

APPENDIX K: ASPECT INDUSTRIAL ESTATE SSD – 10448 RFI RESPONSE

Submission	Comment	Response	
DPIE - Indust	DPIE - Industry Assessments and Central (Western) Team		
1.1	The proposed Access Road 1 is identified as a higher order road in the draft Mamre Road Precinct Development Control Plan (MRP DCP) as it provides a key controlled access location to Mamre Road for the development and future developments to the north, east and south of the site. The draft MRP DCP identified a required road width of 30.6 m at the Mamre Road/Access Road 1 intersection with a potential midblock width reduction to 26.4 m, subject to design and Council agreement. The road is also 'accessed denied' meaning car park access and loading dock access should not be provided to/from this road. The Department notes the width of Access Road 1, car park and loading dock entries/exits at Access Road 1 are retained. The development does not achieve the nominated width and includes direct access from warehouses 1 (Stage 1 development) and 8 (Concept Proposal). The Department also notes TfNSW raised concerns about locating the access for the car park to the west of the café close to the proposed Mamre Road/ Access Road 1 intersection and potential impacts on road safety.	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has undertaken extensive consultation in relation to the proposed road network for AIE. A copy of the letters submitted to DPIE on 26 November 2021 and 25 January 2022 are provided within Appendix F1 and Appendix F2 of the Amended Development Report. Mirvac believe this letter and other correspondence submitted to DPIE and TFNSW adequately addresses and closes out items relating to the AIE road network.	

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	Please provide detailed justifications for the above departures from the draft MRP DCP.	
1.2	The Department notes Section 4.2 of the RtS report states construction of Access Roads 1 and 3, and the roundabout would be staged. Stage 1 Phase 1 road works will be completed prior to issuance of first Occupation Certificate for Warehouse 1 and 3. The Stage 1 Phase 2 road works will be completed prior to issuance of first Occupation Certificate for any warehouse which connects to it, therefore ensuring timely provision of access to adjacent landholdings. Considering Access Roads 1 and 3 would provide key access to adjacent sites to the north and south, please provide detailed justifications for the proposed staging approach and departures from the draft MRP DCP, evidence confirming neighbouring landowners' agreements to the proposed approach.	 The AIE Stage 1 SSD proposes to facilitate access to adjoining properties on a staged basis consistent with other developments recently approved by DPIE within the Mamre Road Precinct and wider Western Sydney Employment Area and in accordance with the objectives and controls outlined within the Mamre Road Precinct DCP. Mirvac supports providing access to adjoining development lots and, more broadly, development throughout the Mamre Road Precinct, though this reasonably needs to be on a staged basis informed by the nexus between the proposed road infrastructure and the subject warehouse development works. It is considered that there is nexus between the Stage 1 Phase 1 works and the proposed Stage 1 Warehouse No.1 and No.3 operations. It is considered that there is nexus between the Stage 1 Phase 2 road works and any future AIE warehouse which connects to those road works. Stage delivery of the access roads is required for the following reasons: The estate earthworks have been designed to achieve a general balanced cut to fill and across the estate to avoid creation of additional construction truck traffic as would be required if material was to be imported or exported to / from the estate Due to existing topography the cut to fill generally require cut from southern portion of the site and filling in the northern portion to create building platforms including those for the Stage 1 buildings (warehouse 1 & 3)

