GYDE

Submissions Report

New High School for Medowie
6 Abundance Road, Medowie

Submitted to the NSW Department of Education on behalf of Gyde Consulting

15 May 2025

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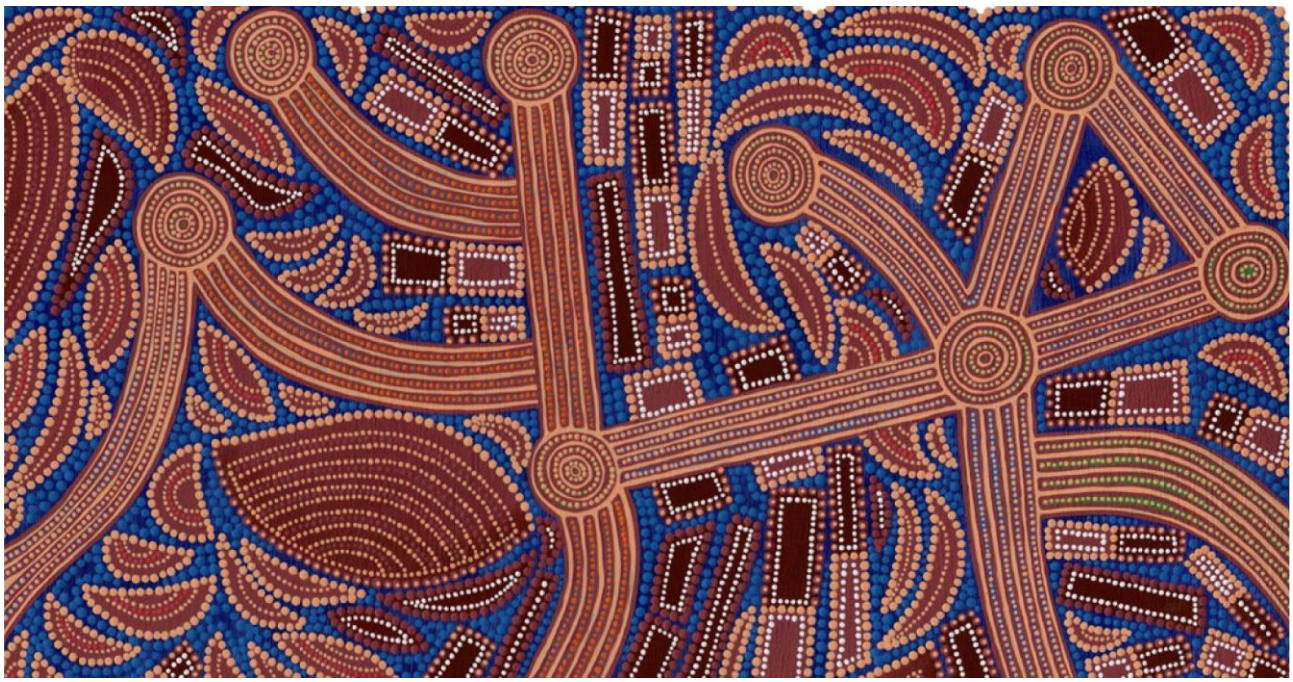
Acknowledgment of Country

Gyde Consulting acknowledges and pays respect to Aboriginal and Torres Strait Islander peoples past, present, Traditional Custodians and Elders of this nation and the cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander people. We recognise the deep and ongoing connections to Country – the land, water and sky – and the memories, knowledge and diverse values of past and contemporary Aboriginal and Torres Strait communities.

Gyde is committed to learning from Aboriginal and Torres Strait Islander people in the work we do across the country.



Towards Harmony by Aboriginal Artist Adam Laws

This report was prepared by:

Approver:	Mel Krzus – Director
Author:	Belinda Barrie – Senior Associate
	Lucy Hammond – Senior Project Planner
Project:	New High School for Medowie
Report Version:	Final

This report was reviewed by: Mel Krzus

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1. Introduction

1.1 Background and purpose of this Report

A Review of Environmental Factors (REF) has been prepared and submitted to the Department of Education (the department) as 'development permitted without consent' under State Environmental Planning Policy (Transport and Infrastructure) 2021 (the T&I SEPP) for a New High School for Medowie (the project).

The project is for a new high school accommodating 640 students in 29 permanent teaching spaces including three support teaching spaces across three storeys of buildings on the site. Ultimately, the project has been designed to accommodate 1,000 students at a future stage. The maximum capacity under the subject activity however is the aforementioned 640 students.

The particulars of the proposed activity are as follows:

- Main vehicular ingress and egress to Ferodale Road to the north, with a new pedestrian and vehicle crossing proposed.
- Main pedestrian access to Abundance Road.
- Kiss and ride drop off zone to Abundance Road (eight spaces) and Ferodale Road (four spaces).
- Bus drop and pick up areas to Abundance Road (three spaces) and Ferodale Road (one space).
- New pedestrian wombat crossing to Abundance Road.
- 46 car parking spaces and three accessible car parking spaces.
- 57 bicycle parking spaces.
- Central quad, one playing field, and one sports court.
- 7,376 sqm of gross floor area consisting of:
  - Block A (Admin) comprising administration and learning spaces.
  - Block B (Foodtech/Workshop) comprising food technology rooms and workshops.
  - Block C (Hall) comprising a school hall.

The project will be constructed in a single stage.

The project was publicly exhibited on the NSW Planning Portal between 3 March 2025 and 30 March 2025 (inclusive). In this period, a total of 35 submissions were received, including 28 public submissions and seven agency submissions.

A Request to Consider Submissions Memo was issued to the project team by the department Assessments Team on 4 April 2025.

This Response to Submissions (RtS) Report responds to the issues raised in the submissions from the community, Port Stephens Council (Council), and State and Federal Government agencies in response to the above memo.

The exhibited REF has been updated to include a summary of submissions and the project team responses, which are outlined in detail in this RtS Report. Any change to the environmental assessment for the activity in response to the submissions has been addressed in **Section 6** of this RtS Report.

The contents in the RtS Report with accompanying annexures and the updated REF will enable the Minister (or delegate) to determine the REF in accordance with the *Environmental Planning and Assessment Act 1979* (the EP&A Act).

1.2 Material relied upon

This RtS Report has been prepared by Gyde Consulting based on the REF exhibited for the project (also prepared by Gyde with technical inputs from the broader project team) and the supplementary information listed below:

- **Appendix A** of this RtS Report – Register of Submissions
- **Appendix B** of this RtS Report – Traffic Response to Submissions
- **Appendix C** of this RtS Report – Flood Response to Submissions
- **Appendix D** of this RtS Report – MUSIC Modelling
- **Appendix E** of this RtS Report – Sewer Servicing Options
- **Appendix 1** of the updated REF – Updated Mitigation Measures – Version 2 dated 15 May 2025
- **Appendix 6** of the updated REF – Updated Architectural Drawings
  - Sheet Number MHS-NBRS-ZZ-ZZ-DR-A-00200 Revision 6 dated 09 May 2025
  - Sheet Number MHS-NBRS-ZZ-ZZ-DR-A-00201 Revision 7 dated 09 May 2025
- **Appendix 7** of the updated REF – Updated Landscape Plans
  - Sheet Number MHS-NBRS-00-XX-DR-L-006000 Revision 5 dated 08 May 2025
- **Appendix 9** of the updated REF – Updated FIRA – Updated post exhibition – Revision F dated 21 April 2025
- **Appendix 10** of the updated REF – Updated FERP – Updated post exhibition – Revision D dated 21 April 2025

This RtS Report should be read in conjunction with the above documentation.

2. Analysis of submissions

This section of the RtS Report provides an analysis of the submissions received during the public exhibition of the REF. Submissions have also been categorised based on the type of issue raised.

2.1 Breakdown of submissions

The department publicly exhibited the REF between 3 March 2025 and 30 March 2025 (inclusive).

In this period, a total of 35 submissions were received. This included six submissions from Federal Government Department and NSW Government/service agencies, one submission from Council, and 28 individual public submissions. We understand that all individual public submissions were from individuals located in the Medowie area.

Appendix A includes a Register of Submissions.

The public authorities that made submissions include:

- Department of Defence
- Civil Aviation Safety Authority (CASA)
- NSW Rural Fire Service (RFS)
- Jemena
- NSW State Emergency Service (SES)
- Transport for New South Wales (TfNSW)
- Port Stephens Council (Council)

It is noted that Hunter Water Corporation (HWC) provided a submission after the completion of the exhibition period. Typically, late submissions are not required by the department to be considered prior to determination of the activity. However, due to the importance of the matters raised, this submission has been considered and responded to accordingly.

We have addressed transport, however, we did not respond to DCCEEW -

A supplementary late submission was also received from TfNSW, which again, would typically not require consideration. However, in reviewing the transport needs of the project and in making adjustments to the public domain improvements for the project, the matters raised in the TfNSW supplementary submission have also been responded to in this RtS Report.

Of the 35 submissions received (public and authority):

- Zero expressed full support in any one single submission (public submission). However, nine of the public submissions received did state that in principle, a New High School for Medowie was positive and welcomed.
- Two did not object or require a response from the department and the matters in these submissions can be incorporated as conditions of consent as relevant/required,
- Five did not object but have requested additional information,
- All 28 individual public submissions objected and have requested additional information (public submissions).

2.2 Categorising issues

The following table categorises the issues raised in individual and authority submissions. **Section 4** of this RtS Report includes a detailed response to each of these issues. The issues have been categorised based on whether they are project related, procedural matters, related to impacts of the proposed activity,

associated with the overall justification of the project, or out of scope items. They have then been further categorised based on the type of issue raised, such as related to flooding, or parking or the like.

Table 1 below outlines the key issues raised, a summary of said issue, and how many times this was raised in public submissions. Respectively, the issues raised by authorities are relative to that particular field, for example, TfNSW raised concerns around the traffic impact, and parking proposed for the activity.

Table 1 Categorisation of issues raised in public submissions

Category and issue	No. of times raised in public submissions	Summary of issues raised
Site selection and design		
Site selection	8	Some public submissions supported the provision of a high school in Medowie and emphasise that it is a positive development that is needed for the local area. However, some submissions raised concern on the suitability of the site. Others raised questions in relation to why the existing site at Wirreanda Public School (which was the original location proposed for the high school) was not developed instead, whilst others questioned the rationale behind the site selection which was outlined in Section 3 of the exhibited REF.
Geotechnical	1	The geotechnical matters raised were technical questions and requests for clarification rather than concerns. These questions focused on the onsite detention (OSD) tank and groundwater levels, the proposed foundations, and details of the sampling process undertaken by the project's geotechnical engineer.
Design and landscaping	3	Issues raised relating to design and landscaping focused on the size and provision of the sport playing field and courts, the orientation of Block A and Block C, and the scale and height of the buildings with regard to the character of the area, and the wider Medowie township.
BCA and Access	1	One submission raised a question around the BCA compliance and the Access Report which detail a number of current nonconformities with the BCA.
Economic, environmental, and social impacts		
Traffic and parking	27	Traffic and parking were raised as the main issues in the majority of the submissions. The main concerns that were raised were focused on the lack of student car parking, the increase of pressure on the traffic congestion of the local network, the traffic safety concern related to adjoining intersections, the safety in the operation of the bus drop zones, kiss and drop zone, and the proposed footpath network including road crossings.
Flooding	3	The main issues raised by the public and by public authorities (such as the SES) on flooding questioned the approach and assumptions made around the flood modelling that was carried out as part of the FIRA. Clarification and further information were sought on a number of scenarios, relevant to pipe capacities, adjoining flooding to neighbouring sites, pre and post development flooding, and flooding overflow to the stormwater network. The SES also requested updates to the FERP be made.

Category and issue	No. of times raised in public submissions	Summary of issues raised
Sewer	4	Many submissions raised concerns about the increased demands on the local sewer systems and the upgrades required to service this, as well as the potential impacts on surrounding neighbours.
Stormwater / Water Quality	1	A range of technical questions were submitted in regard to the stormwater design set out in the Civil Engineering Report. The submissions received did not raise issue with the proposed management of stormwater, rather, clarification was sought on specific details. HWC did raise questions in the relation of the treatment of stormwater given the site is located within the Grahamstown Dam Drinking Water Catchment.
Noise	1	Some concern was raised around the operational noise of the school and the relationship from a noise perspective between the school and the adjacent industrial development to the east of the site.
Bushfire	N/A	The RFS provided a submission to the activity indicating that the new school is required to obtain a Bush Fire Safety Authority. The need for a Bushfire Safety Authority (BFSA) arises from S100B of the Rural Fires Act 1997, which lists a school as a development with a ‘special fire protection purpose’.
Procedural, administrative, and other issues		
Infrastructure contributions	1	One submission raised a question in relation to funding infrastructure associated with the school, and that it should not fall to Council to pay for the infrastructure triggered by the activity.
Consultation	2	General concerns were raised in relation to the lack of community consultation for this project. Other submissions raised specific questions in relation to consultation process.
School logistics	1	The submissions received did not raise issues, rather, they had questions around the future operation of the school.
Other	2	Some submissions were received that do not fit into the categories above, such as concerns regarding students trespassing onto neighbouring properties, and questions regarding the maintenance of footpaths around the school site.

3. Actions taken since exhibition

This section summarises the actions taken to inform the preparation of the response to submissions received. The department and the project team have met with relevant authorities where required. Where appropriate to any design changes proposed, the REF has also been accordingly updated to reflect any changes as set out in this RtS Report.

Table 2 Summary of actions taken since exhibition

Sub-Consultant	Theme	Actions	Response
Traffic engineer and Architect	Traffic, parking, and access	The project traffic engineer was required to provide a detailed response under separate cover due to the extent and number of issues raised regarding traffic, parking, and access related to the proposed activity. The traffic engineer assessed all comments received by the public, Council, TfNSW, as well as those raised as part of an internal review by the department. A design workshop took place with the traffic engineer on 28 April 2025 to discuss potential options that were being explored regarding the provision of additional bus stop, kiss and drop zone, pavements, and the formalisation of pedestrian crossings. The project architect was required to revisit the design in terms of the public domain plan to update this accordingly to reflect the updated design proposed by the traffic engineer (Refer **Appendix 7** of the updated REF). Additionally, the department have further consulted with Port Stephens Council 02 May 2025 to outline the amendments to the proposed public domain plan, which was considered acceptable. No updates to the Traffic and Accessibility Impact Assessment were required. Mitigation Measures have been added (refer TR15 to TR21) to address particular aspects of the issues raised within the submissions. No further actions are required.	**Section 4.2.1.**
Flood engineer	Concerns around flood modelling and impact on stormwater management	The project flood engineer was required to provide a detailed response under separate cover due to the extent and number of issues raised regarding flooding. Due to submissions raised from HWC regarding the site's compliance with NorBE, additional MUSIC modelling took place as part of the RtS process. The MUSIC modelling report has been attached to this RtS Report at **Appendix D.** Due to submissions raised from SES, the project flood engineer was required to update both the FERP and FIRA as part of the	**Section 4.2.2 and Section 4.4.4**

Sub-Consultant	Theme	Actions	Response
		updated REF package (Refer **Appendix 9** and **Appendix 10** of the updated REF). No updates to mitigation measures were required. No further actions were required**.**	
Acoustic consultant	Noise	Key concerns were issued to the project acoustic consultant for response. An email response was provided which satisfied the issues raised. No further actions were required.	**Section 4.2.5**
Architect and landscape architect	Site selection and size of site for a school	Key concerns were issued to the project architect and landscape architect for response. An email response was provided which satisfied the issues raised. No further actions were required.	**Section 4.1.1**
	Design and landscaping		**Section 4.1.3**
	Concerns around landscaping design and potential bird strike from the airport		**Section 4.2.7**
Geotechnical consultant	Geotechnical questions	Key concerns were issued to the project architect and landscape architect for response. An email response was provided which appropriately answered the questions asked from the public submissions. No further actions were required.	**Section 4.1.2**
Sewer consultant	Sewer questions and concerns	HWC provided a late submission to the activity on 4 April 2025. Further correspondence from HWC was received via email. To address HWC issues it was deemed necessary to formulate a discussion with them and as a result a meeting took place 25 April 2025. Meeting minutes were issued by HWC, and it was evident that the department would be required to investigate the sewer capacity and management further. Investigation of which is underway. Current options are being pursued as part of ongoing design development and the department are progressing the preparation of a sewer servicing report. Two potential options that are being explored are: a) Connection from Medowie High School near the staff carpark, upgrade from that point running along on the northern side of Ferodale Road to sewer pump station. b) Connection from Medowie High School near main entry, upgrade from that point running along the eastern side of Abundance Road, turning east	**Section 4.2.3**

Sub-Consultant	Theme	Actions	Response
		to run along the northern side of Ferodale Road to sewer pump station. These options are shown diagrammatically in **Appendix E.** A general mitigation measure has been added (SER24) to ensure compliance with any future approvals required by HWC as part of the REF.	
Bushfire	Bushfire safety authority	The RFS required that a bushfire safety authority (BFSA) was obtained from the RFS. This was actioned promptly and subsequently approval was obtained. A mitigation measure has been added (BF9) as a safety measure to ensure that all RFS approvals are satisfactorily obtained as part of the REF. No further actions were required.	**Section 4.2.6**

4. Response to submissions

The following section outlines the key matters raised in the submissions and how they have been addressed. As per **Section 2.2** of this RtS Report, the issues raised in the submissions received can be largely grouped into three main categories:

1. Site selection and design (**Section 4.1**)
2. Economic, environmental and social impacts (**Section 4.2**)
3. Procedural, administrative, and other issues (**Section 4.3**)

4.1 Site selection and design

4.1.1 Site selection

4.1.1.1 Summary of issues

Many of the submissions supported the need for a high school in Medowie but questioned the proposed location for the school.

Others questioned the size of the site and whether it was too small for a school. Questions were also raised as to why the two additional lots on the corner of Abundance Road and Ferodale Road were not acquired by the department and included as part of the site for the activity.

Others queried why the proposed high school is not to be located near Wirreanda Public School as first planned for.

4.1.1.2 Response to issues

The proposal need and alternatives were outlined in Section 3 of the REF. Further to the information provided in the REF, the site selection process by the department was guided by:

- site size: ensuring the site can accommodate the required buildings, open spaces and support future growth

- location: prioritising safety, accessibility, transport, walkability and proximity to primary feeder schools
- environmental and cultural context: minimising impacts to biodiversity and respecting the heritage by integrating it into the design
- risks: assessing risks including flood or bushfire hazards
- site servicing: ensuring access to utilities such as water, sewer and electricity.

Table 4 in Section 3.2 of the REF outlined an assessment of options and alternatives, including the land associated with Wirreanda Public School which had a sufficient area of undeveloped land. However, it was ruled out on the basis of due diligence investigations identifying significant biodiversity values.

In terms of the site being considered 'too small' for the proposed school, the project architect has provided the following response:

> *The high school site was designed to accommodate all required spaces as per the SINSW standardised Schedule of Accommodation for the proposed number of students and staff. The facility provides adequate teaching and learning spaces to deliver NSW curriculum across various general learning and specialist learning spaces, as well as the core facilities required of a high school including library, staff and administration spaces, hall, and student and staff amenities. The external play areas exceed the guidelines requiring minimum of 10m^2 per student for outdoor learning and play.*

It is also acknowledged that the New High School for Medowie occupies 2 hectares of the 6.51-hectare site. Design development of the masterplan allows for expansion of school facilities into the broader site to support future growth and student enrolments. As the site can accommodate the school's facilities required now and into the future, acquisition of the privately owned lots adjacent to the site is not deemed necessary.

4.1.1.3 Conclusion

No further updates are required to the design of the activity, the REF or Mitigation Measures in response to this matter.

4.1.2 Geotechnical

4.1.2.1 Summary of issues

A range of technical questions were submitted regarding the Geotechnical Report which accompanied the exhibited REF, as follows:

1. Has uplift been considered on the OSD tank?
2. How are deep foundations for the building being considered with respect to the OSD tank and how do they interact?
3. If shallow foundations are used, are there concerns for differential settlement where the tank is relative to the building structure? I.e. different support for the tank end.
4. It was noted that there were no boreholes or pits evident on Abundance Road – the submission sought clarification on whether it could be assumed at California Bearing Ratio (CBR) 6%?

4.1.2.2 Response to issues

There are variable depths to water in the geotechnical logs with water levels 5m below surface at some spots but about 7.5m at the tank locations on Abundance Road. The base of the OSD tank is well above the ground water levels. Therefore, no "uplift" is required.

The building and the OSD tank are generally supported on piles.

The supporting piles were found well below the OSD tank base in similar founding material and therefore differential settlement will not occur.

As per ADE's desktop study, ADE included publicly available information in the vicinity of the Medowie High School. A geotechnical investigation was completed approximately 50m northwest of the site by Geotechnical Engineering Group, State Projects – a division of NSW Public Works (1994). The report titled "Medowie Public School – Upgrade, Geotechnical Investigation. Ref: 94-HQ74, dated: April 1994", which recommended a CBR of 6%.

Section 5.9 of the Geotechnical Investigation Report prepared by ADE confirmed that:

"A California Bearing Ratio (CBR) bulk sample was collected from BH08 between 0.5m to 0.9m BGL. A 4-day soak CBR test was completed with a CBR result of 7%. A CBR of 7% was achieved due to the high likelihood of ironstone gravel present within the silty clay. It should be noted that if no ironstone gravel is present in the silty clay that a CBR of 3% should be adopted for the pavement design".

Existing Mitigation Measures (GEO1-GEO5) ensure that the detailed design of CBR 7% is in accordance with the findings of the geotechnical investigations, and requirement of validation of foundations to be completed prior to the issue of a Crown Construction Certificate.

4.1.2.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.1.3 Design and landscaping

4.1.3.1 Summary of issues

Some submissions raised concerns regarding the design and landscaping of the school. The following comments were received:

1. The half field and basketball court does not seem sufficient for the level of students.
2. Blocks A and C are oriented to face east/west resulting in excessive heating on the western side. The submission requested the design to be reconsidered or to include large eaves.
3. The proposed buildings of 13-14 metres are out of scale and character with Medowie.

4.1.3.2 Response to issues

The School Infrastructure Pattern Book provides standardised design and building components compliant with the Department's Educational Facilities Standards and Guidelines (EFSG). The capacity of the school determines the number of learning spaces, core facilities and external play space that the school is entitled to. The playing field and multi sports court meet the requirements for a 640-student school.

The proposed buildings comply with the EFSG and Green Star 4 stars rating as demonstrated in the ESD Report at **Appendix 22** of the REF.

Potential visual amenity and impact has been considered in Table 32 in Section 6.14 of the REF and in the Architectural and Landscape Design Report at **Appendix 5** of the REF. As outlined in these documents, the potential for visual impact of the buildings has been ameliorated through siting, generous setbacks, particularly from the street, materials and finishes and supplementary landscaping.

The windows on the western elevation of Block A are protected by the covered walkways which effectively act as large eaves. The occupiable spaces of Block C are protected by the utility spaces (store rooms and change rooms) which occupy the western elevation of the building thus providing thermal protection.

4.1.3.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.1.4 BCA and access

4.1.4.1 Summary of issues

One submission raised concerns regarding non-compliances with the Building Code of Australia (BCA), and non-compliances identified within the Access Report.

4.1.4.2 Response to issues

The BCA and access reviews at this design stage are high level and look to indicate areas of potential non-compliance for resolution in detailed design. Non-compliances with the BCA will be addressed during detailed design, noting that BCA compliance will need to be achieved in the final design for construction. Mitigation measures have already been included which requires all building work on site to be in accordance with the National Construction Code, the Building Code of Australia, as well as all required universal access Australian Standards and requirements.

4.1.4.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.2 Economic, environmental and social impacts

4.2.1 Traffic and parking

4.2.1.1 Summary of issues

Issues regarding traffic and parking matters were the dominant theme of the public submissions. Submissions were also received by TfNSW and Council.

Key concerns included lack of student car parking provision and impact on on-street parking, increased pressure on the local road network resulting in traffic congestion, and safety risks at nearby intersections. Additionally, concerns were raised about the safe operation of bus drop-off zones, kiss and ride drop off zones, and the proposed footpath network, particularly in relation to road crossings and student safety.

4.2.1.2 Response to issues

A detailed response to the traffic and parking issues has been prepared by the project's traffic engineer which is provided at **Appendix B.** Furthermore, the following responses refer to updated public domain plans, which can be found in the updated Architectural Drawings (**Appendix 6**) and the updated Landscape Drawings (**Appendix 7**) as part of the updated REF package.

Additionally, the department have further consulted with Port Stephens Council on 02 May 2025 to outline the amendments to the proposed public domain plan. Port Stephens Council considered the updated proposal acceptable.

A summary of the key issues and how they have been addressed are below in Error! Reference source not f ound.. Additional Mitigation Measures are provided in **Table 4**.

Table 3 Summary of traffic and parking issues raised in submissions

Topic	Comment	Response
Parking	No student parking is provided on site and therefore this will have impacts on parking capacity in the area for both local businesses and the adjacent Medowie Public School. Council requested the provision of student parking on site as per the Port Stephens Development Control Plan 2014 (DCP).	As outlined in **Appendix B**, the demands for on street parking will likely be small compared to the number of spaces available in the area, and that demands will only be during the peak drop off and pick up times. High level estimates of student parking were undertaken as part of the TAIA (using ABS census data, population estimates and the baseline mode share of 23 per cent for driving). They indicate that approximately 15 parking spaces would be required. Whilst this is only an estimate using the baseline mode share, it does indicate that the likely demand for all day on-street parking from the new school will likely be small compared to the supply of kerbspace for parking on Abundance Road. It is therefore expected that the impact on parking for businesses will be small with spare parking available, based on historical imaging data The department notes that student parking is not provided in line with State policy, and that this is a consistent approach taken for all new high schools. Mitigation measures have already been included which encourage a shift to sustainable travel modes to reduce the potential impacts of on street parking, and to also stagger the bell times with Medowie Public School.
Abundance Road and Ferodale Road intersection	The school will generate congestion at this intersection, and it should be updated to either a roundabout or traffic lights to accommodate the additional demand and to accommodate the future residential development to the north.	As outlined in the submitted Traffic Accessibility and Impact Assessment (TAIA) prepared for the REF, the results of the SIDRA intersection modelling identified satisfactory performance for the existing intersection arrangement with the new school operational. The results are satisfactory according to the TfNSW Guide to Transport Impact Assessment. Furthermore, the intersection has been assessed against the traffic generation of the school only. The development to the north is not confirmed at the time of preparing the REF with land rezoning still required. The traffic impact of the residential development to the north is outside the scope of this school project, and the details of the development mentioned are not currently available. The traffic impact of future development must be considered through its respective impact reports and planning assessment which are outside the scope of this project. The department is not responsible for intersection updates to accommodate future private residential developments. Therefore, no upgrades are required for the school.

