access (Section 6.9) is provided in Section 7.13.

5.3.1 State Environmental Planning Policy (Industry and Employment) 2021 Assessment

Chapter 3 of the Industry and Employment SEPP, applies to all signage that under an environmental planning instrument can be displayed with or without development consent and is visible from any public place or public reserve.

The proposed signs are building identification and wayfinding signage for the purpose of assessment under the Industry and Employment SEPP, in that the proposed signs contain content which states the name of the new Melrose Park High School, which will occupy the site. As no advertising signage is proposed, the provisions within Part 3.3 do not apply and as set out in Part 3.2, Section 3.6 only the objectives of Chapter 3 and the assessment criteria specified in Schedule 5 require consideration.

The objectives of Chapter 3 of the Industry and Employment SEPP relevantly include, to ensure that signage:

- is consistent with the usage of the site for the new Melrose Park High School;
- suitably and effectively communicates directions for students to access the new Melrose Park High School through the dedicated entrances; and
- is of a high-quality design and finish through the use of materials, colours and illumination that seamlessly integrates with the building's architecture and its surrounds.

The proposal is consistent with these objectives as it will facilitate building identification and wayfinding signage for the new Melrose Park High School and ensures that the signage:

- is consistent with the usage of the site for the new Melrose Park High School;
- is compatible with the desired amenity and visual character of the area because it is envisaged to align with the activated podiums of surrounding future developments;
- suitably and effectively communicates directions for students to access the new Melrose Park High School through the dedicated entrances; and
- is of a high-quality design and finish through the use of materials, colours and illumination that seamlessly integrates with the building's architecture and its surrounds.

The proposed building identification and wayfinding signage is consistent with the assessment criteria contained within Schedule 5 of the Industry and Employment SEPP, as demonstrated within **Table 12** below.

Table 12: Assessment criteria under Schedule 5 of the Industry and Employment SEPP

Assessment Criteria	Comments	Compliant
1. Character of the area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signage is compatible with the future character of the Melrose Park Precinct. The site is located within the recently rezoned Melrose Park North Precinct and is specifically zoned for the purposes of a school. The signage is for the purpose of identifying the new Melrose Park High School and is consistent with the size and design of signage used for school developments. The signage is simple in nature, clearly communicates the name of the high school and details clear wayfinding messages for students, teachers and general members of the public.	Yes
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed activity is for building identification and wayfinding signage only and does not contain any advertising content.	N/A
2. Special areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed building identification and wayfinding signages does not detract from the amenity or visual quality of the area. Rather, it will improve the visual quality of the site in the emerging Melrose Park Precinct through providing contemporary signs which will facilitate the operations of the new Melrose Park High School. The proposed signs have been designed within the limits of the proposed building envelope and will be consistent with the character of the school. In turn, the proposed signage will not detract from the amenity of the area.	Yes
3. Views and vistas		
Does the proposal obscure or compromise important views?	The proposed signage will be located within the proposed building envelope and will not obscure	
Does the proposal dominate the skyline and reduce the quality of vistas?	views along the future north-south road, Hope Street and Wharf Road. Given the location and scale of the proposed signage it will not obscure or compromise any important views or vistas, nor dominate the roofline.	Yes

Assessment Criteria	Comments	Compliant
viewing rights of other advertisers?	and wayfinding signage only and does not contain any advertising content.	
4. Streetscape, setting or landsca	ape	
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, proportion and form of the proposed signage is appropriate for the site's setting because of its envisaged use for an educational use and within the south-eastern corner of the Melrose Park North Precinct, where the built form height is staggered to cater for an appropriate transition to low-density areas to the east. The proposed signs are consistent in nature, quality and size compared to other signage used in schools. The signage will contribute to a future high-quality streetscape adjacent to the Melrose Park North town centre and broader precinct area.	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed building identification and wayfinding signage will seamlessly integrate with the design of the new Melrose Park High School. It will be commensurate with the materiality of the building and add visual interest, contributing positively to the future streetscape and future Melrose Park North town centre setting.	Yes
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	Not applicable as there is no existing advertising signage.	N/A
Does the proposal screen unsightliness?	The proposed signage does not screen unsightliness but acts as an opportunity to provide building identification and wayfinding signage which is compatible in scale, materiality and finish with the new Melrose Park High School.	N/A
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage will be erected throughout the ground floor plane and in the existing building fabric, it will not protrude above the building, other structures, nor the future tree canopy in the area.	Yes
Does the proposal require ongoing vegetation management?	The proposed signage does not require ongoing vegetation management.	Yes
5. Site and building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed building identification and wayfinding signage has been carefully designed to be compatible with the scale, proportions, and presentation of the new Melrose Park High School as well as the context of the site and will support the character of the town centre.	Yes
Does the proposal respect important features of the site or building, or both?	The proposed signage is respectful in its design and is appropriately integrated with the features of the building.	Yes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage has been designed for the purposes of building identification and wayfinding and appropriately relates to the new high school and its location within the broader Melrose Park North Precinct.	Yes

Assessment Criteria	Comments	Compliant		
6. Associated devices and logos	6. Associated devices and logos with advertisements and advertising structures			
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Safety devices are not applicable. There is no logo proposed for the signage.	Yes		
7. Illumination				
Would illumination result in unacceptable glare?	The LED sign will have specifications which ensure it will not result in any unacceptable glare.	Yes		
Would illumination affect safety for pedestrians, vehicles or aircraft?	The proposed illumination will not affect the safety of pedestrians, vehicles or aircraft.	Yes		
Would illumination detract from the amenity of any residence or other form of accommodation?	The illuminated LED sign will face commercial tenancies of the town centre, and therefore surrounding residential amenity will not be adversely impacted by the illumination of the proposed signage. Compliance with relevant standards and requirements will also be achieved in terms of intensity and control of glare.	Yes		
Can the intensity of the illumination be adjusted, if necessary?	The level of illumination on the LED signage can be adjusted to align with the appropriate Australian standards.	Yes		
Is the illumination subject to a curfew?	The proposed signage is not intended to be subject to a curfew.	Yes		
8. Safety				
Would the proposal reduce the safety for any public road? Would the proposal reduce the safety for pedestrians or bicyclists?	The proposed signs do not contain images, flashing lights, moveable parts and the like which would impact upon road safety. The proposed signage will not reduce the safety for any public road, pedestrian, bicyclist, given the signage will be securely fixed to the proposed structure above street level. Signage proposed throughout the ground floor plane will be adequately setback from the surrounding public roads and will not reduce safety for pedestrians or bicyclists.	Yes		
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposed signage will not reduce the safety of pedestrians, as it will not obscure sightlines from public areas.	Yes		

5.4 Strategic Plans

 Table 13 considers strategic plans that are relevant to the proposed activity.

Strategic Plan	Assessment
Greater Sydney Region Plan	The Greater Sydney Region Plan (Region Plan) presents a 40-year
Central City District Plan	vision (up to 2056) for Greater Sydney published by the Greater Cities Commission (GCC), built on a vision of three cities where most residents live within 30 minutes of their jobs, education and

Strategic Plan	Assessment
	health facilities, services, and great places. The Central City District Plan identifies key planning priorities and actions which give effect to the objectives outlined in the Region Plan.
	The site is located along a 'city serving transport corridor', as it is located adjacent to the alignment of the Stage 2 Parramatta Light Rail Route. The District Plan states that an extra 89,360 students will need to be accommodated in both government and non- government schools within the Central District by 2036, with the Parramatta LGA to take up 32% of the district's increase in school- aged children.
	The Proposal will directly contribute to Action 8 of Planning Priority C3 'Providing services and social infrastructure to meet people's changing needs' which is to 'Deliver social infrastructure that reflects the needs of the community now and in the future'. Furthermore, the proposed joint usage of the adjoining 0.8ha open space with Council also responds to the Plan's intentions of creating more collaborative urban spaces.
Future Transport Strategy (FTS) 2056	The Future Transport Strategy (FTS) 2056 sets out the NSW government's vision for transport in a growing and changing state. It guides the community on strategic directions for future planning integrated with evolving transport networks throughout the Sydney metropolitan area and the state. The strategy delivers a framework that informs place-based planning and policy decisions to achieve successful outcomes, aiming to connect community to the city and state shaping infrastructure and services pipeline.
	The introduction of stage 2 of the Parramatta Light Rail (scheduled to be completed in 2033) will involve the establishment of a Melrose Park stop, located approximately 175m to the west of the new high school. This public transport improvement aligns with Objective C1 of the FTS, which seeks to improve the accessibility of key infrastructure agglomerations (such as tertiary and educational institutions) and employment centres. Ultimately, once completed, the expanded light rail will provide improved opportunities for the new high school to be accessed via public transport throughout the local secondary school educational catchment.
	Further detail on the provision of public transport services throughout the surrounding area is provided within the Transport and Access Impact Assessment (Appendix 8).
City of Parramatta Local Strategic Planning Statement 2036	The City of Parramatta LSPS provides the City of Parramatta's 20- year land use planning vision for the LGA. This document identifies Melrose Park as a growth precinct, with the capacity to deliver an additional 6,330 dwellings by 2036. Furthermore, it also identifies the subject site as being within proximity to a proposed new local centre, being the new Melrose Park town centre. The proposal aligns with the LSPS's overarching objectives of balancing infrastructure delivery with the exponential population growth that the LGA is experiencing.
	The proposal ensures provision of community infrastructure is balanced with projected growth within the Melrose Park Town

Strategic Plan	Assessment
	Centre Precinct. Furthermore, the intention to enter into a joint use agreement with Council for the adjoining 0.8ha open space with Council aligns with Action 31 within the LSPS, which seeks to "work with NSW Department of Education to create new shared use arrangements of school assets by the broader community and develop a policy for sharing maintenance cost."
	Moreover, the subject site's location within proximity to the recently approved Parramatta Light Rail – Stage 2 stop at the Hope Street / Waratah Street intersection also aligns with the LSPS's intention for the new light rail to provide connectivity between business, health and education nodes within the LGA.
Better Placed: Design Guide for Schools	The Better Placed Design Guide for Schools sets out the Design Quality Principles in accordance with Schedule 8 of the TI SEPP. The Architectural Design Report (Appendix 4) sets out how the proposal has been guided by, and complies with, the seven (7) design quality principles in schools.

6. Consultation

The department has conducted extensive stakeholder engagement in its preparation of the proposed activity. This REF summarises the feedback received, and issues raised by specific stakeholders and how feedback has been considered.

6.1 Early Stakeholder Engagement

Table 14 provides a summary of early stakeholder (non-statutory) consultation undertaken to inform project development and preparation of the REF.

Stakeholder	Engagement
Aboriginal stakeholders	Stakeholders were engaged through the Connecting with Country process involving a Walk on Country (24 April 2024), one (1) TEAMs meeting (24 July 2024), one (1) presentation to the Aboriginal Education Consultative Group and two (2) on-site design workshops with elders, registered Aboriginal parties and community members.
	Through the Connecting with Country process, numerous items were discussed on how to integrate cultural heritage into the activity design, including but not limited to:
	Considering country as a whole – water/land/sky.
	• Integration of the colours of Country, as well as the shapes and patterns of Country.
	Implementation of yarning circles.
	• Embedding a prominent acknowledgment of Country into the design.
	Use of flora references including Ironbark and Blue Gum Forest, Mangrove Community and Sheoaks and Coastal Saltmarsh within the landscape plans.
	• Fauna references to the snapper fish and mud crab within the landscape plans.
City of Parramatta Council	Consultation with Council was undertaken twice, on 6 June 2024 and 27 November 2024.
	First meeting notes:
	Key points of discussion from the first meeting on 6 June 2024:
	• Pipeline risk management, potential for the site to be located within 131m of the Viva gas line that traverses Melrose Park South.
	As per Section 7.1 and the Hazard and Risk Assessment (Appendix 14), adequate consultation has been conducted with Viva, which confirmed that the site and proposed usage for a school was compatible and an appropriate distance from the Viva pipeline.
	Second meeting notes:
	Key points of discussion from the second meeting on 27 November 2024:
	 Connecting bridge between Block A and Block D observed to be more dominant than expected.
	 Insufficient detail provided on the internal landscaped finishes, with the layout not functional in design, functionality and constructability.

Table 14: Summary of Early Stakeholder Engagement

Stakeholder	Engagement
	 Opportunity to plant larger, more prominent trees within the play spaces is missed, design prioritises provision of high frequency of smaller trees. Joint use areas of the outdoor spots courts and car parks should have the capability to be fenced off from the rest of the school to enable public use outside of school hours. The paved area outside the site in Wharf Road Gardens requires further rationale, noting it is envisaged to be retained to promote green infrastructure. The proposed activity relies heavily on active transport, critical for the activity to propose more upgrades to the surrounding local bicycle network. A combined raised pedestrian and cyclist crossing will be required in Hope Street at Wharf Road and at Wharf Road just north of Hope Street. However, likely to result in vehicles blocking the intersection of obstructing sightlines for vehicles in Hope Street that are continuing straight through or turning right. Reliance on the Melrose Park North DA TMAP modelling will not be sufficient in modelling assumptions regarding mode share
	Response to second meeting queries:
	 Council's comments regarding the connecting bridge between Block A and Block D have been addressed in the Architectural Design Report (Appendix 4).
	 Council's comments addressing landscaping detail, potential to plant larger trees, fencing of joint use areas and paving outside the site in Wharf Road Gardens have been addressed in Section 7.8 and the Landscape Drawings (Appendix 5).
	• Council's comments on the required local bicycle network upgrades (due to heavy reliance on active transport), the combined raised pedestrian and cyclist crossings on Hope Street and Wharf Road causing traffic queuing and reliance on the Melrose Park North DA TMAP modelling has been addressed in Sections 1.10 and 11.4.4 within the Transport and Access Impact Assessment (Appendix 8).
Transport Working Group – City of Parramatta Council, City of Ryde Council	Stakeholders were engaged through the Transport Working Group (TWG) process on two occasions (13 December 2023 and 11 September 2024) through a teleconference meeting. The outcomes from both meetings are summarised below.
and TfNSW	13 December 2023 Meeting:
	 Need to emphasise public transport and consider this in the traffic assessment. Prioritise bicycle parking and opportunities for future expansion.
	• Consider student safety during construction of Parramatta Light Rail Stage 2.
	11 September 2024 Meeting:
	Roundabout upgrade at Hope Street / Wharf Road intersection.
	Importance of safe crossing points along Victoria Road.
	Hope Street and Waratah Street to be signalised during construction of Demonstruct Linkt Dail Stars 2
	 Parramatta Light Rail Stage 2. Diversion of the 523-bus route to service the school was observed to be difficult.

Stakeholder	Engagement
	Further detail on the consultation summary, as well as the responses to the outcomes from both meetings is addressed within the Transport and Access Impact Assessment (Appendix 8).
Community Engagement	A community information session took place in October 2024, which updated the community on the project progress and shared concept designs with the school community. More than 45 attendees visited, who were mainly residents/neighbours who live around the proposed site and parents/carers of students at Melrose Park Public School. Key comments related to traffic and parking, infrastructure related enquires and school operation related enquiries.
State Design Review Panel	The proposed activity was presented to the SDRP on 28 August 2024. The following topics were addressed within the presentation:
	Site location and school size.
	Connecting with Country principles and consultation.
	Site analysis.
	Masterplan design option.
	Architectural design intent.
	Sustainability and landscape design.
	The response to the feedback from the SDRP has been included within the Architectural Design Report (Appendix 4).

6.2 Statutory Consultation

Consultation was undertaken in accordance with statutory requirements under the TI SEPP and having regard to the SCPP DPHI and the SCPP DoE. This includes:

- sending notices to adjoining neighbours, owners and occupiers inviting comments within 28 days
- sending notices to the local council and relevant state and commonwealth government agencies and service providers inviting comments within 21 days
- placing an advertisement in the local newspaper
- making the REF publicly available on the Planning Portal throughout the consultation period, which was from 14 March until 10 April 2025.

Further, Section 171(4) of the EP&A Regulation outlines circumstances where an REF must be published on the department's website or the NSW Planning Portal. This REF is required to be published as the activity has an estimated development cost of more than \$5 million, in accordance with Section 171(4).

6.2.1 Summary of Submissions

• During the exhibition of the REF, a total of **11 submissions** were received, including submissions made by relevant government authorities, agencies, members from neighbouring organisations and local community members. Five (5) submissions from the local community and general public providing general comments, recommendations or support.

• Six (6) submissions from government agencies, comprising two (2) from the City of Parramatta Council and City of Ryde Councils respectively and four (4) from various other government agency bodies.

A numerical breakdown of the submissions received is provided in **Table 15**, and a summary of their position is provided in **Table 16**.

Stakeholder Group	Engagement	Total
Government agencies	DPHI Hazards Endeavour Energy Sydney Water Transport for NSW	4
Local Council	City of Parramatta Council City of Ryde Council	2
General Public	Design and planning advice, as well as general queries about the operation of the school and the eventual school opening.	5
Total Submissions	11	

Table 15: Submissions received

Table 16: Position of submissions

Author	Support	Support with Comments	Comment / Neutral	Total
Government agencies	0	0	4	4
Local Council	0	1	1	2
Public	0	1	3	5
Total	0	2	8	11

Comments received have been carefully considered and responded to in Table 17 below.

Table 17: Response to issues

Submission	Project Response			
TRANSPORT, ACCESS AND PARKING				
Transport for NSW (TfNSW)				
Modifications to bus stops or zones will need to be undertaken to the satisfaction of TfNSW under the Transport Administration Act 1998. The Applicant is required to consult with TFNSW at the post-consent stage.	The Mitigation Measures (Appendix 1) have been updated to include an additional measure within OT-7 which ensures that any modifications to bus stops or zones is undertaken to the satisfaction of TfNSW.			
The school can generate approximately 400 daily trips, which is a significant traffic generation within close proximity of the Parramatta Light Rail Stage 2. Satisfactory traffic management is required to prevent vehicles queuing back on Waratah Road, potentially impacting the safety and operation of the Parramatta Light Rail Stage 2. "	As discussed in Appendix 35 and in Section 7.1.3 , all kiss and drop zones are expected to accommodate the maximum queueing modelled in the queueing analysis, and therefore, will not result in queues spilling on to Waratah Road.			
School zones must be installed along all roads with a direct access point (either pedestrian or vehicular) from the school. The school zone is likely to include part of the Parramatta Light Rail Stage 2 (PLR 2) route, which will require early notification to the PLR project team. The Developer must obtain written authorisation from TfNSW to install the School Zone signs	The Mitigation Measures (Appendix 1) have been updated to include an additional measure within OT-8 which requires installation of school zones subject to appropriate written authorisations from TfNSW.			
and associated pavement markings and/or remove/relocate any existing Speed Limit signs at a minimum of six months prior to opening.				
40km/hr School Zones are to be installed on North South Road 4 and Hope Street in accordance with the following conditions. Council should ensure that any parking, drop-off / pick-up zones and bus zones incorporated are in accordance with TfNSW standards.				
To obtain authorisation, the Developer must submit the following for review and approval by TfNSW:				
a. A copy of Conditions of Consent				
b. The proposed school commencement/opening date				
c. Two (2) sets of detailed design plans showing the following:				
i. School property boundaries				
ii. All adjacent road carriageways to the school property				
iii. All proposed school access points to the public road network and any conditions imposed/proposed on their use				
 All existing and proposed pedestrian crossing facilities on the adjacent road network (including School Zone signs and pavement markings). 				

