

Issues Raised	Response
PENRITH CITY COUNCIL	
Access, Traffic and Transport	
• The proposed right turn bay length on Grace Drive for the turning movement onto Castlereagh Road should be extended to cater for traffic growth. Current storage is insufficient and the North Penrith development will generate a need for extending turning provision. In this regard, the current median should be fully utilised to cater for traffic growth.	Refer to the response for the Stage 2B & 2C application.
 It is unclear if a shared path is provided on Thornton Drive into estate. A minimum 2.5m wide shared path is required connecting the existing Grace Drive to Thornton Drive. It is preferable that this is provided on the northern side. 	The configuration of cycle and pedestrian access on Thornton Drive has been modified to included a 2.5m shared path on the northern side.
 Concern that the intersection of Combewood Avenue and Thornton Drive will not cater for short to medium term traffic volumes. A give-way controlled median island arrangement is not considered sufficient, and a roundabout controlled intersection should be provided in order to cater for traffic growth of the development and to provide adequate residential amenity. 	 This matter has been comprehensively addressed in the Concept Plan and Traffic and Transport Assessment submitted with the EIS. The configuration of the intersection is consistent with the approved Concept Plan. Parsons Brinckerhoff have undertaken traffic analysis of this intersection using the SIDRA Intersection modelling software for the 2026 future year ultimate design scenario. The results indicate that the proposed give-way controlled intersection has ample traffic capacity to cater for future growth.
The creation of a right turn bay from Richmond Road into Coreen Avenue and the installation of a seagull treatment on Coreen Avenue at the eastern intersection with Coombes Drive is requested up front to cater for anticipated traffic movements associated with the development.	 The Coreen Avenue / Richmond Road intersection is currently being discussed with RMS The timing of the seagull intersection treatment at Coreen Avenue and Coombes Drive is linked to Stage 3A under the approved Concept Plan (note reference to Stage 2A in Concept Plan now modified to Stage 3A). This will be addressed as part of the application for Stage 3A.



Water Cycle Management	
 No details provided regarding the proposed GPTs. Council recommend they are not visible and that access for maintenance is appropriate for Council's maintenance fleet. Design considerations should include but not limited to the following: 	 Noted. This matter can be dealt with through the Department's standard conditions of consent.
 All GPTs should be sized to ensure that they can treat the 3 month to 1 year ARI flow. 	
 As the GPTs are to be designed for the pre-treatment of a wetland, it is important that they be designed to remove coarse sediment loads. 	
 All GPTs should be designed to ensure there is no risk of increased flooding upstream of the GPT. 	
 Council should be given an opportunity to review and approve the proposed GPTs so that life cycle costs and maintenance issues can be considered. The proponent should provide Council with a detailed operation and maintenance manual which includes estimated costing. 	
 Handover of assets to Council should not occur before a minimum of 3 years have passed. 	 The Mitigation Measures confirm Urbangrowth NSW's commitment to maintain any local drainage and stormwater infrastructure for a period of 36 months from the date of practical completion of the works unless otherwise agreed by Urbangrowth NSW and Penrith City Council. The commitment to hold local infrastructure is also confirmed by the Maintenance Schedule approved as part of the Concept Plan.
Environmental Matters	
The development has a number of contamination protocols in place and the overall issues of contamination will be overseen by a Site Auditor. As such, no concerns are raised in relation to land contamination for this development.	Noted.
 Council considers that noise and vibration issues during construction are adequately dealt with through the adopted Construction Environmental Management Plan for the development. 	Noted.

RESPONSE TO AGENCY SUBMISSIONS



- Clarification should be provided on how road and railway noise is going to be managed for the future dwellings and buildings within this development. In particular:
 - road traffic noise from the new internal roadways on future dwellings; and
 - railway noise on future dwellings within the development.