Topic	Comment	Response
Safety of Abundance Road	Concerns regarding general traffic congestion to increase in the area and also increased risk for drivers and that the road is not wide enough to accommodate the additional traffic load while maintaining safety levels.	As outlined in **Appendix B**, excessive speeding is likely to be the reason for the recent accidents along this road. The introduction of the school, along with the implementation of school zones, will help reduce vehicle speeds along Abundance Road, lowering the risk of future collisions. Additionally, proposed traffic calming measures such as the raised pedestrian crossing outside the school are expected to further slow traffic and enhance overall safety in the area. Refer to **Table 4** below which includes an additional Mitigation Measure regarding the approval of school speed zones and signage, supplementary to Mitigation Measure TR8 outlined in the REF.
Drop off and pick up zones	Concerns regarding the drop off / pick up system and its creation of further congestion in the area as it is not long enough.	The public domain plans have been updated to reflect the additional kiss and ride drop off zones being provided. The original location on Abundance Road has been moved further south and has increased from 36 metres to 52 metres which can now accommodate eight cars. In addition, a new 28 metre kiss and ride drop off zone has been provided on Ferodale Road which can accommodate four cars. In total the kiss and ride drop off zone capacity has increased from five to twelve, which will ensure no congestion occurs. Ongoing monitoring of the kiss and ride drop off zone will be required by the Travel Plan Coordinator in conjunction with the department once school travel patterns are better understood (addressed under Mitigation Measure TR5 outlined in the REF).
	Council requested an additional bus bay be provided to ensure that the expected number of students can safely use the public transport network.	The proposal has now been updated to include additional bus bays to ensure that public transport can operate more safely and efficiently. The bus bay on Abundance Road (westside) now extends to 50m, accommodating two buses, with an additional bus bay provided further south of 36m. The kiss and ride drop off zone has been located further south to accommodate these changes. The existing bus bay on Abundance Road (east side) has been relocated slightly to accommodate the proposed footpath network and pedestrian crossing. Furthermore, an additional bus bay has been provided on Ferodale Road (westbound) which can cater to school services and private coach services. Refer to the updated Architectural Drawings (**Appendix 6**) and Landscape Drawings (**Appendix 7**) of the REF. Mitigation Measures have been included to ensure any of these public domain works are in place prior

Topic	Comment	Response
		to the school operation, and constructed to Council's requirements.
	A U-Turn in some form should be provided along Abundance Road to access the drop off / pick up zone safely for both cars and buses. Council requested a roundabout at the Industrial Road and Abundance Road intersection to prevent illegal U-Turns from occurring.	The potential for U-Turns has been mitigated by the provision of the additional kiss and ride drop off zones onto Ferodale Road. This will allow parents flexibility to use either kiss and ride drop off zone and not be required to travel south onto Abundance Road if they so choose. Additional Mitigation Measures have been provided in **Table 4** and **Appendix 1** to the REF to ensure that illegal U-Turns do not occur.
Footpaths and pedestrian crossings	The pedestrian crossing on Ferodale Road warrants further consideration and may be too narrow for the increased foot traffic. Council requests the upgrade of the existing pedestrian refuge located adjacent to the Medowie Ambulance Station to a formalised crossing.	The traffic engineers assessed the trip generation based on estimated hourly traffic volumes and projected pedestrian activity, which is confirmed as not likely to meet the criteria for a zebra crossing at this location once the school becomes operational. It is recommended that following the school opening, a formal warrant assessment including traffic and pedestrian counts be conducted to support and justify this upgrade. A Mitigation Measure has been added in **Table 4** and **Appendix 1** of the REF.
	The proposed wombat crossing on Abundance Road will create conflict with the neighbouring industrial sites.	As outlined in **Appendix B**, the proposed wombat crossing will be located at the school's entrance on Abundance Road, offset from any driveway / site access on this road. It is not expected to interfere with heavy vehicle access to the industrial properties on the east side of Abundance Road. Heavy vehicle traffic has already been addressed in Section 6 of the TAIA.
	There is a lack of footpaths proposed from the acreage side of Medowie Road until Mahogany Drive near the Christian School.	Refer to Section 2.3.1 of the TAIA, noting the extent of the existing pedestrian network connecting the Medowie town centre to the west. There is an existing 2m wide footpath from Medowie town centre along the northern side of Ferodale Road, into Waropara Road and past the turn off to Mahogany Place. The proposed new footpaths will extend from the school frontage on Abundance Road to the new pedestrian crossing. At the pedestrian crossing, the footpath will continue north along the eastern side of Abundance Road and then head east along Ferodale Road to connect into the existing pedestrian refuge. This ensures students have a safe pedestrian connection to the existing footpath on the northern side of Ferodale Road using the pedestrian refuge. This means students can walk from the start of Mahogany Place to the new Medowie High School on footpaths.
Alternative road concerns	Submissions raised concerns for a number of	This has been addressed in **Appendix B** which notes that Port Stephens Council is currently

Topic	Comment	Response
	additional local roads in the area such as Fairlands Road and how they would cope with the additional demand.	upgrading Fairlands Road. Additional demand has been mitigated in the revised public domain proposal which has two Kiss and Ride zone which will distribute the traffic load on roads based on inbound and outbound travel directions.
Road design	Many submissions raised technical questions in relation to the road design, traffic modelling used and road pavement.	All technical questions have been responded to in **Appendix B.**
Speed zones	TfNSW are to review and approve speed zone changes to reflect the proposed School Speed Zones.	An additional Mitigation Measure is proposed to be included which requires the relevant road authority to review and approve speed zone changes before they are installed on site. Refer to **Table 4** below and **Appendix 1** of the updated REF.
Green Travel Plan	TfNSW encourage active and public transport facilities and connections, as well as the preparation and implementation of a Green Travel Plan	The Green Travel Plan has been assessed in the REF and mitigation measures have already been included in relation to its implementation on site, which cover the activities as suggested within the TfNSW response.
Parking signage	TfNSW confirm that the regulation of public and street parking signage is a matter for Council and require approval.	An additional Mitigation Measure is proposed to be included which requires any street signage to obtain Council approval prior to installation. Refer to **Table 4** below and **Appendix** 1 of the updated REF.
Additional feedback was received from TfNSW after the exhibition period had closed. This additional feedback from TfNSW was received via emails dated 29 April 2025 and 30 April 2025. Given the importance of traffic and parking matters and the number of concerns raised also by the public, these comments have been considered by the department and the project team, in particular by the traffic engineer in **Appendix B**. A high level summary is provided below.		
Single bus zone	TfNSW raised concerns regarding the proposed single bus zone being inadequate in length.	As discussed previously, a new bus stop will be provided to Ferodale Road, an additional space provided on Abundance Road, and the initial proposed space increased to accommodate more bus drop offs and pick ups.
The Guide	The Guide has been superseded by the Bus Stop Urban Design Guideline and Functional Spaces – Part 4 Bus Stops. TfNSW advise to be aware of high-floor vehicles and single door buses that may affect bus dwell times, and recommend a dwell time of five minutes.	The traffic engineer confirms that this does not change the recommendations in terms of bus stop length and compliance. Additional bus stop spaces are proposed to allow the longer dwell time without affecting the regular passenger bus services. Assuming a clearance time for high school students of 30 minutes, a dwell time of five minutes in the afternoon allows up to six buses per bus space. This requires a minimum of three bus spaces. The proposal now includes five bus spaces in three bus stops (not including the existing bus stop in front of Medowie Primary School). Allowing two active bus stops for regular passenger bus services, this provides the required three bus spaces for school services.

Topic	Comment	Response
Existing Abundance Road bus stop	TfNSW note that the existing bus stop ID 2318103 does not have infrastructure or a footpath to the proposed wombat crossing.	The existing bus stop is to be relocated north of the pedestrian crossing and will be connected to the crossing with the proposed footpath. The public domain plans in **Appendix 7** of the REF identify this new bus stop location and footpath connection.
Additional bus bay	TfNSW strongly recommend an additional bus bay to Ferodale Road.	Addressed above.
Conflict between bus and private car	Best practice is to provide separate bus bays and kiss and ride drop off zones.	The revised design proposes separate bus stops, separated by kerb extensions.
Transport documents	TfNSW note that the following documents are to be applied to the design: • Design of Roads and Streets • Cycleway Design Toolbox • Walking Space Guide	The traffic engineer confirms that these documents have been applied.
Pedestrian crossing	TfNSW request consideration of locating the proposed pedestrian crossing toward the Abundance Road and Ferodale Road intersection.	The proposed pedestrian crossing location has been specifically designed to capture the pedestrian desire line to the main gate of the school on Abundance Road.
Speed limits	Speed limits will need to be reduced to support the installation of raised pedestrian crossings. TfNSW recommend 'in-principle' support is sought to change and/or relocate the current speed zone prior to finalising the design, as necessary.	Addressed above. Expanded school speed zones have been recommended for Transport for NSW consideration and 'in-principle support'.
Footpath width	TfNSW request consideration of the provision of all footpaths to be provided at a minimum of 4 metres in width.	The currently proposed footpath width of 3.0 metres is in excess of the 2.3 metres minimum for a local footpath – medium activity according to the Walking Space Guide.
On-road cycleways	TfNSW request consideration of on-road cycleways along Ferodale Road.	The baseline scenario of 13 students cycling to the new high school does not justify on-road cycle lanes. The wider cycle strategy to be updated by Port Stephens Council will likely plan for increased cycling from future residential development areas to the school.
Bicycle parking	TfNSW note that bicycle parking is to be sheltered, does not need to be located together and should be spaced appropriately to accommodate larger e-bikes	The proposed bicycle parking has been purposely grouped together to enable to area to be adequately sheltered and secured, ensuring safety for those using the bicycle parking and the security of the bikes stored in the area.

Topic	Comment	Response
	or cargo bikes (at a minimum of 5%).	Micromobility bikes, cargo bikes etc. are not typically utilised by students so have not been considered in the spacing of the bike racks.

4.2.1.3 Conclusion

Due to the design changes to the public domain including the kiss and ride drop off zones, bus bays, footpaths and pedestrian crossings, relevant updates have been made to the REF. Updates are made to relevant plans within the Architectural Drawings (**Appendix 6**) and the Landscape Drawings (**Appendix 7**) to reflect these amendments. Whilst there is no requirement to update the Transport and Accessibility Impact Assessment (**Appendix 26**) of the REF, some additional Mitigation Measures have arisen from the RtS process.

The following mitigation measures set out in **Table 4** has been provided to the updated Mitigation Measures in **Appendix 1** of the updated REF to ensure the requirements of Council and TfNSW are satisfied.

Overall, the amendments made to the public domain and transport provisions can be concluded as a positive benefit for the function of the school. The proposed transport and access improvements for the New High School for Medowie will enhance safety, efficiency, and accessibility for all travel modes, including walking, cycling, public transport, and private vehicles. These measures will support current needs of the school with consideration of the existing network to ensure minimisation of congestion and disruption to the surrounding community.

Table 4 Updated traffic mitigation measures

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
TR15	Prior to operation	The location of the proposed School Speed Zones is to be submitted to and approved by the relevant road authority prior to the installation of the signage. The School Speed Zones are to be in place prior to Day 1 of the school commencing.	To ensure that the road authority approves the location of the School Speed Zones required to service the new school.
TR16	Prior to operation	Any additional public and street signage required as a result of the public domain works are to be submitted to and approved by Council prior to their installation. Any required signage is to be in place prior to the school commencing.	To ensure that any street signage approved is compliant with Council's requirements.
TR17	During operation	The Travel Plan Coordinator and school administration are to communicate regularly in writing with parents regarding the approved pick up and drop off arrangements on Abundance Road and Ferodale Road	To ensure the kiss and ride drop off zone is being used as intended. To help minimise the risk of U-Turns on Abundance Road.

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
TR18	During operation	Within 12 months of the school opening, a formal warrant assessment including traffic and pedestrian counts is to be conducted to identify if an update to the pedestrian refuge on Ferodale Road to a formal crossing is required.	To ensure the pedestrian crossing is not too narrow for the increased foot traffic.
TR19	Prior to construction	Prior to construction commencing in the road reserve, a construction set of drawings are to be prepared which outlines all works proposed within the road reserve and to be prepared to the relevant standards and guidelines. This is to also include any additional line marking as required. The construction set of drawings is to be submitted as part of the S138 application (Mitigation Measure TR12) if required.	To ensure that any works proposed in the road reserve are designed to Council's requirements.
TR20	Prior to operation	All works in the public domain (as required under Mitigation Measure TR20) are to be constructed prior to Day 1 of the school commencing.	To ensure all relevant public works are in place prior to the school operations commencing.

4.2.2 Flooding

4.2.2.1 Summary of issues

The public, and relevant authorities, including the SES, raised concerns about the flood modelling conducted as part of the FIRA, specifically questioning the approach and underlying assumptions used. They requested clarification on the number of flooding scenarios, and additional information on pipe capacity, flooding impacts on adjacent properties, flooding conditions pre and post development, and overflow into the stormwater network. The SES also recommended that updates be made to the FERP.

4.2.2.2 Response to issues

A consolidated response to all flooding matters is provided in **Appendix C.**

An updated FIRA and an updated FERP have also been prepared in response. The updated FIRA and FERP are attached to the updated REF at **Appendix 9** and **Appendix 10** respectively.

4.2.2.3 Conclusion

There are no updates required to the design or to the assessment of flood impacts in the REF in response to the submissions. However, several matters raised have required an update to technical documentation associated with the REF to provide further detail and clarification on the flood response, which as noted in **Section 4.2.2.2** above includes the FIRA and FERP.

4.2.3 Sewer

4.2.3.1 Summary of issues

Many submissions raised concerns about the increased demands on the local sewer systems and the upgrades required to service the school, as well as the potential impacts on surrounding neighbours.

4.2.3.2 Response to issues

As outlined in Section 6.14 of the REF, initial engagement with the relevant utility providers has occurred and at that time, it was demonstrated that there is sufficient capacity to accommodate the activity and that adequate connections to services can be made.

Hunter Water Corporation (HWC) are the relevant reticulated water and sewer authority for the site. HWC provided a late submission to the activity on 4 April 2025. Regarding water and sewer requirements, HWC do not provide any objection to the activity. However, during a meeting that took place 28 April 2025 and further correspondence from HWC dated 28 April 2025, confirmed that the school cannot connect into the existing pressure sewer, and that a new gravity sewer main is needed, which would connect to the Medowie 10 Wastewater Pump Station at 36B Ferodale Road.

Current options are being pursued as part of ongoing design development and the department are progressing the preparation of a sewer servicing report. Two potential options that are being explored are:

a) Connection from Medowie High School near the staff carpark, upgrade from that point running along on the northern side of Ferodale Road to sewer pump station.

b) Connection from Medowie High School near main entry, upgrade from that point running along Abundance Road, turning east to run along the northern side of Ferodale Road to sewer pump station.

These options are shown diagrammatically in **Appendix E.**

Mitigation Measure SER1 already requires written confirmation with the relevant utility providers to confirm connection points and design approvals for services. To demonstrate to the community that the sewer design has to meet the relevant standards for sewer design, a specific mitigation measure has been added for the department to gain the relevant approval from HWC before construction commences.

The department will continue to collaborate with HWC to address any sewer-related concerns and to achieve the most effective design outcome for the site and existing sewer network.

4.2.3.3 Conclusion

The following mitigation measure in **Table 5** has been provided to the updated Mitigation Measures in **Appendix 1** of the updated REF to ensure the requirements of HWC are satisfied.

Table 5 Additional sewer mitigation measure

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
SER24	Prior to construction	A Section 50 compliance certificate and/ or written approval for sewer and water	To confirm that the activity has met Hunter Water's requirements to

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
		supply is required from Hunter Water Corporation.	be serviced by water and sewer.

4.2.4 Stormwater and water quality

4.2.4.1 Summary of issues

A range of technical questions were raised regarding the stormwater design set out in the Civil Engineering Report. The submissions received did not raise issue with the proposed management of stormwater, rather, clarification was sought on specific details:

1. Where will resultant stormwater flow to?
2. The onsite detention tank is underground and under a building. How will maintenance occur?
3. The pipes shown in the drawings are 375mm diameter but are under pressure (hydraulic grade line higher than the culvert obvert). This is undesirable. As mentioned in the Flood Impact comments, it is also unknown whether this is based on a 100% clear cross section for the pipe. The concerns might be compounded further if 100% clear is assumed.

Furthermore, HWC requested that as the activity is located within a drinking water catchment, it will be expected to demonstrate a Neutral or Beneficial Effect (NorBE) on water quality. HWC does confirm that the activity is considered to meet NorBE in terms of wastewater as the proposal is to be connected to the reticulated sewer network. HWC requested more information about how the proposal will demonstrate NorBE as well as providing Model for Urban Stormwater Improvement Conceptualisation (MUSIC modelling), in order to demonstrate effective stormwater management. The MUSIC Modelling Report is provided in **Appendix D**.

4.2.4.2 Response to issues

Resultant stormwater will outflow to the northern exit at the Abundance Road and Ferodale Road intersection. The stormwater from the site will flow through the on site detention (OSD) tanks where water will be cleaned via filters to the water quality levels required for catchment areas before it is discharged into the local storm water network at the required flow rates. There are two OSD tanks, the northern tank will discharge into the local network on Ferodale Road, the larger OSD will discharge into new pipes constructed in Abundance Road which will connect to the local network at the intersection of Abundance Road and Ferodale Road.

The building which sits above the OSD tank does not entirely cover the tank, with access available at the northern and eastern edge of the B Block building for maintenance.

Given the latent conditions, stormwater networks are under pressure as noted. Pits are modelled as 20% blocked in line with Council's development design specification "0074 Stormwater Drainage (Design)".

NorBE has been demonstrated through the MUSIC modelling that was conducted for the proposed activity. MUSIC modelling results will be provided to HWC and the department assessment team to ensure acceptability.

4.2.4.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.2.5 Noise

4.2.5.1 Summary of issues

Two submissions raised concerns in relation to noise levels, as follows:

1. Noise levels on site while the school is operating
2. The area is zoned industrial and there are concerns that there may be noise complaints from the school to the neighbours.

4.2.5.2 Response to issues

Noise and Vibration has been assessed within Section 6.2 of the REF and determined that the operational levels of the school are satisfactory and are within prescribed limits. Mitigation measures are already in place for noise such as the loudspeaker on the school. It is also noted that schools are not defined as 'offensive noise' and therefore do not have the same impact to other industry such as heavy machinery.

In terms of the potential impact of the industrial area on the school, this was already considered in the Noise and Vibration Assessment in **Appendix 28**. The Noise and Vibration consultant has confirmed that the readings used to obtain existing noise levels were taken within proximity of the industrial area and that the industrial noise levels are expected to be under road noise levels and therefore specification of façade glazing to mitigate road traffic noise is also expected to address industrial noise intrusion. The need for façade glazing design to control noise is adequately addressed in Mitigation Measure AC5.

4.2.5.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.2.6 Bushfire

4.2.6.1 Summary of issues

As outlined in **Section** Error! Reference source not found. below, the RFS provided a submission to the a ctivity indicating that the new school is required to obtain a Bush Fire Safety Authority.

4.2.6.2 Response to issues

The need for a Bushfire Safety Authority (BFSA) arises from S100B of the *Rural Fires Act 1997*, which lists a school as a development with a 'special fire protection purpose'.

A BFSA approval is separate from the REF approval and has already been obtained through the RFS. An additional mitigation measure is proposed to acknowledge and address the requirements associated with this approval.

4.2.6.3 Conclusion

The following mitigation measure in **Table 6** has been provided to the updated Mitigation Measures in **Appendix 1** of the updated REF:

Table 6 Additional bushfire mitigation measure

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
BF9	Prior to construction	An application is to be prepared and submitted to the NSW Rural Fire Service (RFS) for approval under	To ensure that the school meets the relevant bushfire requirements as

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
		Section 100B of the *Rural Fires Act 1997*. This approval is to be obtained in writing prior to construction commencing on site.	prescribed by the NSW Rural Fire Service.

4.2.7 Aviation

4.2.7.1 Summary of issues

The Department of Defence (Defence) submission raised the following concerns:

1. Defence does not accept liability based on aircraft noise nor will it modify its activities.
2. Declared Defence Aviation (DAA) approval required for structures higher than 45m including cranes.
3. Bird Strike – Defence recommended that the landscape design give consideration to minimising bird habitat opportunities and ongoing monitoring of bird activities during construction, alongside the management of organic waste on site to ensure bins are covered.

A response received from Civil Aviation Safety Authority (CASA) confirmed no issues with the proposed activity.

4.2.7.2 Response to issues

No permanent structures are proposed to be over 45m in height on site. Mitigation Measure OLS 1 adds a requirement to obtain the DAA approval if any cranes or construction measures or machinery exceeds this threshold.

The proposed landscape design does not intend to encourage tree species that may attract an unusually large number of birds. However, as part of the biodiversity and sustainability approach/consideration, the design supports a mix of local fauna and habitat. As portions of the site are bushfire prone, there are some limitations on vegetation in response that will naturally minimise habitat opportunities. It is not anticipated that bird habitat will be encouraged on site, and general practices such as proper waste management practices must be implemented.

4.2.7.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.3 Procedural, administrative, and other issues

4.3.1 Infrastructure contributions

4.3.1.1 Summary of issues

One submission raised the question in relation to funding infrastructure associated with the school, suggesting that Council should not be required to pay for the infrastructure demand triggered by this activity.

4.3.1.2 Response to issues

The exhibited REF and associated documents demonstrate the necessary road and footpath infrastructure upgrades, as well as service/utility upgrades and connections will be undertaken as part of the activity. This infrastructure (which is to be approved and constructed with the school) is to be funded by the department. It is not intended for Council to pay for any infrastructure required for the school.

Irrespective, infrastructure contributions (as outlined in Section 7.11 and Section 7.12 of the EP&A Act) are not payable to Council for Part 5 projects.

4.3.1.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.3.2 Consultation

4.3.2.1 Summary of issues

Many submissions made general complaints in relation to the lack of community consultation on the project. Other submissions raised specific questions in relation to consultation. A particular question was raised in the submissions as to why there was no consultation with adjacent property owners.

4.3.2.2 Response to issues

Throughout the planning of the new Medowie High School, the department has conducted an Expressions of Interest process, distributed planning updates and held a community information session. All activities and planning updates that were distributed provided details on how local community could get in contact with the department to request more information or provide feedback.

This is highlighted in the following stages:

- In July and August 2023, an Expressions of Interest process was conducted to locate the most appropriate site for the new high school. Notification of this process was publicly advertised and provided local land holders with the opportunity to put forward potential locations for the new school.
- In October 2023, a planning update was distributed to the Port Stephens school community group to inform them that the expressions of interest period had closed and investigations into site options were under review.
- In June 2024, a planning update was distributed to residents and business owners on Ferodale Road, Abundance Road, Lisadell Road and Fairlands Road. This included the announcement of the new site and next steps to appoint the design and technical consultants to develop the concept design.
- In November 2024, a planning update was distributed to residents and business owners on Ferodale Road, Abundance Road, Lisadell Road and Fairlands Road, and included an invitation to attend a community information session. The information session was held in late November 2024 to provide the community an opportunity to see plans for the new high school and share feedback. Feedback provided during this session was considered in the preparation of the technical assessments for the REF.
- In March 2025, a notification letter was distributed to residents and business owners on Ferodale Road, Abundance Road, Lisadell Road and Fairlands Road. This included notification that the REF was placed on public exhibition, and provided a link to view detailed plans and reports for the proposed activity.

Throughout this process, adjoining property owners have been invited to attend face-to-face community information sessions and have been provided with contact details for any questions or concerns.

The department did not communicate that additional information sessions would be held. The department has engaged with Council and Councillors numerous times on the proposed plans and technical assessments prepared for the new Medowie High School. The community information session, project updates, letter box drops included ways that the community could contact the department with any questions or concerns.

Table 11 in Section 5.1 of the REF provides a detailed summary of agency and community consultation provided before the formal exhibition of the REF.

4.3.2.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter. Consultation with community will continue throughout the delivery of the project. Project updates are provided at key stages on the department project website (New high school for Medowie).

4.3.3 School logistics

4.3.3.1 Summary of questions raised

One submission asked questions in relation to the operational elements of the school as outlined below:

1. What years will the school be operating in 2027?
2. How can a parent join the school's Parents and Citizens (P&C) Association?

4.3.3.2 Response

Based on the project information available publicly in the 'frequently asked questions', year groups have not been determined for school opening in 2027. This is expected to be confirmed around 6-12 months before the new school opens and when enrolments open.

Options to join the P&C will be available once the school commences operation.

4.3.3.3 Conclusion

No further updates are required to the design of the activity, the REF, or Mitigation Measures in response to this matter.

4.3.4 Other

4.3.4.1 Summary of other matters

The following questions were raised during the submissions and cannot be categorized in any other topics.

1. How will students be prevented from trespassing onto neighbouring properties?
2. Who will maintain responsibility for maintenance of new footpaths surrounding the school given the concern for Council not having the financial ability to do so?

Furthermore, Jemena outlined no issues with the proposal, however recommended that a dial before you dig is obtained as part of the construction process. An additional mitigation measure has been included to meet the requirements of Jemena.

4.3.4.2 Response to other matters raised

The proposed school has fencing proposed which limits access in and out of the premises as per standard operating procedures. It is extremely unlikely that students will be able to exit the school and trespass onto neighbouring properties.

The department will construct the footpaths required to service the school (and as shown on the public domain plans) to Council standards and these footpaths will be dedicated to Council for ownership and ongoing maintenance. Funding arrangements for that maintenance is not a matter for the department.

4.3.4.3 Conclusion

No further updates are required to the design of the activity, or the REF in response to this matter.

The following mitigation measure set out in **Table 7** has been provided to the updated Mitigation Measures in **Appendix 1** of the updated REF:

Table 7 Additional dial before you dig mitigation measure

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
DBYD1	Prior to construction	Prior to the commencement of any excavation or ground-disturbing activities, the proponent shall undertake a 'Dial Before You Dig' (DBYD) enquiry to identify the presence and location of any underground utilities and infrastructure within the proposed work area. Evidence of the DBYD and all relevant utility plans shall be kept on site at all times. The proponent shall ensure that all personnel involved in ground works are informed of the identified underground services and that appropriate exclusion zones, protective measures, and procedures are implemented to prevent damage, service disruption, or safety incidents.	To ensure that excavation is conducted safely and in accordance with the requirements of utility asset owners

5. Mitigation measures

As outlined in this RtS Report, a number of mitigation measures have been added where appropriate to address any outstanding concerns of the public, or government agencies, moving forward. A summary of additional mitigation measures is provided below in **Table 8**, and within **Appendix 1** of the updated REF.

Table 8 Summary of all additional mitigation measures

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
TR15	Prior to operation	The location of the proposed School Speed Zones is to be submitted to and approved by the relevant road authority prior to the installation of the signage. The School Speed Zones are to be in place prior to Day 1 of the school commencing.	To ensure that the road authority approves the location of the School Speed Zones required to service the new school.
TR16	Prior to operation	Any additional public and street signage required as a result of the public domain works are to be submitted to and approved by Council prior to their installation. Any required signage is to be in place prior to the school commencing.	To ensure that any street signage approved is compliant with Council's requirements.
TR17	During operation	The Travel Plan Coordinator and school administration are to communicate regularly in writing with parents regarding the approved pick up and drop off arrangements on Abundance Road and Ferodale Road	To help minimise the risk of U-Turns on Abundance Road.
TR18	During operation	Within 12 months of the school opening, a formal warrant assessment including traffic and pedestrian counts is to be conducted to identify (by a suitably qualified engineer/ consultant) if an update to the pedestrian refuge on Ferodale Road to a formal crossing is required	To ensure the pedestrian crossing is not too narrow for the increased foot traffic.
TR19	Prior to construction	Prior to construction commencing in the road reserve, a construction set of drawings are to be prepared which outlines all works proposed within the road reserve and to be prepared	To ensure that any works proposed in the road reserve are designed to Council's requirements.