Submission	Project Response
v. All existing and proposed street furniture and street trees.	
School Zone signs and pavement marking patches must be installed in accordance with TfNSW approval/authorisation, guidelines and specifications. All School Zone signs and pavement markings must be installed prior to student occupation of	
the site. The Developer must maintain records of all dates in relation to installing, altering, removing traffic control devices related to speed.	
Following installation of all School Zone signs and pavement markings the Developer must arrange an inspection with TfNSW for formal handover of the assets to TfNSW. The installation date information must also be provided to TfNSW at the same time. Note: Until the assets are formally handed-over and accepted by TfNSW, TfNSW takes no responsibility for the School Zones/assets.	
The construction of the PLR 2 Main Works will likely occur post-occupation of the school. The Applicant should consider traffic management arrangements for school travel movements during construction activities, noting the disruption is likely to be significant and pedestrian and traffic impact to the PLR 2 contractor should be minimal.	The Mitigation Measures (Appendix 1) in CT-10 have been updated to require that the preparation of a CPTMP be undertaken in consultation with TfNSW if the construction of Stage 1 or Stage 2 of the school will be concurrent to the construction of the PLR2 main works. This will be undertaken
If the construction of Stage 1 or Stage 2 of the school will be concurrent to the construction of the PLR2 Main Works, the Applicant will be required to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW. Prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier, the Applicant shall prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW. The CPTMP needs to specify matters including, but not limited to, the following:	prior to any construction works commencing.
A description of the development.	
Location of any proposed work zone(s).	
• Details of any alteration/s to the traffic arrangements on the surrounding road network, including any lane closures.	
• Details of crane arrangements including location of any crane(s) and crane movement plan.	
Haulage routes.	
Proposed construction hours.	
Predicted number of construction vehicle movements, detail of vehicle types and	

Submission	Project Response
demonstrate that proposed construction vehicle movements can work within the context of road changes in the surrounding area, noting that construction vehicle movements are to be minimised during peak periods.	
Construction vehicle access arrangements.	
• Construction program and construction methodology, including any construction staging.	
A detailed plan of any proposed hoarding and/or scaffolding.	
Measures to avoid construction worker vehicle movements within the precinct.	
• Consultation strategy for liaison with surrounding stakeholders, including other developments under construction. Identify any potential impacts to general traffic, cyclists, pedestrians, and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works. Proposed mitigation measures should be clearly identified and included in the CPTMP; and	
 Identify the cumulative construction activities of the development and other projects within or around the development site. Proposed measures to minimise the cumulative impacts on the surrounding road network should be clearly identified and included in the CPTMP. Submit a copy of the final plan to TfNSW for endorsement via development.ctmp.cjp@transport.nsw.gov.au 	
The Applicant will be required to liaise with PLR Stage 2 during its detailed design stage to make any required amendments to public domain works or traffic management arrangements for post-construction PLR 2. The Applicant is required to provide update of construction schedule to the PLR 2 Project Team for factor into project considerations	The Mitigation Measures (Appendix 1) have been updated to include a new OT-1 which addresses the consultation requirements with the Parramatta Light Rail Stage 2 team throughout the detailed design process.
Prior to the commencement of any operation, a School Transport Plan (STP), must be submitted to the consent authority for approval. The plan must be prepared by a suitably qualified transport/traffic professional in consultation with Council and TfNSW.	Mitigation Measure OT-11 within the Mitigation Measures (Appendix 1) addresses the requirement to prepare a School Transport Plan in consultation with TfNSW and City of Parramatta Council.
City of Ryde Council	
In addition to the proposed provision of raised pedestrian crossing on Wharf Road, it is recommended that the provision of a raised pedestrian crossing on Lancaster Avenue and a	Based on the walking catchment analysis, there will be minimal pedestrian activity from Lancaster Avenue, and thus the provision
Submission	Project Response
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median island be also incorporated to the construction of the Melrose Park High School and be delivered as part of the REF (refer to the map below). The abovementioned additional treatments not only improve active transport safety and connectivity within the area, but also provides less expensive treatment at the intersection of Wharf Road/Hope Street/Lancaster Avenue compared to the proposed traffic signals based on the approved Melrose Park TMAP.	of a raised crossing on Lancaster Avenue does not provide benefits to the pedestrian path. In regard to the median island, this will have an impact on traffic turning right from Wharf Road to Hope Street to go to MPHS and traffic turning right from Hope Street to Wharf Road to go to MPPS. It is recommended to not implement the median island.
Regarding the construction of the proposed High School, all construction vehicles are to use Victoria Road and Hughes Avenue for accessing the construction site via Hope Street. The use of Wharf Road as construction vehicle route for accessing the construction site is not supported. In addition, all construction workers are to park their vehicles on site and the use of on-street parking for construction workers are restricted.	The Mitigation Measures (Appendix 1) including CT-10, which requires the preparation of a detailed Construction Pedestrian and Traffic Management Plan (CPTMP). This mitigation measure has been updated to require the CPTMP to consider construction vehicle routes, among other matters.
Prior to the issue of any approval letter for the future Construction Traffic Management Plans (CTMPs) for this development, the applicant is encouraged to consult with City of Ryde Council.	The Mitigation Measures (Appendix 1) including CT-10, which requires the preparation of a detailed Construction Pedestrian and Traffic Management Plan (CPTMP). This mitigation measure has been updated to require the CPTMP to consider construction vehicle routes, among other matters.
City of Parramatta Council	
Council notes that the Transport Impact Assessment (TIA) claims that the following travel	The baseline scenario provides a reference point for developing

Submission	Project Response
 patterns are to be expected in the baseline case: 21% Active Transport 50% Public Transport including 9% by train 29% by car (driver or passenger) These are based on averages from schools based in similar locations and catchment sizes. However, these figures do not take into account site specific conditions. The Baseline Mode Share presented in the TIA is unlikely to be achievable. It is anticipated that there will be high vehicle usage given that majority of students will be living outside of the 800m walking radius (89%), and that there is limited public transport access to the school from large parts of the catchment area. Furthermore, a good proportion of students will be living north of Victoria Road which has limited crossing locations. 	the forecast travel mode splits for the new MPHS. With the inclusion of an additional bus for the town centre and the proposed new school, TTW think that the car will not be the majority mode of transport to the school. Mitigation measure OT-11 requires the preparation of a School Transport Plan, which must detail how the NSW Department of Education will seek additional bus services to the site.
Accordingly, at least in the initial phases of the school and prior to significant residential development in Melrose Park, it should be expected that the majority of students will be arriving by car as this will be the most convenient form of transport. As such, measures will need to be taken to ensure the roads surrounding the school can cater for high traffic volumes.	
With regards to the roundabout at the intersection of Wharf Road and Hope Street, Council has previously indicated a need for this facility primarily as there will be queued traffic in Wharf Road due to the proposed pedestrian traffic, meaning that vehicles turning right from Hope Street will have an obstructed view of vehicles travelling south in Wharf Road. In response, the TIA notes the following:	It is not the responsibility of the NSW Department of Education to construct a roundabout at this location. The forecast traffic generation in the TAIA (Appendix 8) was underpinned by the Melrose Park Transport Management and Accessibility Plan (TMAP) which was endorsed by TfNSW. The TMAP provides a framework for the implementation of a range of measures designed to achieve a sustainable transport outcome for the
 There will be queued traffic across the intersection regardless of the roundabout. The modelling undertaken shows that the intersection will perform at a LoS B in the AM peak and C in the PM peak. With regards to the first point, it should be noted that a roundabout will mean that 	Melrose Park precinct. It does not require the construction of a roundabout. TTW's assessment in the TAIA found that the intersection of Wharf Road and Hope Street will continue to operate at a satisfactory level of service with minimal delay during
 With regards to the hist point, it should be noted that a roundabout will mean that southbound vehicles are required to give way to vehicles already on the roundabout that are turning right. This change of priority will result in much safer movement of traffic. With regards to modelling, Council has previously raised with the proponent that the base case for the TMAP and the Melrose Park DAs, significantly underestimates the existing traffic flows in Hope Street. In addition to this, the SIDRA Modelling being relied upon within the TIA has two southbound lanes in Wharf Road. In accordance with the Australian Standards, a 	both the morning and afternoon peak periods. Furthermore, it is noted that the Assessments team with SINSW engaged an independent consultant to peer review the TAIA and this independent peer review did not identify any need for a roundabout at this location.

Submission	Project Response
 pedestrian crossing cannot have two travel lanes in the same direction as vehicles in the adjacent lanes obstruct the line of sight of motorists approaching a crossing. Accordingly, the actual configuration of Wharf Road will mean that right turning traffic will delay the straight through movement which can have significant impacts on the modelling results. As such, this modelling should not be relied upon. It should be noted that Council staff have previously provided Traffic Counts to TTW that are more up to date and could have been used. Accordingly, it is still Council's opinion that the following should be done to undertake more accurate modelling: 1. Use up to date traffic counts to determine the base case. 2. Use the TMAP and Melrose Park Town Centre modelling to determine the additional traffic those developments will bring. 3. Use the TTW assessment to determine additional traffic generated by both the High School and the primary school upgrade. 4. The SIDRA model should be calibrated to take into account the short peak duration of the schools (ideally 15min). 	Regarding the traffic modelling associated with the proposed pedestrian crossing, the traffic consultant has noted that they agree that a pedestrian crossing cannot be installed across two lanes of traffic, and that they have conducted traffic modelling with only one travel lane on the northern and southern leg of the intersection. The traffic consultant notes that most of the MPHS vehicle movements have been included in the baseline traffic, and only pedestrian movements are included in the modelling. This modelling shows that the single travel lane setup is adequate and therefore the pedestrian crossing configuration would be compliant and adequate.
Given the above, it is considered essential that a roundabout be constructed at this intersection for the safe and efficient movement of traffic. With regards to the proposed pedestrian crossing in Hope Street just east of NSR-4, the TIA notes that this location will provide better access to bus services in Hope Street and also for staff to access the car park in the public school. While these points are acknowledged, it is considered that it may be better to have this crossing closer to Wharf Road instead for the following reasons:	
 A crossing at Wharf Road will connect with a future shared path. It is along a desire line for the primary school and will better link the two schools. It will align better with the entrances along Wharf Road. There is an existing crossing in Hope Street near Waratah Street that would provide similar benefit to that proposed near NSR-4 given that Waratah Street is the next north south connection from the school. 	
The detailed CTMP to be prepared post-approval must include reference to the following:	The Mitigation Measures (Appendix 1) include CT-10, which
• There must be sufficient provision for parking on-site for workers, or, negotiations should be	

Submission	Project Response
 had with Sekisui whether parking can be provided on their site. The truck site access points should preferably be in locations where there is less pedestrian activity As part of the detailed review, Council will need to consider the volume of child pedestrians on the footpath and measures to restrict construction vehicle movements during certain times may be required to avoid conflict (20min before the school start time and 20min after school finish time or similar). 	requires the preparation of a detailed CTMP. This mitigation measure has been updated to require the CTMP to address construction worker parking, truck access points and other matters.
The applicant is proposing to consolidate the two existing bus stops in Hope Street between Waratah Street and Wharf Road. Furthermore, a new 'Kiss and Ride' facility is proposed in Wharf Road north of Hope Street. In addition to this, the applicant is proposing a loading zone in Hope Street which is in addition to on-site loading via NSR-4 suitable for a vehicle up to the size of a 10.8m waste vehicle. The TIA does not provide justification for why the additional on-street loading zone is required but does note that the development will result in minimal service vehicle demand.	The on-street secondary loading zone on Hope Street is proposed in order to provide better proximity to wood and metal workshops within the site, reduce the amount of materials being moved through some sections of the school, and provide greater redundancy for deliveries of any kind. For these reasons, the project team will continue discussions with Council post-approval to gain endorsement of this facility through Local Traffic Committee. However, if for any reason this is not ultimately accepted by Council, the school would be able to operate adequately with the onsite loading zone. Refer to the TAIA (Appendix 8) and Traffic Response to Submissions (Appendix 35) and for further detail.
The proposal uses space within the Melrose Park public school to provide the majority of the staff car park for the high school, noting that there is limited space on the high school site. In total, 29 spaces are proposed for 52 staff at stage 1 and 44 spaces for 79 staff for stage 2. While this rate falls short of the baseline mode share, it is acknowledged that through the future growth in the precinct, the mode share is likely to shift away from private vehicle usage for staff.	Noted. Refer to the TAIA (Appendix 8) for further detail.
General public	
The existing reduced parking arrangement, despite acknowledgement that "A non-car mode share of 50% represents a sizeable shift from the existing travel characteristics of the area" is not sympathetic to staff with children in child-care or in complex family arrangements, or those who live in inaccessible areas. It is unrealistic and unfair to residents in the original Melrose Park in the Ryde council area. An additional 40-50 cars parking in the area will adversely impact surrounding streets. Sufficient on-site parking should be made available to minimise dependence on public streets, and 50% is not sufficient.	The reference to the 'sizeable shift' to the non-car mode share within the TAIA (Appendix 8) is related to the emerging character of the area, which, within the coming years will house a maximum of 6,700 dwellings (which would likely cater a proportion of the staff and student population) and opening of the Parramatta Light Rail Stage 2 in 2032. Furthermore, the TAIA (Appendix 8) utilised comparable mode splits for staff from five (5) separate public primary and secondary schools throughout the surrounding area. In saying this, limited size of the subject site does not allow

Submission	Project Response
	for the provision of 64 and 79 parking spaces in both respective stages, whilst continuing to deliver a 1,000-student school. To limit the impact of on-street parking as much as possible, 24 parking spaces have been provided during stage 1 with an additional 15 spaces provided during stage 2. If more car parking was installed on the subject site, the total number of students and open spaces associated with the school would need to be reduced. Subsequently, the reduction in student numbers on the site would result in the projected demand within the local secondary school catchment not being met.
The proposal makes far-fetched assumptions associated with the car usage of teachers, which is modelled at a lower rate than nearby schools with arguably better public transport options. The solution to utilise 'on-street' parking is not suitable given that on-street parking is already saturated, with long-term residents reporting that on-street parking is filled by cars from the new developments. The existing intersection from Hope Street into Wharf Road is already difficult to ascertain and will be exasperated from traffic increases associated with the development.	The TAIA (Appendix 8) utilised comparable mode splits for staff from five (5) separate public primary and secondary schools throughout the surrounding area. This determined that the majority of staff in comparable schools travelled to work via private vehicle. The adopted mode split for the proposed activity reflects the existing site-specific constraints, which limit the provision of a large amount of on-site parking. Furthermore, the position of the site within an emerging high-density precinct, which will have a maximum of 6,700 dwellings, as well as the usage of the available shuttle bus during morning and afternoon peak periods provides opportunities for staff to utilise other forms of transport options to travel to work which will aim to not exasperate on-street parking demands throughout the surrounding area. Furthermore, the DoE is currently reviewing and considering options for local staff recruitment, which will encourage employment of staff who live in proximity to the site. In this arrangement, proximity will feature as one element of the recruitment process for future staff of the high school.
There is little on-street parking available for after hours usage of the courts and hall within the school. The on-street parking within the high-density area will be scarce, making it harder to access the facilities after hours. Will the staff parking be opened up for usage during these activities? And are there are parking restrictions which could be included in this plan?	The private shuttle bus services within the Melrose Park Precinct to surrounding public transport nodes, as well as the high-density nature of the Melrose Park Precinct presents a variety of alternative nodes of travel for future users of the after-hours usage of the courts within the school. Ultimately, any after-hours usage of the school will be driven by a community activity which prioritises residents throughout the immediately surrounding area.

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	It is noted that the DoE is not responsible for providing parking to accommodate third-party user groups of the private shuttle bus service .
FLOODING	
City of Parramatta Council	
Council notes the proponent's preference to utilise a proprietary water treatment system for water quality and quantity management over the use of on-site landscaping. Whilst this approach can be supported by Council, it is noted that a 10% reduction in total stormwater discharge compared to the undeveloped/natural state of the site has not been accounted for. Council notes that this is a general requirement for all development in the Melrose Park North precinct as stipulated in Chapter 8, Section 8.2.6.7.6. Council requests that the civil engineering design of the proposed development be amended to incorporate the above requirements.	 Water Quantity: Given the volume of water required to be detained to reduce peak flows, a landscaped above-ground detention basin was not practicable, further, this would introduce the risk of drowning, the reason why an underground OSD tank was chosen (This is included in the ESFG departures). Water Quality: Natural and artificial systems are used to improve water quality. Please note that most landscaping planters are above ground, making it harder to send the surface runoff by gravity for filtering. Similarly, biofiltration/bioretention measures are limited given the geometry constraints of the site, therefore, we rely on natural grassed areas but mostly on mechanical proprietary systems, which are not locked to any particular manufacturer. Equivalents can be used so long they meet the same criteria (or better). Finally, a rainwater tank will provide a reduction in annual water volume discharged off the site via reuse. Hydraulics engineers have stipulated a 100m³ tank to supply water for both toilet flushing and irrigation of landscape areas for the site. Refer to the Civil Drawings (Appendix 7) and Flood Impact Assessment (Appendix 10) for further detail.
PUBLIC DOMAIN, OPEN SPACE AND LANDSCAPING	
City of Parramatta Council	
The viewel link between Wherf Read and the Melrope Bark Town Centre through the site must	The trees within the contern and of the lown area will be medium

The visual link between Wharf Road and the Melrose Park Town Centre through the site must	The trees within the eastern end of the lawn area will be medium
be maintained through rearranging trees around the lawn at the eastern end to enable a view	to large canopy trees to provide significant areas of canopy and
corridor to the link from Wharf Road. It is also requested the pedestrian gate located to the	to frame the proposed lawn area. Further, they provide protection
north of Block B is relocated north to maintain a visual connection with the pedestrian gate	from adverse north-easterly prevailing winds to the centre of the

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located to the west, as well as a relocated pathway connection to Wharf Road to reduce garden bed disturbance.	site and are thus recommended for retention in the design by the Pedestrian Wind Environment Statement (Appendix 32). In relation to the proposed gate, after reviewing the topography and level changes at the site interface with Wharf Road Gardens, a direct pathway connection in the requested location will be feasible only with considerable design changes to allow for an accessible entry. As such, maintaining the existing pathway alignment to the periphery of the lawn area is recommended, which continues to provide strong pedestrian connectivity while protecting sensitive tree root zones.
In the event that a joint use agreement is entered into between Council and the Department, the provisions of Condition 10 of DA/459/2024 will apply (provided that the playing field is dedicated to Council prior to the execution of the agreement). A detailed fencing plan must be prepared and submitted to Council. The fencing must be constructed in accordance with the plan, with costs to be borne by the Department of Education (Schools Infrastructure NSW). In addition, any additional construction works required in Wharf Road Gardens to provide better pedestrian connectivity to the new high school requires an agreement in accordance with the requirements of Condition 10.	Noted. Conditions of consent to DA/459/2024 are the responsibility of that applicant. SINSW will enter into appropriate commercial arrangements with Sekisui House to ensure delivery of the playing field and Wharf Road gardens.
It is noted that a 4m Corro mesh fence is proposed along the northern boundary of the site, with 2.1m palisade fencing proposed along the eastern, southern, and western boundaries. The inconsistent application of fencing across the site will create a significant visual barrier, exacerbated by a 1.3m retaining wall to the north (see figure below). The fencing strategy should be amended to address the contex of safety and visual permeability requirements and associated impacts.	The fencing strategy for Melrose Park High School includes 2.1m palisade fencing around the general perimeter of the school, and 4m Corromesh fencing along the northern and eastern boundaries, adjacent to the sports courts, particularly for safety and ball containment. The palisade fencing was selected for its aesthetic qualities, offering a more refined and visually appropriate outcome for a school located within an urban context. Should Council prefer a Corromesh fence for consistency of materiality across the site, this change can be readily accommodated during the design development phase.

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The siting of Block B potentially conflicts with the canopy of retained trees within Wharf Road Gardens (Trees 1, 2, and 3 – see figures below). It is recommended for this arrangement to be amended to better address impacts to the canopy of retained trees within Wharf Road Gardens.	A 3% incursion will occur to Tree 3, however this will remain in accordance with the AS4970-2009 recommendations.
The calculation of open space areas in relation to the minimum 10m ² /student EFSG requirement within the architectural plans includes landscaped areas (which do not function as usable outdoor space) and the indoor gymnasium. This is not reflective of the genuinely unencumbered open play space proposed on-site, with further detail required to clarify the calculation of open play space.	Melrose Park High School is classified as an urban school, and while it is still required to meet the EFSG (Educational Facilities Standards and Guidelines) benchmark for unencumbered play space, the NSW DoE's Urban School Guidelines provide additional flexibility in how this requirement can be achieved. According to these guidelines, the minimum requirement of 10m ²

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	of unencumbered play space per student can be satisfied through a combination of:
	 A minimum of 6m² per student provided within the building and on the ground plane of the school site, including indoor facilities such as the gymnasium and multipurpose hall; and An additional 4m² per student provided via Games Fields, which may be located off-site, provided they are within a contiguous 5-minute walk from the campus.
	Stage 1 – 560 Students In Stage 1, the design provides 10.15m ² of unencumbered play space per student, which excludes both the external planting areas and the indoor gymnasium (refer to diagram below). The adjacent Playing Fields are not included in this calculation at this stage.
	Stage 2 – 1000 Students In Stage 2, the full enrolment scenario meets the Urban School Guidelines by providing:
	 6.29m² per student of unencumbered play space within the school site, including rooftop areas; and
	 An additional 4m² per student in the adjacent Playing Fields, which are within the allowable walking distance.
	During Stage 2 construction, the two sports courts will be closed as they will be used for site accommodation, material set-down and vehicular circulation. The resulting shortfall in open play space will be supplemented by use of the adjacent playing field which can be accessed through the Wharf Road Gardens on the eastern boundary. Therefore, mitigation measure CMM18 (see Appendix 1) is proposed to ensure that the joint use agreement for the playing field is operational prior to commencement of

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	Stage 2 construction to ensure the play space provision is unaffected.
The proposed rooftop play space is supported, to increase the provision of play space within the constraints of the site. The rooftop play space should incorporate natural elements, where possible. Access to nature elements in school environments has been proven to reduce levels of anxiety and stress and increase mood and overall well-being. Any additional opportunities to increase the provision of play space should be considered, to maximise the provision of open play spaces onsite and reduce reliance on the adjacent playing field.	Council's emphasis on the inclusion of natural elements in this rooftop area is acknowledged and supported. While space and structural considerations must be balanced carefully, the design of the terrace will incorporate soft landscaping and planting to the extent practicable. These elements are intended not only to provide a visual and environmental benefit but also to contribute positively to student wellbeing. Access to nature, even in compact or vertical forms, has been shown to reduce stress and promote mental health in school environments, and the NSW Department of Education is committed to delivering a rooftop space that reflects these principles.
	Beyond the rooftop terrace, the design team continues to explore opportunities to maximise open play space across the site. While the overall site constraints are acknowledged, additional terraces and smaller-scale outdoor areas have been integrated into the scheme to support a variety of recreational needs. In particular, the terrace adjacent to the Level 2 library, as well as informal gathering zones within the courtyard, are designed to provide further options for student downtime outside of structured sports.
	The adjacent playing field also remains a valuable open space asset adjacent to the school. That said, the proposed approach prioritises onsite access to a diverse range of open spaces—from active recreation to informal, quiet zones—to ensure the school supports the full spectrum of student needs throughout the day.
Given that the adjacent public playing field will be restricted to public access during school operating hours, it is requested that the future joint use arrangement with Council provides opportunities for community access to the multipurpose courts and hall within the site in due course.	Mitigation measure SA4 (Appendix 1) requires the proposed activity to promote the availability of shared-use of school facilities through the implementation of the SINSW Share our Space program.
General public	
Playground space does not meet the suitable Department of Planning standards, where it is	The proposed arrangement to enter a joint use agreement with

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instead proposed to use the public playing field. Council previously raised concerns regarding the alienation of this space using fencing and limited access to non-students.	the City of Parramatta Council to utilise the adjacent public playing field to meet the minimum EFSG requirement of 10m2/student is a suitable approach which has been implemented in several other large high school developments in NSW. It is noted that Stage 1 of the proposed activity meets the minimum EFSG requirement without requiring access to the adjacent public playing field. The fencing installation on the southern edge of the playing field is an appropriate size and provides a visually permeable design, which clearly delineates the school from the playing field. The specific access arrangements to the field will be subject to a future joint use agreement between the DoE and Council. This is addressed within CMM18 in the Mitigation Measures (Appendix 1).
Despite the north/north easterly aspect of the site, there is reduced canopy coverage throughout the uncovered multi-purpose courts adjacent to Block C. Additionally, there is no seating or fixed shade provision throughout the play spaces.	The proposed activity provides a variety of play spaces with differing levels of activation, which collectively contributes to 1,416m ² of outdoor shaded play space. Furthermore, the reduced permeability available between the multi-purpose courts reduces the capacity to plant medium-large sized vegetation to facilitate shading. Refer to the Architectural Design Report (Appendix 4) for further detail.
ACCESSIBILITY	
City of Parramatta Council	
 Provision of an accessible adult change facility would provide a dignified sanitary compartment for those who need additional support and should be included in the design of the new high school. Low level thresholds are required to be provided at the entry door and all doors providing access to outdoor areas. Abutment of differing surfaces including concrete paths, paving and play surfaces should have a smooth transition. Design transition should be 0mm. Construction tolerances are recommended as follows: 0 +/- 3mm vertical. 	An Accessible Adult Change facility is not required under the BCA Premises Standard. Compliant thresholds will be required within detailed design documentation to comply with the BCA and AS1428.1. Abutment of surfaces will also be required in detailed design documentation, and as a minimum specified to comply with AS1428.1. Equipment and furniture is not a BCA requirement however recommendations to provide a variety of furniture and facilities is recommended under the DDA and is suggested further within
- 0 +/- 5mm, provided the edges have a bevelled or rounded edge to reduce the likelihood of	detailed design documentation.