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		 To avoid creation of construction traffic on public roads and safely manage transportation of material on site a temporary haul road will be created to facilitate filling activities from the south to the north of site As road 1 would bisect this temporary access for construction traffic the delivery of road 1 has been split into two phases to avoid delays to completion of the filling works and reduce the need for this construction traffic to traverse road 1 during construction or operation. In summary, the SSD Stage 1 seeks to deliver Access Roads No.1 and No.3 on a staged basis as follows:
		Stage 1 Phase 1 (Refer Appendix E of Amended Development Report): Signalised Intersection, Access Road No.2 and Access Road No.1 to proposed local Access Road 2 intersection prior to issuance of first Occupation Certificate for WH1 or WH3. It is proposed there is nexus between this section of Access Road No.1 infrastructure and the occupancy requirements for WH1 & WH3. This section has been staged noting this is critical path to enabling occupancy for the stage 1 warehouses (WH1 & WH3) to meet customer requirements.
		Stage 1 Phase 2 (Refer Appendix E of Amended Development Report): roadworks will include construction of Access Road 1 from the intersection of Access Road 2 to and including the roundabout and Access Road No.3 south to the temporary cul-de-sac. Access Road 1 and Access Road 3 to be completed prior to issuance of first Occupation Certificate for any warehouse which connects to it other than WH1 or WH3, therefore ensuring timely provision of access to adjacent landholdings.
		Further to the above in relation to connections to adjoining sites, Mirvac note the following.

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		Access Road 3 connection to southern adjoining landowner Access Road 3 South provides cul-de-sac turning facilities at the adjoining site boundary to facilitate turning movements up to an A-Double. To enable connection to the adjoining landowner, turning facilities for road users must be provided within the adjoining development.
		To ensure a broader Mamre Road network operates and development occurs in a logical, coordinated, and staged manner, adjoining landowners should deliver and contribute the required road infrastructure within their developments prior to a connection being made. This is to avoid a situation where developments and intersections become overly relied upon as access points to the wider MRP.
		Access Road 3 connection to northern adjoining landowner
		It is proposed to deliver SSD Stage 1 Phase 2 road works as per above.
		In relation to the Northern extension of Access Road 3 from the roundabout, Mirvac will coordinate delivery of this road with the landowner of 784-786 Mamre Road, Kemps Creek (Lot 59 DP259135) with 50% of the road reserve to be completed on landowner of 784-786 Mamre Road, Kemps Creek (Lot 59 DP259135) side and 50% of the road reserve on Mirvac site. The AIE Concept Masterplan has accounted for this.
		Mirvac understand the adjoining landowner is seeking approval of a re- location of the E2 zoned land connection point at the shared boundary and therefore this would need to be approved in order for Mirvac to deliver this section of road.

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1.3	Traffic modelling to determine road hierarchy within Mamre Road Precinct is still being undertaken. The Department reiterates its previous comments that an amended Traffic Assessment prepared in accordance with the traffic modelling including trip generation rate agreed by TfNSW and Central (Western) team must be provided in the Supplementary RtS.	Traffic modelling to determine the road hierarchy within the Mamre Road Precinct has now been completed. Mirvac has adopted a road network layout in accordance with the DCP road network modelling. Refer letters submitted to DPIE on 26 November 2021 and 25 January 2022 within Appendix F1 and Appendix F2 of the Amended Development Report for additional information.

1.4	Please clarify in the Supplementary RtS whether the interim layout (2026) of the proposed Mamre Road/ Access Road 1 intersection could sufficiently accommodate traffic generated by the Stage 1 development and surrounding developments based on the latest agreed traffic modelling.	As above.
1.5	Please confirm whether the right-turn lane on Mamre Road northbound approach is sufficient to accommodate 30 m PBS Type 2 vehicles queuing.	The right turn lane on Mamre Road northbound approach has been documented as 80m in length which could accommodate 2 x PBS 2B vehicles queuing.
1.6	Please clarify if a bus jump lane is proposed at Mamre Road/ Access Road 1 intersection.	Provision for a bus jump has been provided for in the proposed interim 2026 intersection layout design in accordance with the TfNSW Mamre Road Upgrade Strategic Design.
1.7	The Supplementary RtS should include an assessment of the Concept Proposal (11 warehouses) under the ultimate scenario (2036) which also considers traffic generated by development on surrounding sites	Since receipt of this RFI Request for additional information on 29 March 2021 and in response to TFNSW's correspondence on 4 August 2021, Mirvac has submitted modelling that includes for 2026, 2031 and 2036 horizon years to identify the entire Aspect Industrial Estate master plan. Further details are provided within Appendix F of the Amended Development Report.
1.8	Table 30 of the NVIA reported a predicted increase in time averaged LAeq road traffic noise level of up to 2.0 dB(A) for the masterplan scenario. An increase in 2.0 dB(A) appears to have been predicted from simply looking at the variation in the percentage of heavy vehicles. The approach utilised in the NVIA to predict road traffic noise does not take into account the change in heavy vehicle composition as it assumes all heavy vehicles are acoustically similar irrespective of their axle configuration and acceleration characteristics. That is, 2-axle rigid trucks are assumed to emit the same amount of noise as longer and heavier vehicles. A list of road	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has submitted letters additional information to DPIE on 26 June 2021 and 31 August 2021. Copies of the additional information are provided within Appendix G1 and Appendix G2 . Mirvac understands the additional information submitted to DPIE adequately addresses DPIE's requested for additional information relation to noise and vibration.