Mitigation Number/ Name	Aspect/ Section	Mitigation Measure	Reason for Mitigation Measure
		to the relevant standards and guidelines. This is to also include any additional line marking as required. The construction set of drawings is to be submitted as part of the S138 application (Mitigation Measure TR12) if required.	
TR20	Prior to operation	All works in the public domain (as required under Mitigation Measure TR19) are to be constructed prior to Day 1 of the school commencing.	To ensure all relevant public works are in place prior to the school operations commencing.
SER24	Prior to construction	A Section 50 compliance certificate and/ or written approval for sewer and water supply is required from Hunter Water Corporation.	To confirm that the activity has met Hunter Water's requirements to be serviced by water and sewer.
BF9	Prior to construction	An application is to be prepared and submitted to the NSW Rural Fire Service (RFS) for approval under Section 100B of the *Rural Fires Act 1997*. This approval is to be obtained in writing prior to construction commencing on site.	To ensure that the school meets the relevant bushfire requirements as prescribed by the NSW Rural Fire Service.
DBYD1	Prior to construction	Prior to the commencement of any excavation or ground-disturbing activities, the proponent shall undertake a 'Dial Before You Dig' (DBYD) enquiry to identify the presence and location of any underground utilities and infrastructure within the proposed work area. Evidence of the DBYD and all relevant utility plans shall be kept on site at all times. The proponent shall ensure that all personnel involved in ground works are informed of the identified underground services and that appropriate exclusion zones, protective measures, and procedures are implemented to prevent damage, service disruption, or safety incidents.	To ensure that excavation is conducted safely and in accordance with the requirements of utility asset owners

6. Conclusion

All submissions received during the public consultation period have been carefully reviewed and considered as part of the REF exhibition process. Each issue raised has been addressed in adequate detail, with input from relevant consultants across relevant disciplines where required. Where appropriate, additional mitigation measures have been developed and incorporated into Appendix 1 of the updated REF to respond to community and stakeholder concerns, ensuring potential impacts are minimised and managed effectively.

Since the preparation of the REF and in direct response to the issues raised, minor updates have been made to the project. These updates do not result in any changes to the overall design intent, scope, or footprint of the proposal. The most notable update relates to traffic and access arrangements, which have been updated to improve traffic flow, safety, and site accessibility. This change represents a positive outcome for both the project and the surrounding area.

Overall, the proposed activity continues to align with the environmental assessment and planning objectives outlined in the REF and is considered suitable to proceed with the recommended mitigation measures in place.

Appendix A

Register of Submissions

New High School in Medowie Submitter List - March 2025

Public / Agency Submission	# Public	# Agenc	# Total	Date Received	Planning Portal Reference No	Submitter	Suburb/Town	Contact	Submission	Attachments?
Public	1	-	1	3/3/2025	SUB-9835	Robbie Danckert	2318	rdanckert@gmail.com	This location is not right for a school.	No
Public	2	-	2	3/3/2025	SUB-9836	Kristy Grieve	2318	kristygrieve3@gmail.com	Hello, excited for the new HS however much like Catherine McAuley road and traffic lights were not put into place until after the build and school started it caused major manic! It would be nice to see at the T intersection where abundance meets feradale and I'm assuming that will become traffic lights be installed during the high school build and not after. Just with medowie public school alone the traffic is already chaos turning left and right. Also have you factored in when students are able to drive? Catherine McAuley have had multiple complaints from near by residents in pacific dunes with parking issues much to not the students faults as the high school have told them they must park over there. Would be good to see a car park either expanded to facilitate for driving students or one created separately for them. I would imagine parking out on the street would then spill into the medowie public school area which is already limited being only one straight road. Thank you for your time. Resident of medowie and Mother of children who attend medowie public and Catherine McAuley.	No
Public	3	-	3	3/3/2025	SUB-9839	Sally Rolfe	Medowie	sals4ade9@gmail.com	Just wondering if a student car park has been considered to keep them safe whilst driving to & from school as there's no where really for them to park along the road within walking distance? Would love to know which years will be opening in 2027 as this could change my plans for my oldest child who will be yr 8 in 2027. Would love to be on the committee/planning committee for the new high school as a parent & current primary school P&C member.	No
Public	4	-	4	3/3/2025	SUB-9841	David Healy	Medowie	wellanbah@hotmail.com	This site is far too small. The amount of traffic from 7.30am to 9am and 2pm to 3.30 pm will be horrendous. This is not fair. I live on Abundance Road and will have to put up with the lack of parking and drop off lanes. I would bet the whole road will be walking pace at that time. Please put an internal long road system to cater for the car line and bus line that is off the road to stop gridlock. If you are going to put a high school there do it properly.	No
Public	5	-	5	3/3/2025	SUB-9844	Robert Pedder	Medowie	robpedder65@gmail.com	I note that under 'Parking' in the document, it details teacher, visitor and accessible parking onsite. What appears to be forgotten, is that students in both years 11 and 12 are now getting their driving licenses and choose to drive to school. Where is the parking for these students? As is normally evidenced around high schools, student vehicles will end up parked wherever there is available parking. This will undoubtedly result in student parking along Abundance Rd (to the east) in front of the many businesses operating in that area, and/or along Ferodale Rd. As has been recently evidenced, parked structures on Abundance Rd have resulted in one casualty due to a blocked view for a vehicle leaving a storage facility. Also evidenced during each school day along Ferodale Rd, parent's cars dominate parking as far east from Medowie PS, to beyond the new ambulance station. Student vehicles would just make both Abundance and Ferodale Rds into parking lots during school hours, resulting in potential street use limitations, impact on 'along street' vision, potential ambulance station imposition and a considerable increase in street use. The plans must account for potential student parking. Based not he potential student numbers of 640, this could result in a year/grade populous of just over 100 students per grouping. There is considerable potential for ALL year 12 students and beyond 50% of year 11 students to be licensed; with a consequent number of vehicles then requiring parking at or near to the site. Where would 50 stunted vehicles, alone, be considered safe to park without having a significant impact on Abundance and Ferodale Rds; particularly given Abundance Rd employs drainage ditches, not kerbs and guttering, beyond the current commercial premises to the south of the site.	No
Public	6	-	6	3/3/2025	SUB-9847	Name withheld	medoqie	chloejed26@hotmail.com	you pick the wrong spot. it's going to be impossible to get out of medowie in peak times. because the three ways out all will have schools. do u realize the amount of death near miss accidents on abunace rd. i lived here for 41yrs. not to mention you have a public school right around the corner. why didn't you build next to wirreanda like promise 40 yrs ago that would of made better sense because ppl who live that end can get around easier. big mistake putting it there hope u have good insurance that cover deaths and being sued your going to need it	No
Public	7	-	7	3/3/2025	SUB-9851	Ann Scopel	Medowie	gravyboat6677@hotmail.com	I am an immediate neighbour and this will impact me greatly. What impact will this school have on my property? Will I still be able to enjoy peace and quiet. I have concerns regarding students trespassing on my property. What infrastructure will there be and how do you propose to not disturb current residents and businesses? How are you going to deal with traffic and parking? How are you going to keep noise levels down once school commences? How are businesses going to operate when there parking and surrounding areas are taken up by parents and students parking where they shouldn't, this happens now with medowie public school. Why was there no consultation with connecting property owners? A driver has died from an accident on Abundance Road so how are you going to prevent any more deaths on this road? Why are you determined to have the school on Abundance Road instead of near wirreanda public school where you have more land. My family has lived here for over 50 years and you never considered disturbing our peace and quiet. It is supposed to be rural. Why do you want 3 schools so close to each other? This end of Medowie is all that is left of the original Medowie and you want to destroy it. No one on Ferodale Road or Abundance Road want this school. The roads aren't wide enough and the traffic is already chaos. This position is a big mistake. It's not bad enough that we deal with the noise and traffic from the public school directly across the road, now we will have to deal with 3 times as many students right next to us. Department of Education has made a mistake and couldn't give a stuff about the life long residents of this little area.	No

Public	8	-	8	3/4/2025	SUB-9856	Daniel Pickles	MEDOWIE, 2318, NSW	DANIEL.PICKLES@SANDVIK.COM	I personally believe it's great that we are getting a public High School in Medowie, so long as it's done right, and is safe for the local community. I have to assume that with such a large infrastructure build, there would need to be the upgrades to facilities to support such. The main concerns / items I would wish to see are as below: Pedestrian access. There must be a requirement for a footpath extending all the way up Abundance Road. At the moment with the culverts either side, and a narrow busy road, there is limited pedestrian access. This will vastly increase with 600+ students coming and going from campus each day. Upgrade to the local sewage system. Currently we struggle to pump down our septic at certain times, and with the additional load by a school of 600+ people using the same system main sewer lines the demand will increase. I know there was a plan to use storage tanks, however that's no different to anyone else on a septic pump to sewer system. Traffic management. There were talks to stagger school start finish times, however the concern is more with student vehicles rather than drop off/pick up. (I know when I was 17 and just got my Ps, I drove to school everyday). If there is no parking at the school, the streets will become full quickly. This adds to the need to improve/ widen the Road to accommodate School green space. In the landscape plan, only half a sport field is shown, why would this not be completed initially, as completion at a later stage will only cause rework, and damage to the landscaped areas that have become established. With high school aged students, there is a need for sport, which facilitates teamwork, sportsmanship, and healthy living. Half a field, and a basketball court does not seem sufficient. School zoning area. Is there specific reason as to why the school did not reach to the end of Abundance road, rather than leaving 2 x residential blocks. This makes the school compress into a smaller lot, with more restrictions. Abundance road. Will the road be widened to accommodate for the school, and industrial area opposite. A drop and kiss zone will cause standstill if there are more than a few cars dropping off / picking up students at school times, which will in turn impact the	No
Public	9	-	9	3/4/2025	SUB-9863	Michael Salerno	2318	michael.salerno76@gmail.com	School idea is great however, this little street will become a high traffic area. I'm led to believe the farm on abundance is going to sell and develop, this would benefit as it will make room for large roundabout or traffic lights. Will abundance road join medowie Rd or cut through to campsite to ease traffic.	No
Public	10	-	10	3/5/2025	SUB-9878	Name withheld	MEDOWIE (NSW)	jmagin@hotmail.com	It's great to see Medowie possibly getting a long overdue high school. However I have concerns regarding the traffic impact assessment. Whilst the school caters for teaching staff and bicycle riders, it almost deliberately lacks parking facilities for students and parents. A 5 bay kiss and ride bay seems grossly inadequate, and the assumption that parents will take the 4km detour to get to the school side of Abundance Road is a poor assumption. I would imagine that parents will either drop kids on Ferrodale Road, or the eastern side of Abundance Road. Evan jf parents did take the 4km loop via Fairlands and Lisadell Roads, there will be a lack of space for queuing traffic at the 5 bay kiss and ride bay. Abundance Road is a single lane (in each direction) Road with minimal verge on the western side. This does not appear to be a well thought out plan. The assumption that there will be no additional bus services is surely incorrect. 1000 students using existing services? There is a single bus bay proposed, with queued buses to use Abundance Road to queue. Simply won't work, same for excursions etc. I expect that there will be significant pedestrian movement crossing both Ferodale and Abundance Roads. Yet only a raised crossing on Abundance Road. It is already difficult to safely drive down Ferodale Road when the much smaller Medowie public school has drop off and pick up. I would have thought much more consideration is given to the safety of students. There is an assumption that students will park on the street (Abundance and Ferodale Roads). Again, a poor assumption for those roads, residences, and businesses. Where do parents park for events and assemblies at the school? The intersection of Abundance and Ferodale Roads will be a nightmare, though the numbers in the traffic impact assessment seems to indicate it will be OK. Has there been consideration given to the length of no parking zones, such that turning vehicles have adequate site distances in all directions? Recently, Catherine McCauley high school was constructed, with clear thought given to traffic, drop off / pick up, parking, etc. Why has almost no similar consideration been given to the proposed high school? If the main access to the school is to be via Abundance Road, I would expect vehicles (buses and cars) to have off street circulation rather than just pulling up on the side of the road. And adequate consideration for vehicles coming from the east (eg the ability to turn right once on Abundance) into the school. This I would think would require a widening of Abundance and the provision of signals, which would also allow students to safely cross the road, rather than just a biased crossing. My concern is if the school goes ahead with the current poor traffic proposal, there will be frustrated Road users, leading to accidents, potentially involving pedestrians/school kids. I support the proposed high school, but not with what seems to be very poor traffic considerations.	No

Public	11	-	11	3/6/2025	SUB-9883	Deborah Murdoch	MEDOWIE	dmurdoch@activ8.net.au	Sewerage What capacity does the existing and predicted sewerage system have and will it be adequate to cater for the school Storm water Where will the resultant storm water flow to? Currently Medowie relies on the Campvale drain to remove water in times of high flow. This pipe and associated drain is located north of the school site requiring that water would need to flow up hill! Parking - Traffic Increased traffic from the school should necessitate the development of a roundabout at Abundance and Ferodale Rd and the existing corridors are not adequate for this Where will the students and visitors park? Traffic issues due to student etc parking for students coming from the Tilligerry peninsula – only transport is private or bus How will delivery vehicles to the admin, canteen, school and sport fields access these areas? Ferodale and Abundance Roads are already highly congested due to traffic at the Medowie Primary school with parents, visitors and staff already parking the full length of Ferndale Rd and approx 100m down Abundance Road morning and afternoon. This congestion is also compounded by the traffic to the service station, mechanics, storage zone Congestion is further increased due to buses 136, 137 and private bus companies taking children to the Christian and Catholic schools. Congestion linked to the light industrial area on Abundance Rd especially considering the addition of 6 more blocks as per PSSC rezoning /sale of land. As highlighted this week with a fatality on Abundance Rd Where will footpaths be located on Abundance and Ferndale Rds Environmental considerations Blocks A and C are orientated to face east /west resulting in excessive heating especially on the western side of these buildings. The design needs to be reconsidered or include large eaves Bus Bay The bus bay is proposed to be located on Abundance Rd and would require the addition of a new lanes out the front of the school. As Abundance Rd is currently a two lane road there is simply no room for this bay to be inserted, especially when footpaths are also to be developed Acquisition of additional property Acquire the blocks on the corner of Abundance Rd and Ferodale Rd currently occupied by Health n Abundance and a private residence. This would provide a corner access for traffics and parking and offer the idea of a drop off zone Review alternate access to the school off Fairlands Rd in the area of 20 Fairlands Rd and through a corridor via series of properties to provide a one way flow of traffic and ease congestion on Abundance and Ferodale Rd Extension of Lisadell Rd through to Medowie Rd adjoining intersection with Brocklesby Rd, this would help to alleviate the current and heighten bottle necks that occur on Ferodale, Abundance and Lisadell Rd	No
Public	12	-	12	3/6/2025	SUB-9888	Name withheld	Medowie	katemc0192@gmail.com	The infrastructure of the roads around the high school need to be seriously considered. Even with bus and parent drop off zones abundance road and Ferodale road will not cope. The intersectional will especially be concerning as this road now when busy is hard to see traffic coming from both directions due to the large amount of cars which park on Ferodale road. This intersection cannot be left how it is when the school is built or more accidents are going to happen on these roads. The school needs to ensure there is enough parking for staff and students because if high school students start driving and parking on nearby streets this is going to cause more congestion and an inconvenience to those who live or have businesses on abundance. Additionally, more traffic will no doubt be using grahamstown road and burning onto Richardson road. This is already a bad intersection and causes traffic to back up with accidents being known in this spot. This will have to have an upgrade to lights or something similar to reduce the number of accidents and continue traffic flow.	No
Public	13	-	13	3/6/2025	SUB-9891	Jacki Adams	Medowie	jacki.adams7787@gmail.com	The plan detailed in the School Transport Plan is unrealistic; parents will not travel through another School Zone (Medowie Public School), to do a large round the block trip to access a Kiss and Drop. The number of Kiss and Drop zones is unrealistic, as is the amount of parking to be provided for both staff, students, service providers and parents. The current condition of Fairlands Road is completely inadqueate to cope with current road users, let alone adding additional cars 'travelling the block' to be able to drop their children off. The realistic picture will see people conducting illegal u-turns on Abundance Road, in front of businesses with poor visual access, with a mix of heavy industry vehicles/trucks. It will also add additional delays on those trying to leave Medowie via Fairlands Road. There is also a complete lack of pathways, with the exception of directly in front of the proposed High School. Those children coming from the acreage side of Medowie Road do not have access to any pathways until arriving part way along Mahogany Drive, near the Christian School. It is therefore unrealistic to think encouraging children to walk/ride will provide a safe passage to school for those that live on acreage lots in Medowie.	No
Public	14	-	14	3/10/2025	SUB-9925	Aaron Hart	Medowie	aaron@inspecservices.com.au	I am generally for the introduction of a public high school in the area. However the surrounding infrstructure does not support it. During school drop off and pickup at that time of the morning. Ferrodale road and abundance road are typically already congested due to the public school and catholic schools nearby and most students seemingly traveling by car. The allowance of only a 36m drop off / pickup area is not enough. There is no facility for student parking. Which in a rural town with a low density of people to is not enough. With some 150-200 students to be of driving age, a suitable area is required for those that drive. The so called pathway of Abundance Road is hardly suited for people to walk let alone ride a push bike. Abundance road should be upgraded to conventional guttering and stormwater to support a propper pedestrian pathway, with upgraded sewerage and on street parking outside the school. This will also support the local industrial business area and residents that will suffer the increased traffic caused by the school. A reduced minimum lot size in rural residential properties within a 2Km of the school will help with enabling increase housing options within walking distance that also will reduce congestion and the environmental footprint.	No

Public	15	-	15	3/10/2025	SUB-9933	Ebony Stuart	MEDOWIE	stuartebony05@gmail.com	Hi There, I wasn't too sure on how to start this Submission in regards to the New High school being placed on Abundance Road, But as a resident of Abundance Road I thought it would be vital for our Voice to be heard about the concerns and the factors that will affect us residents. I think it's fantastic medowie is getting a high school but the location is not ideal and poorly thought of. There were so many other places which would have been better thought to place the school yet we chose one of the main exit roads for medowie and the same intersection as another school which already gathers enough traffic in the morning and afternoon! The main concern of residents and business owners of Abundance road was the parking situation, In the information night it was stated that there would be no parking for students ect. I went to the same school my father taught at. It was a 30 minute drive there and back but the moment I got my license the majority of the days I drove myself as he would stay back after school and I did not want to and no bus came near my house. It was told students could just catch the bus or ride their bike but the moment they get their license and Their own car they won't ever catch the bus again they rather drive so they can get home earlier or go out after school. Not having a appropriate place to park is going to lead so many students to park alongside the road in front of businesses and in the drains As Well as in front of medowie Public school which during pick up drop off times the whole of ferodale road in front of the school is parents picking up the kids, If students park there it will cause a large amount of traffic and less space of what's not already their for parents to pick up kids. The road plans for the School is so poorly designed, having a one way entrance for bus and parent drop off coming down Abundance road to ferodale is going to cause a large amount of traffic considering you will only be able to fit a certain amount of cars into that drop off and pick up spot. Which brings me to my next point, Parents are not going to come all the way down abundance road and to the dead end to do a uturn to go pick up their kids nor will they drive around the whole block to get there, They will park across the road in front of the Sheds and businesses that operate there and make their kids walk across the road creating a hazard for all involved and Block Businesses own Customer from having somewhere to park. Not only that not uprgrading the intersection onto ferodale where you could sit there for almost 10 minutes in the morning due to traffic is going to double in time. November 25th 2024 there was a motorcycle accident right on the spot where you plan on putting your bus/ car drop off lane due to a driver not being aware of the situation and pulling out quickly. Imagine being a parent Picking up their kid and seeing all the traffic so they throw themselves out to get in front before they are stuck there for another 10 minutes waiting to get out and it's a student crossing the road? Have you thought about that? Let's also remember in 2016 Another Motorcycle hit a car at a stand still and was killed right across the road from where you plan on putting the school. Abundance Road is not safe, For residents, Drivers or a school. There are far too many accidents while some may be the fault of the driver who suffered from his own actions. It could happen at any time and it could be someone losing their child. At the other end of Abundance where the intersection is coming off Lisadell Road into abundance there have been almost 12 accidents where someone has	No
Agency	15	1	16	3/13/2025	-	CASA	Canberra	Alder, David <David.Alder@casa.gov.au>	See attachment	Yes
Agency	15	2	17	2/27/2025	-	Jemena	North Sydney	lands@jemena.com.au	See attachment	Yes
Public	16	2	18	3/14/2025	SUB-9976		Medowie	mrsscutt@hotmail.com	Construction of a foot path the full length of Abundance and Lisadell roads would be beneficial for students to minimise their safety risk during their commute to school. It is currently a safety hazard for the kids to walk or ride along Abundance Rd with narrow shoulders and drains the majority of the road. Since we have lived on Abundance Rd there has been 3 driving related fatalities which has the potential to climb with the increased traffic in the area.	No
Public	17	2	19	3/14/2025	SUB-9975		Medowie	timothy.scutt@westrac.com.au	With the construction of the school and the increased traffic both vehicular and pedestrian expected, I believe there should be a pedestrian foot path along the length of Abundance road, it should also connect to Fairlands through Lisadell. Both Abundance and Lisadell are main arterial roads in and out of medowie, the roads are narrow with no shoulder for pedestrians to walk along or cycle along, it is also not possible to traverse along the nature strip due to the undulations and angles created by the swale drains. If the school is constructed and there is no footpaths along the road there is a significant risk of pedestrian and vehicular interaction. There have been 3 fatalities along the Abundance road in the short time I have lived in this area with the potential for this to increase if no consideration is put into the access and egress of citizens in the construction of the new school.	No
Public	18	2	20	3/18/2025	SUB-10040	Nicole Sacmaroski	Medowie	medowiemx@bigpond.com	Regarding the new Medowie High School.. Firstly, congratulations on a wonderful future asset to our community. In my opinion, the design looks attractive, and it is exciting for our town. My husband Rob and myself own Medowie Mowers and Medowie MX, 2 businesses at 5 Abundance Rd which is the first industrial shed closest to the Ferodale intersection, across from the new high school. We have been owners here for approximately 4 years. As business owners that work 6 days per week (closed Sundays) we are well aware of the impact that particularly additional traffic and parking will make on Abundance Road. I was directly involved in the attempted resuscitation at the fatality in November on our road and the speed of some drivers and riders as well as the lack of visibility bring to me write my submission and base my points off the Traffic Report provided. Item 2.5 Road Safety - Although it may seem insignificant, I feel it is important to point out that it was infact the motorcycle on the roadway and a vehicle entering the road, not the other way around as mentioned in report. Speed of the motorbike, being on a wheelstand and overtaking was recently proven to be the cause of the vehicle entering the roadway to not see the motorbike and as the rider re-entered the lane, still on the back wheel, he hit the car entering the road. My point being, entering the roadway from driveways is already a major issue. Visibility is very poor once cars are parked along the roadside and pulling out into traffic can be dangerous even when speed isn't a factor. A major concern will be morning drop off and afternoon pick up times for the high school putting at risk residents, business owners and customers pulling out of driveways into heavy traffic as well as students walking to school. 2.7 Parking Availability and Item 6.0 Student Parking - It is noted that students and visitors won't have allocated parking. It is suggested in the report that there are 40-45 unrestricted parks along Abundance Road. Has it even been considered that these parks are already used for the existing businesses? Medowie is continuing to grow and along with that is our industrial area customer base and therefore carparks are full, and the unrestricted roadside parks are being used very regularly by business customers. If students are getting to school early and taking these parks because they have no allocated parking, it will create enormous problems for Medowie small businesses along Abundance Road and will likely push customers away. A lot of our Medowie Mower customers are retired and simply cannot walk the distance, particularly with broken yard equipment, if the parks outside our business are taken all day by both students and visitors. By PSCC accepting that another "10-15" students will park along Abundance Rd and in addition removing some unrestricted parks for the new crossing and clearly not considering the current usage of these parks for the long-standing businesses seems highly inconsiderate to our small business owners and adds to the visibility issues.	No

Public	19	2	21	3/18/2025	SUB-10044			Medowie		kaylabehansmith@outlook.com.au	I'm worried about the parking and traffic. The stop sign from Abundance Road going onto Ferodale Road is already near impossible to get out of during the school zone hours especially but also when teachers, parents and visitors park on the side of the road you can not see what is coming from either side. There was a serious accident on Abundance road in Nov 24 and the speed people go down that road is unexceptionable and I think the parking will make the visibly along that road EVEN worst. I hope you all take this into consideration as it can be scary and very dangerous. For all the small businesses along there as well, where will their customers park when their car parks are full?	No
Public	20	2	22	3/19/2025	SUB-10057	Darren Symes			2287	dsmedowie@gmail.com	Much needed for our area Unfortunately the infrastructure has not been put in place to keep up with current development and with future developments planned this is a must for our younger generation As we move into the future this area has turned from a rural area to outer metropolis of the city and surrounds that we now know as greater Newcastle We need close access for our kids for their convenience and safety plus to have less cars and busses on our roads that again have been not revised and upgraded at the same pace as development	No
Public	21	2	23	3/20/2025	SUB-10059	Ben Niland		Medowie		benn.psc@gmail.com	See attachment Please refer to the attached. My submission includes my own opinions but also those of the people I have consulted with in the community.	Yes
Public	22	2	24	3/20/2025	SUB-10061			Medowie		lyonden5@bigpond.com	As residence of Ferodale Rd living within the existing Medowie Public School zone, while applauding the building of a Public High School we wish to submit our concern regarding traffic and parking requirements for the school and feel that the Education Department should have designed OFF street parking, drop off, pickup and bus bays, also cycleways to alleviate pedestrian safety and traffic congestion on Ferodale and Abundance Rds as was the requirement for the new Catholic College on Medowie Rd and this should not be passed onto the local government Port Stephen's Council to manage and fund. We feel this has been highlighted by the recent tragic loss of life due to parked traffic on Abundance Rd when someone was just trying to safely leave their driveway. We are also concerned about the flow of traffic with the ambulance station only 100's of metres away and already with one much smaller school there are times when traffic is at a stand still, we can not state strongly enough the importance of getting this right in the first stage of building to keep the whole area flowing and safe. We wish this venture every success and are happy to discuss this further. Thank you.	No
Public	23	2	25	3/21/2025	SUB-10067	Craig Baumann		Medowie		craig.baumann@valleyhomes.com.au	See attachment	Yes
Agency	23	3	26	3/20/2025		NSW RFS		Blacktown		Allyn Purkiss records@rfs.nsw.gov.au	See attachment	Yes
Public	24	3	27	3/22/2025	SUB-10072	Name withheld		Medowie		Theresed2011@gmail.com	I am writing in regards to the proposed public high school for Medowie, with respect to the impact of traffic and height of the proposed classroom blocks. Having lived in Medowie for the past 25 years I have seen the town grow significantly. In that time, the ability for the road to cope with the increased traffic, especially the Ferodale Rd and Peppertree Rd intersection and the traffic lights at Catherine McAuley, has been significantly compromised. The town was already significantly impacted by road works on Medowie Rd during the construction of Catherine McAuley high school, often being held up for 20 minutes to leave town, when typically journeys to surrounding major towns are approx only 30 minutes. The proposed parking plan, lack of visitor parking and lack of senior student parking are inadequate for the size of the school. While it might meet traffic standards, it will be inadequate for the reality of the situation. As recently as Thursday, 23rd March, there were cars on both sides of Ferodale Rd from Medowie public school to almost the corner of Waropara Rd in the middle of the day. This happens fairly often and allows for no parking for anyone who would need to park on the street for the proposed public high school. The staggered start times will not impact this in any significant way. There will need to be at least half an hour difference, preferably more, in the start and finish times for Medowie PS and the proposed high school to allow for one school's traffic to depart before the next arrives. I also believe the proposal woefully underestimates how many families drive their children to school in Medowie rather than using public transport or walking. It is a unique township whose characteristics are being modelled off a standard and not reality. I don't believe the traffic counts were done over a statistically significant time period to enable an accurate representation of vehicle movements on Ferrodale and Adundance Rd. I am also concerned about the brought of the proposed buildings totally changing the character of the town as a whole, and the localised area specifically. Medowie is a rural- urban fringe township that people move to for the calmer, quieter, rural feel. It is already losing that due to the intense development of the township. Adding buildings of 13m and 14m height will change the character of the space, setting a precedent for more multi-story buildings and running the rural feel. There are virtually no towns with a rural feel in such close proximity to Newcastle and Port Stephens. Destroying one of the last ones by allowing this type of development goes against the heart of the community, the character of the town and the desire of the community. I believe the building heights need to be reconsidered to be more in keeping with the area. To resolve these issues, in reality, the proposed high school should be moved to one of the new development areas, such as The Bower, where: * more intensive housing is being built, thereby not impacting the risk feel of the 'old' Medowie township, * where the site can be developed from scratch, rather than forced to fit into an existing space, and	No
Agency	24	4	28	3/26/2025		NSW SES				Ana Chitu, rra@ses.nsw.gov.au and lisa.ignatavicius1@ses.nsw.gov.au	See attachment	Yes