- The Development Near Rail Corridors and Busy Roads Interim Guidelines were considered during preparation of the EIS. The nature of development for which consent is sought has not triggered those Guidelines.
- Section 3.8(6) of the approved North Penrith Design Guidelines also require future dwellings in close proximity to the railway corridor and Coreen Avenue to include design measures to achieve internal noise targets of 35 dBA) LAeq in sleeping areas and 40 dBA) LAeq in other living areas.
- The detailed design of future dwellings will therefore need to address Section 3.8(6) of the Design Guidelines and where necessary incorporate mitigation measures such as glazing and screening to achieve the target noise levels.
- The CEMP is comprehensive and satisfactorily addresses the key environmental management aspects of the development. However, the following additional information should be incorporated into the CEMP:
 - additional procedures should be added to the CEMP to address reports received by Council that following storm events the site dewaters heavily sediment laden water into the stormwater system.
 - clarification as to how often the environmental audits identified in the CEMP will be undertaken.
- There does not seem to be any information or assessment regarding the
 potential conflict between the proposed residential dwellings on the northwest part of the site and the adjoining Mobil fuel storage depot.

 The CEMP can be updated prior to construction commencing. This can be addressed as a condition of consent.

 This is not relevant for Stage 3B. The Mobil fuel depot abuts the Stage 2D site. Please refer to the Stage 2D EIS for further assessment.

Public Health Matters

- Council's submission contains recommended conditions of consent to address:
 - temporary food stalls and mobile food vendors within recreation areas;
 - the need for water from fountains is potable and the fountains are maintained in good working order and in a clean condition; and
 - specification and management of aeration devices as part of the water
- Noted. Urbangrowth NSW has reviewed Penrith City Council's recommended conditions of consent and generally has no objection to the matters covered by Council's recommended conditions being dealt with through the Department's standard conditions of consent.



feature to aide against legionella dispersal.		
Safety, Security and Crime Prevention		
 Surfaces throughout shall be anti-graffiti coated or made of materials suitable for graffiti removal (i.e. surfaces that won't erode if high pressure cleaned). 	Noted.	
 Pedestrian walkways shall provide good sight lines and be clear of obstruction to maximise natural surveillance and minimise entrapment spots or opportunities to hide. 	Noted.	
 All street side vegetation shall have high canopies or be low in height to maximise surveillance. 	Noted.	
Social Planning Matters		
 Council welcomes Landcom's commitment to deliver 44 affordable housing dwellings, 44 adaptable housing dwellings and 100 dwellings for older people at the North Penrith site. 	Noted.	
 No objection is raised to the proposed delivery approach which involves Landcom selecting an aged housing provider at the next stage of planning. Council supports the idea that the size and specific location of the site for aged housing will depend on the housing and care delivery model of the selected provider. 	• Noted.	
 Council's Community and Cultural Development staff has ample knowledge and understanding of the housing needs of older people in Penrith and would welcome the opportunity to work closely with Landcom during the planning process. The expertise and local knowledge of Council staff will assist Landcom in achieving the best outcome for the project. 	Noted. UrbanGrowth NSW is committed to working collaboratively with Penrith City Council and will continue to discuss the project with Council in due course.	
 The delivery of 44 affordable rental dwellings in North Penrith to be managed by a community housing provider is supported. It is recommended that the 44 affordable housing dwellings will be different housing types to suit the diverse housing needs of families. 	Noted.	



The location and distribution of these 44 dwellings need to be carefully considered. It is strongly recommended that the dwellings be evenly distributed and located across the whole development. The concentration of all of these dwellings within one location is not recommended.	Noted.
Public Art	
The public art works will require foundation and structural engineering details for approval.	 This is not relevant for the Stage 3B application. See the response for Stages 2B & 2C.
Council's submission identifies particular specifications for glass elements.	 This is not relevant for the Stage 3B application. See the response for Stages 2B & 2C.
Flooding	
The Department is reminded of Council's submissions regarding the proposal to alter the approved Penrith Lakes Scheme, particularly the reduction in the number of interface weirs. Council has urged the Department to ensure that the delivery of the Penrith Lakes Scheme does not compromise the Flood Planning Levels for surrounding lands including those that have been established for the North Penrith site. It is critical that this issue is taken into account as part of any project approval relating to these stages of the North Penrith development.	 The application complies with flood planning levels approved under the Concept Plan. Any issues relating to the Penrith Lakes Scheme are not relevant to this application.
Engineering Matters	
One corner of the Coreen Avenue roundabout is to be widened to accommodate turning for large vehicles. The boundary of the Mobil fuel storage depot site encroaches into the vicinity of this area and hence some land acquisition is required to widen the corner of the roundabout	 The requirement for potential widening of this roundabout is related to the future supermarket within the Stage 3A area and is therefore not relevant to this application. This matter will be dealt with as part of the Stage 3A application. However, it must be noted that UrbanGrowth NSW cannot be required to acquire private land for road widening.
Council's submission contains recommended conditions of consent.	 Noted. Urbangrowth NSW has reviewed Penrith City Council's recommended conditions of consent and generally has no objection to the matters covered by Council's recommended conditions being dealt with