	traffic noise prediction models of varying complexity is given in Attachment B4 of the NSW Road Noise Policy. The use of a model or a combination of models, or any other procedure, must be justified according to the circumstances of this proposal.	As the Aspect Industrial Estate development is a SSDA for a Concept Masterplan and specific tenants and onsite operations are not yet known, it is difficult to provide a breakdown of different heavy vehicle types for the development. Generally, our opinion of the suggested approach is
1.9	 "The road freight transport strategy in NSW is targeted at expanding the Performance Based Standard (PBS) freight network into metropolitan areas. As such, the environmental impacts associated with PBS 2B vehicles need to be better understood. PBS 2B heavy vehicles require a longer distance to accelerate, thus generating noise for a longer duration compared to light vehicles and standard trucks. For accurate environmental noise impact assessments, a component of a road traffic noise prediction model must include the evaluation of acceleration characteristics and associated noise emissions of PBS 2B vehicles." 	subsequent staging of the Aspect Industrial Estate and not appropriate at the SSDA Concept Masterplan stage, given the lack of available actual data. Notwithstanding the above, the potential off-site impacts have been re- evaluated using recently forecast daytime and night-time traffic data for the proposal (peak daytime traffic was only available at the time of writing the SSDA NVIA) within the Noise Assessment Addendum at Appendix G1 and Appendix G2 . It should be noted that the traffic data is indicative and includes several assumptions regarding the prospective future tenants. The re- assessment has concluded that noticeable increase in traffic noise at
1.10	The Department notes that of the models listed in the NSW Road Noise Policy, Nord 2000 and FHWATNM can most accurately predict the variation in heavy vehicle noise. However, these models would need to be further adapted to accurately model PBS 2B vehicles with a maximum length of 30 m and higher load capacity than semi-trailers and 26 m B-double. Guidance for acceleration characteristics can be sought from Austroads' Guide to Road Design Part 3 – Geometric Design (AGRD03-16) and research report on Modelling for High Productivity Vehicles in Metropolitan Areas (AP-R558-18).	residential zoned receivers adjacent to Mamre Road south of the Ma Road Precinct due to traffic from the proposal may occur during nigh time as result of the development, including conversion to PBS 2B vehicles. Where off-site noise impacts from off-site traffic are confirm is proposed that Transport for NSW as the Roads Authority for Mam Road would be the appropriate party to determine and implement appropriate noise mitigation strategies and selected measures. Pote mitigation strategies have been outlined within the submitted Noise Assessment Addendum.