Public	25	4	29	3/28/2025	SUB-10157	Adam Wheat	Medowie	adam.wheat@devcoproperty.com.au	As a stakeholder in the Medowie community, I write to address critical oversights in the planning and development of Medowie High School. Specifically, the lack of consideration for future housing strategies and the associated infrastructure challenges pose significant risks to the town's long-term growth and sustainability. 1. Future Housing Strategy: Medowie is projected to gain over 1,000 new homes in the coming years, bringing with it a substantial increase in population and demand on the local road network and sewer systems. The planned high school will further exacerbate these pressures, yet it appears that the broader impact of these developments has not been adequately accounted for in the current proposal. This influx of residents will without doubt place immense strain on the local road network and sewer systems. Integrating the housing strategy into the high school's planning is essential to align with Medowie's broader development goals and ensure the school can meet its community's needs. 2. Infrastructure Upgrades: The high school's proposed location at the intersection of Ferodale Road and Abundance Road presents significant challenges. This intersection already experiences high traffic volumes due to its proximity to an existing public school. The addition of a high school in the same area will exacerbate traffic congestion, particularly during peak hours. The Council's S7.11 plans currently propose the construction of a roundabout at this intersection, a critical improvement to enhance traffic flow and safety. SINSW must make a significant financial contribution to these planned works to ensure the success of the project and mitigate the impact on the local community. In addition, the sewer network in Medowie is not equipped to handle the combined impact of the high school and the projected housing developments. SINSW has acknowledged the need for sewer infrastructure upgrades. It is essential that these upgrades be integrated into the high school's development plan, taking into account the Housing Strategy to prevent future capacity issues. 3. Specific Requests to SINSW To address the outlined concerns, I urge SINSW to: a) Work with Council to seek additional funding for infrastructure upgrades to the intersection of Abundance Road and Ferodale Road. This can be easily sourced via the NSW Government Grants and Funding Programs; b) Increase the capacity of the local sewer network and lead-in to the proposed high school, with pipe and pump sizes increased to allow for the proposed Housing Strategy of Area J and K within the Medowie Housing Strategy. By taking these actions, SINSW can ensure that Medowie High School is a cornerstone of the community's growth, providing quality education and the infrastructure needed to support a thriving and sustainable future. The residents of Medowie look forward to seeing these considerations reflected in the final plans.		
Agency	25	5	30	3/28/2025	SUB-10162	Port Stephens Council		Mathew Egan - Development Planning Coordinator, (02) 4988 0121, mathew.egan@portstephens.nsw.gov.au.	See attachment		Yes
Agency	25	6	31	3/28/2025		Transport NSW		Kane Hitchcock,Development Services Case Officer development.north@transport.nsw.gov.au	See attachment		Yes

Public	26	6	32	3/29/2025	SUB-10184	Gary Stuart	Medowie	gary.stuart5@det.nsw.edu.au	As a long time resident of Abundance Rd and affected by both flooding and lack of sewerage facilities the positioning of the new school has been done with no insight, no community involvement and rushed through to buy votes. As an employee of the Department of Education, I didnt realise I worked for such a corrupt organisation. There are several considerations that need to be taken into account and will obviously be brushed over and buried. 1. Lack of drainage in Medowie and the flooding of the properties around the Lisadell end of Abundance Road. The fact that you answer have stated that tanks will be put in place, filtered and then pumped directly onto my property. How many 100,000s litre tanks will be installed to hold water during times of floods as not to add to the water ingress. I have 20years of flood level data on the end of Abundance Road, so what guarantees are there that this development will not adversly affect the residents of Abundance Road. 2. Inadequate sewerage systems on Abundance Road. Hunter Water another corrupt NSW Government department have recently admitted that the sewer line does not meet the requirements of the residents. How are you going to ensure that the sewerage system will not impact resides. Currently I burn out a sewer pump approximately every 2 years and I am one of the lucky ones, I am assuming the department will have a fund to replace pumps and infrastructure if the frequency of replacement increases. 3. Parking. To expect Port Stephens Council to fix your problem is completely wrong. As a high school teacher at Tomaree High School, on average there would be approximately 60 student cars parked on verges, fire trails and Tomaree Aquatic Centre, Irrawang High has makeshift carparks for students as does Hunter River and anyone who believes that students will use public transport, ride bikes or even walk, obviously do not live in the real world or any world actually, to think that students wont drive after receiving their licenses really have no idea. This will impact residents and more importanlly the local businesses, cost them money and impacting their livelyhoods. 4. Current state of Abundance Road. The road is not wide enough to handle a constant flow of buses and to only have room for 2 bus to be dropping off is insane. All buses will need to go down Fairlands, to Lisadell and then travel on Abundance so they can drop students off. What happens if there are 3 or 4 buses arriving, do they just shut the road down. 5. Abundance Road Safety. In the past 5 years there have been 2 deaths on the stretch of Abundance Road where the school is to be built. The construction of school WILL add to the already congested and dangerous condition of this section especially as the department has no plan to manage traffic. How does the department intend to stop parents doing u-turns on Abundance or pulling into random driveways to turn as most traffic is going to be coming from Ferodale Road and will be on the wrong side for parents to drop off. this will also greatly impact on the running of small bussinesses in the industrial area. 6. Parent Parking. To think that the department believes that it only needs to supply a few parking spots for parents in an industrial area, proves this project is a political stunt only. 7. Wildlife corridor. There has been no Koalas in this area for over 20 years, another political stun	No
Public	27	6	33	3/30/2025	SUB-10189	Melissa Gole	Medowie	melissagole@outlook.com.au	I am the Administrator of the Medowie hub group and making a submission on behalf of our group to ensure the voices of our group members are heard. We are a group of 3800 members mostly living within the Medowie area. We were initially involved in petitioning in favour of having a high school within Medowie. Our concerned members are mostly those directly affected who either live in the street or have businesses in the street. Some have made individual submissions. The biggest concern from our members was around traffic and flow. Businesses were concerned about the parking having only 45 spaces with no onsite spaces for parents and students. There were concerns voiced about not having space for their customers to park. Another concern from business was given the area is zoned as industrial use if there might be a complaint about the noise from their businesses. There was a concern from residents and businesses about the increase to the volume of traffic in the area. Concerns about flow with a member who was experienced in traffic flow voicing concern that possibly the intersection may require traffic lights to assist with flow. Other suggestions were around having staggered start and drop off times to assist with flow. Some members voiced concern about the lack of community consultation prior to choosing the site and deciding where it would be built. Another concern is around the lack of communication between the state government and council with the education department claiming that council would be responsible for paths surrounding the school when it is known that council has needed an SRV to fix their current costs around roads in our area and may not have a budget for pathways. The blocks surrounding the site are known to flood so some residents are worried that this situation may exacerbate with less places for water to flow and also the added burden of sewerage from the school. We would hope that some consideration would be given for the state to assist with funding upgrade to the roads and drainage surrounding this area to make it safe and fit for purpose. Sadly there has been a fatality in the street in the time since the land was purpose which occured partially due to lack of visibility in the street. We wish you well in the establishment of the high school and invite you to please keep our community in the loop. Kind Regards Melissa and group members from Medowie Hub.	No

Public	28	6	34	3/30/2025	SUB-10190	Name withheld	Medowie	scott.broadhead@abetterway.net.au	FOREVER CONFLICT + CHAOS + COMPLAINTS + COLLISIONS is the legacy that our NSW Government has for the families and businesses of Medowie with the proposed New Medowie Public High School (NMPHS) plan. The Abundance Rd and Ferodale Rd intersection is already chaotic if anecdotal feedback is a reflection of the stats quo: "it already takes 20 minutes to drive less than ~1km to pick up kids from the private school around the corner"; and that is before adding to the traffic problem with a NMPHS. Ironically, education is about learning. WHY has the NSW Government not learned from the CHAOS and CONFLICT that effects other communities due to locating three schools in close proximity: refer Submission Attachment Document item_A [SAD_A]. In addition to having three schools in close proximity, the additional traffic associated with the NMPHS [pedestrian, cyclists, vehicles and busses] will be competing with the neighbouring expanding industrial area, GP clinic, ambulance station, petrol station and residents, as well as the traffic impacts associated with Medowie's ~50% forecast population growth. While traffic solutions may be possible to alleviate congestion and create better traffic flows [with major infrastructure $ investment by NSW Govt and time delays] car parking and other infrastructure [eg. sewerage, student numbers and capacity] are still prohibitive, so why was the Abundance Rd site selected? To avoid the FOREVER conflicts, chaos, complaints and collisions, the NSW DoE should work with Port Stephens Council (PSC) and the Medowie community (specifically Real Estate agents) to find an appropriate site for the NMPHS. WHY has the NSW Government short changed the Medowie community in regards to community consultation? as in November 2024 residents and business owners were promised that the "the next step is for us to have another info session for community involving Council as well" [refer SAD_B]. This stated "next step" did this not happen. WHY is the NSW Government FORCING an inappropriately located school development on the residents and business owners of Medowie? The next step should be a return to the drawing board to establish a Public High School plan that satisfactorily caters for residents, business owners, other schools and emergency services, as well as for the future by taking into account traffic flow [pedestrian, cyclists, vehicles and busses] now and forever. As things stand the NSW Government is PLANNING TO FAIL the Medowie community. WHY does the NMPHS only cater for 649 students? when there are 1000+ students travelling by bus to public high schools	No
		7								

Our Ref: ID 2943
Your Ref: P5-2025-44

26 March 2025

Tejal Bafna
NSW Department of Education
Level 11
8 Central Avenue
Eveleigh NSW 2015
Via email

email: Part5Assessments@det.nsw.edu.au
CC: lisa.ignatavicius1@ses.nsw.gov.au

Dear Tejal,

Notification under section 3.37A of the State Environmental Planning Policy (Transport and Infrastructure) 2021 in relation to the proposed New high school for Medowie.

Thank you for the notification under section 3.37A of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* in relation to the proposed new High School at 6 Abundance Street, Medowie. It is understood that the proposed new school will accommodate 640 students in 29 permanent teaching spaces, including 3 support teaching spaces across 3-storeys of buildings on the site. The proposed development will consist of the following:

- 29 permanent teaching spaces including 3 support teaching spaces, to accommodate 640 students, and school hall to accommodate 1,000 students.
- Main vehicular ingress and egress to Ferodale Road to the north, with a new pedestrian and vehicle crossing proposed.
- Main pedestrian access to Abundance Road and a new pedestrian wombat crossing.
- Kiss and ride, and bus drop and pick up areas to Abundance Road (6 x parallel spaces).
- Approximately 55 x car parking spaces and 70 x bicycle parking spaces.
- Block A (Admin), Block B (FoodTech/Workshop) and Block C (Hall).
- Central quad, 1 playing field, and 1 sports courtyard.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The NSW SES recommends that consideration of flooding issues is undertaken in accordance with the requirements of NSW Government's Flood Prone Land Policy as set out in the Flood Risk Management Manual 2023 (the Manual) and supporting guidelines, including the Support

for Emergency Management Planning and relevant planning directions under the *Environmental Planning and Assessment Act, 1979*. Some of the key considerations relating to emergency management are further detailed in Appendix A.

We refer to our previous communication dated 15 October 2024 (ID2694) and 09 January 2025 (ID2839). We have reviewed the proposal and the flood risk information available to the NSW SES, including the updated Flood Impact Risk Assessment (2025) and Flood Emergency Response Plan (2025), and note that additional modelling has been conducted for the 5% Annual Exceedance Probability (AEP) event, the 1 in 500-year flood event, and the Probable Maximum Flood (PMF) event. In a PMF event, almost the entire site becomes inundated (including the area surrounding all three school blocks) with up to 0.5 metres for the majority of the site and up to 1 metre in the area between the proposed three school buildings and another area west of Block C.[1] We note that the hazard level at the site remains largely H1 up to the 1 in 500 AEP event (with the exception of small isolated areas of H2).[2] However, in a PMF event all school Blocks are surrounded by H2 – H3 flood hazard level and the central courtyard has a H3 flood hazard level[3] – which is unsafe for vehicles, children and the elderly.[4]

The site appears to be a **Low Flood Island**, with access cut before the site becomes completely inundated in a PMF event. Access from Ferodale Road east to Medowie Town Centre is cut during a 1% AEP flood event (or larger) as the road becomes flood affected at Campvale Drain (Brad's Bridge). Alternative access is available to the west via Ferodale Road, Fairlands Road, and on to Grahamstown Road, ultimately linking to the Pacific Highway at Raymond Terrace to the west – which is the proposed evacuation route.[5] However, as previously stated, Ferodale Road west of the site exit is also flood affected, including in frequent events such as the 5% AEP and experiences high hazard (H5) flooding in a PMF event.[6] Notably, the proposed evacuation route is flood affected and considered unsafe for small vehicles during the 1 in 500 AEP flood event, and unsafe for all vehicles during the peak of a PMF event.[7]

The updated Flood Emergency Response Plan (FERP) notes *"Peak flood levels were observed during the 30-minute storm event to several hours for the 1% AEP and the PMF storm event. The high intensity short duration flood behaviour is considered flash flooding and there would be insufficient or no warning following the start of the storm event. This is considered short duration 'flash flooding' and the warning provided would be for immediate safety precautions such as evacuation off the open playing fields, emergency evacuation out of areas where significant water will be stored, temporary refuge in buildings on site, and accounting for*

[1] Enstruct. 2025. Flood Impact Risk Assessment – Revision E. Figure 10, page 12

[2] Enstruct. 2025. Flood Impact Risk Assessment – Revision E. Figure 19, page 17

[3] Enstruct. 2025. Flood Impact Risk Assessment – Revision E. Figure 20, page 18

[4] Department of Planning and Environment. 2023. Flood risk management guideline FB03, Flood Hazard - Figure 1 General flood hazard vulnerability curve, page 3

[5] Enstruct. 2025. Flood Impact Risk Assessment – Revision E. Figure 15, page 15

[6] Enstruct. 2025. Flood Impact Risk Assessment – Revision E. Figure 17, page 16 & Figure 20, page 18

[7] Enstruct. 2025. Flood Impact Risk Assessment – Revision E, page 15

people on site."[8] Therefore, evacuation must be implemented prior to flood inundation of local roads and the school site.

We note that the proposed Finished Floor Levels (FFLs) for all school buildings (Blocks A, B and C) are at the height of the PMF event level.[9]

Based on this review, we provide the following advice:

- **Recommend** referring to the Port Stephens Flood Emergency Sub Plan[10] to inform flood-specific emergency management arrangements for the school site.
- **Support** the approach for early closure of Medowie High School before the start of the school day and implementing early warning triggers in the FERP for evacuation to be completed prior to flood inundation of local roads, the school site and the wider area.[11]
- **Reiterate** that there are currently no formal flood warning products available for flash flooding at the site, therefore we recommend monitoring BoM Severe Weather/ Severe Thunderstorm Warnings as the most appropriate form of advice to prompt early evacuation, and not expect flood warnings, as stated in the FERP.[12] School closure should be proactive and not rely on receipt of any warnings provided by NSW SES. **Currently, the NSW SES Australian Warning System (AWS) flood-specific warning products are associated with riverine flooding.**
- **Note** that Shelter in Place (SIP) is being considered (in case evacuation becomes unsafe)[13] and we **recommend** ensuring that any proposed refuge space aligns with the Shelter in Place Guideline For Flash Flooding and the Red Cross Preferred Sheltering Practices for Emergency Sheltering in Australia.[14] As part of identifying flood refuge opportunities, we **recommend:**
    - Identifying and analysing the available refuge space, facilities and the maximum number of people who may require sheltering at any given time, to ascertain if this complies with the SIP requirements (for example, having a minimum floor space of 2 m² per person[15]).
    - considering that any proposed refuge location should be above the height of the PMF, and provide appropriate shelter, water supply, waste management, sanitation, food and space management for the entire period people need to take refuge there.

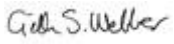
[8] Enstruct. 2025. Flood Emergency Response Plan – Revision C, page 12
[9] Enstruct. 2025. Flood Impact Risk Assessment – Revision E. Table 1, page 15
[10] NSW SES. 2022. Port Stephens Flood Emergency Sub Plan. Volume 1
[11] Enstruct. 2025. Flood Emergency Response Plan page 3
[12] Enstruct. 2025. Flood Emergency Response Plan – Revision C, page 13 - 14
[13] Enstruct. 2025. Flood Emergency Response Plan – Revision C, page 14
[14] Smith, C., and Parsons, C. 2015. Preferred Sheltering Practices for Emergency Sheltering in Australia
[15] DPHI. 2024. Shelter in place guideline for flash flooding, page 5

- considering the high hazard flooding on the surrounding road network and the sensitive nature of the development.[16]

- **Reiterate** that the FERP should include clear flood emergency response actions, including arrangements for sheltering, associated trigger points and timeframes. Section 8 of the FERP does not provide clarity around evacuation triggers, proposed sheltering arrangements. In addition, a number of actions appear to be out of order (e.g display signage that evacuation has occurred before actual evacuation).[17] **Please note that NSW SES does not have statutory authority to endorse or approve flood emergency response plans.**
- **Recommend** ensuring that all site users, including parents and carers, are made aware of the flood risk at the site and broader area for the lifespan of the development. Evacuation must not require people to drive or walk through flood water.

Please feel free to contact Ana Chitu via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely,



Gillian Webber
Coordinator Emergency Risk Assessment - Regional
NSW State Emergency Service

[16] DPHI. 2024. Shelter in place guideline for flash flooding, Point 3 & 8c, page 4
[17] Enstruct. 2025. Flood Emergency Response Plan – Revision C, page 14

Australian Government
Department of Defence
Security and Estate Group

ID-EP-DLP&R/OUT/2025/BS65184757

Tejal Bafna
Senior Statutory Planner
Office of the Deputy Secretary
School Infrastructure NSW
Level 11
8 Central Avenue
Eveleigh NSW 2015

Dear Sir/Madam

RE: P5-2025-44 PROPOSED NEW GOVERNMENT HIGH SCHOOL, 6 ABUNDANCE ROAD, MEDOWIE, NSW (LOT 3 DP788451)

Thank you for referring the abovementioned proposal to the Department of Defence (Defence) for comment. Defence understands that the proposal is for a new school, including demolition, new building and structures, landscaping, sport and play spaces, and associated infrastructure at 6 Abundance Road, Medowie. The subject site is approximately 4.3 kilometers northeast of RAAF Base Williamtown.

Defence has assessed the proposal as presented for any possible impact on the safety of flying operations at RAAF Base Williamtown. Defence seeks to ensure that the long term viability of RAAF Base Williamtown is not compromised by inappropriate development on surrounding land, as this has the potential to impact on Australia's Defence capability. On this basis, Defence would like to make the following comments.

Aircraft Noise

Defence acknowledges that the subject site is outside the 20 contour of the 2025 Australian Noise Exposure Forecast for RAAF Base Williamtown and Salt Ash Air Weapons Range. However, due to the subject sites location in close proximity to the base and weapons range, it will experience some level of aircraft noise.

While Defence is conscious of the noise generated by its activities and makes every effort to minimise community aircraft noise exposure, Defence cannot readily modify its activities due to the establishment or intensification of noise – sensitive developments in close proximity to Salt Ash Air Weapons Range and RAAF Base Williamtown. Defence will not accept any liability based on aircraft noise.

Defence (Aviation Area) Regulations

Under the Defence (Aviation Area) (DAA) Regulations, the subject site is constrained by building height controls that protect airspace near RAAF Base Williamtown to ensure the safety of aircraft on approach, departure and low-flying manoeuvers. The DAA requires Defence approval of any structure that may pose a hazard to military aviation within a radius of approximately 15 km of RAAF Base Williamtown. This includes vegetation and man-made structures including ancillary such as plant equipment and aerials and temporary structures such as cranes.

The DAA constraint for the subject site is an area where "Structures higher than 45 metres above ground level (AGL) requires approval". The structure height refers to height above natural ground level. If future buildings or structures were to infringe the building height triggers applicable to the subject site Defence approval under the DAA regulations is required. Any temporary structures such as cranes used during construction would also need approval under the DAA.

Please note that DAA approval is separate to any approval that may be obtained under New South Wales Legislation. Further information on the DAA Regulations, including the Defence (RAAF Base Williamtown Defence Aviation Area) Declaration 2024 map is available through the following link https://www.defence.gov.au/about/locations-property/defence-aviation-areas-regulation to Defence's website.

Bird Strike

The subject site is located in an area mapped by Defence as "Birdstrike Zone B". In this area, certain land uses that have the potential to attract wildlife should be avoided, as they will potentially increase the risk for bird strike for aircraft operation from RAAF Base Williamtown.

Water management structures, such as drainage basins that are associated with the proposed development might be attractive to birds and will potentially increase the risk of bird strike for such aircraft. Defence requests that appropriate advice to the applicant be included in any approval, which addresses the bird strike risk from proposed drainage basins, as well as, the need for their design to give consideration to the minimisation of bird habitat opportunities and the ongoing monitoring of bird activities upon their construction.

Organic waste and/or storage of commercial bins associated with proposed development might also be attractive to vermin and/or birds and will potentially increase the risk of bird strike operating from RAAF Base Williamtown. Defence therefore requests that appropriate advice to the applicant be included in any approval which addresses the management of organic waste (such as maximum storage onsite and the use of covered/enclosed bins).

Should you wish to discuss the content of this advice further, my point of contact is Anthony Deutschmann at land.planning@defence.gov.au

Yours sincerely,

Timothy Hogan

Director Land Planning & Regulation
Department of Defence
(02) 5109 7933
Timothy.hogan2@defence.gov.au

14 March 2025

Hunter Water Corporation
ABN 46 228 513 446

PO Box 5171
HRMC NSW 2310
36 Honeysuckle Drive
NEWCASTLE NSW 2300
1300 657 657 (T)
(02) 4979 9468 (F)
enquiries@hunterwater.com.au
hunterwater.com.au

01 April 2025

Our Ref: HW2025/316

Planning and Assessment
NSW Department of Education

Via email: NSW Planning portal

To Whom It May Concern

RE: P5-2025-44 – PROPOSED NEW HIGH SCHOOL FOR MEDOWIE AT 6 ABUNDANCE ROAD, MEDOWIE

Thank you for the Department's letter of 24 February 2025, notifying Hunter Water of the proposed new high school for Medowie, to be located at 6 Abundance Rd, Medowie (Lot 3 DP788451). Whilst we have no objections as a neighbouring property owner, we believe this notification should also be referred to Hunter Water due to the development proposal being situated within a drinking water catchment, as further explained below.

Sections 55 and 56 of the *Hunter Water Act 1991* (NSW) require public agencies undertaking activities in gazetted drinking water catchments (special areas) to give notice of the activity to the Secretary (of the Department of Climate Change, Energy, the Environment and Water (DCCEEW)), and subsequently Hunter Water, to allow for representations to be made to the agency regarding the activity. In the interests of time and efficiency, the following information is what Hunter Water would have provided if notified of the proposed development and provided an opportunity to review the proposal.

Hunter Water's expectations and minimum standards for all development in drinking water catchments are described in "*Protecting our Drinking Water Catchments: Guidelines for developments in the drinking water catchments"* which are discussed further below. The guidelines were referenced in the Development Requirements Letter (reference 2024-1878) that was issued to the Department regarding the proposed development on 17 December 2024. Hunter Water requires compliance with the requirements prior to the connection to water and sewer services.

Hunter Water seeks to engage with all proponents of development that could impact on our drinking water catchments in a productive and collaborative manner to ensure the standards described in the abovementioned guidelines are achieved.

We note that notice of the proposed development and supporting documentation is currently on public exhibition via the NSW Planning Portal at https://www.planningportal.nsw.gov.au/part-5/new-high-school-medowie. This response is being provided via the planning portal in response to the exhibition notice, with a copy to the Education Department at the email address (schoolinfrastructure@det.nsw.edu.au) provided in the notification letter.

Grahamstown Dam Catchment
The proposed development falls within the Grahamstown Catchment Area, a gazetted Special Area under the Hunter Water Act 1991 and referenced in the *Hunter Water Regulation 2024*. This catchment drains to Grahamstown Dam, which supplies drinking water to approximately 60% of the population of the Lower Hunter.

Hunter Water's Operating Licence requires compliance with the Framework for Management of Drinking Water Quality that is part of the Australian Drinking Water Guidelines (ADWG). The Framework requires adoption of a multiple barrier approach to water quality, and states that "the most effective barrier is protection of source waters to the maximum degree practicable". Protection of land within the Special Area is key to ensuring that this barrier is effective. In accordance with the *Hunter Water Regulation 2024*, prevention of pollution or contamination of water in the Special Area is of paramount importance to Hunter Water and for the protection of water quality in Grahamstown Dam.

Hunter Water expects that all development in drinking water catchments will demonstrate a Neutral or Beneficial Effect (NorBE) on water quality. A development is considered to demonstrate NorBE if the development:
(a) has no identifiable potential impact on water quality, or
(b) will contain any water quality impact on the development site and prevent it from reaching any watercourse, waterbody or drainage depression on the site, or
(c) will transfer any water quality impact outside the site where it is treated and disposed of to standards approved by the consent authority.

Further details are provided in Hunter Water's "*Protecting our Drinking Water Catchments: Guidelines for developments in the drinking water catchments"*, a copy of which is available on Hunter Water's web site at https://www.hunterwater.com.au/building-and-developing/developers-and-designers/subdividing-and-developing. The guidelines were prepared in consultation with the Department of Planning, Housing and Infrastructure, local councils and NSW Health.

Hunter Water's Review of the REF
We have reviewed the Review of Environmental Factors (REF) and other supporting plans and documentation on exhibition at https://www.planningportal.nsw.gov.au/part-5/new-high-school-medowie with regard to our development guidelines and clauses 171 and 171A of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation). Our review indicates that the information needed to demonstrate NorBE as achievable is not included in the REF but should be, in order to comply with the requirements of the EP&A Regulation.