	through the Department's standard conditions of consent.
Subdivision Matters	
 Penrith City Council shall be appointed as the PCA for the subdivisions and related works. 	 Noted and agreed. UrbangrowthNSW is committed to continuing its strong working relationship with Penrith City Council and will appoint Council as the PCA for the subdivision and related works.
Council's submission contains recommended conditions of consent.	 Noted. Urbangrowth NSW has reviewed Penrith City Council's recommended conditions of consent and generally has no objection to the matters covered by Council's recommended conditions being dealt with through the Department's standard conditions of consent.
Landscape and Public Domain	
 A maintenance plan shall be provided for any Construction Certificate approval for landscape elements for general maintenance and asset renewal purposes. Costs should also be included. 	 Urbangrowth NSW prepared and submitted a maintenance schedule during preparation of the approved Concept Plan. The Schedule confirms Landcom's intention to fund the initial set up (construction and embellishment) costs, and subsequently maintain open space areas. Accordingly, UrbanGrowth NSW will hold the associated maintenance costs for a period of 36 months. The Maintenance Schedule indicates that the ongoing costs to Council will be minimal post handover. Council has previously reviewed the Schedule and advised that the costings are acceptable.
 Street cross sections are inconsistent with Council standards. Council's standard is 1.5m, however this path in a 3.6m verge means there is insufficient space for street trees. Also, there are both 3.8m and 3.9m verge widths. 	 The proposed street cross sections are consistent with those approved under the Concept Plan Approval. There are only minor adjustments where new street cross sections need to integrate with existing conditions (such as on Thornton Drive and on Combewood Avenue at the interface with the commuter car park). 1.5m footpaths are provided in all locations, and street trees are still provided within the 3.6 verge.
 Fencing details should be provided. Council requires assurance that opportunities for graffiti are minimised and surrounding and streetscape amenity is not compromised by the height and scale of fencing. Of particular 	 The boundary to the commuter car park is already fenced; this fencing was installed as part of the car park construction. UrbanGrowth NSW does not intend to install additional fencing.



interest is the southern boundary, backing onto the commuter car park. Additional screen planting is recommended to supplement existing planting for an effective vandal resistance and amenable interface.	
 Council generally supports a mix of native and exotic species. Council requests more native species be included in the planting palettes for the development to respond to the locality, assist native birdlife and add to biodiversity generally. 	• Noted.
 Street trees should take into account and not compromise the levels of lighting from street lights. 	Noted.
 More detail is required in relation to the materials palette, and particularly pavement materials. Specifications and construction details require Council sign off and are also required for asset renewal and maintenance programs. Alternative materials to timber for the boardwalk and deck are to be considered as Council consistently encounters fire vandalism to timber structures in the LGA. 	 The proposed materials palette and specifically the incorporation of timber viewing decks and boardwalks is consistent with the approved Concept Plan and also works now delivered as part of Stage 1. It is important to maintain a continuity of materials across all stages for the overall cohesiveness of the public domain. Notwithstanding the above, UrbanGrowth NSW will explore opportunities to reduce the extent of timber decking during the detailed construction certificate design.
• In relation to the furniture palette, Council does not support lighting bollards (ineffective lighting levels and vandalism). Bollards should include luminance contrast strips (as required by AS 1428). An adequate proportion of seats with backs should also include arm rests. Council does not support timber as a material used in shelters (fire vandalism). Throughout the LGA, Council has adopted and is implementing stainless or galvanised steel circular hoops as attachments to street posts as a form of cycle rack and this should be considered for North Penrith.	Noted. These matters can be addressed as part of the construction certificate.
• In relation to the Radcliffe Place through site link, it will be necessary to ensure sufficient luminance contrast to the stone elements extending into the footpath. It will also be necessary to ensure there are no concealment opportunities provided by the sandstone structures compromising safety to path users. A perception of safety can be provided by reducing the height of	Noted. These matters can be addressed as part of the construction certificate.