1.11	The NVIA must also be revised to incorporate each distinct outdoor operation corresponding to forklift operations as well as heavy vehicles idling, passing by, accelerating and reversing (including the contribution of energy-average noise emission associated with non- tonal reversing alarms). This would involve changes to modelled sound power levels for onsite vehicle movements and source path footprint. In addition, the representative duration of noise emission for each distinct operation also need to be amended accordingly. It should be noted that it is unlikely articulated trucks, B-doubles and PBS 2B vehicles would be able to consistently manoeuvre at 25 km/h within the site. The operational noise modelling must consider 'worst- case' emission scenarios.	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has submitted letters additional information to DPIE on 26 June 2021 and 31 August 2021. Copies of the additional information are provided within Appendix G1 and Appendix G2 . Mirvac understands the additional information submitted to DPIE adequately addresses DPIE's requested for additional information relation to noise and vibration. The NVIA details that operation of forklifts and unloading activities has been modelled in the hardstand areas along with heavy vehicle manoeuvring.
1.12	The Department requires all operational modelling assumptions be clearly identified and justified in the amended NVIA, including an updated source emission inventory that delineate steady and non- steady noise generating activities and a visual illustration that maps the location of modelled sources. The NVIA shall adhere to the reporting requirements for steady and non-steady sounds specified in the Australian Standard AS 1055:2018 Acoustics – Description and Measurement of Environmental Noise	
1.13	"The application of modifying corrections for annoying noise characteristics need to be revised in the NVIA in line with Fact Sheet C of the NSW Noise Policy for Industry 2017.Given the NVIA reported exceedances of sleep disturbance screening criterion at all residential assessment locations and that the predicted temporal variation in noise is well above 5 dB within a 15-minute	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has submitted letters additional information to DPIE on 26 June 2021 and 31 August 2021. Copies of the additional information are provided within Appendix G1 and Appendix G2 .

	assessment period, the Department considers the application of a +5 dB modifying correction for intermittent noise to be warranted."	Mirvac understands the additional information submitted to DPIE adequately addresses DPIE's requested for additional information
1.14	The Department's recommendation is supported by ISO1996-1:2016 on description, measurement and assessment of environmental noise which considers motor vehicle noise under conditions of small traffic volume to be intermittent. Furthermore, Guidelines for Community Noise from the World Health Organization (WHO) reiterated the need to account for the intermittent character of noise when setting night- time noise limits in terms of energy-average noise levels. The WHO notes that the intermittency of a time-varying sound can be determined by quantifying the number of noise events as well as examining the difference between the maximum sound level and background sound level.	relation to noise and vibration. Fact Sheet C of the NPfI defines intermittent noise as "noise where the level suddenly drops/increases several times during the assessment period, with a noticeable change in source noise level of at least 5 dBA, for example, equipment cycling on and off", and that the correction applies when "the source noise heard at the receiver varies by more than 5 dBA and the intermittent nature of the noise is clearly audible". SLR interprets the NSW EPA's intentional use of the term 'sudden' as it relates to the intermittent noise definitions in the NPfI as meaning the noise rapidly changes in a clearly abrupt manner over a short time period. SLR agree that non-tonal reversing alarms could be considered intermittent, in the event that noise from this source is sufficiently dominant above the ambient noise level to result in a 5 dB change in level at the receiver. However, occasional air brake releases (which drive the highest sleep disturbance noise levels) are not considered intermittent under the NPfI definition as they are not repeated events. The receivers which were identified with potential sleep disturbance impacts are all located in relatively close proximity of the proposal site. These receivers are all within the Mamre Road Precinct which was rezoned to industrial in June 2020 and are therefore not long-term receivers. The nearest permanent receivers are around 800 m to the south of the proposal (ie west of Mamre Road) and the potential noise impacts from the proposal at this distance are expected to be relatively