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tripping. AS 1428.1.7.2.Equipment and furniture will require universally accessible and inclusive features, suitable for a person with a mobility or other impairment.	
SCHOOL DESIGN AND OPERATIONS	
City of Parramatta Council	
By 2046, the secondary school aged population (12 to 17 years) is expected reach 286 in Melrose Park and 1,090 in Ermington, totalling 1,376. In 2021, 64% of secondary school students in City of Parramatta attended a public secondary school. If this rate remains consistent, by 2046, approximately 880 students from Melrose Park and Rydalmere will be attending a public secondary school. This does not include demand generated by neighbouring suburbs within Ryde LGA. Consideration must be given to managing enrolments within capacity as the population of the school catchment area grows, ensuring there is not a reliance on demountable classrooms in	Noted. The NSW Department of Education has specific guidelines for determining school capacity, based on factors like student numbers, class sizes, and designated learning spaces. The NSW Department of Education will manage future enrolment demands within the new high school in accordance with relevant guidelines and policies.
the future.	High Donsity School Considerations
 The following design considerations have been recommended based on student feedback and research on high-rise schools: Children like green terraces and open hallways with opportunities for play. Open hallways with opportunities for indoor play activities are preferred to narrow, 	High Density School Considerations The NSW Department of Education acknowledges the importance of integrating student-informed design principles to support wellbeing, connectivity, and developmental needs within a vertical learning environment.
 overcrowded corridors. The provision of atriums and Hellerup stairs is valued for promoting connectivity as long as they are acoustically compatible with the surrounding learning environments Children appreciated having access to sub-spaces (smaller 'chill out' areas) that accommodated homogeneous and peaceful activity types that were generally disturbed by the crowd of children elsewhere. 	The proposed development is a dedicated high school, not a primary school. As such, the nature of play and social engagement evolves with age, and the design has been tailored accordingly. While younger students may require traditional playground-style areas, high school students typically engage in a broader range of passive and active recreational activities. In recognition of this, a controlled and supervised environment is being created that supports a variety of student preferences during longer breaks.
	For students who choose not to engage in physical activities on the games court, playing field, or in the gym, a range of alternative smaller gathering spaces will be available in the courtyard. Additionally, the library will be a supervised, accessible space during these times, offering students a quiet alternative.

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	The library terrace (Stage 1) will further enhance this environment, providing an outdoor area for informal gathering and reflection.
	To ensure student safety and maintain supervision standards, teaching spaces will be out of bounds during longer breaks, as these areas are not supervised during those periods.
	Terraces and Outdoor Access
	In Stage 2, a series of linking terraces will be provided between Block A and Block D on Levels 1 to 4, with a rooftop terrace located on Level 5 of Block D. While the rooftop terrace will include landscaped areas and planting, the linking terraces on Levels 1 to 4 will not include planting, due to maintenance constraints and spatial limitations. However, to maintain visual interest and support student wellbeing, biophilic and Connecting with Country design elements will be integrated into the balustrade and soffit design of these terraces. A larger terrace will also be provided in front of the Level 2 library, centrally located to support informal use and direct access from a key communal learning spaces.
	Vertical Circulation and Movement
	Vertical circulation has been a key focus of the design process. A dedicated vertical transportation report has assessed the proposed stairs, lifts, and circulation spaces as appropriate for the school's anticipated population. As part of Stage 1, two lifts are being provided, and the main stairwell has been widened to ensure smoother flow during busy periods. In addition to these design solutions, the school will adopt operational measures to manage peak movement times.
General public	
Community spaces for organisations such as a P&C or a uniform shop should be included within the floor space associated within the "administration" floor space.	Several storerooms have been provided within the "administration" and "gym & canteen" floor spaces which can cater for spaces for other activities and uniform shop uses. Refer

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	to the Architectural Drawings (Appendix 3) for further detail.
Query relating to the intake of students when the school opens.	All years from 7-12 will be catered within the new high school from Term 1 in 2027.
Implications associated with open classrooms in relation to noise levels between classes, confirmation that there will be no open classroom spaces provided as part of the Proposed Activity.	Noted. This is an operational matter which will be developed by the DoE in accordance with best practice and the relevant secondary school educational guidelines.
ELECTRICAL	
Endeavour Energy	
An extension or augmentation of the existing electricity distribution network is likely to be required. Whilst there are distribution substations in the area which are likely to have some spare capacity, it is not unlimited and unlikely to be sufficient to provide for the additional load from the proposed development.	As noted within the design report and electrical specification, an Accredited Service Provider (ASP) shall be engaged to coordinate with Endeavour Energy to develop the proposed method of supply.
	Preliminary maximum demand calculations as indicated in the electrical specification have been performed to assess the requirement for a new pad mount substation dedicated to the site.
Any required padmount substation/s will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling not located within a public road / reserve) with an appropriate form of property tenure as detailed in the attached copy of Endeavour Energy's 'Land Interest Guidelines for Network Connection'.	The proposed padmount substation location, as shown in the site plan is positioned within the property boundary in an accessible location, complying with Endeavour Energy's typical details for locating assets.
	This proposed location currently ensures suitable access and maintenance, safety clearances, and fire ratings as shown on the site plan and described within the electricals specification.
All new cabling / reticulation infrastructure must be of an underground construction type. Where existing overhead construction is present on or in proximity of the site, it may require undergrounding as the development proceeds.	As outlined in the design report and site plan underground cabling is proposed for new HV reticulation, consistent with Endeavour Energy's policy for urban developments. There are no proposals for new or the modification of any existing overhead services.
	The low voltage service conductor and customer connection points have been designed to comply with the 'Service and Installation Rules of NSW' as described in the electrical specification.
Whilst there are no restrictions in legislation relating to the distance of school uses in proximity	The site layout shows good design practices to assist in

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to electrical infrastructure, it is recommended that the separation distances within Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', Table 1 'Minimum easement widths', electric and magnetic fields (EMF) are applied.	minimizing electrical magnetic fields (EMF) through the proposal of a padmount substation being physically separated from the main buildings where students are present and keeping distances as far as practical from those buildings.
Driveways should be designed to increase the separation to the any electricity infrastructure on the road verge as much as reasonably possible, with the following clearances required.	The proposed design takes into account easements for access and maintenance, including the considerations of new lighting installations and low voltage pillars, this is shown on the site plan.
The planting of large / deep rooted trees near electricity infrastructure is opposed. Existing trees which are of low ecological significance in proximity of electricity infrastructure should be removed and if necessary, replaced by an alternative smaller planting. The landscape designer will need to ensure any planting near electricity infrastructure achieves Endeavour Energy's vegetation management requirements.	The proposed design as shown on the site plan takes into account the landscaping design, including the distances to adjacent vegetation of trees.
	All distances to the adjacent vegetation are greater than 800mm away and no vegetation is proposed within the easement.
WATER	
Sydney Water	
Sydney Water require a Section 73 Compliance Certificate and Building Plan approval to be obtained prior to an Occupation Certificate being issued for the future school.	This requirement has been addressed within PACMM6 in the Mitigation Measures (Appendix 1).
The plans must be approved by Sydney Water prior to demolition, excavation or construction works commencing. This allows Sydney Water to determine if sewer, water or stormwater mains or easements will be affected by any part of the development. Any amendments to plans will require re-approval.	This requirement has been addressed within PACMM6 in the Mitigation Measures (Appendix 1).
Certain tree species placed in proximity to Sydney Water's underground assets have the potential to inflict damage through invasive root penetration and soil destabilisation. Section 46 of the Sydney Water Act specifies what might occur when there is interference or damage to our assets caused by trees.	Noted. This recommendation is addressed within LT6 in the Mitigation Measures (Appendix 1).
For any trees proposed or planted that may cause destruction of, damage to or interference with our work and are in breach of the Sydney Water Act 1994, Sydney Water may issue an order to remove that tree or directly remove it and seek recovery for all loss and associated compensation for the removal.	
HAZARDS	

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DPHI Hazards			
The hazards team has reviewed the relevant hazard related information Melrose Park New High School (P5-2025-40). The proposed high school being located at 37 Hope Street Melrose Park 2114. The proposed development (the proposal) is located within the measurement length specified under Australian Standard 2885 Pipelines - Gas and liquid petroleum (AS 2885) for the Clyde to Gore Bay pipeline operated by Viva Energy Australia. As such, we recommend the proposal be forwarded to Viva Energy for their consultation to ensure that proposal will not impact on the continual compliance of these pipelines with AS 2885. The above pipeline is also listed in Section 2.77 of State Environmental Planning Policy (Transport and Infrastructure) 2021. A Hazard and Risk Assessment (Arriscar, Revision B, 23 December 2024) was included in the assessment package. We consider the assessment is in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis', showing that the proposal satisfies the risk criteria in the Department's Hazardous Industry Planning Advisory Paper No. 10, 'Land Use Safety Planning'. As such, the proposal is not precluded by pipeline risks provided that all actions arising from consultation with Viva Energy is carried out to their requirements."	The project team has undertaken ongoing engagement with Viva Energy. This has informed the consideration of impacts from the activity's proximity to the Clyde to Gore Bay as required under the <i>Guidelines for Division 5.1 assessments: Consideration of</i> <i>environmental factors for health services facilities and schools,</i> <i>Addendum October 2024</i> and clause 171 of the EP&A Regulation. Section 2.77 of <i>State Environmental Planning Policy (Transport</i> <i>and Infrastructure) 2021</i> does not apply to activities under Part 5 of the EP&A Act, rather it applies only to development proposed under Part 4 of the EP&A Act. Therefore, there is no statutory requirement for further consultation with Viva Energy.		
RECOMMENDED CONDITIONS OF APPROVAL			
City of Parramatta Council			
 Detailed engineering plans must be submitted to Council for the following works within the proposed activity: A new combined raised pedestrian and cyclist crossing in Hope Street west of Wharf Road. A new raised pedestrian crossing in Wharf Road. Footpath widening in Wharf Road. A new roundabout at the intersection of Hope Street and Wharf Road. The construction of the approved treatment is to be carried out by the applicant and all costs associated with the supply and construction of the traffic facility and appropriate signage are to be paid for by the applicant at no cost to Council. It is the applicant's responsibility to assess and upgrade the existing street lighting to 	Details of the proposed public domain upgrades design within the proposed scope of works in this REF will be provided to City of Parramatta Council in due course.		

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ensure it complies with the relevant Australian Standards for the proposed traffic facility. Should the lighting need to be upgraded, the applicant must liaise with the relevant utility authority directly and arrange for the works to take place at no cost to Council.	
A separate application associated with the proposed parking changes to restrictions in Hope Street and Wharf Road must be submitted to Council's Traffic and Transport Services for consideration by the Parramatta Traffic Committee under Delegated Authority and Council's approval. The construction of the approved treatment is to be carried out by the applicant and all costs associated with the supply and construction of the traffic facility and appropriate signage are to be paid for by the applicant at no cost to Council and Roads and Maritime Services.	This requirement has been addressed within a new mitigation measure OT10 (Appendix 1).
Parking spaces are to be provided in accordance with the approved plans and with AS 2890.1, AS 2890.2 and AS 2890.6. A total of 29 spaces are to be provided for Stage 1 including five (5) spaces in the High School site and 24 spaces in the Primary School site, and 44 spaces are to be provided for Stage 2 including five (5) spaces in the High School site. Details are to be illustrated on plans submitted with the construction certificate application.	The provision of parking for the proposed activity is consistent with the quantum provided in both stages. The Australian Standard requirements have been reflected within OT 7 and OT8 in the Mitigation Measures (Appendix 1).
Elements within the at-grade car park not shown on the issued plans such as columns, garage doors, fire safety measures and the like must not compromise appropriate manoeuvring and that compliance is maintained with AS 2890.1, AS 2890.2 and AS 2890.6.	The Australian Standard requirements are satisfied within a new OT3 in the Mitigation Measures (Appendix 1).
Prior to the issue of any Construction Certificates, the applicant shall submit a Construction and Pedestrian Traffic Management Plan (CPTMP) to the satisfaction of Council's Traffic and Transport Manager. The CPTMP shall be prepared by a suitably qualified and experienced traffic consultant. The CPTMP must be approved by Council prior to any works commencing and must be complied with at all times including any additional conditions imposed by Council and/or TfNSW in the approval of the plan.	The Mitigation Measures (Appendix 1) include CT10, which requires the preparation of a detailed Construction Pedestrian and Traffic Management Plan (CPTMP). This mitigation measure has been updated to require the CPTMP to be prepared in consultation with the City of Parramatta and City of Ryde Councils.
Occupation of any part of the footpath or road at or above (carrying out work, storage of building materials and the like) during construction of the development shall require a Road Occupancy Permit from Council.	These recommendations are addressed within CT11 and CT12 in the Mitigation Measures (Appendix 1).
Oversize vehicles using local roads require approval from the National Heavy Vehicle Regulator (NHVR).	

7. Environmental Impact Assessment

The following section outlines the potential impacts of the proposed activity on the environment, and how these potential impacts will be mitigated and/or managed.

7.1 Operational Traffic, Access and Parking

A Transport and Accessibility Impact Assessment (TAIA) has been prepared by the transport consultant and is included at **Appendix 8**. The report outlines the existing surrounding road network arrangements and conditions and provides an assessment of the traffic and parking impacts associated with the proposal.

7.1.1 Travel Demands and Mode Share

The transport consultant has prepared a holistic transport strategy for the proposed activity which prioritises active transport such as walking and cycling, and public transport over private vehicle movements. This is consistent with the Transport Management and Accessibility Plan (TMAP) that underpins the Melrose Park Precinct, prepared as part of the precincts rezoning, which has been endorsed by TfNSW, and which is required to be used as a supporting technical document for all new developments within Melrose Park Precinct. As such, the transport assessment of the proposed activity is based on the objectives, strategies and modelling of the TMAP.

Based on the TMAP and an analysis of the school catchment, with the majority of students expected to live outside a 15-minute walk from the site upon the school's opening, though reducing by 16% as the Melrose Park Precinct evolves, the transport consultant has formulated the following mode share scenarios shown in **Table 18**. The activity proposes to achieve the "moderate" travel mode share targets for students and staff in the opening year of the new school, which will be achieved through implementation of a final School Transport Plan prepared in accordance with the Preliminary School Transport Plan (**Appendix 9**), as required in mitigation measure OT4.

However, to enable a thorough and conservative assessment, the transport assessment is based on the worst-case scenario, being the full Stage 2 capacity either the baseline or target mode share splits, whichever results in the largest travel demand.

Travel mode		Students		Staff		
Travermode	Baseline	Moderate	Reach	Baseline	Moderate	Reach
Walk	20%	20%	35%	3%	5%	5%
Bicycle	1%	5%	8%	0%	3%	5%
Bus	41%	48%	30%	3%	17%	5%
Train	9%	0%	0%	5%	5%	5%
Light rail	0%	0%	12%	0%	0%	20%
Car, passenger	27%	25%	15%	2%	15%	10%
Car, driver	2%	2%	0%	87%	55%	50%
Total	100%	100%	100%	100%	100%	100%

Table 18: Mode Share Scenarios

7.1.2 Traffic Impact

Traffic Generation

Based on the mode share scenarios, the transport consultant has determined that worst-case traffic generation would occur in the baseline scenario for Stage 2 in 2036, which is expected to result in the following trip generation:

- 428 vehicle trips (259 inbound, 189 outbound) during the AM peak period and School Afternoon peak period.
- 67 vehicle trips (35 inbound, 3 outbound) during the commuter peak period.

Detailed traffic modelling for the TMAP, which has since been updated to reflect the approved street network associated with the infrastructure DA, DA/1100/2022, and town centre DA, DA7642022, considered traffic generation of an 800-student primary school on the site for the morning and evening peaks at 2036. A comparison is shown in **Table 19**.

	Melrose Park North 'Primary School'	Proposed Activity (worst- case scenario)	Difference
Morning Peak	417 (213 inbound, 204 outbound)	428 (259 inbound, 189 outbound)	+11 vehicles
School Afternoon Peak	-	428	Not modelled
Commuter Afternoon Peak	89 (40 inbound, 49 outbound)	67 (35 inbound, 3 outbound)	-22 vehicles

Table 19: Traffic Generation Comparison – Melrose Park North Precinct

As a worst-case scenario, the transport consultant has determined that the proposed activity may generate an additional 11 vehicles during the morning peak period and a reduction of -22 vehicles in the commuter peak period when compared to the previously modelled 'primary school' traffic volumes for Melrose Park North Internal Street Network, which also accounts for the 2036 traffic generation associated with the some 11,000 new dwellings in the Melrose Park Precinct.

However, noting that the proposed activity is targeting a moderate mode share, with 407 AM peak period trips and 61 commuter peak period trips, the proposed activity would result in a net reduction of -10 vehicle trips during the morning peak period and -28 vehicle trips during the commuter peak period. As such, there would be no net impact. Traffic generation would be further reduced should the reach target be achieved.

Appendix 35 confirms that the afternoon school peak was considered acceptable not to be modelled, given the background traffic during the school afternoon peak is anticipated to be lower than the afternoon commuter peak period.

Intersection Performance

The transport consultant refers to the latest modelling undertaken for 15 intersections throughout the future Melrose Park North internal road network and broader local road network which accounted for the previously envisaged 800-student primary school and recently approved Melrose Park Town Centre (DA/764/2022) and associated interim road upgrades. The results demonstrated that the road network would operate satisfactorily (being a Level of Service of A-C) under the forecast 2036 (projected full completion of Melrose Park North Precinct) during the morning and evening peak periods.

The transport consultant has determined that while there may be a slight increase (by a maximum of 31 vehicles) in traffic generation should the baseline scenario occur, the increase would have no material impact on the surrounding road network given all intersections modelled operate at a satisfactory level with spare capacity. Furthermore, the transport consultant notes that computer modelling techniques available to analyse intersection performances are not sensitive to such small changes in traffic volumes and hence, updated traffic modelling accounting for the minor potential increase in trip generation is not considered to be required. The traffic impacts of the proposed activity are considered acceptable.

Moreover, should the proposed activity achieve its target mode moderate mode share, it will not generate any additional traffic than what has been analysed and approved as part of the Melrose Park North Precinct.

It is noted in regard to intersection performance, it was estimated that Victoria Road is the main road that vehicles use to travel to Melrose Park, therefore a rough assumption has been established that 90% of staff travel from Victoria Road and 10% are coming from local roads throughout the immediately surrounding area. **Appendix 35** establishes that the staff mode share in **Table 18** was partly derived from Journey to Work data, noting there is no accurate way to forecast staff trip distribution, with the estimation derived using an appropriate level of accuracy.

7.1.3 Drop off and pick up operation

To adequately meet the anticipated future drop off and pick up demand, the new Melrose Park High School will be supported by the following arrangement:

- Wharf Road: approximately 60m length zone that will accommodate 10 parking bays.
- **Future North-South Road 4:** approximately 68m length zone that will accommodate 11 parking bays and approximately 16m accessible drop off pick up area that will accommodate two accessible parking bays.

It is noted that only the Wharf Road drop off and pick up zone is a part of this REF application, with the future North-South Road 4 zone proposed to be completed in a separate planning application by Sekisui House (will be finished prior to the opening of the new high school in term 1 2027).

The split nature of the drop off and pick up arrangement will assist in accommodating eastern and western vehicle approaches. A worst-case queuing analysis, based on the moderate mode share targets proposed to be achieved upon school opening, was carried out that determines that the forecast demand for the new high school can be accommodated or processed in approximately 9 minutes during the AM peak and 7 minutes during the PM peak.

An additional detailed queueing analysis has been completed in **Appendix 35** and notes that throughout peak AM drop off period of 9 minutes, each drop off and pick up area will have a maximum queue length of 41 metres, and that during the PM peak pick-up period of 7 minutes, there will be a maximum queue length of 49 metres. Therefore, as the Wharf Road kiss and drop zone is 60m long, and the North-South Road 4 kiss and drop zone has a combined 68 metre length, both kiss and drop zones are expected to fully accommodate the maximum queue lengths.