sandstone structures to 1.2m, permitting sight lines beyond. Overhead lighting should be provided, the effectiveness of which is not compromised by tree plantings. An effective barrier to cars is to be provided but should allow maintenance vehicle access.	
NSW HERITAGE BRANCH	
 An updated Heritage Interpretation Study should be undertaken by an appropriately qualified interpretation specialist and be subject to review prior to approval of this project by DPI. 	A detailed Heritage Interpretation Strategy forms part of the approved Concept Plan. The author of the Interpretation Strategy has remained involved in the project and reviewed each stage for consistency with the Strategy. Heritage interpretation is being successfully implemented across the site is being achieved by virtue of street and open space naming, public art and creation of view corridors. The preparation of an updated Heritage Interpretation is unnecessary and unwarranted.
NSW OFFICE OF WATER	
The Geotechnical Report and the Contamination Report for Stage 2D confirms the development has no requirement for the extraction of groundwater (see Appendix G, page 7 and Appendix H, page 5). However other information provided in the Stage 2D DA indicates drilling for piling construction below depths of about 5m to 8m might encounter ground water (page10) while the Containment Report states site works for Stage 2B, 2C, 2D, 3A and 3B are not expected to encounter any ground water (page 8).	 Urbangrowth NSW confirms that there is no intention to intercept or use groundwater during either the construction or operation of the proposed Stage 3B development. The EIS had simply sought to recognise that in the very unlikely event that groundwater was unexpectedly intercepted, UrbangrowthNSW understood that it would be required to obtain an approval under the Water Management Act, 2000. Further design undertaken since exhibition of the EIS has now confirmed that drilling and piling will not encounter groundwater. This will be confirmed by the Construction Certificate documentation, when finalised and submitted to the Private Certifying Authority, prior to commencement of works.
 If groundwater is proposed to be intercepted or extracted, the applicant will be required to hold sufficient licensed entitlement to account for the annual volume within the groundwater source in accordance with the Water Sharing Plan and the trading rules for Hawkesbury Alluvium Groundwater Source. 	As above and noted.
 Depending on the volumes encountered and the duration of the pumping, a license may be required under Part 5 of the Water Act, 1912 in relation to the 	As above and noted.



construction excavation/dewatering activities.	
EPA	
EPA's submission contains recommended conditions of consent.	 Urbangrowth NSW has reviewed the EPA's recommended conditions of consent and generally has no objection to the matters covered by the EPA's recommended conditions being dealt with through the Department's standard conditions of consent.
The development sewerage reticulation system (including any main, sewerage pump stations and overflow structures) must be completed to the standard necessary to ensure that it would not compromise Sydney Water Corporation's capacity to satisfy the condition of its Penrith sewage treatment system environment protection licence.	Noted. This matter can be dealt with through the Department's standard conditions of consent.
NSW OFFICE OF ENVIRONMENT AND HERITAGE	
It is recommended that protocols are developed in the event that evidence of Aboriginal occupation is encountered during works.	Noted. This form part of the CEMP at Appendix K of the original EIS.
Development controls are needed for all development below the flood record (i.e. 1867 flood) or the 200 year flood level in order to limit or avoid structural and contents damage in residential development to an amount which can be endured by individual households, without reliance on flood insurance.	 This comment is inconsistent with the flood levels established under the approved Concept Plan. Section 117 Direction issued by the Minister of Planning on 1 July 2009 required that: "A planning proposal must not impose flood related development controls above the residential flood planning level (i.e. 100 year flood level plus appropriate freeboard) for residential development on land, unless a relevant planning authority provides adequate justification for those controls to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General)." The requirement to impose development controls for "all development below the flood record (i.e. 1867 flood) or the 200 year flood level" is inconsistent with this Ministerial direction.
The site grading and road layout and road grading needs to provide for staged orderly retreat to high ground away from rising floodwaters.	 Constant rising grades are impractical given the flat topography of the site. It is noted that the road network will provide access to higher areas to the east of the site, both via Coreen Avenue and also Mountain View Crescent