1.15	"The NVIA dismissed significant exceedances of the sleep disturbance screening criterion at residential receivers by referring to the declarative statement made in the NSW Road Noise Policy (2011) that maximum internal noise levels of 50-55 dBA are unlikely to awaken people. The threshold for sleep disturbance has been known for over a decade to be lower than maximum indoor noise levels of 50 to 55 dB(A). Important new studies and WHO guidelines have become available since then, together with new sights into sleep disturbance. New information has made more precise assessment of exposure response relationship. It is prudent that the NVIA provide a detailed maximum noise level event assessment and consider the current scientific literature regarding the impact of maximum noise level events at night in line with the advice provided in the Noise Policy for Industry. The detailed assessment should consider all feasible and reasonable noise mitigation measures with a goal of achieving the above trigger levels.	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has submitted letters additional information to DPIE on 26 June 2021 and 31 August 2021. Copies of the additional information are provided within Appendix G1 and Appendix G2 . Mirvac understands the additional information submitted to DPIE adequately addresses DPIE's requested for additional information relation to noise and vibration.
1.16	"The draft MRP DCP adopts the EES Group, DPIE approach to water quality and flow related objectives for the Wianamatta-South Creek catchment. The Department's Central (Western) team note that reliance on a "regional approach" is still under investigation and is subject to further consideration. The Supplementary RtS should clarify how the proposed water management system will achieve the draft MRP DCP waterway health outcomes, rather than relying on a regional approach, which has not been confirmed."	 Since the RTS package was submitted to the Department the MRP DCP was adopted (19 November 2021). The MRP DCP along with the Operational phase targets as set within the <i>MUSIC modelling toolkit – Wianamatta (20 April 2022)</i> (MUSIC toolkit) as prepared by the <i>Environmental and Heritage Group</i> (EHG) of the <i>Department of Planning and Environment</i> provides the waterway health requirements to be met either on-lot, estate, catchment or a regional solution. 1.1.1. Waterway Health – Stage 1 In-lieu of a regional solution, Mirvac has provided AIE Stage 1 waterway health documentation to demonstrate an estate-based solution to part the MUSIC operational solution.
		compliance with the Operational phase targets as set within the <i>MUSIC</i> modelling toolkit – Wianamatta (20 April 2022) (MUSIC toolkit) as prepared

by the *Environmental and Heritage Group* (EHG) of the *Department* of *Planning and Environment*.

The Stage 1 proposal has demonstrated compliance with the MUSIC toolkit operational phase stormwater quality targets Option 2 – allowable loads and the operational Phase stormwater quantity (flow) targets option 1 – MARV.

Mirvac understand that DPIE have no further comments on the Stage 1 waterway health proposal.

Reference plan for the AIE Stage 1 waterway health solution is included within **Appendix J**.

Waterway Health – Concept Masterplan

Mirvac has provided three (3) potential waterway health estate-based configurations to demonstrate compliance with the *MUSIC modelling toolkit* – *Wianamatta (20 April 2022)* (MUSIC toolkit) as prepared by the *Environmental and Heritage Group* (EHG) of the *Department of Planning and Environment.*

Each option demonstrates an estate scale waterway health solution to demonstrate compliance with the waterway health objectives whilst supporting the Concept Masterplan.

A detailed package of Options 1 - 3 (inclusive) including associated MUSIC modelling files and post processing spreadsheet documentation was provided to the Department in February 2022. This package of work demonstrates that the current AIE concept masterplan is capable of support with multiple options available to achieve waterway health objectives at an estate scale without amendment to the current AIE concept masterplan. Mirvac understands that DPE have no further comments on the Concept Masterplan waterway health proposals at this stage.

Following DPE review, Mirvac understands that the following elements have been endorsed in principle:

 Utilisation of the non-validated portion of the re-aligned watercourse for swamp forest to provide a detention and evapotranspiration solution as

		 set out in Options 1 & 2 is approved in principle by NRAR, EES & IDC (& DPIE) however this is subject to confirming that the site-specific infiltration rates are field validated as being appropriate based on ground conditions and do not pose a salinity risk to the satisfaction of DPIE; and Utilising 'thin film' irrigation as set out in Options 2 & 3 which could be scaled to be applied to one or more buildings and delivered on a staged basis as part of the overall estate solution Reference plans for the AIE Concept Masterplan waterway health solutions are included within Appendix J.
1.17	"The Department notes the proposed building and landscaping setbacks to Access Road 1 are inconsistent with the draft DCP requirements (building setback: 7.5 m comparing to 12 m, landscaping setback: 3.5 m comparing to 6 m). The Applicant previously advised amending layout of lots to the south of Access Road 1 would be undertaken to achieve setback compliance. Please clarify why amendments were not made and demonstrate how the proposed setbacks comply with the draft MRP DCP."	 The draft MRP DCP (and finalised MRP DCP 2021) propose a 12m building setback on lots fronting key access roads. In response to the DPIE's concerns regarding the proposed building setbacks to Access Road 1 the Concept Plan has been amended to increase the setback for Warehouse 8 from 7.5m to 12m. Minor incursions into the 12m setback are proposed for the office elevations of Warehouse 1 (10.7m) and Warehouse 2 (8.8m) and a small portion of the warehouse elevation of Warehouse 3 (7.5m) however this is countered by the extent to which the warehouse elevations of Warehouse 1 and 2 are setback from Road 01 at 22m. Setbacks greater than 12m are proposed along the majority of Access Road 1 offsetting these minor incursions. This provides an additional 1,705 sqm or 42% more setback area than is required by the DCP for warehouses 1, 2 and 3. The proposed variation to the draft MRP DCP building setback control is considered justified given that:

- The average building setback is significantly in excess of the minimum building setbacks.
- The proposed design improves the public domain and pedestrian experience.
- It enables offices and carparks to address Access Road 1. Alternatively, Mirvac would need re-orientate buildings to achieve viable building layouts that meet customer operational requirements. This would result in warehouse elevations and operational hardstands fronting Access Road 1.
- It provides for variation in the building setbacks ensuring that the building form is not a single wall extent rather is modulated by the smaller scale office components.

The draft MRP DCP required a landscaped area equivalent to 6m or average 50% of the setback along the road frontage on lots fronting key access roads. The majority of warehouses are consistent with the landscape setbacks within the draft MRP DCP.

A 6m setback along Access Road 1 would result in approximately 6,069 sqm of landscape setback. The proposed Concept Masterplan provides 9,001 sqm of landscape setback along Access Road 1 being 1,040 sqm and 54% more than required under the draft MRP DCP.

A minor variation to the landscape setback area requirement is proposed for Warehouse 2 (88 sqm). The proposed variation is considered justified given the increased area that is being provided for the balance of the frontage to Access Road 1 across other lots, and to ensure a unified setback and urban design approach is achieved for the Estate.

		Aspect Industrial Estate will feature a number of initiatives to create a strong, layered landscape master plan that is well integrated into the urban space and built fabric. This will include the reinforcement of entries and avenues, bounded with appropriately selected trees and native plants.
1.18	"The proposal has been designed taking into account the future development of adjoining properties as much as possible given timing. The E2 connection and Northern Road connections will be coordinated with GPT following lodgement of their application. It is noted that this may result in a modification application of the AIE application."	The proposal does not require amendment to earthworks levels on adjoining properties. The proposed riparian realignment along the northern and eastern boundary is proposed to match existing surface levels at the existing drainage connection location so as to allow for upstream stormwater drainage to continue to occur. The proposed riparian realignment is not reliant on approvals of adjoining landowners. The potential future riparian connection point levels at the North Eastern boundary are driven by and subject to meeting minimum grading requirements from the existing connection point. Potential future realigned creek levels of adjoining properties will need to meet proposed levels which are driven by matching existing levels. Whilst the future north-south road does not form part of this proposal, Mirvac has undertaken coordination with the neighbouring property owner which has resulted in amendments to the future north-south road. This information was provided to the Department as part of the previously issued AIE RTS.
2. Penrith Cit	y Council	
2.1	"The SEPP zoning plan depicts a meandering E2 corridor that is more reflective of a riparian corridor and not a drainage channel as is currently suggested by the submitted plans. The proposed redirection	Noted.