The primary ways in which this development can adversely affect water quality in the catchment are through construction activities, which can mobilise significant sediment loads to water bodies, and sewage and stormwater discharge during the occupation phase, which can introduce sediment, pollutants and pathogens into water bodies.

As the development is proposed to be connected to the reticulated sewer network, it is considered to meet NorBE in terms of wastewater unless that connection is not achievable. Servicing requirements are addressed below.

Other applicable risks are mentioned in the Civil Engineering Report (prepared by Enstruct Group) exhibited as Attachment 8 of the REF. This report indicates that appropriate erosion and sediment controls will be implemented. Hunter Water recommends if any fill is required within the drinking water catchment that only certified Virgin Excavated Natural Material (VENM) be used.

Information about Water Sensitive Urban Design, Stormwater Quality and Model for Urban Stormwater Improvement Conceptualisation (MUSIC modelling), in sections 4.6, 4.7 & 4.8 of the report is limited and inconsistent with our expectations for demonstration of effective stormwater management.

Whilst the Port Stephens Council Development Control Plan requirement to meet "whichever achieves the better water quality outcome, NorBE or Council's water quality targets" is mentioned, no MUSIC modelling results are presented in the report to demonstrate if either can be achieved. Instead, the report includes a brief written description of the treatment train proposed and indicates that modelling has determined the required amount of 'ZPG stormfilter' cartridges in two instances.

Hunter Water advises that for stormwater discharge leaving a site, a development can demonstrate NorBE for typical stormwater pollutants (total nitrogen, total phosphorus, total suspended solids and gross pollutants) through the use of MUSIC modelling, by comparing the post-development pollutant loads to existing pollutant loads. If MUSIC modelling is undertaken, the appropriate Port Stephens MUSIC-link defaults should be used, and the modelling files should be provided to Hunter Water for review, together with the MUSIC Link report and justification for the catchment selected and any parameters used that are outside the usual values.

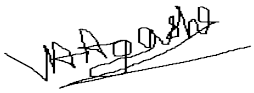
Upon receipt of the modelling files, Hunter Water can assess the modelling input parameters to determine the validity of reported results. We can then compare the modelling with the proposed civil plans, accompanying stormwater management report and other supporting documentation that might be a constraint to design feasibility such as a flood impact assessment.

We recommend that the MUSIC modelling be designed in accordance with the *Using MUSIC in Sydney Drinking Water Catchment* (WaterNSW, 2023) for any design considerations outside of Council's MUSIC-link defaults. This guidance should be consulted to ensure the treatment efficiencies associated with modelling nodes, for any proprietary treatment measures proposed, are appropriately justified.

Water and Sewer Servicing
For details of water and sewer servicing requirements please refer to our previously issued notice letter dated 17 December 2024, reference 2024-1878. If you require any further information on water or wastewater servicing, please contact the Hunter Water's Account Manager nominated in that letter.

If you require further advice or clarification regarding the information provided, or questions regarding the application of NorBE, please contact our Manager Water Planning, Kirby Morrison at kirby.morrison@hunterwater.com.au.

Yours sincerely



Varun Agashe
Group Manager, Development Services

cc. schoolinfrastructure@det.nsw.edu.au

Australian Government
Civil Aviation Safety Authority

AIR NAVIGATION, AIRSPACE AND AERODROMES BRANCH

CASA Ref: F22/27407-44

DE ref: P5-2025-44 26/02/2025

Tejal Bafna
The Department of Education
NSW
part5assessments@det.nsw.edu.au

NEW HIGH SCHOOL FOR MEDOWIE AT 6 ABUNDANCE ROAD, CASA COMMENTS

CASA has reviewed the Architectural Drawings for the new High School for Medowie at 6 Abundance Road.

The height of the 3 storey building(s) is in the order of RL 28.850m. The site is approximately 5.4km from the runway at RAAF Base Williamtown / Newcastle Airport. The buildings will be under the Obstacle Limitation Surfaces.

RAAF Base Williamtown / Newcastle Airport is operated by Defence (Newcastle Airport is a lessee). Therefore, Defence is the primary stakeholder for town planning issues, height of structures, cranes etc. land.planning@defence.gov.au

The site is not near any strategically important hospital Helicopter Landing Sites

CASA has no issues with and no objections to the High School for Medowie. Notwithstanding that CASA is not an Approval Authority, CASA does not object to the proposal. There are no civil aviation safety implications.

Please note that CASA does not have regulatory responsibilities regarding aircraft noise and does not comment on noise issues.

Yours sincerely

David Alder

David Alder
Aerodrome Engineer

13 March 2025

From:	LANDS
To:	Tejal Bafna (Tejal Bafna)
Cc:	Jenny Chu; David Lewis; LANDS
Subject:	RE: Jemena - Notice of Exhibition of Proposed Activity under Part 5 of EP&A Act - New high school for Medowie
Date:	Thursday, 27 February 2025 1:41:38 PM
Attachments:	image002.png image003.png

Hi Tejal,

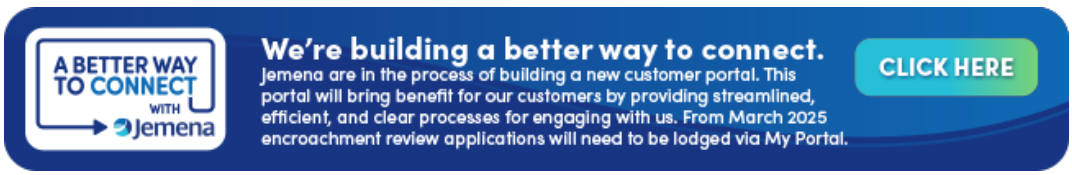
Jemena has reviewed the location of the Development Application and undertaken a review of the documentation provided.

Jemena has no objection to this development application.

Ensure appropriate Before You Dig Australia (BYDA) processes are followed as part of the construction process.

cheers

Robert Campbell
Lands Management Officer
Jemena
Level 10, 99 Walker Street North Sydney,NSW, 2060
0404 885742
robert.campbell@jemena.com.au | www.jemena.com.au



From: Tejal Bafna (Tejal Bafna) <Tejal.Bafna1@det.nsw.edu.au>
Sent: Wednesday, 26 February 2025 10:01 AM
To: LANDS <lands@jemena.com.au>
Cc: Jenny Chu <Jenny.Chu4@det.nsw.edu.au>; David Lewis <david.lewis83@det.nsw.edu.au>
Subject: Jemena - Notice of Exhibition of Proposed Activity under Part 5 of EP&A Act - New high school for Medowie

Description of the Activity: Construction and operation of a new government school, including demolition, earthworks, buildings and structures, landscaping, sport and play spaces, and associated supporting infrastructure as described in the Review of Environmental Factors.
Exhibition Period: 3 March 2025 to 30 March 2025

The REF and attachments will be available on the Division 5.1 (Part 5) Planning Portal (https://www.planningportal.nsw.gov.au/part-5) during the exhibition period as set out in the attached notice.

The department invites you to provide comments by 30 March 2025. .

If you have any enquiries, please contact Tejal Bafna, Senior Statutory Planner at Part5Assessments@det.nsw.edu.au.

Regards,
Planning and Assessment
Department of Education

Regards
Tejal Bafna
Senior Statutory Planner | Office of the Deputy Secretary | School Infrastructure NSW
M 0416 488 983 | **E** tejal.bafna1@det.nsw.edu.au | **W** schoolinfrastructure.nsw.gov.au
Level 11, 8 Central Avenue, Eveleigh, NSW 2015
For any statutory planning assistance, please complete the 'Request for Statutory Planning Assistance' form.

NSW GOVERNMENT Education

I acknowledge the homelands of all Aboriginal people and pay my respect to Country.

PORT STEPHENS COUNCIL

Murat Dizdar
Secretary
NSW Department of Education
GPO Box 33, Sydney NSW 2001
Via public feedback portal

Re: Public Exhibition – Review of Environmental Factors – Medowie High School

Thank you for the opportunity to make a submission on the Review of Environmental Factors – Medowie High School.

Port Stephens Council supports the Government's commitment to the delivery of the new Medowie High School. Council has long advocated for the school to support the needs of the growing community of Medowie.

Council has considered the exhibited Review of Environmental Factors and provides the following comments. The feedback seeks to highlight key issues that Council has identified with the proposal and provide solutions to address the issues raised.

Vehicle Movements

Abundance Road is proposed as the primary access to the site. Both the proposed bus bays and kiss and ride areas are to be located in this location. There is no proposal to upgrade the existing transport/road infrastructure to support this. As such to safely utilise both the Kiss and Ride area as well as the bus stops, all traffic from the north and east of Medowie will need to use the Fairlands / Lisadell Loop as described in the Transport Impact Assessment. This potentially adds in excess of 4km in travel distance for every journey. The REF states that 30% of students would access the site from the north with a further 60% of students would access the site from the east. This would mean that 90% of students who utilise public or private transport to get to school would need to make this extended journey.

This will result in additional, unnecessary kilometres travelled, generation of additional noise and traffic movements and impacts on properties that would otherwise be largely unaffected by this proposal. Council also holds concerns that vehicles will either perform unsafe u-turns on Abundance Road or drop-off children on the eastern side of Abundance Road which would impact other road users and potentially lead to children crossing the road in unsafe locations.

Council would suggest addressing this via the construction of a roundabout at the Industrial Road intersection. This would allow for u-turns for all vehicles (private and public) and minimise the need to impact areas beyond the immediate footprint of the high school project.

PORT STEPHENS COUNCIL

116 Adelaide Street
Raymond Terrace NSW 2324

PO Box 42
Raymond Terrace NSW 2324

p 02 4988 0255
e council@portstephens.nsw.gov.au

w portstephens.nsw.gov.au

Alternatively, the project could look to develop an internal u-turn / kiss and ride facility on the southern portion of the site. This would have the same benefit in it would allow for u-turns for all vehicles and minimise the need to impact areas beyond the immediate footprint of the high school.

Public Transport

The Traffic Impact Assessment (TIA) seeks to increase the number of students utilising public transport via both the existing and proposed bus network which is strongly supported. However, the size of the proposed bus bay is considered to be inadequate, with the capacity for only 2 bus spaces proposed.

The TIA recommends that the bus operation be monitored once the school is operational highlighting the concern regarding the capacity of the proposed bus bays. Should there be a deficiency identified post construction there will be limited opportunity to reconsider the need or upgrade the infrastructure.

As such Council requests that an additional bus bay be provided to ensure that the expected number of students can safely use the public transport network to make their way to and from school.

Pedestrian Movements

The current proposal includes additional pedestrian links to allow for the utilisation of the existing pedestrian refuge east of Abundance Road. This provides access to the broader Medowie pedestrian network via the footpath on the northern side of Ferodale Road. Council welcomes the inclusion of additional footpaths to help students make their way to and from school.

Ferodale Road is the primary east / west connection within Medowie. In excess of 750 vehicles are recorded per hour during both the morning and afternoon peak travelling along Ferodale Road. This coupled with the relevant speed data suggests the need for additional considerations of pedestrian safety.

To ensure that students can safely cross Ferodale Road when approaching from the east, Council requests the upgrade of the existing pedestrian refuge located adjacent to the Medowie Ambulance Station to a formalised crossing. This will assist in the reduction of speed on approach to the school, increasing visibility of pedestrian movement and prioritising the safety of vulnerable road users.

Student Parking

The REF states that 46 standard and 3 accessible on-site car parking spaces will be provided for staff. This car park is intended to support staff parking only. No on-site parking spaces are provided for students. The REF also notes that visitors will need to utilise existing on-street parking along Ferodale Road and Abundance Road. These roads are

not currently line marked (with either fog lines or designated parking spaces) and are not signposted in relation to parking area, time regulations and no stopping relative to corners / driveways etc. At the very least, Council would expect that these treatments are included within the project scope to suitably address the off-site development impacts.

Notwithstanding this, the TIA assumes 23% of Years 11 and 12 students will drive to school, which will generate the need for up to 15 street parking spaces.

The Port Stephens Council's Development Control Plan (DCP) recognises the need for both staff and senior student parking. It stipulates the following parking rates for educational establishments:

- One car space per employee
- One car space per eight senior high school students
- One accessible parking space per 20 car spaces

This is a key project issue that has been raised with the School Infrastructure team by both Council staff and the elected Council.

To address this issue, Council requests that a portion of the proposed on-site parking be dedicated to senior students. It is considered that this could be achieved with minimal impact on the overall project. Alternatively, Council would also be supportive of a dedicated student parking area to the south of the site on the area reserved for future school expansion (understood to have no confirmed funding or timeframe for delivery). This would ensure that the intent of Council's DCP is achieved and would serve to minimise the impacts of the project on the areas surrounding the school.

Port Stephens Council appreciates the opportunity to review and provide comments on the Review of Environmental Factors – Medowie High School.
.
Please direct any further enquiries that you may have to Mathew Egan - Development Planning Coordinator on (02) 4988 0121 or via email at mathew.egan@portstephens.nsw.gov.au.

Yours sincerely,

Brock Lamont
Strategy and Environment Section Manager

28 March 2024

CC The Hon. Kate Rebecca Washington – Member for Port Stephens

NSW Department of Education
164 WALTERS RD
BLACKTOWN NSW 2148

Your reference: P5-2025-44
Our reference: DA20250304000794-Original-1

ATTENTION: Tejal Bafna

Date: Thursday 20 March 2025

Dear Sir/Madam,

Development Application
State Environmental Planning Policy – SEPP – School
NSW RFS - Notice of Exhibition of Proposed Activity under Part 5 of EP&A Act - New high school for Medowie - 6 ABUNDANCE ROAD MEDOWIE NSW 2318, 3//DP788451

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 26/02/2025.

Construction and operation of a new government school, including demolition, earthworks, buildings and structures, landscaping, sport and play spaces, and associated supporting infrastructure (the activity). The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the Environmental Planning and Assessment Act 1979.

The subject land is mapped bushfire prone land. The neighbourhood consists of developed lots with remnant vegetation on undeveloped lands.

SEPP Transport & Infrastructure S3.11 states -
(2) A public authority, or a person acting on behalf of a public authority, must consider Planning for Bush Fire Protection before carrying out the development in an area that is bush fire prone land.

Rural Fires Act 1997 states:-
S100B Bush fire safety authorities

(1) The Commissioner may issue a bush fire safety authority for

(b) development of bush fire prone land for a special fire protection purpose

(3) A person must obtain such a bush fire safety authority before developing bush fire prone land for a purpose referred to in subsection (1).

(6) In this section—

Postal address
NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address
NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
F (02) 8741 5550
www.rfs.nsw.gov.au

special fire protection purpose means the purpose of the following—
(a) a school,

The new school is required to obtain a Bush Fire Safety Authority. Upon application the NSW RFS will review the school documentation.

For any queries regarding this correspondence, please contact Alan Bawden on 1300 NSW RFS.

Yours sincerely,

Allyn Purkiss
Manager Planning & Environment Services
Built & Natural Environment

Transport for NSW

27 March 2025

File No: NTH24/00752/002
Your Ref: Notice of Exhibition - New Medowie High School

Manager Statutory Planning
Department of Education
Level 8, 259 George Street,
Sydney, NSW 2000

Attention: Tejal Bafna

Proposed Activity – Public exhibition of the Review of Environmental Factors - New high school for Medowie, Abundance Road Medowie

Thank you for referring the abovementioned Review of Environmental Factors (REF) to Transport for NSW (TfNSW) on 26 March 2025 for advice in accordance with the State Environmental Planning Policy (Transport and Infrastructure) 2021.

TfNSW key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with the *Future Transport Strategy*.

Abundance Road and is a local road and Ferodale Road is a local road. Council is the roads authority for both roads and all other public roads in the area, in accordance with Section 7 of the *Roads Act 1993*.

Advice to the Determining Authority

- A School Speed Zone is proposed on Abundace Road and an extension is proposed on Ferodale Road. TfNSW is responsible for the review and/or approval of permanent speed zones in NSW and these reviews are undertaken in accordance with the NSW Speed Zoning Standard. Please refer to this Standard for further information on key factors influencing speed zones.

  To ensure compliance to the Speed Zone Standard can be met, TfNSW recommend 'in-principle' support is sought to change and/or relocate the current speed zone prior to finalising the design, where necessary.

- TfNSW encourages consideration of active and public transport facilities and connections to support place outcomes and the objectives of the Future Transport Strategy 2056.

- TfNSW supports the provision of bicycle storage and end-of-trip facilities to encourage travel by active transport modes.

  TfNSW recommends that the Department of Education consider the preparation and implementation of a Green Travel Plan (Sustainable Transport Plan) setting objectives, targets and measures to reduce private car travel and encourage travel by active and public transport modes. The plan should include:

6 Stewart Avenue (Locked Bag 2030) Newcastle West NSW 2302
76 Victoria Street (PO Box 576) Grafton NSW 2460
1300 207 783 ABN 18 804 239 602
transport.nsw.gov.au

a. Mode share targets that are specific, measurable and achievable with timeframes for implementation.

b. Tools and actions to promote and support the implementation of the plan, including roles and responsibilities for relevant persons and supporting communication measures.

c. Details of regarding methodology, monitoring and review of the plan over the life of the development.

- The regulation of parking within a public road reserve is a matter for Port Stephens Council. Any regulatory signs and devices will require the endorsement of the Local Traffic Committee prior to Council approval. Please refer to the RTA's guide to the delegation to councils for the regulation of traffic including traffic committees.

Yours faithfully

Should you require further information please contact Kane Hitchcock, Development Services Case Officer, on 1300 207 783 or by emailing development.north@transport.nsw.gov.au

Holly Taylor
A/Team Leader Development Services
Transport Planning
Planning, Integration & Passenger

Appendix B

Traffic Response to Submissions

Our ref: PS211246_New Medowie High School_Transport and Traffic response to Public Exhibition_RevB

13 May 2025

Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001

Tel: +61 2 9272 5100
Fax: +61 2 9272 5101
www.wsp.com

Nathan Martin
Associate Director
Colliers
Level 30, Grosvenor Place
225 George Street, Sydney, NSW, 2000, Australia

Dear Nathan

Thank you for providing a copy of the public and agency response relating to transport for the proposed new high school in Medowie.

In response to the feedback received, we have prepared separate tables addressing the comments raised by both the Department of Education Assessment Team and members of the public. These are included below for your review.

Each comment has been assigned a unique identifier:

- 'D_#' for comments from the Assessment Team
- 'P_#' for public submissions
- 'T_#' for Transport for NSW transport comments
- 'B_#' for Transport for NSW bus comments
- 'A_#' for Transport for NSW active transport comments.

In response to the submissions and agency comments, the proposal has been modified in terms of the on-street parking allocation, bus stops and footpaths. The impacts of these changes are assessed in this letter. An updated set of mitigation measures and conclusions follow.

Yours sincerely

Tom van Drempt
Principal Transport Engineer

1. Response to agency and public comments

Table 1.1 Response to the NSW Department of Education Assessment Team

ID	Item	Comment	WSP Response
D_01	Kiss and Drop access / safety	It is noted that the proposed kiss and drop arrangements will result in a 4km detour for parents / carers to access the facility. This represents a significant impost in both distance and time (~8 minutes). Of particular concern is that parents / carers will attempt to turn around in Abundance Road in order to avoid the detour. In this regard, it is noted that the traffic report identified poor speed compliance in the area at all times of the day including school zone periods and that a fatality has recently occurred in Abundance Road. Further investigation is requested in relation to the efficacy of the arrangement as proposed, together with exploration of alternative arrangements, including but not limited to the provision of an on-site turning facility / kiss and drop. It is noted that this may require additional mitigation measures to address these issues.	A second kiss and drop is proposed on Ferodale Road, south side, east of the new school gate. This in addition to the kiss and drop on Abundance Road will give parents / guardians the flexibility to choose the one that is most convenient for them. The Abundance Road kiss and drop will potentially require a 4.1 km[1] loop, depending on where they are travelling to/from. The new proposed kiss and drop on Ferodale Road would require a block diversion of 3.9km)via Ferodale Road, Waropara Road, Kula Road and Kirrang Drive). However, it opens up other paths to Medowie east and north that may be a shorter route. It is noted that the high anticipated use of public and active transport, combined with typically lower kiss and drop demand at high schools, suggests that only a small number (23 per cent) of students will be affected by this arrangement. The following additional mitigation measures would help minimise the risk of U-turns and turning around on Abundance Road: — Clear communication to parents from the Travel Plan Coordinator and school administration about the approved access arrangements and the consequences of conflicting movements e.g. safety risks to students and other parents — Clear communication to parents about other locations where students can be picked-up and dropped-off on Abundance and Ferodale Roads.

[1] Google Streetview, viewed 9 April 2025, using Ferodale Road, Fairlands Road, Lisadell Road and Abundance Road

ID	Item	Comment	WSP Response
D_02	Safety issues associated with the existing wombat crossing in Ferodale Road.	The existing wombat crossing outside of Medowie Public School has been nominated to facilitate pedestrian movements west of the Medowie High School site. In this regard, it is requested that the following matters are addressed: — Safety issues (pedestrian / vehicle conflict) arising from increased pedestrian activity across two wide driveways associated with the mixed-use service station/industrial site at 26 Ferodale Road. The driveways represent a crossing distance of approx. 11.5m and 8m respectively. — The footpath on the southern side of Ferodale Road currently terminates before the Medowie High School site It is noted that this may require additional mitigation measures to address these issues.	The proposal has been amended to include the construction of a footpath on the southern side of Ferodale Road and the west side of Abundance Road, connecting both new school gates to the footpath network in multiple directions. As described, the existing wombat crossing outside Medowie Public School will support students travelling to the new Medowie High School from the west. This arrangement has been deemed acceptable due to the following: — It is anticipated that the majority of students will travel to the high school from the east via Ferodale Road (based on the distribution of dwellings) and therefore will use the new crossing proposed on Abundance Road (based on the findings from the Rapid Transport Assessment (RTA)) — Some students attending the existing Medowie Public School likely cross the two driveways at 26 Ferodale Road when accessing their school from the east (southern side of Ferodale Road). As no safety concerns have been reported with this arrangement, it is expected that high school students will be able to access their school in a similar manner. — Given that these are high school aged children and that, if walking, they will have had to negotiate other instances of driveway and road crossings on the rest of their journey, this is expected to be within their level of capability. The following additional mitigation measures will support this arrangement: — It is recommended that the Travel Access Guide (TAG) directs students walking to and from school to access the site from Abundance Road, therefore minimising the number of students crossing the 26 Ferodale Road site and traversing across the unpaved frontage on Ferodale Road. The TAG can direct students to cross the road at certain locations within the Medowie town centre / locale, to avoid traversing along Ferodale Road to the west of the site — Students requiring DDA support will use the staff carpark for access to the school (as outlined in the School Travel Plan (STP)). As outlined in the STP, it is recommended that the Travel Plan Coordinator (TPC) fulfills their duty of care in line with Work Health and Safety legislation, which includes recording and responding to safety incidents that may arise at access points. —

ID	Item	Comment	WSP Response
D_03	Pedestrian refuge / pedestrian infrastructure	The REF indicates that the existing pedestrian refuge outside of Medowie Ambulance Station will support pedestrian movements east of the Medowie High School Site. However, it is noted that there are no footpaths on the southern side of Ferodale Road between the school site and this potential crossing point at the pedestrian refuge. Please provide additional justification as to the workability of such an arrangement and its efficacy in providing a safe pedestrian environment and supporting active transport.	As outlined in Figure 3.2 of the Transport and Accessibility Impact Assessment, a new shared path is proposed to connect the pedestrian refuge on Ferodale Road with the new raised pedestrian crossing on Abundance Road. This arrangement will support safe access from the pedestrian refuge to the school access on Abundance Road. The proposal has been amended to include new footpaths on the west side of Abundance Road from the new school gate to Ferodale Road and the southern side of Ferodale Road from Abundance Road to the existing footpath.
D_04	Pedestrian infrastructure	It is noted the Transport and Accessibility Impact Assessment (TAIA) only nominates footpaths to be provided on the Abundance Road school site frontage, which appears to be inconsistent with the plans provided in Appendix A to that report. Please confirm what is proposed.	As outlined in Figure 3.2 of the Transport and Accessibility Impact Assessment, a new shared path is proposed to connect the pedestrian refuge on Ferodale Road with the new raised pedestrian crossing on Abundance Road (consistent with the plan provided in Appendix A). The proposal has been modified to include a new footpath on the southern side of Ferodale Road and the west side of Abundance Drive, connecting the two new school gates. This provides flexibility in the footpath network and additional options to get to the pedestrian crossing locations.

D_05	Bus services	It is unclear how the limited bus services (12 inbound and 14 outbound, in total) that are currently available to the site and typically one (1) service a day will be able to satisfy the minimum 15 buses indicated in the assessment to cater for the baseline 70% public transport usage. It is understood that upon commencement of operations, the school will only accommodate Years 7 and 8 students, with a delivery plan in place to provide additional public transport services as required over time as the school expands to other years. The draft mitigation measures (No. TR5) includes a requirement for the approved School Transport Plan to be implemented, including but not limited to: (e) a review of the adequacy of the existing school bus services and public bus services to cater for school demand and consultation with TfNSW and other bus providers in the area to increase bus services if required to meet demand. (f) Identification of measures to be implemented where demand exceeds capacity of the bus services Further evidence of consultation to date with relevant stakeholders regarding provision of additional school buses and/or public transport services is requested. The possibility that public transport could be inadequate at any point during life of the school, should be addressed and the assessment should examine mitigation measures resulting in inflated private vehicle trips which will have a flow-on effect on transport impacts and road user safety. We also note the TAIA specifies that the Travel Plan Coordinator (TPC) will need to consult with the road's authority and public transport provider to negotiate additional public transport services as the need arises, the TPC's responsibilities should be verified with TWG.	As outlined in the Transport Accessibility and Impact Assessment the baseline public transport mode share (70 per cent PT use) would demand approximately 15 buses per hour during the drop-off and pick-up peak periods. As stated the existing bus supply falls short, with approximately 12 inbound and 14 outbound services during the morning and evening periods. Transport for NSW regularly reviews its school services to ensure they provide for the needs of students in the area, and this will be required for the opening of a new high school with an anticipated high use of public transport. Engagement with Transport for NSW is recommended to facilitate a thorough review of the likely demand for buses, as well as a review of potential services that can be upgraded or added to the network (including dedicated school services). The Transport Accessibility and Impact Assessment includes a mitigation measure for SI to consult with TfNSW to ensure the bus services is adequately planned: "*Whilst there are currently no endorsed plans by TfNSW for updating the public transport services in the local area, it is important that this demand is monitored to assess whether it exceeds the existing service provision / capacity. It is recommended that the school and TfNSW further collaborate once the new school is operational, to assess the actual demand for public transport and implement any service changes necessary to support e.g. dedicated shuttles, increasing existing service frequency or upgrades to the bus network.*" The School Travel Plan includes an outline of the role and responsibilities of the Travel Plan Coordinator.