To ensure that the proposed drop off and pick up zones operate effectively, a Preliminary School Transport Plan has been prepared that sets out initiatives that will be implemented to ensure reasonable operation (**Appendix 9**). Implementation of a final School Transport Plan is required by mitigation measure OT4.

7.1.4 Parking

Car Parking Demand

Based on the proposed travel mode share scenarios, a summary of the car parking demand of the proposed activity is shown in **Table 20**, with the baseline mode share being worst-case scenario requiring 20 student spaces and 69 staff spaces.

		Baseline N		Moderate		Reach			
Car users Mode		Volume		Mode Split	Volume		Mode Split	Volume	
	Split	Stage 1	Stage 2	-	Stage 1	Stage 2	Spin	Stage 1	Stage 2
Student	2%	11	<u>20</u>	2%	11	20	0%	0	0
Staff	87%	45	<u>69</u>	55%	29	43	50%	26	40
тот	AL	56	<u>89</u>		40	63		26	40

Table 20: Summary of Car Parking Demands

Proposed Car Parking Arrangement

Due to the constrained size of the site, on-site car parking provision is limited to five (5) staff spaces, including one accessible parking space. The remaining car parking provision is intended to be provided in a new staff carpark within Melrose Park Public School, which is currently undergoing a separate redevelopment process with the same target opening date as the proposed activity. Melrose Park Public School is approximately 200m south of the site. The path of travel to and from the Melrose Park Public School site is provided in **Figure 32** below comprising of footpaths and a new raised pedestrian crossing proposed as part of the activity.



Figure 32 Proposed travel path between the site and Melrose Park Public School staff car park

Source: TTW

Mitigation measures OT7 and OT8 are proposed, requiring the delivery of the following number of staff car parking spaces at Melrose Park Public School prior to the staged operation of the proposed activity:

- Stage 1: 24 spaces
- Stage 2: Additional 15 spaces, resulting in a total of 39 spaces.

Total staff car parking provision for each stage will be:

- Stage 1: 29 spaces for 52 staff
- Stage 2: 44 spaces for 79 staff

In accordance with department policies, no off-street student parking provision is proposed.

Adequacy of Proposed Car Parking

In order to determine an appropriate level of parking provision for the proposed activity, the transport consultant undertook a number of assessments, including a site-specific analysis which developed baseline, moderate and reach travel mode targets, a review of other LGA DCP parking rates, a review of the Parramatta DCP objectives for the Melrose Park Precinct and consultation with SINSW, TfNSW and Council at multiple TWG meetings.

Adequacy of proposed car parking is ordinarily established by car parking rates within DCPs. However, the Parramatta DCP does not apply to development permitted without consent under Part 5 of the EP&A Act. Notwithstanding, the Parramatta DCP does not provide a specific car parking rate for educational establishments. In lieu of this, the transport consultant firstly analysed the car parking rates in other DCPs throughout metropolitan Sydney. This analysis found that a number of LGAs within relatively close proximity to the site, such as the Ryde and Willoughby LGAs require a parking rate of 1 space per 2 staff for schools. These LGAs are similar in nature to the proposed Melrose Park Precinct, located in built up areas typically located in proximity to frequent public transport services. As such, the proposed car parking provision is generally aligned with other LGAs.

Considering the constrained size of the site and its location within the Melrose Park Precinct which will have alternative travel measures, the transport consultant determined that a staff car parking rate of 55% of the staff numbers is appropriate.

While this is reduced from the baseline worst-case scenario, the transport consultant considers that this reduction will be achieved through implementation of the school travel plan (**Appendix 9**) that establishes new targets for travel behaviour, which will differ from other existing high schools. The proposed parking provision and overall sustainable transport strategy and mode share targets are justified and considered reasonable for the following reasons and initiatives, summarised below and detailed within the Transport and Accessibility Impact Assessment:

- The Melrose Park TMAP notes that the Melrose Park Urban Renewal Precinct has been planned to deliver a balanced transport target mode share of 5% walking/cycling, 45% public transport and 50% private car transport. The proposed activity seeks to have the majority of trips undertaken by active transport (especially given its location within a growing high-density precinct). The proposed activity's parking is aligned with the private vehicle mode share and overarching objectives of the TMAP.
- The following public and active transport upgrades are required by the TMAP by opening date of the proposed activity:
 - Additional frequency provided to the M52 bus services along Victoria Road, equating to 18 buses per hour in peak direction.
 - In the interim until the Parramatta Light Rail Stage 2 is completed, private bus services will be chartered by the Melrose Park Precinct during the morning and afternoon peak periods from Melrose Park North to Meadowbank wharf and train station. This will provide 12 services during peak morning and afternoon periods by 2027, with the nearest stop to the site located approximately 200m away at the Taylors Avenue / Cobham Avenue intersection.
 - The 524 'Ryde & West Ryde to Parramatta via Melrose Park' and 802W (Marsden High School to Dundas via Melrose Park and Ermington) bus routes run adjacent to the site through Hope Street and Wharf Road, providing public transport access to the western section of the secondary school catchment area. It is also understood that there is potential for the 513 route to be altered by TfNSW to provide services to the northern part of the school catchment. Correspondence relating to these discussions is provided in **Appendix 8**.
- The provision of adequate bicycle parking spaces (in accordance with the Parramatta DCP) in both Stages 1 and 2, including 100 student and eight (8) staff bicycle parking spaces (supported by associated end of trip facilities) in Stage 2, will encourage the usage of active transport options.

- By an assumed opening date of Stage 2 in 2036, the site will be supported by the Parramatta Light Rail Stage 2, with a Hope Street / Waratah Street intersection stop located approximately 100m west of the new high school.
- It is understood that the DoE is considering options for the recruitment of local staff who live in proximity to the site. Proximity could inform one element of the recruitment process and has the capacity to encourage uptake of public and active transport modes for staff.
- The Melrose Park structure plan recognises that there is a very strong link between parking provision and travel behaviour, and that it is a critical element of the integrated transport strategy.

Students travelling to the site by car will be highly discouraged, managed through measures detailed within the School Transport Plan (**Appendix 9**). However, a baseline scenario could occur prior to the completion of the Melrose Park Precinct upon which there would be sufficient levels of public transport options including the Parramatta Light Rail Stage 2, with students driving to the site, and a higher proportion of staff drive to the site. In this event, the Transport and Access Impact Assessment notes that there is an abundance of unrestricted spare capacity within the surrounding streets which may be utilised. This was observed during two separate site inspections undertaken by the transport consultant during which Wharf Road and Waratah Street had approximately 50% spare capacity and Hope Street had approximately 30% spare capacity.

Therefore, the proposed activity, subject to implementation of the mitigation measure OT7 and OT8 to provide staff car parking on Melrose Park Public School, will not result in any significant environmental effects.

7.1.5 Public Transport

As discussed above, the site is well-serviced by existing bus public transport options, with future light rail provision to further increase public transport accessibility.

Use of busses is likely to be the main form of public transport use by students. The moderate mode share target bus demand for the new high school is approximately 480 students upon opening, equating to 50 students per bus (equivalent to filling 10 buses during the morning and afternoon peak periods).

It is anticipated that students travelling to the site by bus would do so on a mixture of general public route services and dedicated school services, subject to future operations to be determined by TfNSW. Buses may be shared by members of the public and/or other schools. Therefore, the demand for will likely increase to 15 buses.

The proposed consolidated bus zone along the southern side of Hope Street will have a kerbside length of 60m, with other two (2) existing zones on Wharf Road and the northern side of Hope Street having a length of 20m and 25m respectively. In total, the usage of these bus zones could accommodate three (3) buses on each side along Hope Street, meeting the projected capacity of a total of 5-6 buses in three (3) cycles with a separation of services by 5 - 10 minutes. Therefore, it is projected that this demand could be cleared within 15 - 20 minutes in the afternoon peak.

No specific mitigation measures have been considered necessary for public transport.

7.1.6 Bicycle Parking

While the Parramatta DCP does not apply to the proposed activity, it has been used to determine appropriate bicycle parking provision. It requires 100 student bicycle parking spaces and eight (8) staff bicycle parking spaces which is proposed to be provided.

The proposed activity also provides two unisex showers and change rooms for staff with lockers. These provisions are broadly in line with Green Star requirements and the NSW Planning Guidelines for Walking and Cycling and would meet future demand levels with a shift to more sustainable transport modes.

No specific mitigation measures have been considered necessary for bicycle parking.

7.1.7 Pedestrian Safety

New raised pedestrian crossings are proposed on Wharf Road and Hope Street, as well as widening works to the Wharf Road footpath, to improve pedestrian safety. An additional raised pedestrian crossing will be provided prior to the opening of the school under a separate planning application by Sekisui House, which will traverse the Future North-South Road 4. These crossing and footpaths align with the proposed school entrances, and access routes to drop off and pick up areas, and the intended staff parking at Melrose Park Public School.

7.1.8 Loading and servicing

An on-site loading area and on-street loading bay will be provided for the new high school. The loading area can accommodate one service vehicle up to and including a 10.8m waste truck, including provisions for the swept paths of these vehicles, and sufficient height clearance when Building D in Stage 2 is constructed. All vehicles will enter and exit the site in a forward direction. The on-street loading zone will be utilised by couriers and smaller service vehicles and can accommodate one vehicle up to and including a 8.8m MRV. The proposed on-site and on-street loading areas are shown in **Figure 33**. The on-street secondary loading zone on Hope Street is proposed in order to provide better proximity to wood and metal workshops within the site, reduce the amount of materials being moved through some sections of the school, and provide greater redundancy for deliveries of any kind. Swept path analysis for the loading dock and service vehicle area is provided by the transport consultant at **Appendix 8**.

During construction of Stage 2, waste storage and collection which will continue to occur at the onsite loading dock. Secure pedestrian access for authorised school and operations personnel to the waste storage area will be provided via a hoarding.

While there are no dedicated parking areas provided for emergency vehicles, there are multiple options for emergency vehicle parking depending on the nature of an emergency, including either drop off and pick up zones, the existing bus bay on the northern side of Hope Street, the staff car park, the on-street loading dock, and the on-site loading dock.

No specific mitigation measures have been considered necessary for loading and servicing.

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Figure 33 Proposed on-site and on-street loading areas

Source: TTW

Mitigation Measures

The TAIA (**Appendix 8**) concludes that subject to implementing the mitigation measures, the proposed activity is not likely to significantly affect the environment in relation to traffic and transport matters. The proposed activity will be subject to the implementation of the following mitigation measures in **Table 21**.

ID	MM Name	Mitigation Measure	Timing				
Operationa	Operational Traffic and Transport						
OPTMM1	School Transport Plan	Prior to the commencement of operations, a School Transport Plan must be prepared to the satisfaction of the DoE Transport Planning Team. If the school already has a School Transport Plan, the existing plan is to be reviewed and updated if necessary to reflect the impacts of the REF works, to the satisfaction of the DoE Transport Planning Team. A copy of the School Transport Plan is to be provided to the relevant DoE Project Lead for implementation during operations.	Prior to the commencement of Operations				
OPTMM2	Consultation with Parramatta Light Rail Stage 2 project team	Throughout the detailed design process, consultation with the Parramatta Light Rail Stage 2 team will be conducted to ensure any required amendments to public domain works or traffic arrangements align with the post-construction condition of the light rail route.	Design				
OPTMM3	Stage 1 Car Parking	Prior to commencement of Stage 1 Operation, a total of 24 staff car spaces shall be provided in Melrose Park Public School.	Prior to commencement of operation				

ID	MM Name	Mitigation Measure	Timing
OPTMM4	Stage 2 Car Parking	Prior to commencement of Stage 2 Operation, a total of 39 staff car spaces shall be provided in Melrose Park Public School	Prior to commencement of operation (Stage 2)
OPTMM5	Staggered bell times	The activity shall ensure that the bell times are staggered between the Melrose Park Public School and Melrose Park High School by approximately 20 minutes	Operation
OPTMM6	Parking restriction application	A separate application associated with the proposed changes to parking restrictions in Hope Street and Wharf Road must be submitted to Council's Traffic and Transport Services for consideration by the Parramatta Traffic Committee under Delegated Authority and Council's approval.	Pre-Construction
OPTMM7	Construction Traffic Management Plan	The activity shall implement a Construction Traffic Management Plan (CTMP) once a contractor has been appointed to ensure construction traffic is managed during the construction phase.	Construction
OPTMM8	Modification to existing bus zones	Modifications to bus stops or zones is to be undertaken to the satisfaction of TfNSW.	Prior to commencement of operation.

7.2 Construction Traffic, Access and Parking

7.2.1 Construction Vehicle and Pedestrian Access

Construction vehicles will access the site via the Future North-South Road 4 during the Stage 1 and Stage 2 works. Loading and unloading activities will occur within the site, at the nominated vehicle zones, or within any approved Works Zone.

Stage 2 Construction

As the school will be in operation during Stage 2, it is expected that the pedestrian and vehicle access will be redirected temporarily, and additional hoarding and protection will be installed to protect pedestrians, staff and students (refer to CT-7 and CT-8). Construction access to the Stage 2 site will be managed by authorised traffic controllers and a management plan in place prior to construction. This will be further detailed in a CMP prepared by the contractor at the time of construction. Vehicular access to the site will be from the site's driveway for heavy vehicles and waste collection vehicles only. The use of the two sports courts as part of the Stage 2 construction site will allow heavy vehicles and waste collection vehicles to enter, turn and exit the site in a forward direction. Detailed mitigation of impacts on Stage 1 operation during Stage 2 operation will be considered within the detailed CTMP for Stage 2 in due course.

7.2.2 Construction Traffic

Estimated construction vehicle traffic volume for the worst case is approximately 10 - 30 trucks (60 two-way movements, equating to four per hour), while approximately 5 - 10 trucks are expected on a typical day (20 two-way movements). It is noted that heavy vehicles accessing the site would generally arrive outside of AM and PM peaks. Rather, the peak construction traffic periods will typically arrive and depart at 6:30 - 7:00am and 6:00 - 6:30pm respectively each day. Therefore, the peak construction traffic will not overlap with the typical peak commuter traffic and thus, the construction traffic will have a minimal impact on the local network.

On days of high estimated vehicle movements, communication between the site and incoming vehicles will be maintained to stagger the arrival of vehicles, in order for them to be accommodated within the worksite and to minimise traffic disruptions (refer to mitigation measure CT3). The detailed CTMP required to be prepared prior to construction (mitigation measure CT10) will contain detailed construction delivery, vehicle, traffic and route management measures that reflect those discussed in the preliminary CTMP.

During Stage 2 construction, construction worker vehicles will be restricted during key pick up and drop off times to ensure the drop off and pick up zones remain operational and unaffected.

7.2.3 Construction Parking

The preliminary CTMP estimates that the proposed activity will involve an approximate maximum workforce of 130 construction workers, with 20 - 70 construction workers on site during a typical day. It is estimated that the car demand for construction workers would be approximately 10 - 35 parking spaces daily based on a conservative estimate of 2 persons per car. An overview of the surrounding street network observed that Wharf Road and Waratah Street had approximately 50% spare capacity for construction worker parking, with 30% spare capacity observed along Hope Street, which is sufficient to accommodate the expected construction worker parking demand, including Stage 2 construction worker parking demand which must be accommodated by on-street parking due to site constraints and ongoing operation of Stage 1. Worker vehicles will not be permitted to park within 100 metres of the school boundary. Notwithstanding, where possible, construction workers are to utilise public transport and carpool to access the site, informed by a Travel Access Guide, and incorporated within mitigation measure CT2.

Mitigation Measures

The preliminary CTMP (**Appendix 33**) concludes that subject to implementing the mitigation measures, the proposed activity is not likely to significantly affect the environment in relation to traffic and transport matters. The proposed activity will be subject to the implementation of the following mitigation measures in **Table 22**.

ID	MM Name	Mitigation Measure	Timing
Construction Traffic and Transport			
CT1	On-site car parking	On-site car parks are to be made available to workers as soon as practical; additional areas such as the staff car park, which are anticipated to be built at early phases of the project, are to be made available for	Construction

Table 22: Construction Traffic and Transport

ID	MM Name	Mitigation Measure	Timing
		workers car parking if possible. The contractor must prepared a Construction Worker Transport Strategy to encourage alternate transport modes, and reductions in car usage by construction workers. Workers choosing to park on-street should be instructed to park in areas of least impact to neighbours.	
CT2	Limiting private vehicle usage	 The contractor must implement the following strategies in order to limit usage of private vehicle traffic to the site: Provide workers with a Travel Access Guide containing information on available public transport options and transport planning Encourage car-pooling amongst workers where possible. Preferred parking locations should be advised to workers, to reduce impacts to residents for those workers that do choose to drive Ensure no workers park within 100 metres of the school boundary (to ensure parking availability and to reduce impact to drop off and pick up periods) Ensure workers follow all on-street regulatory signage including drop off and pick up zones around the school. 	Construction
СТ3	Construction vehicle movement restrictions	The contractor must ensure all construction vehicle movements are time restricted to occur outside school pick-up and drop off times to avoid conflicts with the existing MPPS. In addition, all construction deliveries are to be monitored by a traffic controller and any delivery related to the project is to be scheduled and staged to reduce congestion	Construction
CT4	Public domain works	The contractor must ensure that public domain construction works are staged and/or managed to maintain vehicle flows along Hope Street and Wharf Road. Any road closures (if required) to be coordinated with Transport for NSW and Council	Construction
CT5	Staging of construction works	The contractor must ensure that construction works are staged and/or managed to maintain cyclist flows. Any construction vehicle movement will be monitored and controlled to ensure cyclists safety on the road. Any road closures (if required) to be coordinated with Transport for NSW and Council	Construction
СТ6	Traffic control measures	The contractor must ensure traffic control measures are in place to divert pedestrians to appropriate locations either in the kerbside parking lane (with suitable barrier protection) or on the opposite side of the road (with suitable crossing points provided).	Construction
CT7	Hoarding	The contractor must ensure appropriate hoarding is provided at the site boundary.	Construction
CT8	Hoarding	During the Stage 2 construction works, appropriate hoarding must be provided at the Stage 2 site boundary. Any pedestrian or cycling accesses that are	Construction

ID	MM Name	Mitigation Measure	Timing
		obstructed by Stage 2 construction will be redirected temporarily during the construction	
СТ9	Temporary notification signage	Sufficient communication methods, such as temporary notification signage installed around the site, door knocking immediately surrounding neighbours, letter box drops, project updates on the school website and project specific distribution lists are to be implemented by the contractor to ensure nearby neighbours are well-informed of any project updates.	Construction
CT10	Construction Pedestrian and Traffic Management Plan	 Prior to construction, a detailed Construction Pedestrian and Traffic Management Plan (CPTMP) shall be prepared in consultation with the City of Parramatta and City of Ryde Councils. Each Council is only required to provide comments on the CPTMP. If the construction of Stage 1 or Stage 2 of the school will be concurrent to the construction of the PLR2 Main Works, the CPTMP must also be prepared in consultation with TfNSW (submitted to development.ctmp.cjp@transport.nsw.gov.au). CPTMP shall address the following matters: A description of the development. Location of any proposed work zone(s). Details of any alteration/s to the traffic arrangements on the surrounding road network, including any lane closures. Details of crane arrangements including location of any crane(s) and crane movement plan. Haulage routes. Proposed construction hours. Predicted number of construction vehicle movements can work within the context of road changes in the surrounding area, noting that construction vehicle movements are to be minimised during peak periods. Construction vehicle access arrangements and parking. Construction program and construction staging. A detailed plan of any proposed hoarding and/or scaffolding. Measures to avoid construction worker vehicle movements within the precinct. Consultation strategy for liaison with surrounding stakeholders, including other developments under construction vehicles during the development suder construction of the general traffic, cyclists, pedestrians, and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works. Proposed mitigation measures should be clearly identified and included in the CPTMP; and Identify the cumulative construction activities of the development and other projects within or around the devel	Pre-construction

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ID	MM Name	Mitigation Measure	Timing	
		the cumulative impacts on the surrounding road network should be clearly identified and included in the CPTMP.		
CT11	Road Occupancy Permit	If any construction works occupy portions of the surrounding footpaths or roads, a Road Occupancy Permit must be submitted to the City of Parramatta Traffic and Transport Services team prior to carrying out the construction works.	Pre-Construction	
CT12	National Heavy Vehicle Regulator	An application must be submitted to the National Heavy Vehicle Regulator portal for an Oversize Vehicle Access Permit, prior to utilising roads within the City of Parramatta LGA.	le Regulator portal for an Oversize Vehicle hit, prior to utilising roads within the City of	

7.3 Noise and Vibration

A Noise and Vibration Assessment (NVA) has been prepared and is included at **Appendix 14**. The report assesses the noise and vibration impacts during the construction and operational stages of the project. A summary of the assessment and proposed mitigation measures are described below.

7.3.1 Identification of Sensitive Receivers

Noise emissions were assessed for the key surrounding sensitive receivers, being a series of lowdensity residential dwellings on the opposite side of Wharf Road, future high-density residential dwellings to the west within Building O1, O3, O6 and H3 in the Melrose Park North town centre, the existing Melrose Park Public School to the south and existing industrial uses on the opposite side of Hope Street to the south. The identified nearby sensitive receivers are shown in **Figure 34** below.