	(part of the approved Stage 2A).
 The SES should be consulted to help determine the acceptability of any car based flood evacuation strategy. 	 UrbangrowthNSW will consult with the SES during the preparation of Construction Certificate, where relevant.
ROADS AND MARITIME SERVICES	
 All works/regulatory signposting associated with the proposed development are to be at no cost to RMS. 	 UrbanGrowth NSW notes that new internal roads and intersections within the development will be at no cost to the RMS.
	 See comments relating to external RMS intersections in the Stage 2B & 2C response.
A Construction Traffic Management Plan (TMP) detailing construction vehicle routes, number if trucks, hours of operation, access arrangements and traffic control should be submitted to DPI and RMS for approval prior to the issue of Construction Certificate. The TMP must detail the traffic impact of the construction works on the local area and State Road network and the means proposed to manage construction works to minimise such impacts.	• Noted.
 The developer shall be responsible for all public utility adjustment/relocation work necessitated by the above work and as required by the various public utility authorities and/or their agents. 	Noted.
The car parking provision is to be to Council's satisfaction.	Noted.
■ The layout of proposed car parking areas (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1-2004 and AS 2890.2-2002 for heavy vehicle usage.	• Noted.
■ The swept path of the longest vehicle (including garbage trucks) entering and exiting subject site, as well manoeuvrability through the site, shall be in accordance with AUSTROADS. A plan shall be submitted to Council for approval demonstrating the development complies with this requirement.	• Noted.
SYDNEY WATER	



 Landcom should engage a Water Servicing Coordinator to get Section 73 Certificate. 	 Urbangrowth NSW will engage a Water Servicing Coordinator to obtain a Section 73 Certificate. The Mitigation Measures have been amended to confirm Urbangrowth NSW commitment to working closely with Sydney Water.
 The Southern portion of the subdivision will require an extension from the existing 150mm wastewater main traversing the site. 	Noted.
 The northern portion of the development will require extensions from the mains constructed in Stage1. These reticulation mains drain to proposed SPS 1180, which must constructed prior to servicing of the subdivision. 	Noted.
 The proposed wastewater infrastructure for this development will be sized and configured according to the Sewerage Code Australia (Sydney Water Edition WSA 02-2002. 	Noted.
TRANSPORT NSW	
 TransportNSW requests proponent demonstrates that the appropriate management of construction traffic impacts is undertaken with regard to commuters accessing the commuter car park during the reconstruction phase of the existing commuter car park access road. 	A draft CEMP was prepared for the EIS, which addresses construction traffic management measures and was provided at Appendix K of the exhibited EIS. The appointed contractor will be required to prepare a detailed CEMP prior to commencement of works which will identify the specific construction traffic issues and mitigation measures associated with the commuter car park, to ensure that development does not result in any adverse impacts. This matter can be dealt with through the Department's standard conditions of consent.
 Proponent is requested to consult with TransportNSW in the preparation of the Construction Traffic Management Plan prior to issue of the Construction Certificate to ensure that provision has been made for adequate information and signage to advise commuters to the temporary change to vehicular access arrangements during road reconstruction. 	 UrbangrowthNSW will ensure that the appointed contractor liaises with TransportNSW during the preparation of the final CEMP. This matter can be dealt with through the Department's standard conditions of consent.
 The proposed roads and intersections as indicated in Appendix A - Revised Concept Plans of the Modification Report should be designed to accommodate overall bus manoeuvrability and swept paths of buses up to 14.5m in length 	 The public transport and the bus routes through the North Penrith site were approved under the Concept Plan following proactive investigations by Urbangrowth NSW with the (then) Ministry of Transport and (then)



such that there is no centre line crossing.	Roads and Traffic Authority. The Concept Plan Approval provides immediate and long term outcomes to ensure bus routes passing through the North Penrith site link with existing bus connections (refer to Section 6.8.3 of the exhibited Concept Plan EAR). All roads within the North Penrith development are now being designed in accordance with the road typologies and dimensions approved under the Concept Plan.
The proposed widths of some of the roads (2.3-2.5m) and intersection layouts would permanently inhibit buses or larger service vehicles. It is important consideration be given to providing roads and intersections that can support bus manoeuvrability in accordance with the relevant standards.	The relevant roads and intersections for the dedicated bus route approved in the Concept Plan are designed to accommodate bus movements. Bus movements are not relevant to Stage 2D as the approved bus route does not pass through this part of the site.
NSW TRADE AND INVESTMENT RESOURCES & ENERGY - MINERAL RESOURCE	S BRANCH
The Mineral Resources Branch (MRB) has no objection to the North Penrith Mixed Use Development Stages 2A, 2B, 2C, 2D and 3B. Other divisions of NSW Trade and Investment including Agriculture, Fisheries and Forests NSW may provide advice in separate correspondence.	• Noted.