ID	Item	Comment	WSP Response
D_06	Adequacy of bus stop infrastructure	It is noted that Council has raised concern about the ability of the existing bus bay in Abundance Road to support the high (70% baseline) bus usage described in the REF and TAIA. The Assessments Team shares this concern and requests that the Project Team provide additional information to address the adequacy of the existing bus stop infrastructure to meet future demand associated with the schools. In the event that bus services to the schools are increased, the timetable may need to be staggered to ensure the bus stops can accommodate additional volumes.	The proposal has been modified to include a new bus stop on the south side of Ferodale Road, a relocation of the stop on the east side of Abundance Road to a more convenient location and additional bus stop space on the west side of Abundance Road in front of the new school. This will increase the number of bus stops in the area available to: — Abundance Road, west side outside school – three bus spaces — Abundance Road, east side relocated to north of proposed pedestrian crossing – one bus space — Ferodale Road, south side, west of new school gate – one bus space — Ferodale Road, north side, near Medowie Public School existing bus stop – one bus space. All bus stops are linked to the new school by footpaths and existing or new marked pedestrian crossings. The increase in bus stops gives additional bus stop capacity for school services. It also provides flexibility for buses to use Ferodale Road or Abundance Road. Existing regular route services (Routes 136 and 137) operate on a 40 minute to one hour headway during peak periods, meaning there are long gaps between buses when these stops can be used by school bus services. Given that the anticipated baseline public transport mode share equates to around 15 buses per hour, the amended four bus stops with increased capacity are considered acceptable. The following additional mitigation measures and proposed, subject to consultation with Transport for NSW, to maximise the usability of the four stops: — Staggering of school bus services to align with gaps in the public bus timetable, allowing uninterrupted operation of regular passenger services — Preparation and implementation of an operations plan to optimise bus stop efficiency — Ongoing monitoring of traffic conditions on Abundance Road by school staff and the Travel Plan Coordinator (see School Travel Plan), to ensure that buses can enter and exit the bay without delay or disruption to other services.

<table>
<tr><th>ID</th><th>Item</th><th>Comment</th><th>WSP Response</th></tr>
<tr><td>D_07</td><td>General</td><td>The LoS of priority intersection should be correctly reported as the worst leg in accordance with TfNSW Modelling Guidelines.</td><td>Table 4.2 in the Transport and Accessibility Impact Assessment does identify the worst leg in accordance with TfNSW Modelling Guidelines.

The results from the SIDRA modelling of the intersection of Ferodale Road / Abundance Road, identify the southern approach (Abundance Road) as the worst intersection leg. The results for this intersection (see table below) indicate that the longest delay in the 2036 AM peak right turning movements (LOS B and average delay 21.2 seconds) is still acceptable in line with the Guide to Transport Impact Assessment (TfNSW, 2024).

This is consistent with the conclusions made in the Transport and Accessibility Impact Assessment and indicates that the critical intersection is anticipated to continue to perform satisfactorily into the future.

<table>
<tr><th></th><th>Total Vol.</th><th>Degree of Saturation</th><th>Overall Delay (s/veh)</th><th>LOS</th><th>Movement with longest delay</th><th>Delay (s/veh)</th><th>Movement with longest queue</th><th>95% Queue Length m</th></tr>
<tr><td>Existing - AM Peak</td><td>141</td><td>0.222</td><td>11.8</td><td>A</td><td>Right-Turn</td><td>12.2</td><td>Left-Turn</td><td>5.7</td></tr>
<tr><td>Existing - PM Peak</td><td>179</td><td>0.267</td><td>11.5</td><td>A</td><td>Right-Turn</td><td>11.6</td><td>Left-Turn</td><td>7.3</td></tr>
<tr><td>Post Dev 2026 - AM Peak</td><td>214</td><td>0.368</td><td>13.8</td><td>A</td><td>Right-Turn</td><td>14.8</td><td>Left-Turn</td><td>12.1</td></tr>
<tr><td>Post Dev 2026 - PM Peak</td><td>226</td><td>0.368</td><td>13.1</td><td>A</td><td>Right-Turn</td><td>13.5</td><td>Left-Turn</td><td>12.1</td></tr>
<tr><td>Post Dev 2036 - AM Peak</td><td>260</td><td>0.593</td><td>19.6</td><td>B</td><td>Right-Turn</td><td>21.2</td><td>Left-Turn</td><td>23.7</td></tr>
<tr><td>Post Dev 2036 - PM Peak</td><td>284</td><td>0.592</td><td>18.3</td><td>B</td><td>Right-Turn</td><td>19</td><td>Left-Turn</td><td>24.2</td></tr>
</table>
</td></tr>
</table>

Table 1.2 Response to the public exhibition comments

ID	Item	Comment	WSP Response
P_01	Parking	The parking capacity in the street is for existing businesses and will be affected by student parking.	High level estimates of student parking were undertaken as part of the Transport and Accessibility Impact Assessment (using ABS census data, population estimates and the baseline mode share of 23 per cent for driving). They indicate that approximately 15 parking spaces would be required. Whilst this is only an estimate using the baseline mode share, it does indicate that the likely demand for all-day on-street parking from the new school will likely be small compared to the supply of kerbspace for parking on Abundance Road. It is therefore expected that the impact on parking for businesses will be small with spare parking available, based on historical imaging data. It is anticipated that the highest demand for on-street parking will not occur all day but rather during the peak pick-up and drop-off periods and as such the following mitigation measures, included in the Transport and Accessibility Impact Assessment, will also be in place to minimise the impacts on on-street parking: — Developing the Travel Access Guide (TAG) to encourage parent pick-up and drop-offs at the kiss and ride bay, to minimise the disruptions to on-street parking — Staggering bell times with the Medowie Primary School (bell times 8:55 AM and 2:50 PM and peak traffic demand 8:00 AM and 3:00 PM) will minimise the short-term demand for parking particularly along Ferodale Road — Implementing behaviour change programs (outlined in the School Travel Plan, Appendix D) to encourage a shift to sustainable travel modes.

ID	Item	Comment	WSP Response
P_02		Parking capacity in the street will reduce capacity for public school parents in the AM and PM	Parents of public school students use Ferodale Road, whereas the student parking for the high school is expected to occur east of the public school and along Abundance Road, reducing the conflicting demand for parking. Parents of the high school will have access to a kiss and drop bay dedicated to school pick-ups and drop-offs as well as on-street spaces anticipated to mostly occur on Abundance Road. From desktop review Abundance Road appears to have a high level of parking availability and many of the industrial businesses along this road provide off-street parking facilities for employees and customers. Therefore it is anticipated that the increased demand for on-street parking can be facilitated in the local street environment. However, the following mitigation measures (outlined in the Transport and Accessibility Impact Assessment) will help minimise the impact of the pick-up and drop-off activities on the local street environment: — Developing the Travel Access Guide (TAG) to encourage parent pick-up and drop-offs at the kiss and ride bay, to minimise the disruptions to on-street parking — Staggering bell times with the Medowie Primary School (bell times 8:55 AM and 2:50 PM and peak traffic demand 8:00 AM and 3:00 PM) will minimise the short-term demand for parking particularly along Ferodale Road — Implementing behaviour change programs (outlined in the School Travel Plan, Appendix D) to encourage a shift to sustainable travel modes.
P_03		Parking will still be congested in the area even with staggered pick up times between the schools	See response #P_02
P_04		Question how the 385 unrestricted carpark locations 'within proximity' to the new school and not on Abundance Road was calculated	This was estimated from a desktop analysis of parking occupancy levels using Nearmap aerial imagery within a distance of 500 metres (see Figure 4.2 of the Transport and Accessibility Impact Assessment). Historical imaging data indicates lower occupancy levels for on-street parking in this area compared with other schools in metropolitan areas and cities. The parking spaces can be reached by a combination of footpaths and/or crossings.
P_05	Abundance / Ferodale Rd intersection	Congestion at Abundance / Ferodale intersection will be an issue and traffic lights should be provided there	The results from the SIDRA intersection modelling (outlined in the Transport and Accessibility Impact Assessment) identified satisfactory performance for the existing intersection arrangement (un-signalised) with the new school operational. Specifically, the lowest performance would be experienced in the 2036 AM peak for right turning movements from Abundance Road, experiencing LOS B and an average delay 21.2 seconds. These results are satisfactory according to the Guide to Transport Impact Assessment (TfNSW, 2024) and would not require the intersection to be upgraded.

ID	Item	Comment	WSP Response
P_06		The Abundance / Ferodale intersection should become a roundabout or traffic lights to accommodate future residential development to the North.	See response #P_05. In addition, the traffic impact of the residential development to the north is outside the scope of this school project. The development mentioned is not confirmed and details are not currently available. The land also requires rezoning. Once the development and its magnitude is confirmed, an assessment process will be required, with a traffic impact assessment including intersection modelling to assess whether an upgrade at the Ferodale Road / Abundance Road intersection is necessary for the future residential development. This will be the responsibility of the private developer. The Department of Education is not responsible for intersection upgrades to accommodate future private residential developments.
P_07		Figure 4.1 seems to indicate no right turn heavy vehicles during the afternoon peak from Abundance Rd with the new school. It appears incongruous for bus bays to be at the school, yet not a single right turn needed in the afternoon, unless I misunderstand the graphic.	The traffic volumes shown in Figure 4.1 are based on traffic counts conducted on Thursday, 22 August 2024. The AM and PM peak periods were identified as 9:15–10:15 AM and 2:30–3:30 PM, respectively. The volumes presented reflect traffic conditions during those periods and are intended to represent typical movement patterns in the area. No heavy vehicle right turns from Abundance Road into Ferodale Road were observed during the PM peak survey period. A review of the current bus timetable indicates that only two services would typically make this movement in the PM: the 1463 school service and the 136 from Raymond Terrace to Stockton via Medowie. The 1463 operates only on Wednesdays during the PM peak and therefore was not captured in the Thursday survey. The 136, while operating on Thursdays, is scheduled to stop at the Medowie school site at 3:28 PM, suggesting it likely reached the intersection after the PM peak survey window had ended. In any case, the inclusion of these two services during the peak period would have minimal impact on the SIDRA intersection modelling results. Since there are no confirmed changes to the bus network as part of this proposal, the future modelling has been undertaken assuming existing bus operations / timetables. If changes are proposed in the future, further modelling would be required to assess the impact on this intersection.
P_08	Abundance Road	Abundance Road is not a safe road due to the number of accidents that have already occurred along that road, let alone once the traffic increases	Our review of crash data from 2019 to 2023 and anecdotal evidence identified two recorded collisions at the intersection of Abundance Road and Ferodale Road, as well as a fatal incident involving a vehicle exiting a driveway and another travelling along Abundance Road. Excess speeding is potentially a contributing factor to some of these incidents. The introduction of the school, along with the implementation of school zones, will help reduce vehicle speeds along Abundance Road, lowering the risk of future collisions. Additionally, proposed traffic calming measures—such as the raised pedestrian crossing outside the school—are expected to further slow traffic and enhance overall safety in the area.

ID	Item	Comment	WSP Response
P_09		Concerns regarding general traffic congestion to increase in the area and also increased risk for drivers and that the road is not wide enough to accommodate the additional traffic load.	The addition of the new school will increase traffic levels in the local road network. However, our assessment of the impact of the school on the critical intersection (Abundance Road / Ferodale Road) indicates that it will continue to perform satisfactorily with the future traffic conditions. By 2036 (with the new school), all approaches were assessed to perform satisfactorily, with the most delayed movement - Abundance Road south approach, achieving LoS B with an average delay of about 20 seconds per vehicle and a queue length of up to four cars (other movements Level of Service A). These results indicate good performance and do not warrant upgrades to the intersection to accommodate the traffic generated by the school. Further, the existing road width along Abundance Road allows for a single lane in each direction. This typically accommodates approximately 600 passenger cars per hour per direction (Austroads Guide to Traffic Management Part 3: Transport Studies and Analysis Methods). Given the existing volumes observed in the AM and PM peak school hours (343 vehicles and 335 vehicles respectively), as well as the additional vehicles anticipated for the school development (a total of 147 additional vehicles for staff and parents/students combined), this total number of vehicles will remain below the maximum capacity. The following mitigation measures aim to minimise the impact of the development on the local road network: — Stagger the high school bell times with the nearby Medowie Public School bell times (currently occurring at 8:55 AM and 2:50 PM) to minimise the peak traffic conditions during pick-up and drop-off times — On-going monitoring of the traffic conditions (e.g. identifying any bottlenecks), will support the continuing management of traffic conditions (see the School Travel Plan Appendix D for the proposed monitoring and evaluation plan).
P_10	Drop off / pick up zone	The drop off – pick up zone should be off the street like at the Catholic School	The impacts of an off-street kiss and ride are expected to be broadly comparable to those of the proposed on-street arrangement and are therefore unlikely to significantly alter the surrounding road environment. The proposed on-street kiss and ride areas on Abundance Road and Ferodale Road are expected operate more efficiently, as they allow vehicles to stop in a parking area clear of the traffic lane. This is likely to be more effective than an off-street arrangement, where vehicles would need to cross a driveway and potentially wait for pedestrians using the shared space within the school grounds.
P_11		Concerns regarding the drop off / pick up system and it creating further congestion in the area as it is not long enough	The proposal has been modified to include more kiss and ride space. The originally proposed 36 metre space has been reallocated to a bus stop. The kiss and ride space has been moved south to a length of 52 metres, which provides approximately eight (8) kiss and ride spaces. In addition, a new kiss and ride area is proposed on Ferodale Road, east of the school gate with a length of 28 metres, which provides approximately four (4) kiss and ride spaces. The kiss and ride space has therefore been increased from five vehicles to 12. This is above the requirement needed to support the number of students expected to travel by private vehicle based on the baseline mode share target of 23%. Ongoing monitoring of the kiss and ride operations is recommended. The Travel Plan Coordinator, in collaboration with the Department of Education, will be able to review and adjust the arrangement as needed once the school is operational and travel patterns are better understood.

ID	Item	Comment	WSP Response
P_12		A U-Turn in some form should be provided along Abundance Road to access the drop off / pick up zone safely for both cars and buses	Parents are able to drive the block of Ferodale Road, Fairlands Road, Lisadell Road and Abundance Road to access the Abundance Road drop-off/pick up without having to do a U-turn. Depending on their trip origin and destination they may be able to use the kiss and drop on their way to / from another location that does not need then to make a U-turn. The modified proposal includes a kiss and ride zone on the south side of Ferodale Road, east of the new school gate. This gives parents and guardians the flexibility to use either kiss and ride area. Vehicles using the Ferodale Road kiss and ride area have the opportunity to return to Medowie east and north via the slightly shorter Waropara Road, Kula Road and Kirrang Drive.
P_13	Footpaths and Pedestrian Crossing	The pedestrian crossing and its location near the ambulance station warrants further consideration and may be too narrow for the increased foot traffic	The pedestrian waiting area covers approximately 3.0 metres by 3.4 metres – with an area of 10.2 square metres. Using a typical space for a pedestrian of 0.7 metres per person, this area will accommodate 14 pedestrians. The trip generation assessment – based on estimated hourly traffic volumes and projected pedestrian activity (informed by key walking routes identified in the Road Transport Authority data and the baseline walking mode share) indicated about 32 pedestrians in the base case and 64 pedestrians in the reach (target) transport scenario. Given that the arrival of pedestrians in the afternoon will be staggered over say 10 minutes, and that not all pedestrians will be walking in this direction, the existing refuge is likely to have enough capacity. This number of pedestrians is not likely to meet the criteria for a zebra crossing once the school becomes operational. It is recommended that a formal warrant assessment, including pedestrian and traffic counts, be conducted after the school opens to support and justify this upgrade.
P_14		Location of the wombat crossing on Abundance Road does not fully account for the neighbouring industrial area and will create conflict between heavy vehicles and students	The proposed raised pedestrian crossing will be located at the school's entrance on Abundance Road, offset from any driveway / site access on this road. It is not expected to interfere with heavy vehicle access to the industrial properties on the east side of Abundance Road. The following mitigation measures, included in the Transport and Accessibility Impact Assessment, aim to minimise the conflict between students and heavy vehicles: — Ensuring that this infrastructure is highly visible through lighting and maintenance will be important for achieving safe outcomes in the long-term — Ongoing monitoring by staff members to ensure that both students and drivers are acting safely around the school's local roads, as outlined in the School Travel Plan Appendix D. — Educational and behaviour change programs as outlined in Appendix D School travel plan, to reinforce safe behaviours for walking and cycling to and from school — Council planning for active transport connections from the proposed future residential development to the high school site.

ID	Item	Comment	WSP Response
P_15	Alternative road concerns	Current condition of Fairlands Road is inadequate to cope with additional people going around the block to the school and will see people undertake illegal U-turns on Abundance Road.	WSP understands that Port Stephens Council is currently (at the time of writing) upgrading Fairlands Road to improve the stability of the road and provide an even surface (see https://haveyoursay.portstephens.nsw.gov.au/projects-works/fairlands-road-medowie). This will improve the condition of Fairlands Road and give it capacity in the future to accommodate the future traffic volume. The high school will generate predominantly car trips which have a much lower impact on road pavement than heavy vehicles. The ongoing maintenance of local streets such as Fairlands Road is unlikely to be impacted by traffic from the high school.
P_16		Students will need to cross Medowie Road to get to the school which is increasing in traffic and may not be safe.	Although Medowie Road falls outside the study area for the proposed school site, it has been reviewed with regard to safety and accessibility. The newly constructed roundabout at the Medowie Road / Gardenia Drive / Magnolia Place intersection includes refuge islands on each crossing leg, providing a safer crossing for pedestrians. Additionally, the intersection of Medowie Road / Ferodale Road offers a crossing opportunity on the western leg, which is closest to the school, further supporting students who walk or cycle to school. In total there are four pedestrian refuses across Medowie Road between the intersection of Medowie Road/Ferodale Road and the intersection of Medowie Road/Kindlebark Road to the north. Any further upgrades required to address existing safety concerns at these intersections would fall under the responsibility of Port Stephens Council.
P_17	Road Design	The design of the islands and crossings will lead to faster degradation of the road pavement	The new crossing and islands on Abundance Road will be designed and constructed to the relevant Australian Standards. They are not expected to increase the degradation of the road pavement.
P_18		There is a design traffic figure noted. It is unclear what % heavy vehicles are assumed in this report. Given that this is traversing an Industrial area, a higher design traffic may be warranted.	See response #P_07.

ID	Item	Comment	WSP Response
P_19		General concern that the traffic modelling produced is more bog standards and doesn't reflect the reality of Medowie and traffic counts were not done over an extensive period of time to truly reflect the township.	The traffic modelling was based on up-to-date traffic counts collected in 2024 on a Thursday, which typically represents the highest traffic volumes during the week. The intersection of Ferodale Road and Abundance Road was selected for assessment as it is the key intersection most likely to be affected by the proposed school development. The modelling was carried out in accordance with the Guide to Traffic Impact Assessment (TfNSW, 2024) and incorporates projected future growth associated with the school, ensuring a robust and evidence-based analysis. By 2036 (with the new school), all approaches were assessed to perform satisfactorily, with the most delayed movement - Abundance Road south approach, achieving Level of Service B with an average delay of about 20 seconds per vehicle and a queue length of up to four cars (other movements Level of Service A). These results indicate good performance and do not warrant upgrades to the intersection to accommodate the traffic generated by the school.

Table 1.3 Response to Transport for NSW comments (letter of 27 March 2025)

ID	Item	Comment	WSP Response
T_01		A School Speed Zone is proposed on Abundace Road and an extension is proposed on Ferodale Road. TfNSW is responsible for the review and/or approval of permanent speed zones in NSW and these reviews are undertaken in accordance with the NSW Speed Zoning Standard. Please refer to this Standard for further information on key factors influencing speed zones. To ensure compliance to the Speed Zone Standard can be met, TfNSW recommend 'in-principle' support is sought to change and/or relocate the current speed zone prior to finalising the design, where necessary.	SI is proposing the main entry to the new school from Abundance Road, which complies with the NSW Speed Zoning Standard requirement for a school speed zone. The speed limit on Abundance Road is currently 60km/h, therefore, a 40km/h school speed zone is appropriate. As per Figure 3.5 of the Transport and Accessibility Impact Assessment (WSP, January 2025), the extent of the speed zone proposed is approximately 400 metres, from south of Industrial Road to Ferodale Road. This is larger than the minimum distance of 200m. It extends 300m south of the main gate. SI seeks Transport for NSW's 'in-principle' agreement to the proposed school zone extension.
T_02		TfNSW encourages consideration of active and public transport facilities and connections to support place outcomes and the objectives of the Future Transport Strategy 2056.	The Transport and Accessibility Impact Assessment (sections 4.3, 4.4, 5.3 and 7) proposes actions and mitigation measures to encourage use of active and public transport, including but not limited to bicycle parking, new crossing opportunities and new Type 3 footpaths (NSW Walking and Space Guide). These actions and measures are further captured in the School Travel Plan.

ID	Item	Comment	WSP Response
T_03		TfNSW supports the provision of bicycle storage and end-of-trip facilities to encourage travel by active transport modes. TfNSW recommends that the Department of Education consider the preparation and implementation of a Green Travel Plan (Sustainable Transport Plan) setting objectives, targets and measures to reduce private car travel and encourage travel by active and public transport modes. The plan should include: a. Mode share targets that are specific, measurable and achievable with timeframes for implementation. b. Tools and actions to promote and support the implementation of the plan, including roles and responsibilities for relevant persons and supporting communication measures. c. Details of regarding methodology, monitoring and review of the plan over the life of the development.	A School Travel Plan has been prepared (included in the Transport and Accessibility Impact Assessment) which all three elements requested. This plan will be updated with the proposed modifications described in this letter.
T_04		The regulation of parking within a public road reserve is a matter for Port Stephens Council. Any regulatory signs and devices will require the endorsement of the Local Traffic Committee prior to Council approval. Please refer to the RTA's guide to the delegation to councils for the regulation of traffic including traffic committees.	Port Stephens Council has been consulted throughout the application process of the new school. Additional changes to on-street parking are proposed based on the comments received during the public exhibition and those provided by Transport for NSW. These include: — Bus zone on Abundance Road, west side, south of the proposed marked pedestrian crossing — No Parking (Kiss and Ride) zone on Abundance Road, west side, south of bus zone — Bus zone on Abundance Road, east side, to north of the proposed marked pedestrian crossing — Bus zone on Ferodale Road, south side, in front of school — No Parking (Kiss and Ride) zone on Ferodale Road, south side, east of school. These changes were discussed with Port Stephens Council at a meeting on 02 May 2025, with initial feedback indicating no issues with the changes.

Table 1.4 Response to Transport for NSW comments (email 29 April 2025)

ID	Item	Comment	WSP Response
B_01		We acknowledge that the proposed school is located along the path of an existing regular bus route, as well as several dedicated school bus routes. We support this site location as locating new schools along bus routes results in better public travel options for students and staff.	Noted and agreed
B_02		The proposed single bus zone is inadequate in length. It is inappropriate to use the State Transit Bus Infrastructure Guide (the Guide) to size school bus zones due to the varying nature of school bus services, and regular bus services. The Guide is appropriate to size bus stops that are predominantly used by regular bus services. However, the Guide is inappropriate for bus stops at schools because school bus services typically dwell (time spent at a bus stop) much longer than regular urban bus services, and school bus zones are often used by coaches for excursions where they may dwell for significant periods. For example, schools regularly deploy teachers as bus marshals. These bus marshals often require students to wait on school grounds while waiting for their bus and will only call students to board once the bus arrives at the stop. The walk between the waiting area and the bus stop adds to the bus dwell time. In addition, school bus stops regularly see larger than typical amounts of passengers, resulting in longer dwell times because of the greater number of passengers getting on and off services.	**Bus Bay accommodates two buses** The length of the indented bus bay proposed for Abundance Road, west side is 50 metres. This distance accommodates two standard buses (12.5m in length) at the same time with space for draw-out. The proposal has also been modified to include an additional bus space south of the originally proposed bus stop on Abundance Road (west side). This third space is 36 metres long, and was originally proposed for kiss and ride (which has subsequently been moved south). It is noted that Bus Route 136 that currently uses the stops on Abundance Road has a headway of approximately 45 minutes. Bus Route 137 is approximately an hourly service. School bus set-down is relatively quick, with a dwell time in the typical range. Longer dwell times occur in the afternoon as students board the bus. The current timetable for Route 136 has one service which might be required to share the bus stop in each direction and one service on Route 137 in the southbound direction (three services in total). **Additional bus stops** SI have advised of the intention to create an additional bus stop on Ferodale Road, westbound, west of Abundance Road, creating an extra bus space, for exclusive use by school bus services. This will cater for regular school buses as well as provide a space for a coach that does not affect regular buses. Another change is the proposed relocation of the southbound bus stop on Abundance Road, east side, to north of the proposed pedestrian crossing. This proposed relocation places this stop with a connection to the proposed footpath that leads to the marked pedestrian crossing, improving the accessibility of the stop. **Other bus stops** It is also noted that the area has a bus stop on Ferodale Road north side, outside Medowie Public School.
B_03		The Guide has been superseded by the Bus Stop Urban Design Guideline and Functional Spaces – Part 4 Bus Stops.	Noted. This does not change the recommendations in terms of bus stop length and compliance.

ID	Item	Comment	WSP Response
B_04		Other factors that increase dwell time at school bus stops include: — High-floor vehicles are regularly used for school services in Outer Metropolitan and Regional NSW. — Buses in Outer Metropolitan and Regional NSW typically only have a single door.	Understood. Additional bus stop spaces are proposed to allow the longer dwell time without affecting the regular passenger bus services.
B_05		The bus zone design for Medowie HS should assume a dwell time of five minutes for each bus service.	Assuming a clearance time for high school students of 30 minutes, a dwell time of five minutes in the afternoon allows up to six buses per bus space. This requires a minimum of three bus spaces. The modified proposal includes five bus spaces in three bus stops (not including the existing bus stop in front of Medowie Primary School). Allowing two active bus stops for regular passenger bus services, this provides the required three bus spaces for school services.
B_06		For context, the proposed new Bungendore HS will have a 70 m bus bay and is expected to reach up to 600 enrolments.	Noted. The extended bus bay provides a combined length of 86 metres on Abundance Road in front of the school plus an additional bus space on Ferodale Road.
B_07		The existing bus stop on Abundance Road opposite the school entrance (Stop ID: 2318103) does not have infrastructure, nor is there a path proposed to the new wombat crossing. This bus stop needs to be upgraded to be a compliant bus stop with adequate capacity for multiple buses. The addition of bus bays at this location will mitigate the need to lengthen the bus stop on the school side of Abundance Road.	A new position for this bus stop is proposed north of the pedestrian crossing. This new location will be connected to the crossing with the proposed footpath and a concrete pad connected to the back of kerb.
B_08		Strong consideration should be given to providing a new bus bay on the Ferodale Road frontage of the school. This bus stop would service the new school as well as Medowie Public School. Having bus stops on both sides of Ferodale Road promotes efficient servicing of the two schools as buses do not have to undertake turning manoeuvres to access a stop on just one side of the road.	A new kerbside bus stop is proposed on Ferodale Road west of the new staff carpark entrance to give this flexibility for bus services.

ID	Item	Comment	WSP Response
B_09		It is best practise to separate bus bays and kiss-and-ride zones to remove conflict between buses and private vehicles. It is commonplace for cars to queue to enter a kiss-and-ride zone. Should this occur on Abundance Road, buses will be unable to enter the bus bay as there is just one northbound lane."	The revised layout proposes bus stops on their own, physically separated by a kerb extension. The new Ferodale Road bus stop would be in front of the new kiss and ride space.