Figure 34 Sensitive Receivers Map

Source: Arup

7.3.2 Construction Noise

Construction Hours

All construction work is proposed to be undertaken during the standard construction hours set out within the Interim Construction Noise Guideline (ICNG):

- Monday to Friday 7:00am to 6:00pm.
- Saturday 8:00am to 1:00pm.
- No work on Sundays and Public Holidays

Construction Noise Impacts

The NVA predicts that construction noise associated with Stage 1 of the proposed activity will exceed the applicable noise management levels for all nearby sensitive receivers during the majority of construction phases. Compliance is predicted at the nearest non-residential receivers being the existing public school and industrial receivers on the southern side of Hope Street. It is noted that the NVA has not assessed construction noise impacts of Stage 2, due to uncertainty with the timeframe of its construction. Notwithstanding, the NVA states that construction noise

impacts during Stage 2 are expected to be comparable or lower than the Stage 1 construction works, including construction noise impacts to Stage 1 which will be in operation. The Preliminary CMP (**Appendix 18**) states that prior to Stage 2 construction, noise impacts for Stage 2 will need to be assessed within the Construction Noise and Vibration Management Plan (CNVMP) for Stage 2. To mitigate Stage 2 construction noise impacts on the school's operation, the detailed CMP will need to include measures for coordination with the operational school including consideration of examinations and school events to be considered. Mitigation measure CMM19 is proposed, requiring a CNVMP for Stage 2 to be prepared in consultation with the operating Stage 1 school, including a mitigation measure to utilise weekend and school holiday periods to undertake noisy and disruptive works, and soundproofing to be utilised where possible on hoardings. Therefore, the construction noise management measures will remain appropriate across both stages.

Ultimately, the exceedance of the noise management levels at sensitive receivers is not unusual given that heavy plant and equipment will be used, such as excavators, and concreting, and the proximity to sensitive receivers (the closest being to the immediate west of the site within the future Melrose Park North town centre). Construction works are temporary in nature and any potential noise impact on the community and the surrounding environment will not be permanent or continuous.

In addition, it is unlikely that all construction equipment will be operating at their maximum sound levels simultaneously, with the maximum level only used for a brief amount of time. Therefore, at other times, equipment may emit lower sound levels carrying out activities.

Where the predicted noise level is predicted to exceed the relevant noise management levels, all feasible and reasonable work practices in accordance with the mitigation measures will be applied. This will ensure that any adverse noise impacts to surrounding receivers are minimised. Mitigation measures are provided at **Appendix 1** and include mitigation measure NV6 which requires the preparation of a detailed CNVMP by the future contractor prior to the construction of both stages on the site. A summary of the key potential construction noise mitigation measures recommended by the acoustic consultant include:

- The future contractor should inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.
- Where construction noise is above the highly affected 75dB(A) noise level, a respite period is recommended to be implemented, which restricts the hours that the very noisy activity can occur. It is recommended for this to take into account:
 - \circ $\;$ Times identified by the community when they are less sensitive to noise.
 - If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.

Construction Vibration Impacts

Based on the scope of works and typical equipment required, the acoustic consultant anticipates that vibration during construction will be perceivable by humans. Vibration intensive plant including the Vibratory Roller, Hydraulic Hammer and Vibratory Pile Driver, require specific minimum working distances to nearby receivers to address the risk of cosmetic damage and encourage human comfort. It is important to note that the minimum distances are indicative are likely to vary dependent upon the item of plant to be used and apply to typical buildings under typical geotechnical conditions.

Mitigation measure NV6 requires that a CNVMP be prepared by the engaged contractor to manage construction vibration impacts. The CNVMP will consider proposed plant, equipment and construction methodology, prior to the commencement of the project. Where vibration intensive works are required within the minimum working distances, vibration monitoring at the nearest potential affected building will be considered, with real-time alerts to be generated if measured vibration levels exceed criteria. If this occurs, there will be subsequent review of equipment selection and/or method of construction.

Construction Traffic Noise Impacts

As per the TAIA (**Appendix 8**), traffic caused by the construction of both stages is expected to increase by a maximum of 60 vehicles per day as a worst-case scenario. The acoustic consultant has determined that this increase will result in a noise level rise of under 1 dB, which is observed to be below the 2 dB threshold for traffic noise increase screening criteria, and as such, is expected to be barely perceptible to the average person. It is noted that heavy vehicles would likely produce noise levels higher than regular traffic, therefore the following measures have been recommended to be implemented within the CNVMP prepared by the future contractor:

- Staging truck arrivals to prevent queuing and idling on public streets
- Directing vehicles to arrive and depart via designated routes that minimise the use of local roads.
- Reducing the need for reversing to limit the use of reversing alarms ("beepers") and/or using quieter alarms (e.g., quacker alarms).
- Minimising engine braking and avoiding unnecessary noise from slamming doors, loud radios, shouting, or the use of truck horns for signalling.

7.3.3 Operational Noise

The acoustic consultant has determined the potential operational noise impacts from various sources of the activity, including building services associated with the school, standard operations during the standard school hours, waste removal, the use of the Public Address (PA) system and movement associated with the car park facilities. Overall, the acoustic consultant has determined that the impact of the operational noise impacts is able to satisfy the established criteria and can be mitigated through the successful implementation of the mitigation measures set out in the NVA and **Appendix 1** such that there will be no likely significant acoustic impacts on the environment.

Noise Emissions

Building services

Building services including condenser units, fan coil units and exhaust fans will be integrated into the proposed activity and required for the operation of the new high school. As is typical for this stage of design development, final plant selections have not been made, and therefore a detailed assessment has not been carried out.

Notwithstanding, a preliminary assessment has been undertaken. The assessment demonstrates compliance of all building services and the substation with the target criteria based on the preliminary service selections and typical acoustic attenuation measures at all nearby sensitive receiver locations. Further analysis and refinement of equipment selection and layouts will be necessary during subsequent design stages of the development to ensure continue compliance (refer to mitigation measure NV3).

Outdoor play areas

The acoustic consultant has determined that noise levels during times when the entire student body is using outdoor play areas (i.e. recess and lunch) are expected to comply with the operational noise criteria at all sensitive receivers. This assessment has been based on the Stage 1 student population only (560 students), with the increase of 440 students associated with Stage 2 corresponding to an approximate 2 dB increased, which is expected to still comply with the target criteria.

Covered outdoor workshop area

Noise emissions from the covered outdoor workshop area were using a circular saw as a worstcase. With no acoustic treatment in place, the noise emissions are expected to be more than 20 dB above the existing ambient background noise at the nearest sensitive receivers and 60 dBA throughout the school courtyard. The acoustic consultant has determined that inclusion of acoustic louvres would bring noise levels at the nearest sensitive receivers to within industrial noise emission criteria, though noise levels on Hope Street are expected to remain high, being in the order of up to 70 dBA, though this is considered acceptable. Should powered machinery be required, the acoustic consultant recommends installation of acoustic louvres throughout the externally exposed areas of the covered outdoor workshop. This recommendation has been implemented into the noise and vibration mitigation measures within NV5 and will be implemented into the final design of the space. It is noted that weather louvres (which would render the workshop an indoor space) would further mitigate noise emissions but are not suitable as the space must be 'outdoor' to meet school operational requirements.

Gymnasium operation

The acoustic consultant has determined that noise emissions from typical worst-case gymnasium operation with sports and music with high-level louvres is expected to comply with target criteria during all time periods with doors open and doors closed.

School traffic

School traffic generated during operating hours at peak periods is expected to increase by less than the 2 dB threshold for traffic noise increase screening criteria, and as such, is expected to be barely perceptible to the average person. Notwithstanding, in accordance with mitigation measure NV-5, where considered the proposed activity will implement feasible and reasonable mitigation measures for traffic generation in alignment with the NSW Road Noise Policy such as regulating bell times, use of noise barriers and property treatment.

Public address system

The public address system has the potential to affect nearby sensitive receivers. To reduce impacts, directional speakers facing inwards to the school and covering only necessary areas is recommended, with usage restricted to daytime hours only (between 7am and 6pm) and volume levels to the minimum required to ensure clarity and audibility within the designated coverage zones, as specified in EFSG, per mitigation measure NV8.

Car park

The modelled operational noise levels of the car park operation, including loading, are expected to meet target criteria at all locations.

Waste removal, deliveries and cleaning

To minimise disturbance to surrounding sensitive receivers, the acoustic consultant has recommended that all noisy cleaning activities be conducted between 7:00 AM and 10:00 PM. If activities must occur between 10:00 PM and 7:00 AM, the following mitigation measures are recommended:

- Ensure windows and doors are closed to minimize noise emissions.
- Do not operate air conditioning.
- Refrain from performing outdoor cleaning activities (e.g., leaf-blowing).

These measures are included at mitigation measure NV9 at Appendix 1.

Noise Intrusion

Road Traffic

The primary source of noise intrusion for the site is associated with the existing and future projected road traffic throughout the immediately adjacent local road network. Road traffic model outputs have been based on existing peak hourly flows and future projected peak hourly flows (as modelled within DA/1100/2021) and therefore are considered to represent the worst-case period of the day. The NVA contains the following to mitigate noise intrusion impacts:

- Recommended sound insulation requirements and indicative constructions for façade glazing along the western and eastern facades.
- Recommendation to install acoustic louvres for natural ventilation openings to the hall.
- Recommended sound insulation requirements and indicative constructions for lightweight façade walls.
- Recommended minimum ratings for external doors to meet required internal noise levels.

To reduce the impact of road traffic noise intrusion, these design recommendations are summarised and proposed in mitigation measure NV4.

The NVA has also assessed noise intrusion impacts to outdoor learning areas. While not all outdoor areas are suitable for outdoor learning or the necessary acoustic attenuation required to meet the applicable noise levels, each key outdoor learning space has a portion that complies with the target outdoor learning noise criteria, which is considered to be acceptable. Compliance is not achieved in the covered outdoor workshop area as it is not appropriate to be enclosed. This is reasonable as the workshop itself is expected to generate a high level of noise which may be louder than the noise intrusion.

Mitigation Measures

The Noise and Vibration Assessment (**Appendix 14**) concludes that subject to implementing the mitigation measures, the proposed construction and operational activities associated with the new Melrose Park High School are not likely to significantly affect the environment in relation to acoustic matters The proposed activity will be subject to the implementation of the following mitigation measures in **Table 23**.

ID	MM Name	Mitigation Measure	Timing	
Noise and Vibration				
ID	MM Name	Mitigation Measure	Timing	
-----	--	---	------------------	--
NV1	Equipment selection	The department shall ensure that appropriate equipment selection and noise mitigation design of building services is implemented to enable the achievement of internal and external building services noise and vibration criteria.	Design	
NV2	Acoustic Design Recommendatio ns	 are to be designed to control noise break-in to sensitive areas. Natural ventilation is to incorporate acoustic louvres where noise break-in is required to be controlled. Acoustically absorptive finishes are to be installed to underside of outdoor learning areas to control reverberation build up and mitigate noise intrusion. 		
NV3	Acoustic Design Recommendatio ns	Acoustic louvres shall be installed within the Covered Outdoor workshop areas.	Design	
NV4	Construction Noise and Vibration Management Plan	A detailed construction noise and vibration management plan shall be prepared prior to construction in accordance with the recommendations of the Noise and Vibration Assessment.	Pre-construction	
NV5	Traffic Generation	The department shall implement feasible and reasonable mitigation measures for traffic generation in alignment with the NSW Road Noise Policy.	Operation	
NV6	Public Address System Usage	Usage of the public address system shall be restricted to daytime hours only (7am to 6pm). Directional speakers shall be used facing inward to the school and set at minimum volume levels required to ensure clarity and audibility as specified in the ESFG.	Operation	
NV7	Loading Dock Activities	 Where practicable, all loading dock activities, waste removal and noisy cleaning activities shall take place between 7:00 AM and 10:00 PM. Outside of these hours, the following mitigation measures shall be implemented: Ensure windows and doors are closed to minimize noise emissions. Do not operate air conditioning. Refrain from performing outdoor cleaning activities (e.g., leaf-blowing). 	Operation	

7.4 Hazard and Risk – Pipelines

The site for the new Melrose Park High School is located in the vicinity of the following underground pipelines (as shown in **Figure 35**):

- **The Gore Bay Pipeline** a high-pressure dangerous goods pipeline operated by Viva Energy Australia (Viva).
- Secondary Natural Gas Mains operated by Jemena, which are not licensed pipelines, but covered by the NSW Work Health and Safety Regulation

The Gore Bay Pipeline is located 123m from the south-west corner of the site. The site is within the reported measurement length (which is defined as the distance from the centre of pipeline to a distance to 4.7 kW/m² thermal radiation intensity, from a full-bore rupture of the pipeline and ignition) of 132m (refer to **Figure 36**).

Accordingly, the risk engineering consultant has prepared a Preliminary Hazard Analysis of Oil and Gas Pipelines. It has found that:

- The proposed activity has 'negligible' to 'as low as reasonably practicable' societal risk, and accordingly satisfies the individual fatality risk criteria and is not affected by the relevant maximum individual fatality risk.
- The proposed activity complies with DPHI's indicative societal risk criteria.
- The Viva Gore Bay Pipeline has no risk contribution. In the event of a fire, while smoke may disperse towards the site depending on the wind direction, sheltering indoors would protect against smoke exposure. The proposed building within the measurement distance will be designed to BCA requirements which implicitly resist the predicted thermal radiation level at the site in the event of a pipeline rupture
- The secondary Jemena natural gas mains present a very low risk contribution, and the risk of thermal radiation from the gas mains release and fire affecting the new high school is negligible.





Source: Arriscar



Figure 36 Proximity of Gore Bay pipeline in relation to the site

Source: Arriscar

Mitigation Measures

The risk engineering consultant has concluded that the presence of nearby pipelines does not require any specific design changes. A Safety Management Study is not necessarily required because the Viva Gore Bay Pipeline has no risk contribution to the proposed activity and is not legally required for an activity proposed under Part 5 of the EP&A Act. **Table 24** outlines the mitigation measures recommended by the risk engineering consultant.

ID	MM Name	Mitigation Measure	Timing		
Hazard a	Hazard and Risk – Pipelines				
HZ1	Safety Management Study	A Safety Management Study must be conducted with Viva Energy and other stakeholders (Project Manager, SINSW, construction contractor) in accordance with AS 2885.6-2018, once the construction plan is developed, and the outcomes implemented.	Pre-construction		
HZ2	Consultation With Jemena	Consultation with Jemena shall be undertaken with the primary aim of protecting the 350mm primary gas line during the construction of the Project, after a construction plan is ready.	Pre-construction		
HZ3	School Emergency Plan	The school emergency plan must include pipeline rupture as a scenario and develop an appropriate shelter in place policy to prevent the potential for injuries from people exposed to radiated heat flux in the open.	Prior to commencement of operation		

Table 24: Hazard and Risk – Pipelines Mitigation Measures

7.5 Hydrology, Flooding and Water Quality

7.5.1 Stormwater Quantity

A Civil Engineering Report has been prepared by the stormwater consultant (**Appendix 16**) which supports this REF, which includes a description and assessment of the proposed stormwater, drainage, and sediment/erosion control measures to be implemented in the proposed activity.

The minimum on-site stormwater detention (OSD) storage required for the site, based on the site area, is 452m³. As a result of the smaller size of the site, the proposed activity will include an underground OSD tank, which has been determined to meet the acceptable stormwater runoff discharge rates from the site (taking into consideration the flood levels for the downstream neighbouring site).

The report also confirms that this proposed arrangement will be situated in a manner that does not impact the construction of Stage 2. The OSD storage volume will be provided in a manner that the total discharge and bypass flow from the site will not exceed the maximum permissible site discharge. The requirement for the OSD tank is included as mitigation measure SM4 and SM5.

The activity's stormwater drainage strategy is designed for up to the 1% AEP storm event. Pipes and pits and designed to convey at least the 5% AEP flows per the EFSG guidelines.

In the event that the piped in-ground stormwater system fails due to blockage or other obstruction, or where pipe capacity is exceeded, such as in the 1% AEP storm event, stormwater is proposed to be conveyed by overland flows which will be directed away from buildings and towards the site's boundary. The overland flow paths are will be sized to accommodate a 1% AEP storm flow and will not exceed safe depth and velocity for pedestrians and vehicles. The designated overland flow route for the site will is directed to the northeast corner where water will be conveyed to the adjacent playing field.

7.5.2 Stormwater Quality

Water quality measures were also considered and detailed in the report, to mitigate and exceed stormwater borne pollutant targets. The proposed activity seeks to integrate a series of pollution control devices which will remove contamination in stormwater runoff prior to discharge, which will include:

- Litter screens in all pits; and
- An end of line treatment device to remove nitrogen and phosphorus contaminants prior to discharge to the authority's stormwater system.

The Stormwater Management Plan has been designed to meet the requirements' part 8.2.6.7.5 of the Parramatta DCP and is therefore considered adequate.

Mitigation Measures

The Civil Engineering Report (**Appendix 16**) highlights a stormwater strategy which will meet the acceptable stormwater runoff discharge rates from the site. It also confirms that the stormwater quality strategy will meet the City of Parramatta requirements. The proposed activity will be subject to the implementation of the following mitigation measures in **Table 25**.

ID	MM Name	Mitigation Measure	Timing
Hazard a	Hazard and Risk – Pipelines		
OPMM2	Operation Stormwater Management Plan	 Prior to the commencement of operations, a Stormwater Operation and Maintenance Plan is to be prepared and include the following: (a) Maintenance schedule of all stormwater quality treatment devices; (b) Record and reporting details; and (c) Work Health and Safety requirements. A copy of the Stormwater Operation and Maintenance Plan is also to be provided to the relevant DoE Project Lead for implementation. 	Prior to the commencement of Operations
SM1	Stormwater Treatment Drain Design	The safety of the school population is to be considered when designing the stormwater treatment drain. The use of gross pollutant devices such as litter screens in all pits and an end of line treatment device to remove nitrogen and phosphorus contaminants shall be implemented.	Design
SM2	OSD Tank Location	The OSD tank must be located in a manner that does not impact construction works during Stage 2.	Design
SM3	OSD Tank Location	not impact construction works during Stage 2.An OSD tank must be designed and constructed to control stormwater runoff from the development site such that, for all peak stormwater events up to and including 1% AEP discharges from the site do not exceed pre-development stormwater discharges.Design	

Table 25: Stormwater quantity and quality mitigation measures

7.5.3 Flooding

An assessment of the flood impacts on the site has been undertaken by the flood consultant and is provided at **Appendix 10**.

The site is not affected by flooding during the 100-year and 200-year flood events, with safe H1 routes out of the site also possible during both events. Refer to **Figure 37** and **Figure 38**. All flood modelling has been based on the flood study undertaken by Lyall & Associates' for Melrose Park North Precinct (Job No.FG486.006, dated 06/10/23) and accounts for the envisaged flood behaviour for the future built form throughout the precinct.



Figure 37 1:100-year (1% AEP) flood depths, post-construction of school



Figure 38 1:200-year (0.5% AEP) flood depths, post-construction of school

Source: Enstruct

As highlighted above, the Future North-South Road 4 immediately west of the site will be subject to flood risk during the Probable Maximum Flood (PMF) event (as per **Figure 39**). Despite this, the site will continue to remain unaffected during a PMF flooding event. An adequate flood emergency response plan has been prepared by the flooding consultant and is summarised below.

The site is not affected by flooding during the PMF event. However, the Future North-South Road 4 immediately west of the western site boundary is subject to flooding during the PMF event up to a maximum inundation depth of 0.6m. It is noted that an educational establishment is considered a "sensitive use" under the Parramatta DCP. The proposed activity is consistent with the control that sensitive uses cannot be situated on land affected by the PMF. However, the flood consultant has determined that occupants might still need to find routes leading to the nearest hospital in case of an emergency during the PMF. As the site entrance is at the north-western corner of the site to Future North-South Road 4, a Flood Emergency Management Plan has been prepared by the flood consultant and is recommended to be implemented in perpetuity to provide guidance regarding a safe strategy and the provision of refuge with sufficient area to shelter all occupants at the PMF level. This is discussed below.



Figure 39 Peak flood levels and depths at the site in the PMF event, post-construction of school

Source: Enstruct

Climate Change Impacts

As noted in the Flood Impact and Risk Assessment, an analysis of the 1% AEP event has been undertaken with regard to climate change. The flood consultant has determined that the site remains resilient to climate change. The impacts are expected to be minimal, limited to some additional overland flow in the kerb and gutter to the west of the site, with a depth of less than 100mm. The site will remain flood free.

Flood Emergency Response

A Flood Emergency Management Plan has been prepared by the flood consultant (**Appendix 23**) and analyses the access and egress for pedestrians and vehicles from the site in the event of a flood event to the surrounding area. A Flood Emergency Management Plan is required because flooding up to 0.6m in depth will be experienced during the PMF on Future North-South Road 4, and the only vehicle evacuation route out of the site at its north-western corner has a hazard of H2 in the PMF event, which is considered unsafe for small vehicles. Therefore, evacuation management strategies are proposed in consideration of this hazard classification.

The key flood emergency response strategies are pre-emptive closure and shelter-in-place. The proposed flood emergency responses are summarised below:

- If SES flood warnings are issued overnight with sufficient time prior to the flood emergency overnight, it is recommended that the school driveway at NSR-4 remains closed to prevent staff, students, deliveries, and visitors from entering the carpark.
- If the flood warning is issued during school operation hours, the driveway is to be closed to prevent vehicles leaving the site, students are to assemble with a teacher to register that they

are present prior to organising to leave the site into suitable care, or to travel home. Students are to be advised that the driveway is not to be used. This warning buffer allows sufficient time for site occupants to leave the site through provided evacuation routes before they are obstructed as the water level rises in large storm events.

• If there is no warning due to flash flooding, during school hours, then the driveway is to be closed to prevent vehicles leaving the site, students are to assemble with a teacher to register that they are present and are to remain in the classroom until the storm event subsides.

In the event of the PMF, the recommended management strategy is to shelter in place for a short period of time until the storm subsides. All the site's building finish floor levels have been designed above the PMF level, thereby Blocks A and B are nominated as safe locations for sheltering in place.

If the site were occupied up to a 1% AEP storm event, evacuation routes from the site are generally safe for people and vehicles, subject to following evacuation procedures outlined in the Flood Emergency Management Plan.

Implementation of the Flood Emergency Management Plan is included at mitigation measure F1.