Table 1.5 Response to Transport for NSW comments (email 30 April 2025)

ID	Item	Comment	WSP Response
A_01		Note that Transport documents need to be applied to the design: — Design of Roads and Streets — Cycleway Design Toolbox — Walking Space Guide	These documents have been applied.
A_02	Active Transport Access	Pedestrian refuge on Ferodale Road to be upgraded to a raised pedestrian crossing. If there will be shared paths on the route to school adequate cyclist design for crossings to be provided.	This pedestrian refuge is unlikely to meet the warrants for a raised pedestrian crossing based on the number of pedestrians anticipated from the new high school. It has sufficient capacity for the anticipated number of students. The refuge is wide enough to accommodate a bicycle out of the traffic lane.
A_03		Consider locating raised pedestrian crossing at the intersection of Abundance Road and Ferodale Road rather than mid-block on Abundance Road. Pedestrian desire line along Ferodale Road to the west of Abundance Road will be accommodated by this location.	The proposed location of the pedestrian crossing was positioned to capture the pedestrian desire line to the main gate of the school on Abundance Road. The mentioned position at the intersection with Ferodale Road would be away from the desire line to the main gate.

ID	Item	Comment	WSP Response
A_04		Speed limits will need to be reduced to support the installation of raised pedestrian crossings. TfNSW is responsible for the review and/or approval of permanent speed zones in NSW, and these reviews are undertaken in accordance with the NSW Speed Zoning Standard. Please refer to this Standard for further information on key factors influencing speed zones. TfNSW recommend 'in-principle' support is sought to change and/or relocate the current speed zone prior to finalising the design, as necessary.	See response to #T-01. Expanded school speed zones have been recommended for Transport for NSW consideration and 'in-principle support'.
A_05		Consider provision of all footpaths at min 4 m width.	The currently proposed footpath width of 3.0 metres is in excess of the 2.3m minimum for a local footpath – medium activity according to the Walking Space Guide.
A_06		Consider On-road cycleway in Ferodale Road to support bike riding to school with direct access to school entrance with bike parking	The number of children cycling to the new high school (13 students in the baseline scenario) is unlikely to justify on-road cycle lanes. The wider cycle strategy for Port Stephens Council, when it is updated, is likely to plan for increased cycling from the potential future residential development and the new high school.
A_07		57 x bicycle parking spaces to have shelter and/or be located under existing awnings. Bike parking does not need to be together and may be spilt to accommodate direction of travel to school. Some bike racks can be spaced an additional .5m apart to accommodate larger e-micromobility bikes, cargo bikes, etc. The Transport bike parking standard that we use at transport interchanges has a requirement for min 5% of bike parking to accommodate larger bikes – this may be suitable for the school to implement as well. "	All 57 bike parking spaces are proposed to be located under a shelter. The separation of bike parking spaces has not been adopted by the project because the single location provided is also secured with gates during the school day providing security against theft. Micromobility bikes, cargo bikes etc. are not typically utilised by students so have not been considered in the spacing of the bike racks. As the school will not have the breadth of users found at transport hubs, application of the Transport Bike Parking standard is not considered appropriate for the school site.

2. Updated proposal details

Based on the feedback received from agencies and the public, a modified proposal is shown in Figure 2.1 overleaf. Changes include the addition of new footpath on Abundance Road and Ferodale Road linking the two school entry gates, the relocation and addition of bus stops and the relocation and addition of kiss and ride space.

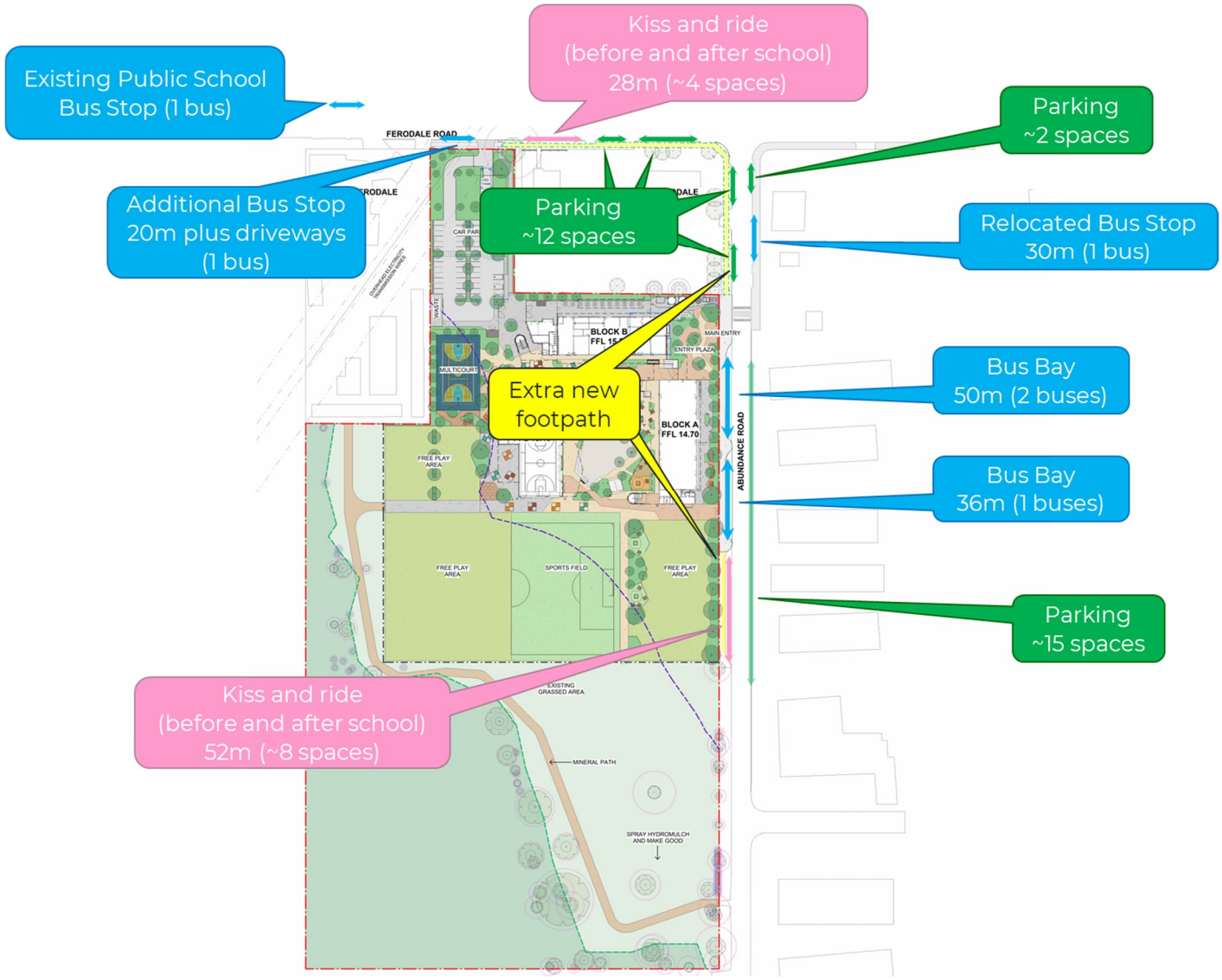


Figure 2.1 Modified proposal for bus stops, kiss and ride space kerbside parking and footpaths

3. Impact of proposed modifications

3.1 Pedestrians

Pedestrians walking to the school will have increased accessibility with the provision of the footpath on the west side of Abundance Road between the school gate and Ferodale Road and on the south side of Ferodale Road and the existing footpath west of the school staff carpark entry.

This new footpath will have additional benefits for pedestrians walking to Medowie Public School from the south-east.

The relocation of the bus stop on Abundance Road east side, to north of the pedestrian crossing where there is a proposed footpath will make the walk from the bus stop to the new school more accessible.

New footpath would also connect the kiss and drop on Abundance Road to the school gate.

3.2 Cyclists

The proposed changes are expected to have little impact on cyclists riding to the school as their main access paths to the gates on Abundance Road and Ferodale Road would remain unchanged.

3.3 Public transport

The proposed changes will provide additional bus stops, improved accessibility to bus stops and additional space for school buses to load passengers. The modified proposal includes:

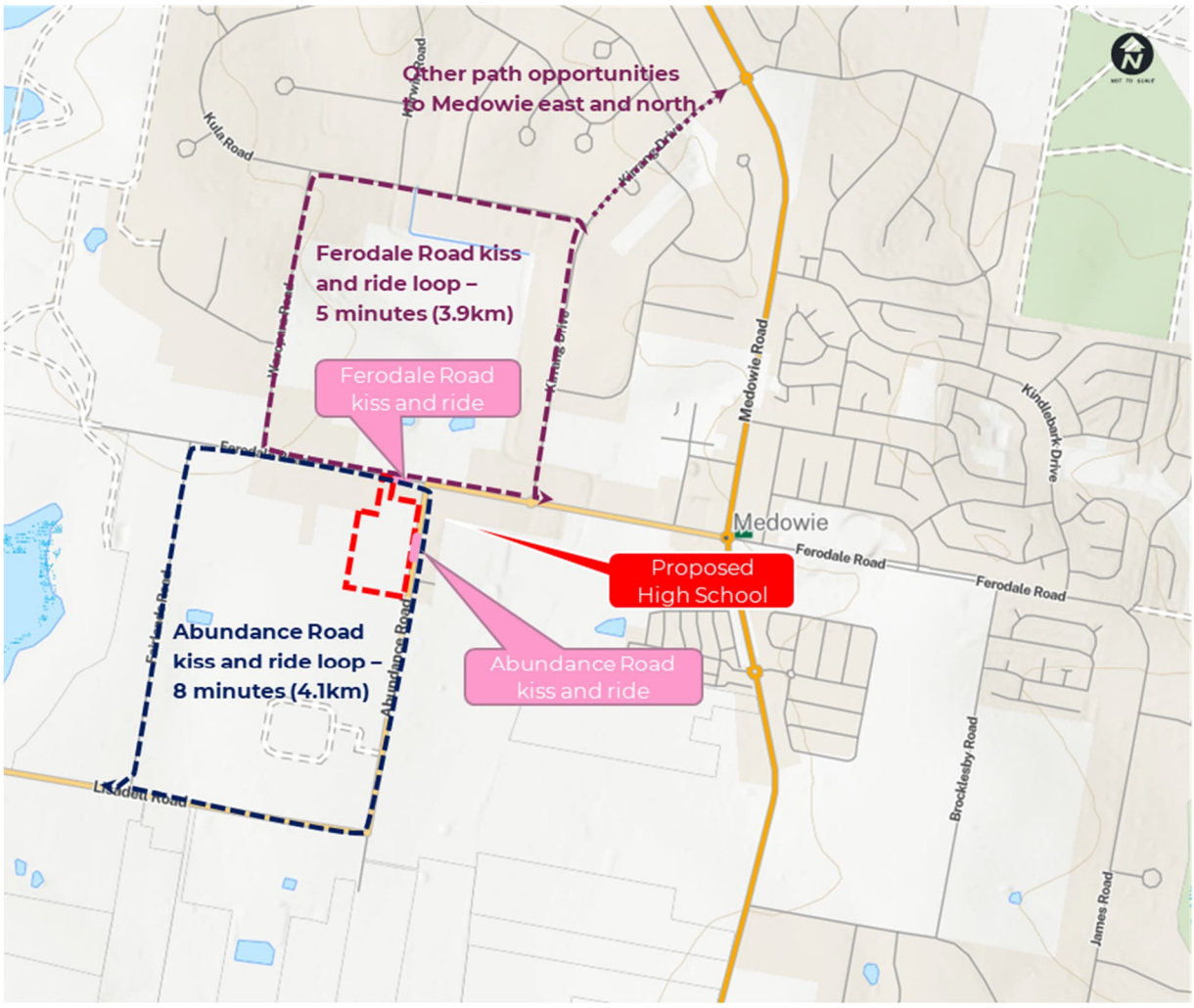
- Bus stops in both directions on Abundance Road and Ferodale Road, providing flexibility for school bus services and regular passenger services.
- Bus stops with concrete pads that are connected to the new school by footpaths and marked pedestrian crossings, providing accessibility for people with reduced mobility.
- A main bus stop on Abundance Road, west side (northbound) with three bus spaces, allowing two school buses to load passengers, while preserving an active stop for regular passenger services
- A corresponding southbound stop on Abundance Road, relocated to north of the pedestrian crossing to give footpath accessibility
- A new westbound stop in front of the new school on Ferodale Road allowing a third school bus to load passengers.

These combination of bus stops provide sufficient capacity for the projected 15 school buses needed for the school with Transport for NSW's recommended five-minute dwell time within a 30 minute clearance period. The provision of space for active bus stops gives the flexibility for buses to pick up passengers on their way to/from other locations without being delayed waiting to get to a bus stop.

3.4 Kiss and ride

The Transport and Accessibility Impact Assessment estimated that five kiss and ride spaces would be required based on the baseline transport mode share and the number of students. The modified proposal includes eight spaces in the relocated kiss and ride on Abundance Road and four spaces in the newly proposed kiss and ride space on Ferodale Road. The impact of the increase in space is a reduced risk that the queue of vehicles using the kiss and ride will spill out of the allocated space, resulting in less congestion in the road network. The addition of a second kiss and ride gives flexibility for parents and guardians to use the space that is most convenient for them.

The changes to the kiss and ride spaces are intended to reduce concerns about U-turns on the road network. They are not expected to change people's transport mode decision, with bus stops still having closer access to the school gates. The potential return loops for vehicles using the kiss and ride are shown in Figure 3.1.



Source: *Base image SDT Explorer*

Figure 3.1 Kiss and ride spaces and return path

3.5 On-street parking

The proposed modifications are expected to have an impact on the availability of on-street parking. Historical imaging data indicates lower occupancy levels in the area. The cumulative impact of these changes are not expected to have a material impact on the availability of parking. The proposed modifications and their impacts are described in Table 3.1.

Table 3.1 Summary of parking impacts

Change and location	Current parking allocation	Proposed parking allocation	Impact
Relocation of Abundance Road kiss and ride south	Unrestricted, grass swale	Formalised parking. Drop Off & Pick Up Only No Parking 8:00am to 9:30am, 2:30pm to 4:00pm School Days	While unrestricted, this area is not currently used, so converting it to formal parking will not have an impact

Change and location	Current parking allocation	Proposed parking allocation	Impact
Relocation of Abundance Road bus stop to north of the proposed marked pedestrian crossing	Unrestricted, marked parking lane, between two kerb crossings, alongside a residential garage/shed	Bus zone – 30 metres	The existing bus stop is not signed. This change will provide a formal space for bus services. It occupies two vehicle spaces between the two kerb crossings. It is noted that there are 20+ parking spaces on this section of Abundance Road (between Ferodale Road and Industrial Road) with only a handful of vehicles and trailers using the parking
New kiss and ride on Ferodale Road, south side, east of the school gate	Unrestricted, kerbside parking between two kerb crossings outside 28 Ferodale Road	Drop Off & Pick Up Only No Parking 8:00am to 9:30am, 2:30pm to 4:00pm School Days	Four parking spaces will be used for drop-off and pick-up for 1.5 hours in the morning and afternoon. They will be available for parking during the day and at night at other times and all-day on non-school days.
New bus stop on Ferodale Road, south side, west of the staff carpark entry	Unrestricted, kerbside parking in front of the school site	Bus zone – 20 metres in between service station driveway and proposed staff carpark entry	Two parking spaces converted to bus zone, in addition to the parking impacted by the proposed staff carpark entry. The total distance of 32 metres affects five parking spaces. The proposed parking arrangement retains six parking spaces between the kiss and ride and Abundance Road on the south side and parking on the north side

4. Mitigation measures

The following updated list of mitigation measures are proposed to assist the proposed infrastructure to fulfill its purpose and minimise the impact of the activity on the local traffic environment. Some have already been included in the plan, some were proposed in the Transport and Accessibility Impact Assessment (TAIA) and/or School Travel Plan (STP), and some have been added following the agency and public comments.

Table 4.1 Mitigation measures

Measure	Status
Active travel	
The provision of a shared path along the site frontage as well as pedestrian crossing points will minimise the safety risks for students and staff walking and cycling to the new school site.	Included in plan
Ensure the visibility and on-going maintenance of the active transport infrastructure for accessing the school.	Included in TAIA
On-site futureproofing for increased bicycle parking demand in alignment with the sustainable mode share scenario targets outlined in the STP.	Included in TAIA
Implement school zone travel speed restrictions along Ferodale Road and Abundance Road frontages to the school. It is important that the local community is notified of the changes to the speed restrictions well before the school opens, to help enforce a lower speed environment from day one.	Included in plan

Measure	Status
Educational and behaviour change programs as outlined in the STP, to reinforce safe practises for walking and cycling to and from school.	Included in TAIA
The Travel Access Guide (TAG) should direct students walking to and from school to access the site from Abundance Road.	Further measure
The Travel Access Guide (TAG) should students requiring DDA support will use the staff carpark for access to the school.	Further measure
Clear communication to parents from the Travel Plan Coordinator and school administration about the approved access arrangements and the consequences of conflicting movements e.g. safety risks to students and other parents.	Further measure
Public transport	
Whilst there are currently no endorsed plans by TfNSW for updating the public transport services in the local area, it is important that this demand is monitored to assess whether it exceeds the existing service provision / capacity. It is recommended that the school and TfNSW further collaborate once the new school is operational, to assess the actual demand for public transport and implement any service changes necessary to support e.g. dedicated shuttles, increasing existing service frequency or upgrades to the bus network.	Included in TAIA& STP
Encourage students at the new high school to use public transport to travel to and from school, by developing educational and behaviour change programs such as the Travel Access Guide (TAG) as outlined in the STP.	Included in TAIA
Staggering of coach and school bus services to align with gaps in the public bus timetable, allowing uninterrupted operation of regular passenger bus services	Included in STP
Preparation and implementation of an operations plan to optimise bus bay efficiency	Further measure
Traffic and intersection performance	
To reduce the traffic and on-street parking impact of the proposed school site, it is recommended that the bell times for the new Medowie High School are staggered with Medowie Public School, to help spread the peak over a longer duration.	Included in TAIA& STP
The traffic impact assessment indicates that the existing intersection layout of Ferodale and Abundance Road can provide suitable performance for the proposed high school.	Included in plan
Implement the behaviour change programs set out in the School Travel Plan to encourage a shift to sustainable travel modes.	Included in TAIA
Ongoing monitoring of traffic conditions on Abundance Road by school staff and the Travel Plan Coordinator (see School Travel Plan), to ensure that buses can enter and exit the bay without delay or disruption to other services.	Included in STP
Kiss and ride operations	
Notify students and parents of the proposed access routes to the site as recommended in the School Travel Plan.	Included in TAIA
Ongoing monitoring of kiss and ride operations in line with the recommendations made in the STP.	Included in TAIA

Measure	Status
Construction activities	
Heavy vehicle traffic should follow the Construction Vehicle Traffic Route outlined in Section 6 of the TAIA. Where possible, general construction traffic should avoid travelling past the Medowie Public School during School Zone hours.	Included in TAIA
Support construction vehicle access and egress by providing a traffic controller at the entrance to the site.	Included in TAIA
Develop a detailed Construction Traffic Management Plan to identify and provide management strategies for the future construction activities at the site.	Included in TAIA

5. Conclusion

The review of the (updated) proposed activity indicates that the transport and parking impacts of the new Medowie High School have been addressed and managed.

Active travel to and from the site will be supported by improvements to footpaths on the Abundance Road and Ferodale Road frontages as well as providing crossing points at key pedestrian and cyclist desire lines. Cyclists will also be supported by a sufficient provision of on-site parking facilities. The proposed shared paths outlined in the Medowie Planning Strategy will support the future anticipated growth in the Medowie region and it is recommended that this is pursued as part of council's development works.

It has been concluded that the provision for 15 buses to access the site per hour will support the anticipated public transport demand in the baseline mode share scenario. However, ongoing monitoring of public transport demand, potentially also resulting from the new local developments, is recommended and should be undertaken by council and TfNSW. Three new or relocated bus stops are recommended with sufficient capacity for regular passenger services and school buses. Supervision and monitoring by staff of the new Medowie High School is recommended to support efficient bus operations at these bus stops, to minimise the risk of disruptions and bottlenecks (as outlined in the School Travel Plan).

Kiss and ride facilities are proposed on Abundance Road and Ferodale Road to facilitate student drop-off and pick-up. Sufficient parking for staff will be provided within the school boundary with access from Ferodale Road. Impacts on parking from the new school are not expected to significantly affect the availability of on0street parking in the area.

The analysis of the intersection of Ferodale Road and Abundance Road under the new site conditions indicates that the performance will be suitable. Staggering of bell times with Medowie Public School is recommended to minimise vehicle movements when students are accessing the local street environment.

Appendix C

Flood Response to Submissions

14th May 2025

Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001

Tel: +61 2 9272 5100
Fax: +61 2 9272 5101
www.wsp.com

Colliers
225 George Street
Level 30, Grosvenor Place
Sydney NSW 2000

Our Reference: PS140220

For the attention of: Tia Cutrupi

Dear Tia,

This letter has been prepared by enstruct to respond to the items raised by public and authorities in the exhibition of the REF (P5-2025-44) for the proposed New High School for Medowie.

No	Item	Planning Recommendation
Stormwater		
1	Where will resultant stormwater flow to	The storm water from the site will flow through the on site detention (OSD) tanks where water will be cleaned via filters to the water quality levels required for catchment areas before it is discharged into the local storm water network at the required flow rates. There are two OSD tanks, the northern tank will discharge into the local network on Ferodale Road, the larger OSD will discharge into new pipes constructed in Abundance Road which will connect to the local network at the intersection of Abundance Road and Ferodale Rd.
2	The onsite detention tank is underground and under a building. How will maintenance occur?	The building which sits above the OSD tank does not entirely cover the tank, with access available at the northern and eastern edge of the B Block building.
3	The pipes shown in the drawings are 375mm diameter but are under pressure (hydraulic grade line high than the culvert obvert). This is undesirable. As mentioned in the Flood Impact comments, it is also unknown whether this is	Given the latent conditions, stormwater networks are under pressure as noted. Pits are modelled as 20% blocked in line with Council's development design

	based on a 100% clear cross section in the pipe. The concerns might be compounded if 100% clear is assumed.	specification “0074 Stormwater Drainage (Design)”
Flooding		
4	The flood modelling report suggests the older models (2012 and 2016) from council have been used to inform the performance of the Campvale drain tail water. It would appear that the project team considered a similar model to not be adequate enough to model the immediate catchment but was adequate enough for the “regional flood analysis”. The “regional catchment” is quoted as being about 2100ha but the more refined model is 84ha. - This opens a question of whether the models “talk to each other” well enough and whether the assumptions for runoff, infiltraton rates, the rates and location of development (changing % impervious) in Medowie and so on are congruous. (The rain event of mid-January 2025 required the engagement of the Pump Station at Campvale to pump into Grahamstown dam. The rain data suggests this event was not close to 1% AEP event.)	The parameters used in the flood model are based on Council’s Hydrologic Soil Mapping defining the site as “Group C soils”. which provides infiltration parameters: *For design purposes, it is assumed that the Antecedent Moisture Condition is "Rather wet" (refer to ARR 2016, Table 5.3.11) and the Horton Maximum (Initial) Infiltration Rate is 33.7 mm/hr, the Minimum (Final) Infiltration Rate is 6 mm/hr and the Shape Factor/Decay Rate k is 2 /hour (refer ARR 2016, Table 5.3.12).* It is not unusual for the pumping station at Campvale to be engaged. Hunter Water’s Grahamstown Dam Factsheet notes: *7% of inflows to Grahamstown Dam is runoff from the east which comes directly from parts of the Medowie urban settlement area. Stormwater from the Medowie/Campvale catchment drains into Campvale Drain and is pumped into Grahamstown Dam by Campvale Pump Station. Hunter Water is required under its Water Management Licence to operate Campvale Pump Station to minimise local flooding by transferring all runoff into Grahamstown Dam.*
	- The pipe networks have been modelled based on a council supplied model. It is unclear from the report if a “% blocked” capacity reduction has been considered in the study, or whether it has been assumed the pipes are always 100% clear. The pipe network, over the	Pipe networks are unblocked, while pits inlets are modelled as 20% blocked in line with industry standard practice and with Council’s development design specification “0074 Stormwater Drainage (Design)”

course of a lifetime will have some silts, other debris and intrusions in it, only removed at a time of maintenance unless a blockage becomes immediately obvious in a flood event.	
- The flood model results suggest exclusion of flood depths of less than 100mm to be more representative. There are residents on Abundance Road Medowie that would consider 100mm to be quite important to the flood immunity of their land and this needs more consideration.	The flood modelling undertaken for the project has demonstrated minimal impact on flooding. Showing all flood depths less than 100mm is not helpful in understanding flood behaviour in this instance. The combination of LiDAR survey and a quasi-rainfall on grid approach produces a flood map that shows flooding almost everywhere, with a shallow depth. By excluding this from the mapping, we gain a better understanding of flow paths rather than sheet flow across wide areas.
- Figure 5 and 6 of the flood report show the pre and post development flooding. Taking into account the comments earlier about the “less than 100mm” depth, there are still areas where flood impacts are increased, including Abundance Rd and the treed area behind the industrial sheds opposite, where development was being planned before the school site was made public. Figure 7 shows this area (and the snip from the model could be larger to show more residents on Abundance Rd) as “was dry now wet”, and some of it even up to 200mm higher water levels. *Afflux appears to be an issue which needs more consideration, especially impact on private properties where people may be staying during rain events.*	Modelling has been undertaken based on LiDAR elevation information, which is only accurate to +/- 150mm, and can be less accurate where there is heavy vegetation. It is recommended that any developments shown impacted by flooding should undertake their own site specific flood study to understand flood risk. The model does not extend to include more residents on Abundance Rd, as there is no impact on flooding here. Any impacts are shown to diminish further south along Abundance Road. Flood impacts are generally limited to the proposed school site, and not private properties. Flood impacts beyond the school site include a small positive impact to the northwest on Ferodale Road, and a small increased flow to the southwest that is not considered to be a significant impact. The proposed development in the treed area will have to consider overland flow regardless of the proposed activity on the subject site.

	- The following comment from the report is not clear "The local sewerage system is typically designed to overflow to the stormwater system in the event this is inundated by flooding and not back up into properties". Is this talking about the onsite sewage disposal or the wider network? I would think it is critical that onsite sewage does not make its way into private properties. There is a significant change to the sewage volume with a 700-person addition to that sewerage subnetwork.	The comment refers to system design for the broader network. Sewer systems are designed to overflow with the increased load caused by flooding. This is preferable to systems backing up into residential floor wastes. It is expected that any load on the sewerage network from the proposed school will be minimised during a flood event, given that flood risk is managed by closing the school down prior to extreme weather events.
	- Has a study of that additional sewage load been done? Is there redundancy in the existing system or does it need upgrading? Feedback from residents in the area is that in rain events these systems can fail.	The local sewer network is reviewed and maintained by Hunter Water Corporation. Hunter Water Corporation will be consulted with as a requirement of the REF's mitigation measures to ensure that the system is compliant with the asset owner's requirements for discharge flow rates and volumes as well as ensuring the local network and system will not function with less efficiency than its current state.
	- It is noteworthy that the *SES comments in its letter, that it would rather see the application of sound land use planning*. I would interpret this to mean that another location ought to be considered, but I cannot speak for the author.	Likewise, enstruct cannot speak for the author, however we note that sound land use planning has been applied to the proposed activity.
5	SES submission requires update to the FERP (**ATTACHED**) + respond to any queries raised in the SES letter.	The FERP has been updated to in response to feedback from the SES. Section 10 of the FERP gives a summary of comments provided by the SES, and a note on what has been changed in the FERP.
6	How can the development guarantee that the school won't flood adjoining residents along Abundance Road and general exacerbation on surrounding properties	Flood modelling has demonstrated any impact to residents on Abundance Road is insignificant.

<table>
<tr><td colspan="3">Drinking Water Catchment</td></tr>
<tr><td>7</td><td>For new activities under Part 5 of the EP&A Act, section 171A of the Environmental Planning and Assessment Amendment (Water Catchments) Regulation 2022 requires determining authorities to take into account whether the activity would have a neutral or beneficial effect on water quality before an activity can be carried out.</td><td>The proposed activity has considered stormwater quality, with the view that any surface water leaving the site will ultimately enter Grahamstown Storage. The design uses a combination of rainwater capture and re-use, pit litter baskets, and filter cartridges within the OSD tanks.

Stormwater quality modelling results are shown in the below tables:

Table 1 Ferodale Road outlet

<table>
<tr><th>Pollutant</th><th>Existing (kg/year)</th><th>Proposed (kg/year)</th></tr>
<tr><td>Gross Pollutants</td><td>4.49</td><td>~0</td></tr>
<tr><td>Total Suspended Solids</td><td>110.7</td><td>15.13</td></tr>
<tr><td>Total Phosphorus</td><td>0.262</td><td>0.174</td></tr>
<tr><td>Total Nitrogen</td><td>2.26</td><td>2.34</td></tr>
</table>

Table 2 Abundance Road outlet

<table>
<tr><th>Pollutant</th><th>Existing (kg/year)</th><th>Proposed (kg/year)</th></tr>
<tr><td>Gross Pollutants</td><td>16.07</td><td>~0</td></tr>
<tr><td>Total Suspended Solids</td><td>393.6</td><td>127.7</td></tr>
<tr><td>Total Phosphorus</td><td>0.93</td><td>0.51</td></tr>
<tr><td>Total Nitrogen</td><td>8.03</td><td>8.05</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>All development in drinking water catchments is required to demonstrate a Neutral or Beneficial Effect (NorBE) on water quality.</td><td>NorBE has been demonstrated by MUSIC modelling of the proposed works. The results (above) show a beneficial impact on stormwater quality with respect to gross pollutants, suspended solids and phosphorus, and a neutral impact on nitrogen.</td></tr>
<tr><td>9</td><td>The REF indicates that MUSIC modelling has been undertaken. It is requested that the modelling files are provided to the Assessments Team, together with the MUSIC Link report and justification for the catchment selected and any parameters used that are outside the usual values.</td><td>Music model and MUSIC Link report will be provided to the assessments team.</td></tr>
</table>

General		
10	The REF and FIRA do not fully address all relevant DCP requirements and should be reviewed to do so.	The updated FIRA and FERP address all relevant DCP controls, as per Section 5 of the DCP. Additionally, a comprehensive assessment of all statutory and strategic requirements has been addressed in Section 4 of the REF.
11	All recommended flood risk management measures, reviewed in accordance with the following comments, should be incorporated into the revised Mitigation Measures for the project.	Noted
Pre-development Conditions		
12	In order to provide a better understanding of post development impacts it is requested that the mapping showing the 1% with climate change, 5% and 0.2% AEP floods is provided for pre-development conditions.	Additional flood maps have been prepared for these three pre-development conditions. It should be noted, however that the future climate under pre-development conditions is redundant.
Blockages		
13	Please advise whether blockages have been considered in the flood modelling undertaken for the project and provide a commentary as to whether this is relevant in this case.	Pipe networks are unblocked, while pits inlets are modelled as 20% blocked in line with industry standard practice.
Off-site flood impacts		
14	It is noted that the modelling shows a reduction in inundation in a 1% AEP event for properties along Ferodale Road and parts of Abundance Road and Ferodale Road road reserves. However, there is an increase in flooding on a small part of Abundance road and properties to the east on the opposite site of Abundance Road. While the FIRA considers that post development flood impacts on the land to the east is not significant, the off-site flood impacts, particularly during a 1% AEP flood, appear to exceed normally acceptable limits and should be reviewed.	Proposed works in the road reserve to provide safe kiss and ride and bus stops will naturally have some impact on flow distribution. Flood modelling indicates this is minor in nature based on the LiDAR survey information. Negative impacts on private properties are limited to car parks where local drainage has conservatively not been included in the flood model. It is reasonable to assume that the inclusion of the local drainage system would alleviate local ponding here. Minor changes to flood levels on Abundance Road towards the southern end of the subject site are considered to be minor changes where flood depth is small in both existing and proposed cases.

SIP Guidelines		
15	The final version of the SIP Guidelines was published about the same time as the finalisation of the FIRA. It is noted that the considerations outlined in the draft SIP Guideline have been substantially addressed in the FIRA and FERP, however the final published version of the Guideline is substantially different. The FIRA and the FERP should be amended to address the published guideline to demonstrate the suitability of SIP, and measures to be employed to facilitate orderly and safe SIP.	The documents have been updated to respond to the published SIP Guidelines.
16	It is noted that FPLs have been based on the PMF, for which climate change is not considered. It is understood that the updated approach in Australian Rainfall and Runoff (Commonwealth of Australia Geoscience Australia 2019, Version 4.2) requires scaling of a PMF to take into account climate change. This has been the practice on other Education projects. - It is requested that this be reviewed by Enstruct and any required adjustments documented.	At the time of preparation of the REF, ARR4.2 had not been adopted across the industry, and so an unfactored PMF was used. The industry has taken some time adopting to the new guidelines, noting they include significant changes over the previous guidelines. Tools and training to implement the new ARR4.2 into key hydrologic modelling software (DRAINS) was only made available by the supplier in March 2025, after the lodgement of the REF. BMT also did not provide any consideration for climate change with respect to the PMF in their Flood Assessment. An additional run has been undertaken – PMF 2090 SSP3 – 7.0. For the critical 30 minute storm, this results in a rainfall multiplier of 1.59. The results of this analysis are presented in the FIRA (rev F). Adding a climate change factor to the PMF does have an impact on Flood Planning Levels in the order of 300-400mm. The flood planning levels have not been adjusted as there are still two floors across two buildings that are above the PMF for safe shelter in place for the school occupants. It is important to note that the FERP outlines procedures to evacuate and close the school when extreme

		weather is forecast. Shelter-in-place is only recommended in the unlikely scenario anyone is remaining on site and unable to evacuate, so the risk here is low. DoE's Educations Facilities Standards and Guidelines has the PMF as a guideline for the floor levels. The height of ground floor finished floor levels is a decision by DoE on each project, this is the practice on other Education projects. Climate change has been considered in the PMF but after review the flood planning levels have not been adjusted as there is adequate safe shelter in place above the ground floor.

Queries raised by the SES have been addressed in the FERP. Section 10 of the FERP gives a summary of comments provided by the SES, and a note on what has been changed in the FERP.

Please contact the undersigned if there is any further clarification required.

Yours Sincerely,

Tim Henderson
for
enstruct group pty ltd

Appendix D

MUSIC Modelling Results

MUSIC-*link* Report

Project Details		Company Details	
Project:	New Highschool for Medowie	**Company:**	enstruct
Report Export Date:	14/05/2025	**Contact:**	Tim Henderson
Catchment Name:	Ferodale Existing	**Address:**	L27 680 George Street Sydney, NSW, 2000
Catchment Area:	3.262ha	**Phone:**	02 9934 7595
Impervious Area*:	39.4083384426732%	**Email:**	tim.henderson@wsp.com
Rainfall Station:	WILLIAMTOWN RAAF - Station 061078 - Zone B		
Modelling Time-step:	Six minutes		
Modelling Period:	01/01/98 - 31/12/2007 11:54:00 PM		
Mean Annual Rainfall:	1125.627mm		
Evapotranspiration:	1394.455mm		
MUSICX Version:	1.30.0.13025 (5.30.0.13025)		
MUSIC-link data Version:	5.1		
Study Area:	Port Stephens Council		
Scenario:	Sensitive Catchment - Clay soils		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node:	**Reduction**	**Node Type**	**Number**	**Node Type**	**Number**
Flow	0%	Sedimentation Basin Nodes	2	Urban_SealedRoad Nodes	1
TSS	0%	Generic Treatment Nodes	4	Urban_RuralResidential Nodes	2
TP	0%	Rainwater Tank Nodes	1	Urban_Mixed Nodes	2
TN	0%				
GP	0%				

Comments

Parameters outside of acceptable range have been provided by the supplier.

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Generic	10 x 460mm Psorb StormFilter (MCC)	High Flow Bypass	None	99	0.046 m³/s
Generic	30x 690mm Psorb StormFilter (MCC)	High Flow Bypass	None	99	0.036 m³/s
Generic	4 x OceanGuard	High Flow Bypass	None	99	0.08 m³/s
Generic	Generic Treatment 12	High Flow Bypass	None	99	0.08 m³/s
Rainwater	Rainwater Tank 15	% Reuse Demand Met	None	None	69.438 %
Receiving	Abundance Developed	Flow Reduction	None	None	17.195 %
Receiving	Abundance Developed	GP Reduction	90	None	100 %
Receiving	Abundance Developed	TN Reduction	45	None	63.799 %
Receiving	Abundance Developed	TP Reduction	60	None	83.521 %
Receiving	Abundance Developed	TSS Reduction	90	None	92.898 %
Receiving	Abundance Existing	Flow Reduction	None	None	0 %
Receiving	Ferodale Developed	Flow Reduction	None	None	-0.001 %
Receiving	Ferodale Developed	GP Reduction	90	None	100 %
Receiving	Ferodale Developed	TN Reduction	45	None	64.347 %
Receiving	Ferodale Developed	TP Reduction	60	None	89.04 %
Receiving	Ferodale Developed	TSS Reduction	90	None	98.388 %
Receiving	Ferodale Existing	Flow Reduction	None	None	0 %
Sedimentation	OSD tank	% Reuse Demand Met	None	None	0 %
Sedimentation	OSD tank	High Flow Bypass Out	None	None	0 ML/y
Sedimentation	SF Chamber.	% Reuse Demand Met	None	None	0 %
Sedimentation	SF Chamber.	High Flow Bypass Out	None	None	0 ML/y
Urban_Mixed	Roofs	Impervious Area	None	None	0.36 ha
Urban_Mixed	Roofs	Pervious Area	None	None	0 ha
Urban_Mixed	Roofs	Total Area	None	None	0.36 ha
Urban_Mixed	Source 8	Impervious Area	None	None	0.595 ha
Urban_Mixed	Source 8	Pervious Area	None	None	0.32 ha
Urban_Mixed	Source 8	Total Area	None	None	0.915 ha
Urban_RuralResidential	Source 13	Impervious Area	None	None	0.064 ha
Urban_RuralResidential	Source 13	Pervious Area	None	None	1.211 ha
Urban_RuralResidential	Source 13	Total Area	None	None	1.275 ha
Urban_RuralResidential	Source 5	Impervious Area	None	None	0.018 ha
Urban_RuralResidential	Source 5	Pervious Area	None	None	0.338 ha

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_SealedRoad	car park	Impervious Area	None	None	0.249 ha
Urban_SealedRoad	car park	Pervious Area	None	None	0.107 ha
Urban_SealedRoad	car park	Total Area	None	None	0.356 ha

Only certain parameters are reported when they pass validation

Failing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Receiving	Abundance Existing	GP Reduction	90	None	0 %
Receiving	Abundance Existing	TN Reduction	45	None	0 %
Receiving	Abundance Existing	TP Reduction	60	None	0 %
Receiving	Abundance Existing	TSS Reduction	90	None	0 %
Receiving	Ferodale Existing	GP Reduction	90	None	0 %
Receiving	Ferodale Existing	TN Reduction	45	None	0 %
Receiving	Ferodale Existing	TP Reduction	60	None	0 %
Receiving	Ferodale Existing	TSS Reduction	90	None	0 %
Sedimentation	OSD tank	Nitrogen Parameters.K	500	500	1 m/y
Sedimentation	OSD tank	Notional Detention Time	8	12	0.061 h
Sedimentation	OSD tank	Phosphorus Parameters.K	6000	6000	1 m/y
Sedimentation	OSD tank	Total Suspended Solids Parameters.CStar1	20	20	12 mg/L
Sedimentation	OSD tank	Total Suspended Solids Parameters.K	8000	8000	1 m/y
Sedimentation	SF Chamber.	Nitrogen Parameters.K	500	500	1 m/y
Sedimentation	SF Chamber.	Notional Detention Time	8	12	0.214 h
Sedimentation	SF Chamber.	Phosphorus Parameters.K	6000	6000	1 m/y
Sedimentation	SF Chamber.	Total Suspended Solids Parameters.CStar1	20	20	12 mg/L
Sedimentation	SF Chamber.	Total Suspended Solids Parameters.K	8000	8000	1 m/y

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MUSIC-*link* Report

Project Details		Company Details	
Project:	New Highschool for Medowie	**Company:**	enstruct
Report Export Date:	14/05/2025	**Contact:**	Tim Henderson
Catchment Name:	Ferodale Developed	**Address:**	L27 680 George Street Sydney, NSW, 2000
Catchment Area:	3.262ha	**Phone:**	02 9934 7595
Impervious Area*:	39.4083384426732%	**Email:**	tim.henderson@wsp.com
Rainfall Station:	WILLIAMTOWN RAAF - Station 061078 - Zone B		
Modelling Time-step:	Six minutes		
Modelling Period:	01/01/98 - 31/12/2007 11:54:00 PM		
Mean Annual Rainfall:	1125.627mm		
Evapotranspiration:	1394.455mm		
MUSICX Version:	1.30.0.13025 (5.30.0.13025)		
MUSIC-link data Version:	5.1		
Study Area:	Port Stephens Council		
Scenario:	Sensitive Catchment - Clay soils		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node:	**Reduction**	**Node Type**	**Number**	**Node Type**	**Number**
Flow	-0.001%	Sedimentation Basin Nodes	2	Urban_SealedRoad Nodes	1
TSS	98.388%	Generic Treatment Nodes	4	Urban_RuralResidential Nodes	2
TP	89.04%	Rainwater Tank Nodes	1	Urban_Mixed Nodes	2
TN	64.347%				
GP	100%				

Comments

Parameters outside of acceptable range have been provided by the supplier.

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Generic	10 x 460mm Psorb StormFilter (MCC)	High Flow Bypass	None	99	0.046 m³/s
Generic	30x 690mm Psorb StormFilter (MCC)	High Flow Bypass	None	99	0.036 m³/s
Generic	4 x OceanGuard	High Flow Bypass	None	99	0.08 m³/s
Generic	Generic Treatment 12	High Flow Bypass	None	99	0.08 m³/s
Rainwater	Rainwater Tank 15	% Reuse Demand Met	None	None	69.438 %
Receiving	Abundance Developed	Flow Reduction	None	None	17.195 %
Receiving	Abundance Developed	GP Reduction	90	None	100 %
Receiving	Abundance Developed	TN Reduction	45	None	63.799 %
Receiving	Abundance Developed	TP Reduction	60	None	83.521 %
Receiving	Abundance Developed	TSS Reduction	90	None	92.898 %
Receiving	Abundance Existing	Flow Reduction	None	None	0 %
Receiving	Ferodale Developed	Flow Reduction	None	None	-0.001 %
Receiving	Ferodale Developed	GP Reduction	90	None	100 %
Receiving	Ferodale Developed	TN Reduction	45	None	64.347 %
Receiving	Ferodale Developed	TP Reduction	60	None	89.04 %
Receiving	Ferodale Developed	TSS Reduction	90	None	98.388 %
Receiving	Ferodale Existing	Flow Reduction	None	None	0 %
Sedimentation	OSD tank	% Reuse Demand Met	None	None	0 %
Sedimentation	OSD tank	High Flow Bypass Out	None	None	0 ML/y
Sedimentation	SF Chamber.	% Reuse Demand Met	None	None	0 %
Sedimentation	SF Chamber.	High Flow Bypass Out	None	None	0 ML/y
Urban_Mixed	Roofs	Impervious Area	None	None	0.36 ha
Urban_Mixed	Roofs	Pervious Area	None	None	0 ha
Urban_Mixed	Roofs	Total Area	None	None	0.36 ha
Urban_Mixed	Source 8	Impervious Area	None	None	0.595 ha
Urban_Mixed	Source 8	Pervious Area	None	None	0.32 ha
Urban_Mixed	Source 8	Total Area	None	None	0.915 ha
Urban_RuralResidential	Source 13	Impervious Area	None	None	0.064 ha
Urban_RuralResidential	Source 13	Pervious Area	None	None	1.211 ha
Urban_RuralResidential	Source 13	Total Area	None	None	1.275 ha
Urban_RuralResidential	Source 5	Impervious Area	None	None	0.018 ha
Urban_RuralResidential	Source 5	Pervious Area	None	None	0.338 ha

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_SealedRoad	car park	Impervious Area	None	None	0.249 ha
Urban_SealedRoad	car park	Pervious Area	None	None	0.107 ha
Urban_SealedRoad	car park	Total Area	None	None	0.356 ha

Only certain parameters are reported when they pass validation

Failing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Receiving	Abundance Existing	GP Reduction	90	None	0 %
Receiving	Abundance Existing	TN Reduction	45	None	0 %
Receiving	Abundance Existing	TP Reduction	60	None	0 %
Receiving	Abundance Existing	TSS Reduction	90	None	0 %
Receiving	Ferodale Existing	GP Reduction	90	None	0 %
Receiving	Ferodale Existing	TN Reduction	45	None	0 %
Receiving	Ferodale Existing	TP Reduction	60	None	0 %
Receiving	Ferodale Existing	TSS Reduction	90	None	0 %
Sedimentation	OSD tank	Nitrogen Parameters.K	500	500	1 m/y
Sedimentation	OSD tank	Notional Detention Time	8	12	0.061 h
Sedimentation	OSD tank	Phosphorus Parameters.K	6000	6000	1 m/y
Sedimentation	OSD tank	Total Suspended Solids Parameters.CStar1	20	20	12 mg/L
Sedimentation	OSD tank	Total Suspended Solids Parameters.K	8000	8000	1 m/y
Sedimentation	SF Chamber.	Nitrogen Parameters.K	500	500	1 m/y
Sedimentation	SF Chamber.	Notional Detention Time	8	12	0.214 h
Sedimentation	SF Chamber.	Phosphorus Parameters.K	6000	6000	1 m/y
Sedimentation	SF Chamber.	Total Suspended Solids Parameters.CStar1	20	20	12 mg/L
Sedimentation	SF Chamber.	Total Suspended Solids Parameters.K	8000	8000	1 m/y

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MUSIC-*link* Report

Project Details		Company Details	
Project:	New Highschool for Medowie	**Company:**	enstruct
Report Export Date:	14/05/2025	**Contact:**	Tim Henderson
Catchment Name:	Abundance Existing	**Address:**	L27 680 George Street Sydney, NSW, 2000
Catchment Area:	3.262ha	**Phone:**	02 9934 7595
Impervious Area*:	39.4083384426732%	**Email:**	tim.henderson@wsp.com
Rainfall Station:	WILLIAMTOWN RAAF - Station 061078 - Zone B		
Modelling Time-step:	Six minutes		
Modelling Period:	01/01/98 - 31/12/2007 11:54:00 PM		
Mean Annual Rainfall:	1125.627mm		
Evapotranspiration:	1394.455mm		
MUSICX Version:	1.30.0.13025 (5.30.0.13025)		
MUSIC-link data Version:	5.1		
Study Area:	Port Stephens Council		
Scenario:	Sensitive Catchment - Clay soils		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node:	**Reduction**	**Node Type**	**Number**	**Node Type**	**Number**
Flow	0%	Sedimentation Basin Nodes	2	Urban_SealedRoad Nodes	1
TSS	0%	Generic Treatment Nodes	4	Urban_RuralResidential Nodes	2
TP	0%	Rainwater Tank Nodes	1	Urban_Mixed Nodes	2
TN	0%				
GP	0%				

Comments

Parameters outside of acceptable range have been provided by the supplier.

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Generic	10 x 460mm Psorb StormFilter (MCC)	High Flow Bypass	None	99	0.046 m³/s
Generic	30x 690mm Psorb StormFilter (MCC)	High Flow Bypass	None	99	0.036 m³/s
Generic	4 x OceanGuard	High Flow Bypass	None	99	0.08 m³/s
Generic	Generic Treatment 12	High Flow Bypass	None	99	0.08 m³/s
Rainwater	Rainwater Tank 15	% Reuse Demand Met	None	None	69.438 %
Receiving	Abundance Developed	Flow Reduction	None	None	17.195 %
Receiving	Abundance Developed	GP Reduction	90	None	100 %
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Receiving	Ferodale Developed	GP Reduction	90	None	100 %
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Receiving	Ferodale Developed	TSS Reduction	90	None	98.388 %
Receiving	Ferodale Existing	Flow Reduction	None	None	0 %
Sedimentation	OSD tank	% Reuse Demand Met	None	None	0 %
Sedimentation	OSD tank	High Flow Bypass Out	None	None	0 ML/y
Sedimentation	SF Chamber.	% Reuse Demand Met	None	None	0 %
Sedimentation	SF Chamber.	High Flow Bypass Out	None	None	0 ML/y
Urban_Mixed	Roofs	Impervious Area	None	None	0.36 ha
Urban_Mixed	Roofs	Pervious Area	None	None	0 ha
Urban_Mixed	Roofs	Total Area	None	None	0.36 ha
Urban_Mixed	Source 8	Impervious Area	None	None	0.595 ha
Urban_Mixed	Source 8	Pervious Area	None	None	0.32 ha
Urban_Mixed	Source 8	Total Area	None	None	0.915 ha
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Urban_RuralResidential	Source 13	Pervious Area	None	None	1.211 ha
Urban_RuralResidential	Source 13	Total Area	None	None	1.275 ha
Urban_RuralResidential	Source 5	Impervious Area	None	None	0.018 ha
Urban_RuralResidential	Source 5	Pervious Area	None	None	0.338 ha

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_SealedRoad	car park	Impervious Area	None	None	0.249 ha
Urban_SealedRoad	car park	Pervious Area	None	None	0.107 ha
Urban_SealedRoad	car park	Total Area	None	None	0.356 ha

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Failing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
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Receiving	Ferodale Existing	TSS Reduction	90	None	0 %
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MUSIC-*link* Report

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Report Export Date:	14/05/2025	**Contact:**	Tim Henderson
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Impervious Area*:	39.4083384426732%	**Email:**	tim.henderson@wsp.com
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Evapotranspiration:	1394.455mm		
MUSICX Version:	1.30.0.13025 (5.30.0.13025)		
MUSIC-link data Version:	5.1		
Study Area:	Port Stephens Council		
Scenario:	Sensitive Catchment - Clay soils		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node:	**Reduction**	**Node Type**	**Number**	**Node Type**	**Number**
Flow	17.195%	Sedimentation Basin Nodes	2	Urban_SealedRoad Nodes	1
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GP	100%				

Comments

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Passing Parameters

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Receiving	Abundance Existing	Flow Reduction	None	None	0 %
Receiving	Ferodale Developed	Flow Reduction	None	None	-0.001 %
Receiving	Ferodale Developed	GP Reduction	90	None	100 %
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Receiving	Ferodale Existing	Flow Reduction	None	None	0 %
Sedimentation	OSD tank	% Reuse Demand Met	None	None	0 %
Sedimentation	OSD tank	High Flow Bypass Out	None	None	0 ML/y
Sedimentation	SF Chamber.	% Reuse Demand Met	None	None	0 %
Sedimentation	SF Chamber.	High Flow Bypass Out	None	None	0 ML/y
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Urban_RuralResidential	Source 13	Total Area	None	None	1.275 ha
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Receiving	Ferodale Existing	GP Reduction	90	None	0 %
Receiving	Ferodale Existing	TN Reduction	45	None	0 %
Receiving	Ferodale Existing	TP Reduction	60	None	0 %
Receiving	Ferodale Existing	TSS Reduction	90	None	0 %
Sedimentation	OSD tank	Nitrogen Parameters.K	500	500	1 m/y
Sedimentation	OSD tank	Notional Detention Time	8	12	0.061 h
Sedimentation	OSD tank	Phosphorus Parameters.K	6000	6000	1 m/y
Sedimentation	OSD tank	Total Suspended Solids Parameters.CStar1	20	20	12 mg/L
Sedimentation	OSD tank	Total Suspended Solids Parameters.K	8000	8000	1 m/y
Sedimentation	SF Chamber.	Nitrogen Parameters.K	500	500	1 m/y
Sedimentation	SF Chamber.	Notional Detention Time	8	12	0.214 h
Sedimentation	SF Chamber.	Phosphorus Parameters.K	6000	6000	1 m/y
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Appendix E

Sewer Servicing Reports

NBRS

MEDOWIE PUBLIC SCHOOL

FERODALE RD

Approximate connection point on Ferodale Rd (Option 2)

NEW BUS STOP

NEW KISS & RIDE (BEFORE & AFTER SCHOOL) PARKING SPACES

EXISTING PARKING

EXISTING PEDESTRIAN CROSSING

BOUNDARY ~ 40.845m

LOT 1511
DP571854

LOT 1
DP788451

LOT 2
DP788451

BOUNDARY ~ 70m

BOUNDARY ~ 134.11m

STAFF & VISITOR CARPARK

BOUNDARY ~ 100m

10M Setback Line

BLOCK B

ENTRY PLAZA

COURT 1

BOUNDARY ~ 60.34m

BLOCK C

QUADRANGLE

BLOCK A

10M Setback Line

LOT 80
DP826540

PLAYING FIELD

BOUNDARY ~ 265.355m

10M Setback Line

NEW PATH

BOUNDARY ~ 327.975m

LOT 3
DP788451

BOUNDARY ~ 201.185m

LOT 1
DP831238

EXISTING PARKING

NEW FOOTPATH 1.2M WIDE

RELOCATE BUS STOP

NEW KERB AND GUTTER (REFER CIVIL DRAWINGS)

NEW PATH

NEW PEDESTRIAN WOMBAT CROSSING LOCATION (TBC)

Approximate connection point on Abundance Road (Option 1)

NEW BUS BAY

ABUNDANCE RD

EXISTING BUS STOP **(NO INFRASTRUCTURE)**

EXISTING PARKING

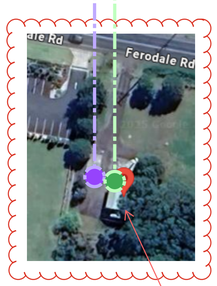
NEW BUS BAY

NEW DROP OFF / PICK UP PARKING

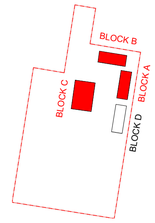
INDUSTRIAL RD

EXISTING PEDESTRIAN REFUGE ISLAND (APROX. LOCATION)

NEW PEDESTRIAN PATHWAY TO MARRY WITH EXISTING PATHWAY



Approximate location of Medowie 10 Wastewater Pump Station at 36B Ferodale Road, Medowie.



KEY PLAN

Legend

Option 1

Construction of a new gravity sewer from a connection point on Abundance Road, along the western side of Abundance Road, east along the norther side of Ferodale Road and connecting to the Medowie 10 Wastewater Pump Station.

School connection point will be determined in consultation with HWC and school design team.

Option 2

Construction of a new gravity sewer from a connection point on northern boundary at Ferodale Road, east along the norther side of Ferodale Road and connecting to the Medowie 10 Wastewater Pump Station.

School connection point will be determined in consultation with HWC and school design team.

Drawing Title		
Sewer servicing options sketch		
Drawing #		
SK-01		
Revision		
1	13/05/2025	Sketch prepared for REF submission response and submission