Mitigation Measures

The Flood Impact and Risk Assessment (**Appendix 10**) and Flood Emergency Management Plan (**Appendix 23**) confirm that the site is not impacted during a flood event. They also provide an appropriate evacuation or shelter-in-place procedure when surrounding areas are impacted during flood events. The proposed activity will be subject to the implementation of the following mitigation measures in **Table 26**.

ID	MM Name	Mitigation Measure	Timing
Flooding			
OPFMM1	Operational Flood Emergency Response Management Plan	 Prior to the commencement of operation, the Flood Emergency Response Plan (FERP) is to be incorporated with the Emergency Management Plan and include the following: a. Prioritise evacuation and avoid shelter-in-place by closing the school before the school day if flood events are forecasted and SES advises. b. School administration must undertake annual evacuation preparations and an evacuation drill prior to the commencement of the wet season (typically November to April); c. School administration to undertake responsibilities as set out in the FERP; and d. Ensure that the Flood Warning Notice is maintained and permanently visible. 	Prior to commencement of operation

Table 26: Flooding mitigation measures

7.5.4 Erosion and Sediment Control

Erosion and sediment control measures are listed in the Civil Engineering Report provided at **Appendix 16**, including the usage of slit removal fences, hay bales, catch drains and water flow dissipation and discharge control devices such as sandbags, pollution mattresses and sedimentation basins. These will be put in place to during construction to minimise the risk of sediment being washed into neighbouring properties and to avoid erosion from occurring on the site and regularly maintained where required and are included at mitigations ES1 to ES11 at **Appendix 1**.

It is noted that the site is not located adjacent to a natural watercourse, nor flood affected, with the construction works associated with the proposed activity not anticipated to intercept groundwater.

An erosion and sediment control plan has been prepared within the Civil Drawings (**Appendix 7**) and is provided in **Figure 40**.

No specific mitigation measures have been considered necessary for erosion and sediment control.

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Figure 40 Erosion and sediment control plan

Source: Enstruct

7.6 Wind

A Pedestrian Wind Environment Statement has been prepared by the wind consultant (**Appendix 32**), which assesses the impact of the proposed activity on the local wind environment at critical outdoor areas within and around the site. It is noted that no wind tunnel testing was undertaken for the proposed activity and therefore the statement only addresses the general wind effects and any localised effects that are identifiable by visual inspection of the Architectural Drawings.

Overall, the proposed activity has incorporated several design features and wind mitigating strategies which will enable it to be suitable for its intended use as a high school and from a pedestrian wind comfort perspective, especially throughout the outdoor play spaces/trafficable areas. There are some areas that are likely to be exposed to stronger winds, and therefore design amendments are required to ameliorate this impact, which are included as mitigation measures within **Appendix 1**. The areas affected by strong winds which require wind mitigation design amendments are:

• Ground level areas and pedestrian footpath (Stage 1):

- The open area between Blocks A and B is exposed to the north-easterly and south to south-easterly prevailing winds, which have the potential to downwash to Block A's eastern façade.
- The pedestrian footpath along Hope Street is exposed to the westerly and south to south-easterly prevailing winds, which are likely to downwash along the southern façade to both Blocks A and B.
- Mitigation measure W-1 requiring additional densely foliating evergreen trees in between Blocks A and B will appropriately mitigate this wind impact.

• Ground level areas and pedestrian footpath (Stage 2):

- The basketball court is impacted by north-easterly prevailing winds which are likely to directly impact the area and create adverse wind condition.
- The pedestrian footpath along the future road is exposed to western prevailing winds, which is likely to downwash off Block D, impacting the wind comfort of the area.
- Mitigation measure W2 requiring additional densely foliating evergreen trees in between Blocks A and B, and along the eastern aspect of Block D, will appropriately mitigate this wind impact.

• Level 1 – 4 external walkway (Stage 1 and Stage 2):

- The walkway including the level 2 terrace is primarily exposed to south to southeasterly, westerly and north-easterly prevailing winds. The south to south-easterly and north easterly prevailing winds are likely to side stream along Block A (Stage 1 and 2) and Block D (Stage 2), affecting the walkway area.
- In Stage 2, the westerly winds have the potential to funnel between Blocks A and D, impacting the open area along the walkway.
- Mitigation measure W3 requiring inclusion of at least 1.3m high balustrades ensuring they are 30% porous, will appropriately mitigate this wind impact.

• Level 5 terrace (Stage 2):

- The Level 5 Terrace, located on the roof of Block D, is exposed to the northeasterly, westerly and south to south-easterly prevailing winds. The north-easterly and westerly winds are likely to impact the area directly with no shielding surrounding the development.
- The south-to-south-easterly winds have the potential to side stream along Block A and corner accelerate into the terrace area.
- Mitigation measure W4 involves two options to appropriately mitigate this wind impact, being either inclusion of at least 1.8m high balustrades that are 30% porous, or at least 1.5m high balustrades that are 30% porous in conjunction with planter boxes of densely foliated evergreen plants.

Mitigation Measures

The Pedestrian Wind Environment Statement (**Appendix 32**) confirms that the proposed activity will be suitable for its intended use as a high school subject to the incorporation of several design features and wind mitigating strategies. The proposed activity will be subject to the implementation of the following mitigation measures in **Table 27**.

ID	MM Name	Mitigation Measure	Timing
Wind			
W1	Provision of trees throughout ground level	Ground level areas and pedestrian footpath in Stage 1 shall include additional densely foliating evergreen trees in between Blocks A and B in accordance with the recommendations of the Pedestrian Wind Environment Statement dated 14 January 2025.	Design
W2	Provision of trees throughout ground level	Ground level areas and pedestrian footpath in Stage 2 shall include_additional densely foliating evergreen trees in between Blocks A and B, and along the	Design

Table 27: Wind mitigation measures

ID	MM Name	Mitigation Measure Timing	
		eastern aspect of Block D in accordance with the recommendations of the Pedestrian Wind Environment Statement dated 14 January 2025.	
W3	Upper-level landscaping recommendations	Level 1 – 4 External Walkway in Stage 1 and 2 shall include at least 1.3m high balustrades ensuring they are 30% porous in accordance with the recommendations of the Pedestrian Wind Environment Statement dated 14 January 2025.	Design
W4	Upper-level landscaping recommendations	 Level 5 Terrace in Stage 2 shall include either of the following options in accordance with the recommendations of the Pedestrian Wind Environment Statement dated 14 January 2025: Option A: Inclusion of at least 1.5m high balustrades ensuring they are 30% porous; Inclusion of planter boxes, ensuring they contain 	Design
		 plants of a densely foliating evergreen variety and reach a combined height of at least 1.5m; or Option B: Inclusion of at least 1.8m high balustrades ensuring they are 30% porous. 	

7.7 Accessibility

An Accessibility Report (Appendix 28) accompanies this REF.

The Accessibility Report confirms that the proposed activity in both Stages 1 and 2 is capable of achieving compliance with the relevant accessibility provisions of the BCA, subject to the suitable recommendations being incorporated. It is noted that compliant access at the eastern boundary of the site, including the eastern pedestrian gate and hall entry, require regrading and paving within the Wharf Road Gardens which are outside of the proposed activity. Mitigation measure A2 addresses this, as the department will work with the landowner of Wharf Road Gardens to ensure that an accessible accessway compliant with AS1428.1 is provided from the allotment boundary to all new principal pedestrian entrances, through a separate planning process involving DA/459/2024.

Mitigation Measures

The Accessibility Report (**Appendix 28**) provided the following mitigation measures which will be implemented throughout the proposed activity. Refer to **Table 28**.

ID	MM Name	Mitigation Measure	Timing	
Accessibility				
A1	Accessible security gates	Security gates along an accessway that do not comply with AS1428.1 shall require a Performance Solution to satisfy the NCC Performance Requirements.	Design	
A2	Car parking	Where carparking spaces are outside of the allotment boundary, and discrepancies with the number of	Design	

Table 28: Accessibility mitigation measures

ID	MM Name	Mitigation Measure	Timing
	discrepancies	accessible parking spaces to satisfy the BCA requirements, a Performance Solution shall be sought where suitable justification is available.	
A4	Compliance with Australian Standards	 Prior to commencement of works, compliance with the applicable accessibility requirements is to be demonstrated in accordance with this Accessibility Statement. 	Pre-construction
A5	Accessible entrance from Wharf Road	ble The department shall work with the landowner of Wharf Road Gardens to ensure that an accessible	

7.8 Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been carried out by the project archaeologist (**Appendix 13**) in accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011). In addition, the project archaeologist has prepared an Aboriginal Archaeological Report (**Appendix 34**) which supplements the ACHAR.

A four-stage consultation process with Aboriginal stakeholders and interested parties was undertaken in the second half of 2024 and a total of 15 Registered Aboriginal Parties (RAPs) expressed their interest in being involved in the consultation process for the site. Based on the consultation, a draft ACHAR report was prepared and presented to all RAPs and provided to all RAPs for feedback and comment on 3 October 2024. A total of three responses were received from RAPs, which were all supportive of the recommendations made and as such, no amendments were required.

No specific cultural significance was identified in the study area by any of the RAPs. All archaeological and intangible cultural heritage sites are considered highly significant to Aboriginal people, but the study area is not considered to hold any specific cultural significance. The report concluded that an archaeological survey in accordance with *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010b)* (the Code) was completed and did not identify any aboriginal objects or areas of archaeological potential. Nonetheless, if an Aboriginal site or object is suspected or identified an unexpected finds protocol should be implemented during construction, as detailed in **Appendix 1**.

Mitigation Measures

The ACHAR (**Appendix 13**) confirmed that there were no Aboriginal objects or areas of archaeological potential on the site. The following mitigation measures are proposed in case an unexpected Aboriginal site or object is found on the site. Refer to **Table 29**.

Table 29: Aboriginal heritage mitigation measures	Table 29:	Aboriginal	heritage	mitigation	measures
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ID	MM Name	Mitigation Measure	Timing
Heritage			

ID	MM Name	Mitigation Measure	Timing
HMM2	Aboriginal Heritage	If any unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during any construction work, all works in the vicinity must cease and the area must be appropriately protected. The DoE Heritage Team is to be notified and an archaeologist engaged to undertake a site inspection to assess the find in consultation with the Registered Aboriginal Parties (RAPs). Following the on-site assessment, the archaeologist and RAPs (if they attended the site) are to advise on whether further management, mitigation or approvals are required in consultation with the DoE Heritage Team. Should Aboriginal objects be identified, these are to be registered in the Aboriginal Heritage Information Management System (AHIMS). An Aboriginal Heritage Impact Permit (AHIP) would also need to be obtained to impact the site.	Construction
НММЗ	Provision of ACHAR to RAP	As per the consultation requirements, a copy of the final ACHAR shall be provided to RAPs for their records. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage sites within the study area throughout the life of the project, should any sites be identified during the remainder of this assessment or during the proposed works.	Design, Construction, Operation
HMM4	Disturbance of Aboriginal Objects	All Aboriginal objects and Places are protected under the NPW Act. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by Heritage NSW. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object, the archaeologist will provide further recommendations. These may include notifying Heritage NSW and Aboriginal stakeholders.	Construction
HMM5	Human Remain finds procedure	 Human remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity, the activity must: 1. Immediately cease all work at that location and not further move or disturb the remains. 2. Notify the NSW Police and Heritage NSW' Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location. Not recommence work at that location unless authorised in writing by Heritage NSW 	Construction

7.9 Landscaping and Tree Impacts

7.9.1 Tree Impacts

The site does not contain any trees and has been cleared as part of the Infrastructure DA (DA/1100/2021) works. However, the Arboricultural Impact Report (**Appendix 22**) has identified nine (9) trees to the east of the site within the Wharf Road Gardens and Wharf Road reserve that are considered as worthy of being a constraint on the proposed activity. Specifically, five trees are located within the future Wharf Road Gardens reserve (refer to **Figure 41**).

The Arboricultural Impact Report confirms that the works associated with the proposed activity will remain largely outside of the Tree Protection Zone (TPZ) of the vast majority of identified trees and therefore no direct impacts are anticipated. There is a 3% incursion into the TPZ of tree 3, although this is within the recommended thresholds of AS4970-2009. While the proposed activity will not remove any of these trees, the arborist has recommended a range of mitigation measures included in **Appendix 1** as TMM1 to TMM10 to protect these trees during construction, including:

- Implementation of 1.8m high protective fencing around high value trees before works commence.
- Usage of signage to indicate that a TPZ has been established.
- Placement of timber boards over the root zone to protect roots.
- Trunk protection through covering of vertical hardwood timbers.

No specific mitigation measures have been considered necessary for tree impacts.



Source: Naturally Trees

7.9.2 Landscaping

The proposed activity's landscape design within the specific school campus area (detailed within **Appendix 5**) will result in a significant improvement to the on-site tree canopy coverage. The proposed tree canopy cover is 2,037m², which equates to 20.5% coverage of the total site, representing an immense improvement considering that the current site is entirely vacant. Moreover, adequate landscaping will be provided within the site's 6m setback along the southern and western boundary and 3m setback along the northern boundary. This is consistent with the approach detailed within the Melrose Park North Precinct design guide in the Parramatta DCP.

As discussed in Section 3.4 of this REF, adequate unencumbered open play space per the EFSG is provided in both stages, noting that Stage 2 relies on the ability for the students to use the adjacent playing field during school hours under a future joint use arrangement between the new Melrose Park High School and City of Parramatta Council. Detailed open play area and tree canopy coverage calculations and diagrams are provided within the Architectural Design Report (**Appendix 4**).

During Stage 2 construction, expected to last for 8-12 months, the two sports courts will be closed as they will be used for site accommodation, material set-down and vehicular circulation. The resulting shortfall in open play space is proposed to be supplemented by use of the adjacent playing field which can be accessed through the Wharf Road Gardens on the eastern boundary. Therefore, mitigation measure CMM18 is proposed to ensure that the joint use agreement for the playing field is operational prior to commencement of Stage 2 construction. No specific mitigation measures have been considered necessary for landscaping.

7.10 Social Impact Assessment

A Social Impact Assessment has been prepared (**Appendix 15**) in accordance with the *Social Impact Assessment Guideline for State Significant Projects (2021)*. The purpose of Social Impact Assessment is to assess the impacts of the activity, both positive and negative, for all stages of the project lifecycle for key stakeholders and the broader affected community

7.10.1 Local Social Context

The SIA identified two areas of social influence:

- **Primary Social Locality (PSL)** The PSL is defined by an area of roughly 250m surrounding the site.
- Secondary Social Locality (SSL) The SSL is defined using the proposed new Melrose Park High School catchment area as outlined by the Schools Infrastructure NSW Community and Engagement Strategy

The SIA summarises that the PSL area is projected to experience significant population growth associated with the Melrose Park Urban Renewal Precinct (includes both Melrose Park North and South precincts), which will accommodate a maximum capacity of 11,000 dwellings. Notably, using an average household size of 2.8 within the SSL, this dwelling capacity would see the precinct accommodate up to 30,800 people when fully realised.

It also summarises the demographic changes within the SSL, which experienced a higher average annual growth rate between 2016-2023 (2.9%) in comparison to the baseline of Greater Sydney

(1.2%). The population of the SSL is projected to continue to grow at a steady rate above the baseline of Greater Sydney between 2023-2041 (2.9% in comparison to 1.2%). A high proportion of residents within the SSL were born overseas (42.7%), with the majority of households being couple families with children. Notably, the most common tenure type within the SSL was renting (39.7%), with a median household income of \$106,670, which is marginally lower than the Greater Sydney baseline (-1.9%).

7.10.2 Social Impact

The SIA evaluates the Proposal's potential impact on the community and social environment compared to the baseline scenario of the site's existing use and social context.

The evaluation includes a risk assessment based on the social impact significance matrix provided within the DPE *Social Impact Assessment Guidelines (2021)*. The matrix determines a social impact's risk based on the following considerations:

- The likelihood of a social impact based on:
 - o The findings of the various technical reports; and
 - The social baseline study.

• The magnitude of a social impact based on the duration, extent, severity and sensitivity of each impact.

Table 30 provides consideration of social impacts.

Type of Impact	Describe the impacts on the community and how they might be experienced, either positively or negatively
Impacts on access – will there be an improvement to the quality of provision and a response to emerging and changing needs?	The proposal directly responds to a growing demand for accessible public educational establishments to cater for high-density population growth within an establish urban infill area, The school will provide for 560 students in stage 1 and 1,000 students in stage 2, which is considered sufficient to meet the community's future demand for all capabilities.
Impacts on privacy, overshadowing, peace and quiet, and visual amenity (views / vistas) - will there be significant change for neighbours and the local area during both construction and	The proposed activity is likely to result in change for neighbours and the local area during both its construction and operation. Notably, the site is located within the Melrose Park North Precinct, which is undergoing a significant amount of change from a low-density industrial precinct into a mixed-use high-density area. Key impacts associated with the proposed activity within the emerging Melrose Park North Precinct include:
operation?	 Traffic impacts will likely be most prominent during peak school drop-off and pick-up periods at future kiss and ride. This will likely increase congestion, particularly on Wharf Rd and North South Road 4, which are anticipated to host the three-school kiss and rides areas. The co-location of car parking for Melrose Park HS with Melrose
	Park Public School has the potential to cause cumulative traffic impacts during peak periods.
	The proposed activity will also deliver the following positive impacts:
	• The school design and massing complement an appropriate step-down in building height from high-density built form to the west and low-density residential areas to the east. The

Table 30: Social Impact

Type of Impact	Describe the impacts on the community and how they might be experienced, either positively or negatively
	 positioning of the stage 1 and stage 2 components of the new school incorporates extensive landscaped setbacks to the east, south and west boundaries, providing an adequate amount of visual privacy to the surrounding public domain, existing residents and future residents within the PSL. The proposed activity will increase the site's canopy coverage from nil to 36% of the total site, delivering significantly improved environmental outcomes. As shown in the shadow diagrams including in the Architectural Drawings (Appendix 3), the proposed design will not cause adverse overshadowing to neighbourhood properties, with the vast majority of overshadowing on the winter solstice falling throughout the surrounding road network.
Impacts on sense of place - will there be effects on community cohesion or how people feel connected to the place and its character?	The proposal provides a significant piece of social infrastructure that will provide accessible public education provision in an evolving locality with increased demand for educational infrastructure. The location of the new Melrose Park High School in proximity to the existing Melrose Park Public School has the ability to support community cohesion through the opportunity for whole of school location in one location, helping maintain long-term social bonds to the area.
	The SSL population has high levels of cultural diversity. The proposed new Melrose Park High School will contribute to supporting cohesion within this diverse community through provision adequate open spaces and infrastructure for young families to connect. Furthermore, the intended joint-use arrangement of the adjacent playing field with Council links the school to recreational infrastructure as a meeting place for community members.
Impacts on the way people get around – will there be changes associated with traffic or parking in the area?	The intention of the proposal is to deliver education uses at an accessible location within an emerging high-density mixed-use precinct, for use by the existing and evolving community within Melrose Park and the broader secondary school catchment. Importantly, active and public transport connections to the school are prioritised, with key connections including public bus stops on Hope Street and Wharf Street. This will provide access the surrounding locality. Further Paramatta Light Rail Stage 2 will provide future transport connection to Parramatta and Sydney Olympic Park. A Light Rail stop is planned for Melrose Park, with construction anticipated to commence in 2025 (TTW, 2024).
	Acknowledging the above, it is noted that the proposed activity will impact the existing traffic conditions within the area. In a worst-case scenario following the delivery of Stage 2 of the proposed activity, an additional 189 vehicle trips would be generated by the proposal at peak school drop-off and pick-up periods (TTW, 2024), which the transport consultant has found can be accommodated on the surrounding road network.
Impacts on wellbeing - will there be benefits for students and the community associated with better school facilities, sporting facilities and grounds, and active transport options?	 The Activity will promote significant benefits on wellbeing including: The delivery of high-quality flexible learning and teaching environments in purpose-built spaces. The provision of extensive outdoor play spaces, which have incorporated Designing with Country principles to improve social

Type of Impact	Describe the impacts on the community and how they might be experienced, either positively or negatively
	cohesion.
	 The provision of new basketball courts and indoor gymnasium space, which will facilitate and promote more active movements.
	• The delivery of raised pedestrian crossings and pick-up and drop- off areas within the surrounding road network, alongside sufficient bicycle storage provision, end of trip facilities for staff and a new bus zone, will encourage use of sustainable modes of transportation.

The design approach has also considered the Crime Prevention Through Environmental Design (CPTED) principles, including surveillance, territorial reinforcement, access control and space management, as detailed in the Architectural Design Report prepared by the architect (**Appendix 4**). The Report sets out various design measures that have been adopted in consideration of the aforementioned principles including:

- Ensuring the public interface of the school is well designed to be visually appealing, offering a first impression of a high quality, well cared for space.
- Design of student facilities such as toilets and waste areas to incorporate clear short sightlines without compromising privacy. Stairwells have also featured open designs with batten screens, enhancing both surveillance and aesthetic appeal.
- Providing perimeter palisade fencing around the site which caters for access control whilst not compromising visual permeability.
- Clearly defined site entries that are visible for casual surveillance, supported by adequate building identification and wayfinding signage to assist in territorial reinforcement.
- The small car park beneath block D will be affixed with adequate CCTV, whilst being fully fenced off with visually permeable fencing to enhance natural surveillance.
- External spaces throughout the surrounding street network will be supported with adequate lighting.

It is considered that through the adoption of these design measures, the proposed Activity will make a positive contribution to the Parramatta LGA's broader community safety objectives.

Overall, the project is assessed to have a positive social impact for the community, with the benefits associated with the delivery of a new high school is considered to have a high to very high positive social impact. Notwithstanding this, Social Impact Assessment has determined that the proposed activity will generate some negative social impacts primarily owing to the construction of the facility, though these will be temporary and can be successfully managed through implementation of the Mitigation Measures listed in **Appendix 1**, including the below.

Mitigation Measures

The Social Impact Assessment (**Appendix 15**) confirms that the new Melrose Park High School will have a largely positive impact on the PSL and SSL. The proposed activity will be subject to the implementation of the following mitigation measures in **Table 31**.

Table 31: Social Impact mitigation measures

ID	MM Name	Mitigation Measure	Timing
Aboriginal Heritage			

ID	MM Name	Mitigation Measure	Timing
SA1	Social Programs	 The activity shall promote regular education and knowledge sharing programs in partnership with the Darug people (e.g., working with the Darug Custodian Aboriginal Corporation) The activity shall include an Acknowledgement of Country within the design in prominent position. 	Design, Operation
SA2	Social Programs	 The activity shall implement school programs and to encourage the use of public and active transport The activity shall provide shading at school bus stop shelters to reduce risk of urban heat impacts on students. 	Design, Operation
SA3	Standards for the CPTMP and CEMP	 Future preparation of a detailed CPTMP shall contain measures to effectively communicate and engage with the surrounding community to minimise disruption, including notification requirements for periods of high impact, key contacts for enquiries and a complaints management process. The CEMP shall consider the cultural and linguistically diverse profile of the local community profile and presence of young children attending Melrose Park Public School and protecting the learning environment from high noise levels The department shall liaise with parties responsible for development across the locality to coordinate community notification of construction works, particularly for road closures and detours. High-volume construction traffic days or periods are to be coordinated to avoid excessive impact to the road network 	Construction
SA4	Shared-Use Arrangement	 The activity shall promote the availability of shared-use and the SINSW Share our Space program The activity shall support the development of community programming such as a monthly school market to foster community use of the proposed school grounds to foster community cohesion. 	Operation
SA5	School Travel Plan	 A School Travel Plan shall be implemented to encourage walking, cycling and the use of public transport Bell times shall be staggered between Melrose Park Public School and the new Melrose Park High School by approximately 20 minutes The activity shall include internal noise controls and acoustic separation 	Design, Operation

7.11 Other issues

An assessment of the other impacts of the proposed activity have been undertaken by the relevant specialist consultants and are appended to this REF as set out below.

Issue	Consideration	Mitigation Measures
Visual Amenity and Privacy	Prevailing receptors within the site's immediate visual catchment are relatively low in number. The site is visible from all	VP1 – VP2

Issue	Consideration	Mitigation Measures
	boundaries, owing to the site's location on the south-eastern corner of the Melrose Park North precinct, with a frontage to Wharf Road Gardens, Hope Street, the Future North-South Road 4 to the west and future public sports field to the north. The Architectural Design Report (Appendix 4) includes photomontages illustrating the view of the new Melrose Park High School campus from the visual catchment, being the surrounding road network.	
	The site is currently vacant, therefore the proposed activity which incorporates the design quality principles for schools, will have a positive visual impact to the locality. Noting that the adjacent future development will have heights up to 24 storeys, the proposed 6-storey school will serve as an appropriate transition in scale and bulk between the high-density and tall future development to the west, and existing low-density residential development to the east.	
	The design approach incorporates the following design moves to minimise adverse visual privacy and amenity impacts and positively contribute to the surrounding neighbourhood character and emerging character of the Melrose Park North Precinct:	
	• The layout of Blocks A and D serve as protective barriers to the west, effectively shielding the campus from visual distractions from that direction.	
	• The material palette of the proposal is sympathetic to contextual elements whilst maintaining a contemporary new school.	
	• Screening and planting will be placed throughout the rooftop play area to enhance privacy.	
	The Proposal includes extensive landscaped setbacks to all property boundaries. This provides a visually appealing setting for the new school, improves the streetscape of surrounding roads and provides screening to the campus	
	from the surrounding local road network.	
	Mitigation measure VP1 is proposed to mitigate visual privacy impacts from the Stage 2 Block D rooftop terrace.	
	The site is not identified as, or located near, a heritage item or a heritage conservation area under Schedule 5 of the Hills LEP or the State Heritage Inventory. The site is also not located in an area of high scenic value, nor will it interrupt any significant views throughout the locality.	
	Due to the commensurate height, bulk and scale of the proposed new high school within the Melrose Park North Precinct, there will be no adverse impacts visual impacts within, from or to the local area. Based on the above reasons, the new Melrose Park High School represents a significantly improved visual outcome compared to the existing vacant site and will provide significant public benefits to the local community.	
	There are no iconic or significant views from the site, and the proposed development is not expected to obstruct any private	

Issue	Consideration	Mitigation Measures
	views from surrounding receivers.	
Overshadowing	This REF confirms that the proposal is unlikely to result in adverse overshadowing. The REF is supported by shadow diagrams prepared by the architect and provided in Appendix 3 .	N/A
	The diagrams illustrate the expected overshadowing associated with the proposed buildings in the context of the maximum building envelopes of the surrounding Melrose Park North Precinct, at 9am, 12pm and 3pm on June 21 (winter solstice) and 21 December (summer solstice).	
	The shadow diagrams show that the proposed activity will retain solar access to the future residential development to the west around midday, with remaining shadows contained primarily within the surrounding street network. Solar access to the school's open play spaces is provided during the morning and around midday. The proposed activity will result in shadowing impacts to the ground floor play spaces at 3:00pm during the winter solstice. This is considered minor in the context of school hours concluding around 3pm and the open space provision throughout the site and within the adjacent open space to the north (via a joint-use agreement with Council).	
Contamination	The Detailed Site Investigation prepared by the contamination consultant (Appendix 12) confirms that the required remediation and validation works for the site have been completed (within DA/1100/2021). The soil on the site was found to have no present contaminants. Therefore, the site is suitable to be used for the purpose of a high school. No further site investigation or remediation is deemed necessary. An unexpected finds protocol is included as a mitigation measure.	LCMM1
Flora and Fauna	A Flora and Fauna Assessment prepared by the ecologist (Appendix 21) has determined the following:	FFA1 – FFA19
	 No significant biodiversity areas were mapped, with no Plant Community Types located on the site. 	
	Activities within the TPZs will require precautions to avoid	
	damage, with a qualified arborist overseeing the process and	
	providing a Tree Protection Plan. Trees and vegetation will be inspected for hollows and nests, with an ecologist	
	relocating any fauna found. Contractors and staff will be	
	inducted on the site's ecological sensitivity, and basic hygiene protocols will be implemented to prevent plant pathogens and fungi.	
	 Regarding fauna, the assessment has determined that the Grey-headed Flying-fox had a low likelihood of occurrence on the site, with no threatened species found on the site during the assessment. 	
	Overall, the assessment confirmed that the proposed activity will have no significant impacts on matters of national environmental significance and would be unlikely to cause a significant impact on the environment.	
Soils and Geology	A Geotechnical Report has been prepared by the geotechnical consultant (Appendix 17) which has considered the environmental impacts associated with the soil and geology of the land to which the new high school is to be located and the	SWMM1 – SWMM7

Issue	Consideration	Mitigation Measures
	foundations to which the proposed buildings are to be built on. Overall, it confirmed that the potential geotechnical impacts arising from the proposed activity are low and will not significantly impact the locality, community and/or the environment.	
	There are no known occurrences of saline and acid sulphate soils across the site. The report confirmed that the site is not located within an area of groundwater vulnerability, with no known occurrences of saline soils within soil profiles. It also confirmed that the site has no known risks associated with slope instability and subterranean instability.	
	However, subsurface soils across the site were identified as being likely to be susceptible to erosion, with risk associated with the occurrence of erodible soils and variation in the depth to bedrock of varying strength.	
	The Geotechnical Report makes various recommendations which will need to be implemented during the progression of design development and construction works on the site, including:	
	 Preparation of a Soil Management Plan. Site preparation.	
	 Usage of ground bearing floor slabs. Integration of shallow (pad or strip) and deep footings where necessary. 	
Waste	<u>Construction</u> A Construction Waste Management Plan (CWMP) has been prepared by the waste consultant (Appendix 19). The impact of waste during construction on surrounding residents and other construction activities throughout the Melrose Park North precinct are temporary and will be undertaken in accordance with the Preliminary Construction Management Plan (Appendix 18).	OPMM1 W1 – W6
	The construction of the new Melrose Park High School will not result in the generation of any hazardous wastage, nor will it generate any wastewater requiring off-site disposal. It is estimated that 1,054m ³ of excavation material will be generated, of which the entirety will be diverted from landfill and re-used throughout the site where appropriate.	
	445.6 tonnes of excavation waste is expected to be generated. These will be managed through a combination of re-use on site, recycling and landfill.	
	<u>Operation</u> An Operational Waste Management Plan has been prepared by the waste consultant (Appendix 20) and provides an assessment of potential waste impacts associated with the operation of the school. It has been prepared in line with the Parramatta DCP, as well as a range of waste management guidance at a local, state and federal level.	
	A 22.7m ² waste storage area is proposed within Block C (north- western portion of the site), which has direct access to the carpark	

Issue	Consideration	Mitigation Measures
	hardstand area. The storage area will accommodate four (4) 1,100L general waste bins and three (3) 1,100L recycling bins, both of which will be collected 5 times per week. Private waste collection is proposed 5 x weekly and waste trucks will enter and exit the hardstand car park in a forward direction. Waste collection is proposed to be undertaken outside of peak commuter hours and school travel periods. The waste area will be regularly maintained and cleaned to avoid odour and unsightliness. Bins will be located throughout the school and the cleaner will transport the waste to the waste area and sort into the bins provided. The proposed number and size of bins, and collection frequencies, is sufficient to accommodate the expected amount of waste generation.	
Air Quality and Odour	 Air quality impacts would be temporary in nature during minor earthworks and construction. These impacts can be mitigated through typical controls listed in the Preliminary Construction Management Plan (Appendix 18) and summarised below: Haulage trucks entering and leaving site will have their loads covered appropriately; Monitoring of weather conditions (including wind); Wherever practical implement a wet process for concrete sawing, coring and grinding; Where not practical to use a wet process for concrete sawing or grinding direct dust extraction to a vacuum is to be used; Subcontractors to maintain equipment/machinery to ensure exhaust emissions comply with relevant legislation and guidelines; All waste material to be sorted, collected and removed from the site (for recycling where possible); and Air quality monitoring. 	CMM1 – CMM19
Ecologically Sustainable Development	 An Ecologically Sustainable Development (ESD) Report has been prepared by the sustainability consultant (Appendix 25). The report confirms that the proposed activity addresses the minimum requirements set out in the following legislation: Clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation SINSW Education Facilities Standard and Guidelines (EFSG) Government Architect NSW (GANSW) Design Guide for Schools and Environmental Design in Schools Manual NSW Government Resource Efficiency Policy (GREP) NSW State Environmental Planning Policy for Sustainable Buildings (Sustainable Buildings SEPP) National Construction Code (NCC) 2022 Section J Part J4 and J5 Notably, the proposed activity will achieve a five star Green Star rating. Furthermore, the Net Zero Statement (Appendix 26) sets out how 	ESD1 – ESD10

Issue	Consideration	Mitigation Measures
	 the proposed activity has been designed to minimise the use of fossil fuels upon occupation, and to allow for future transition to fossil-fuel free operations. The new Melrose Park High School is proposed to be fully electric, sourcing renewal electricity for all energy use. It is noted that the small components of fossil fuel usage within the proposal relates to the following: Science lab Bunsen burners; Welding equipment within the Wood and Metal workshop; and 	N/A
	 Emergency backup power generators. 	
BCA	A Building Code of Australia (BCA) Report has been prepared (Appendix 27) which confirms that the proposed activity is capable of achieving compliance with the performance provisions of the BCA, either by complying with the prescriptive requirements or via a performance-based approach.	N/A
	solutions and areas of the activity which wholly comply with the BCA is provided in Appendix 27 .	
Section J Compliance	The Section J Assessment (Appendix 29) sets out the minimum building fabric performance requirements relating to opaque constructions (such as cladded external walls, internal floors and roofs/ceilings), façade louvres, floor construction and glazing constructions. A series of mitigation measures are proposed to ensure the proposed activity is consistent with the requirements of the National Construction Code 2022 Section J deemed-to-satisfy provisions.	SJ1 – SJ3
Fire Safety	A Fire Safety Statement has been prepared by the consultant fire engineer (Appendix 24). The statement highlights the following features of the development which could be subject to a potential fire hazard:	FS1
	 EV chargers within the under croft car park; Rooftop photovoltaic panels; Chemical storage within science labs and workshops; and Substation. 	
	Ultimately, the statement provides a series of performance solutions which can be implemented into the building design which could reduce the risk associated with the potential fire safety hazards. Overall, the fire safety strategy is considered capable of meeting the performance requirements of the BCA, subject to the validation and verification of any assumptions made through detailed fire engineering analysis in future design stages.	
Electrical and Hydraulic Services	The Electrical Services Design Statement (Appendix 30) and Hydraulic Services Design Statement (Appendix 31) have determined that the installation of electrical and hydraulic services have the potential to result in the following environmental impacts:	UIMM1 – UIMM23
	 Trenching for underground water and drainage services disturbing soil and vegetation. Noise from construction activities temporarily affecting surrounding areas. Visual impact from above-ground installations such as fire hydrant booster assembly, water meters, fire water storage 	

Issue	Consideration	Mitigation Measures
	 tanks and services plant rooms. Potential disturbance of authority water mains and road opening during trenching for new water connections. Potential minimal impacts to existing electrical and communications infrastructure. 	
	Mitigation measures such as erosion and sediment control, noise barriers, materials selection, traffic control, revegetation and standard dial before you dig measures are proposed. Detailed Mitigation measures are included with Appendix 1 .	

7.12 Cumulative Impact

As discussed in Section 2.3.2, the surrounding context is rapidly evolving from a former infill industrial lands into a new high-density mixed use urban area following the recent rezoning of the Melrose Park North Precinct. Future development surrounding the site includes:

- The construction of the Melrose Park North 'playing field' and 'Wharf Road Gardens' Recreation Areas was approved within DA/459/2024 on 20th December 2024. Construction is understood to commence imminently, with the Playing Field (8,032m²) required to be completed under SVPA2021-41 and dedicated to Council by 1 December 2025.
- Works relating to DA/1100/2021 are currently ongoing throughout the broader Melrose Park North Precinct relating to the embellishment of the street network and remediation of land. Construction is anticipated to be completed by early 2026.
- The Melrose Park North 'town centre' development approved within DA/764/2022 comprising a 5-storey commercial podium and 6 x 6-24 storey shop-top housing towers is currently under construction immediately to the west of the site and is expected to be completed in 2028.
- The existing Melrose Park Public School is located to the south of Hope Street, which is currently planned to be redeveloped to maximise its capacity.
- Melrose Park South Precinct was recently rezoned for high-density mixed-use development recently. Currently DA/75/2024 is under assessment relating to the construction of part of the Melrose Park South Precinct Street network, including remediation and bulk earthworks.
- Parramatta Light Rail Stage 2 (SSI-10035) which will run along Hope Street to the west of the site, is expected to commence construction in 2028.

Cumulative impacts associated with the design and operation of the proposed activity include operational traffic, operational noise and flooding impacts. However, it is noted that the traffic modelling, noise modelling and flood modelling have been based on recent studies for the broader Melrose Park North Precinct and therefore already account for the expected increase in traffic and background noise, and the envisaged flood behaviour for the future built form throughout the precinct.

The transport consultant has noted that the traffic modelling undertaken to date does not account for the envisaged expansion of Melrose Park Public School because that project is still in early planning stages and traffic volumes are yet to be confirmed. The transport consultant notes that a detailed traffic assessment including traffic modelling incorporating both the high school and public school at full capacity be completed as part of the Transport and Access Impact Assessment accompanying the Melrose Park Public School REF. Notwithstanding, the transport consultant has recommended that the bell times between the new high school and future expanded primary school be staggered by approximately 20 minutes to reduce cumulative traffic and queueing impacts (refer to mitigation measure OT9). Overall, the expected operational cumulative impacts have been assessed as not resulting in significant environmental impact, subject to implementation of mitigation measures.

The remaining cumulative impacts relate to cumulative construction traffic and noise impacts, noting that the construction timeframe of the developments listed previously will coincide with the construction timeframe of the proposed activity. An assessment of these cumulative impacts These will be mitigated as follows:

- Construction Traffic: The traffic consultant has determined that the proposed activity in conjunction with surrounding projects are unlikely to significantly affect the local traffic network, as it is considered that all relevant roadways can accommodate the extra heavy vehicle trips. This is because the road network is currently used by heavy vehicles such as trucks and buses and is designed to accommodate future population growth and associated traffic volumes, with the construction vehicle volumes associated with these projects being substantially lower than the total volumes on these roads when the projects are operational. Regarding construction working parking, it is noted that both nearby town centre, infrastructure works and Melrose Park Public School projects will provide onsite construction worker parking, and therefore will have minimal impacts on street parking supply. Notwithstanding, cumulative construction traffic and parking impacts will be considered within the detailed Construction Traffic Management Plan as stipulated in mitigation measure OT11 at Appendix 1.
- **Operational Traffic:** The traffic consultant has completed detailed pedestrian and vehicular intersection modelling based on a cumulative traffic scenario including baseline traffic retrieved from the approved Melrose Park Internal Street Network report (which has factored in a new school with similar traffic impacts to the proposed high school), additional Melrose Park Public School traffic and additional pedestrian movements associated with the new high school on the proposed crossings. Low pedestrian usage of the proposed crossings at Wharf Road and Hope Street are predicted to/from the primary school, as catchment analysis has indicated that movements are expected to occur further west, and therefore did not form part of the cumulative impact assessment. Considering the proposed high school pedestrian movements will be concentrated at Wharf Road and Hope Street, this outcome is considered to adequately account for the consolidated pedestrian movement between both schools during operation.

The cumulative traffic impact modelling has been undertaken for the Wharf Road / Hope Street intersection as this is expected to be the intersection most impacted by the proposed schools cumulative operation. It shows that that the Wharf Road / Hope Street intersection continues to operate satisfactorily in both the AM and PM peak periods, with a worst Level of Service (LoS) outcome of B in both the baseline and maximum scenarios. It is noted that the AM peak will experience a maximum 13.5m increase in queue length in the southern leg of Wharf Road up to 21.4m. However, this is acceptable because the existing length distance to the existing pedestrian crossing outside of Melrose Park Public School is approximately 94m and can amply accommodate the maximum increased length, while the LoS remains at a LoS A. Overall, the cumulative impact traffic modelling shows that the worst-case change in intersection performance, queue lengths, and average delays are acceptable.

The traffic consultant notes that the cumulative traffic modelling uses slightly different baseline results to the Internal Street Network report upon which the TAIA is based on. However, even if, the worst-case relative change from the cumulative impact modelling was applied to the worst-case scenario under the Internal Street Network report resulting in a potential LoS D for the Wharf Road / Hope Street intersection, the traffic consultant considers that this outcome remains tolerable. This is especially because short term delays during high-intensity periods are around multiple schools are expected and would clear relatively quickly. Given the proposed pedestrian crossing facilities, the traffic consultant has also concluded that the additional delays are not considered to result in any safety impacts for pedestrians and other road users. Notwithstanding, various mitigation measures within **Appendix 1** are proposed which would further reduce cumulative traffic impacts. Further detail on cumulative operational traffic impacts and assessment can be found in **Appendix 35**.

• Noise and Vibration: The Noise and Vibration Impact Assessment Report (Appendix 14) confirmed that the worst-case acoustic scenario relating to construction traffic would result in a noise level rise of under 1 dB, which is below the threshold for traffic noise increase screening criteria and expected to be barely perceptible to the average person. The report also states that any future contractor would need to evaluate cumulative noise impacts as part of the detailed Construction Noise and Vibration Management Plan (CNVMP), with consultation with other activities throughout the area potentially necessary, which is included as mitigation measure CMM19 at Appendix 1

The new Melrose Park High School will deliver significant benefits to the community and is not expected to give rise to any significant cumulative environmental impacts that cannot be appropriately mitigated.

7.13 Consideration of Environmental Factors

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

Section 171A of the EP&A Regulation sets out additional matters to take into account when considering the likely impact of an activity on the environment in a regulated catchment.

The assessment provided in the sections above has been prepared to provide a detailed consideration of the factors that must be taken into account for an assessment under Division 5.1 of the EP&A Act. These factors are summarised at **Table 32** and **Table 33**, and where mitigation measures have been proposed in response to the factor, these have been identified

	Division Factors for school developments		Mitigation	
Environmental Factor	<i>Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school</i>	Response/Assessment	Mitigation Measure Reference	
Section 171 Assessment				
Any environmental impact on a community?	 (a1) Impact during construction – such as noise, vibration, traffic, construction vehicle routes, access and parking, pollution/dust, water and stormwater flow, sediment and run-off, waste removal, servicing arrangements, bushfire, flooding, contamination, other construction occurring in the area. (a2) impact post-construction (including from any development, activity, public-address systems and sirens, signage, events, hours of operation, or out of hours use of facilities, helicopter facilities, emergency facilities) which may include: (i) water flow/water quality, downstream impacts (ii) flooding impact, flood evacuation routes, changes to flood risk and patterns (iii) bushfire impact, bushfire evacuation routes, changes to bushfire risk and patterns (iv) impact, during a flood or bushfire event, on existing infrastructure such as roads, etc (v) impact on emergency response to existing Communities (vi) traffic and parking impacts, pedestrian and road safety (including pedestrian and cyclist conflict and safety), operation of the surrounding peak hour, intersection performance and any cumulative impact from surrounding approved developments, impacts of potential queuing in drop-off/pick- up zones and bus bays during peak 	The proposed activity involves development of a clear and vacant parcel of land for a new high school within the emerging high-density mixed use Melrose Park North precinct. The community impacts that could arise from the proposed activity relate to traffic, noise and vibration, visual and social impacts. These impacts have been considered as part of this REF report, and where required, mitigation measures have been included to minimise potential impacts where they are unable to be avoided. It is noted that impacts relating to construction noise and vibration and construction traffic will be temporary in nature. The proposed built form of the new Melrose Park High School (reaching a maximum height of 6-storeys and supported by extensive landscaped setbacks) will integrate with the future high-density character of Melrose Park North and while also responding to the existing low-density areas to the east. Notably, it will serve as a transition in height between both residential densities, serving as a marker highlighting the boundary of both precincts. The Activity has been designed in a manner to prioritise the use of active and public transport as much as possible, through its siting within a mixed-use precinct and near bus stops, provision of bicycle parking and situation	Multiple – Refer to Appendix 1	

Table 32: Environmental Factors considered

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	periods, emergency drop-offs, servicing and loading/unloading areas, large vehicles and height clearances, parking arrangements and rates. Consider in the context of availability, frequency, location and convenience of public transport and consequences of parking overflowing into adjoining streets (viii) existing utility infrastructure and service provider assets (a3) impact on flight paths of nearby airport, airfield, or helicopter landing sites (a4) other environmental impacts (social, economic or cultural) on the community not mentioned above (a5) cumulative impacts from the development and other surrounding approved developments	 approximately 100m west of the Parramatta Stage 2 Light Rail Hope Street / Waratah Street intersection stop. The Activity has been designed to enable traffic and pedestrian impacts to be managed through the provision of two raised crossings on Wharf Road and Hope Street, embellishment of ten drop off and pick up spaces and a bus zone on Wharf Road. The operational hours are typical for a school and its operational impacts can be adequately managed. In the long-term, the new Melrose Park High School will have a beneficial impact for the existing community within the secondary school catchment and emerging population within the Melrose Park North Precinct. The activity will also create employment opportunities for individuals in the education industry who reside within the area and surrounding suburbs. Refer to the remainder of Section 7.0 for detailed assessment of construction and post- construction impacts on the community. 	
Any transformation of a locality?	 (b1) impact on the existing and future character of the neighbourhood, streetscape and local area (b2) impact on the operation of existing and future surrounding uses, including industrial or agricultural land uses (b3) visual impact from key viewpoints and views 	The Activity will result in changes to the visual appearance of the site, which is currently vacant. The provision of a new school is identified as a key component of the Melrose Park North Structure Plan which guides the precinct's future development.	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	to key viewpoints (b4) cumulative impacts from the development, and other approved developments, on the locality	The new school will visually enhance the site with a high-quality architectural design. It will provide a substantial uplift in tree canopy coverage and additional pedestrian infrastructure throughout the immediately surrounding road network, whilst providing uniform connections to the future adjacent open space. The proposed activity will provide much- needed needed social and community infrastructure that will support the population growth caused by the high-density mixed-use area. As highlighted previously, the school will be supported by landscape setbacks on its western, southern and eastern boundaries, mitigating the transition in scale between the existing low-density and high-density residential areas. The proposed activity will not obstruct any key viewpoints, and retains a 12m wide view corridor through the centre of the site to align with the pedestrian link through the adjacent future block to the west.	
Any environmental impact on the ecosystems of the locality?	 (c1) impact on the existing and future ecosystem (flora, fauna, habitats, biodiversity, ecological integrity, biological diversity, connectivity/fragmentation, air, water including hydrology, soil) (c2) long- and short-term impact of: (i) loss or harm to trees or other vegetation (ii) removed canopy cover (iii) landscape setting in respect of the site and 	The proposal will not result in any significant environmental impacts on the ecosystems of the locality. The site is currently clear of tree canopy, so the activity will improve the landscape setting, urban heat island effect and presence of native flora through planting 2,037m ² of tree canopy, which is equivalent to 20.5% of site coverage. A full assessment on the potential environmental impacts including environmental	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	streetscape (iv)impacts of the above on urban heat island effect and urban and internal comfort levels on and off-site (c3) impact from introducing new trees and vegetation species (c4) cumulative impacts on the ecosystem	impacts, including stormwater quality, ecology, flora and fauna is contained in Section 7 and confirmed that the proposed activity will not impact any flora and fauna ecosystems throughout the broader locality.	
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	 (d1) impacts onto adjoining properties and public spaces (particularly in residential areas) such as lighting impacts and light spill, acoustic, visual privacy, noise and vibration (including from helicopters and ambulances), visual amenity, solar access, view loss and view sharing, vistas, overshadowing, local character, streetscape, weather factors such as wind impacts (i) the above should be considered from any proposed development or activity on the development site, public-address system, ambulance siren, flashing signage, event, hours of operation, or out of hours use of school facility, helicopter facility, emergency facility, research centre where hazardous material is being used or stored and any potential incident, etc. (d2) impacts on connectivity, permeability and accessibility of public spaces and areas surrounding the development, this includes impacts on arterial and other thoroughfares and green corridors and wayfinding (d3) impacts on other aesthetic, recreational, scientific or other environmental quality or value of the locality not mentioned above or in (a) and the cumulative impacts 	The proposal will result in the conversion of a vacant lot of land into a new high school. The activity will enhance the locality with new and modern educational facilities with enhanced landscape and open spaces which will improve the visual appearance of the locality, in alignment with the surrounding development context as part of the Melrose Park North Precinct. This includes future integration with the playing field to the north and Wharf Road Gardens to the east. The Activity has been designed to ensure impacts onto adjoining properties are either avoided or managed to be acceptable. Mitigation measures are proposed regarding operational noise impacts, including time restrictions on loading, clearing and use of the public address system. The proposed activity will not substantially affect solar access to any nearby sensitive receivers. Overall, the proposed activity will contribute to the aesthetic, recreational and scientific value of the locality.	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
Any effect on locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	 (e1) impacts on heritage items (local, state and commonwealth), conservation areas and Aboriginal heritage (including intangible cultural significance), draft and interim items. Both at / or near the site (e2) impacts on Aboriginal cultural heritage values on the land and connection to Country (e3) direct or indirect impacts on the heritage significance of environmental heritage, impacts to archaeological resources (e4) impacts on aesthetic, anthropological, architectural, cultural, historical, community values and identity, scenic values, scientific or social significant items, or items of other special value for present or future generations 	The site is not located within a heritage item and is not part of a heritage conservation area. The activity will also not little to no impact on Aboriginal Cultural Heritage. An unexpected finds protocol will ensure that any impacts can be appropriately managed should they arise.	Multiple – Refer to Appendix 1
Any impact on the habitat of protected animals, within the meaning of the Biodiversity Conservation Act 2016?	(f1) impacts on listed protected fauna at and in the vicinity of the site, and their habitat.	The Activity site is within land that is cleared of any vegetation or habitat and no tree removal is proposed. Mitigation measures for protection of trees on adjacent sites during construction are provided.	Multiple – Refer to Appendix 1
Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	 (g1) potential endangering of any species or vegetation (g2) protected and threatened flora, terrestrial, fauna species, populations, ecological communities and their habitats 	As above, the proposal is unlikely to result in impacts on the habitat of protected animals, due to the recent clearing of the site. In this regard, it is unlikely that the proposal will endanger any species of animal, plant or other form of like, whether living on land, in water or in the air	Multiple – Refer to Appendix 1
Any long-term effects on the environment?	 (h1) Long-term effects on: (i) flood and bushfire behaviour, flooding and the flood plain, bushfire prone land (ii) natural environment, flora and fauna species and their habitats 	The proposed activity will not impact the existing flood behaviour of the immediately surrounding areas, as per the findings within the Flood Impact Assessment (Appendix 11). Overall, the proposed activity should have a long-term positive effect on the local	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	 (iii) agricultural productivity (iv) industrial land supply (v) housing supply (vi) climate change (vii) cumulative impacts (h2) meet industry recognised building sustainability and environmental performance standards, integrate environmental design, minimise greenhouse gas emissions, minimise energy and water consumption (recycled water) and material resources, renewable energy generation and storage, fossil fuel-free, sustainable travel choices, manage, reuse, recycle and safely dispose of waste (h3) long term ecological, social and economic Effects 	environment by offering the local community a modern educational facility to serve the local population into the future. Any negative impacts associated with the proposed activity, primarily during construction, will be temporary and managed through the imposition of mitigation measures (e.g. traffic, noise, air quality). These matters are discussed in further detail in Section 7. Cumulative impacts associated with traffic throughout local road network have been discussed in Section 7.12.	
Any degradation of the quality of the environment?	No specific factors – to be assessed by the determining authority if relevant	The proposal will not degrade the environment due to the cleared nature of the site. Significant tree planting will improve the quality of the environment. Erosion control measures will be implemented on site to minimise soil erosion.	Refer to Appendix 1 and the Civil Engineering Report (Appendix 17).
Any risk to the safety of the environment?	(j1) whether the development will have adverse environmental impacts (flood or stormwater runoff, storm surge, bushfire, ongoing maintenance of landscaping within the Asset Protection Zone, contamination leak, wind speeds, extreme heat, urban heat, climate change adaptation) on the surrounding area, particularly in sensitive environmental, cultural areas or residential neighbourhoods.	A Flood Impact Assessment Report has been prepared for the site which is discussed in Section 7.5.3 of this report. While the site is not flood affected up to the PMF, evacuation is constrained during a PMF event. Therefore a Flood Emergency Response Plan details the proposed flood response during a PMF event. Furthermore, the siting of the proposed activity will not influence the flood behaviour of the	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	(j2) impacts on soil resources and related infrastructure and riparian lands on and near the site, soil erosion, salinity and acid sulfate soils, surface water resources (quality and quantity),	existing area. Erosion will be managed by an Erosion and	
	hydrology, dependent ecosystems, drainage lines, downstream assets and watercourses,	Sediment Control Plan.	
	groundwater resources.	There are no other key risks to safety of the environment.	
Any reduction in the range of beneficial uses of the environment?	No specific factors – to be assessed by the determining authority if relevant	There will be no reduction of beneficial uses of the environment. Instead, the proposal will enhance the site by providing a much-needed educational facility.	Multiple – Refer to Appendix 1
Any pollution of the environment?	(I1) any pollution during construction and post construction e.g. air (including odours and greenhouse gases); water (including runoff patterns, flooding/tidal regimes, water quality health); soil (including contamination, erosion, instability risks); noise and vibration (including consideration of sensitive receptors); light pollution; waste, including hazardous waste	Minor air, noise, and water quality impacts may be generated during construction. Mitigation measures are proposed to manage pollution to the environment.	Multiple – Refer to Appendix 1
	(I2) impact of contamination spill, movement or disturbance during and post construction, and into the long term		
	(I3) impact of a potential rainfall or flood event during construction (e.g. storage of fuel for construction vehicles, stock piles of soil, etc)		
	(I4) dangerous goods and hazardous materials associated with the development (i.e. labs)		
Any environmental problems associated with the disposal of waste?	(m1) environmental problems of waste during and after construction (left over construction materials, and personnel waste), transport and disposal of waste, ongoing use and eventual decommission of the development	No environmental problems are anticipated with the disposal of waste from the proposed works. The REF is accompanied by a Construction Waste Management Plan (Appendix 20) and Operational Waste	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	(m2) cumulative impacts from waste	Management Plan (Appendix 21) that outline measures to appropriately classify and either reuse, recycle, process or dispose of waste. Waste will be transported to a facility that is licensed to process or dispose of that waste classification to avoid adverse environmental impacts. Appropriate measures will be undertaken to manage and dispose of waste in accordance with legislative requirements and WH&S documents.	
Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?	No specific factors – to be assessed by the determining authority if relevant	Materials salvaged will be sorted and identified for recycling. Impacts associated with the consumption of natural resources through the use of machinery would be minimal	Multiple – Refer to Appendix 1
Any cumulative environmental effects with other existing or likely future activities?	(o1) The cumulative effects of noise and impacts to the road network from surrounding existing and approved developments	The cumulative traffic and noise impacts associated with the proposed activity have been addressed in further detail within Section 7.12.	Multiple – Refer to Appendix 1
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	(p1) coastal processes and hazards (impacts arising from the proposed activity on coastal processes and hazards and impacts on the proposed activity from coastal processes and hazards), climate scenarios	The site is not in the Coastal Zone as identified in the Coastal Management Act 2016, owing to the site's inland location.	Multiple – Refer to Appendix 1
Applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act?	 (q1) relevant issues, objectives, policies and actions identified in local, district and regional plans and compliance of the proposal, and policies that identify community priorities that may be impacted (q2) relevant legislation, environmental planning instruments (including drafts, policies and guidelines). (q3) requirements of any approvals applying to the 	 The proposed activity directly aligns with the strategic planning context as outlined below: NSW State Priorities through the provision of a future development that will allow for new and improved educational facilities; The City of Parramatta Local Strategic Planning Statement as it proposes investment in a fit-for-purpose school that 	N/A

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	site, including concept approval or recommendation from any Gateway determination	 is well-design and efficient, and located within the Melrose Park North precinct, which has the capacity to deliver an additional 6,330 dwellings by 2036. Transport for NSW's Future Transport Strategy 2056 as it would support the ability for the existing school to deliver a new educational facility generating additional new employment opportunities within an existing urban area; and Infrastructure NSW's State Infrastructure Strategy 2018 – 2038 Building the Momentum as it proposes new infrastructure to support current and predicted growth in demand for secondary student enrolments within the school catchment. 	
Any other relevant environmental factors?	 (r1) health or safety risk to children, visitors, patients or staff of the development (r2) developments compatibility with neighbouring land uses, including proximity to: (i) restricted premises, injecting rooms, drug clinics, premises licensed for alcohol or gambling, sex services premises (for schools) (ii) hazardous land uses, waste transfer depots or landfill sites, service stations, air pollutant generating uses, noise or odour generating uses, extractive industries, industrial uses (iii) intensive agriculture, agricultural spraying activities and sources (iv) adjacent to or on land in a pipeline corridor (v) sites which, due to prevailing land use zoning, may in the future accommodate the above uses. 	As highlighted within the Preliminary Hazard Assessment (Appendix 11) and addressed in detail in Section 7.4, the site is located within the vicinity of the Gore Bay Pipeline. The pipeline is not anticipated to have any notable risk contribution to the usage of the site for the purposes of a secondary school. Any residual impacts will be managed through the preparation of a Safety Management Study in consultation with key pipeline stakeholders prior to construction.	Multiple – Refer to Appendix 1

Environmental Factor	Division Factors for school developments Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and school	Response/Assessment	Mitigation Measure Reference
	 (r3) noise/air pollution, vibration and safety impacts from the below on the proposed development: (i) roads with higher traffic volumes, higher operating speeds and more heavy vehicles, freight traffic or used to transport dangerous goods or hazardous materials (ii) rail lines 		

Table 33: Biodiversity and Conservation SEPP Factors considered

Environmental Factor	Response/Assessment
Section 171A Assessment	
 Biodiversity and Conservation SEPP 6.6(1)-(2): (1) In deciding whether to grant development consent to development on land in a regulated catchment, the consent authority must consider the following— (a) whether the development will have a neutral or beneficial effect on the quality of water entering a waterway, (b) whether the development will have an adverse impact on water flow in a natural waterbody, (c) whether the development will increase the amount of stormwater run-off from a site, (d) whether the development will incorporate on-site stormwater retention, infiltration or reuse, (e) the impact of the development on the level and quality of the water table, (f) the cumulative environmental impact of the development on the regulated catchment, (g) whether the development makes adequate provision to protect the 	As highlighted in the Civil Engineering Report (Appendix 16) and section 7.5 above, the proposed activity will not have an adverse impact on the water quality and quantity on the site. An underground OSD tank will be provided to the site which will ensure that the total OSD discharge and bypass flow does not exceed the maximum permissible site discharge. The site is not mapped as being in an area of groundwater vulnerability, the proposed activity will not impact the quality and quantity of ground water, extensive excavation impacting the groundwater table not proposed as part of the development. The proposed activity will have a neutral impact on the quality of water entering the surrounding stormwater network. Ultimately, the proposed on-site stormwater infrastructure in the form of an underground OSD tank, litter screens in all pits and an end of line treatment device will be sufficient in mitigating the impact of water flow into the Parramatta River (located approximately 530m to the south of the site).

Environmental Factor	Response/Assessment
quality and quantity of ground water.	
(2) Development consent must not be granted to development on land in a regulated catchment unless the consent authority is satisfied the development ensures—	
(a) the effect on the quality of water entering a natural waterbody will be as close as possible to neutral or beneficial, and	
(b) the impact on water flow in a natural waterbody will be minimised.	
Biodiversity and Conservation SEPP 6.7(1)-(2):	As highlighted in the Flora and Fauna Assessment (Appendix 21) and section
(1) In deciding whether to grant development consent to development on land in a regulated catchment, the consent authority must consider the following—	7.11 above, the proposed activity will have no significant impacts on terrestrial, aquatic or migratory animals or vegetation. The site is currently cleared and
(a) whether the development will have a direct, indirect or cumulative adverse impact on terrestrial, aquatic or migratory animals or vegetation,	vacant (with no vegetation or tree removal proposed), nor is it located in proximity to coastal wetland or littoral rainforests. The site is located approximately 530m to the north of Parramatta River and therefore erosion or
(b) whether the development involves the clearing of riparian vegetation and, if so, whether the development will require—	sedimentation impacts to this natural waterbody is unlikely.
<i>(i) a controlled activity approval under the Water Management Act 2000, or</i>	
(ii) a permit under the Fisheries Management Act 1994,	
(c) whether the development will minimise or avoid—	
(i) the erosion of land abutting a natural waterbody, or	
(ii) the sedimentation of a natural waterbody,	
(d) whether the development will have an adverse impact on wetlands that are not in the coastal wetlands and littoral rainforests area,	
(e) whether the development includes adequate safeguards and rehabilitation measures to protect aquatic ecology,	
(f) if the development site adjoins a natural waterbody—whether additional measures are required to ensure a neutral or beneficial effect on the water quality of the waterbody.	
Example—	
Additional measures may include the incorporation of a vegetated buffer between the waterbody and the site.	
(2) Development consent must not be granted to development on land in a regulated catchment unless the consent authority is satisfied of the following—	
(a) the direct, indirect or cumulative adverse impact on terrestrial,	

Environmental Factor	Response/Assessment
aquatic or migratory animals or vegetation will be kept to the minimum necessary for the carrying out of the development,	
(b) the development will not have a direct, indirect or cumulative adverse impact on aquatic reserves,	
(c) if a controlled activity approval under the Water Management Act 2000 or a permit under the Fisheries Management Act 1994 is required in relation to the clearing of riparian vegetation—the approval or permit has been obtained,	
(d) the erosion of land abutting a natural waterbody or the sedimentation of a natural waterbody will be minimised,	
(e) the adverse impact on wetlands that are not in the coastal wetlands and littoral rainforests area will be minimised.	
 Biodiversity and Conservation SEPP 6.8(1)-(2): (1) In deciding whether to grant development consent to development on land in a regulated catchment, the consent authority must consider the likely impact of the development on periodic flooding that benefits wetlands and other riverine ecosystems. (2) Development consent must not be granted to development on flood liable land in a regulated catchment unless the consent authority is satisfied the development will not— (a) if there is a flood, result in a release of pollutants that may have an adverse impact on the water quality of a natural waterbody, or (b) have an adverse impact on the natural recession of floodwaters into wetlands and other riverine ecosystems. 	As discussed within the Civil Engineering Report (Appendix 16) and section 7.5.2 and 7.5.3 above, the proposed activity will not significantly impact the existing flood behaviour of the land. The release of pollutants during a flood event is proposed to be mitigated through the implementation of litter screens in all pits and an end of line treatment device, as well as the usage of a piped in-ground stormwater system. It is noted that the presence of pollutant material on the site will be unlikely, given its operation as a secondary school not involving any sensitive activities. The flooding patterns observed and measured to take place throughout the surrounding area of the site do not benefit existing wetlands or other riverine ecosystems. Furthermore, the proposed activity will not impact the natural recession of floodwater into the Parramatta River, with the implementation of a piped in-ground stormwater system and overland flow paths intended to direct water to the site's boundary and connect with the broader local stormwater network.

Environmental Factor	Response/Assessment
Biodiversity and Conservation SEPP 6.9(1)-(2): (1) In deciding whether to grant development consent to development on land in a regulated catchment, the consent authority must consider—	The proposed activity will not have any impact on recreational land uses within the catchment, nor does it have any influence on public access to foreshore areas along a natural waterbody.
 (a) the likely impact of the development on recreational land uses in the regulated catchment, and (b) whether the development will maintain or improve public access to and around foreshores without adverse impact on natural waterbodies, watercourses, wetlands or riparian vegetation. (2) Development consent must not be granted to development on land in a regulated catchment unless the consent authority is satisfied of the following— (a) the development will maintain or improve public access to and from natural waterbodies for recreational purposes, including fishing, swimming and boating, without adverse impact on natural waterbodies, watercourses, wetlands or riparian vegetation, (b) new or existing points of public access between natural waterbodies and the site of the development will be stable and safe, (c) if land forming part of the foreshore of a natural waterbody will be 	The site is not located directly adjacent to a natural waterbody (Parramatta River located approximately 530m to the south). Therefore, the proposed activity will not have any influence of points of public access to natural waterbodies, nor will it lead to the privatisation of the waterfront along Parramatta River.
made available for public access as a result of the development but is not in public ownership—public access to and use of the land will be safeguarded.	

8. Justification and Conclusion

The proposed staged construction and operation of the new Melrose Park High School with associated landscaping, car parking, play space, infrastructure and public domain works at 37 Wharf Road, Melrose Park (Lot 9 in DP 1310509) is subject to assessment under Division 5.1 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to the educational needs within an emerging community in the Melrose Park North Precinct and growth throughout the broader secondary school catchment;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a Species Impact Statement or a BDAR to be prepared. The environmental impacts of the proposal are not likely to be significant. Therefore, it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act. On this basis, it is recommended that the department determine the proposed activity in accordance with Division 5.1 of the EP&A Act subject to the implementation of mitigation measures identified within this report.