	of the riparian alignment, contrary to the zoning maps, was of key concern as the extent of riparian outcomes typically envisaged by this arrangement are not usually achieved. This is due to the regularity of the proposed corridor alignment and its stormwater management functions. It is however understood that NRAR have accepted the amended location despite the zoning in the SEPP, and as such this aspect is no longer raised if the Department is supportive of the resulting location and alignment. "	
2.2	"Council maintains a view that there is a need for the Government to address matters already raised in response to the exhibition of the Draft Precinct Wide DCP, without duplication and layering of a new site specific DCP. As a result of this, the following concerns are noted for consideration in the continued assessment of this application: (1) The suggested landscape setbacks between the front property boundary as detailed in the draft DCP are not supported by Council and are considered inadequate to achieve necessary streetscape outcomes given the abundance of hard stand parking areas proposed within the front setback. Council has continuously advocated for 6m minimum landscape setbacks where extensive car parking is proposed forward of a building line and this position has been put to the NSW Government in response to the exhibition of the Draft DCP. If the indicated setback zones are not increased as suggested, then the layering of street tree plantings in combination with setback plantings will be of critical importance and as yet, there is no detailed design plans located for landscaping in this location to address the objectives of the Draft DCP . Detailed landscape plans for on-lot landscaping should be submitted with this	Refer Section 1.17. Aspect Industrial Estate will feature a number of initiatives to create a strong, layered landscape master plan that is well integrated into the urban space and built fabric. This will include the reinforcement of entries and avenues, bounded with appropriately selected trees and native plants. The offices will incorporate a diverse range of textured materials, to celebrate the entry experience and encourage spaces for external meeting, break-out and recreation for the office populations. Landscaping for the AIE responds to the key interfaces of the estate with the public domain, adjoining properties and environmentally sensitive lands such as riparian corridors. The landscape strategy for the AIE aims to reflect a consistent image and maintenance regime across the entire estate and respond to its unique site characteristics. The landscape design for future stage works will be detailed as part of those future stage development applications. The Concept Plan shows the building footprints in relation to the street network, which provides for the required landscape setbacks. These landscape setback zones are also shown on the plans, demonstrating that the required extents can be
	application for all setback zones. Alternatively, it needs to be	provided. Given that on-lot works are not currently proposed for those

	confirmed if it is intended that on lot landscaping and built form would be subject to separate applications with the resulting setbacks up for review and consideration at that time. This in effect means that the application as lodged is for a subdivision and not a concept plan that locks in a building envelope and car park arrangement. "	future stages, it is unreasonable to require detailed landscape plans. These will be provided as part of the future stage DAs so that the design can be coordinated with the proposed building form. In this regard, however, the future stage DAs will need to demonstrate that they are consistent with the Concept Plan and thereby consistent with the landscape setbacks shown on the Concept Plan.
2.3	(2) The suggested streetscape planting as indicated in the lodged EIS plans is not supported as currently proposed. In particular the clustering of trees in the verge with sizeable canopy separation between clusters is inadequate. The street tree design should be considered in combination with on lot landscaping in the setback zone. This is important to achieve a layering of canopy spread between the private and public domain. It is recommended that the planting of the road verges could be conditioned requiring an amended public domain landscape package be submitted to and approved by Council's Landscape Architecture Supervisor prior to the issue of any Construction Certificate.	Given that the application is subject to Departmental assessment and Ministerial determination, it is reasonable that any post approval design be approved by the Secretary prior to commencement of construction, rather than by Council. It is noted that Mirvac has obtained a proposal from Council, to undertake the role as PCA for this project. Street verge landscaping would form part of any subdivision works certificate documentation.
2.4	(3) Council reiterates that the proposed height of the estate pylon signs as originally lodged is excessive, and these should be reduced in height or deleted altogether as an unnecessary signage feature. At the very least, only one estate pylon sign should be provided. The applicant has not sufficiently responded to this concern, citing considerations in SEPP 64 which are not considered to prevail or prevent considerations relating to streetscape presentation or landscape integration."	The proposed pylon signs are deemed appropriate given their context within an industrial estate. As part of this RFI response and as detailed in the Amended Development Report the pylon signage has been reduced in height from 12m to 11m. It is important to have clear and legible signage to mitigate risk of accidents and ensure enhanced safety through way finding. Penrith Council stated within their original submission "Appropriate signage, visible from the public roadway and on-site, shall be installed to reinforce designated vehicle circulation and to direct staff, delivery vehicle drivers, service vehicle drivers and visitors to on-site parking and delivery and

		service areas". The proposed signage is deemed to satisfy this requirement.
2.5	Councils Section 7.12 Citywide Contribution Plan is currently applicable to this site. Please note that an amendment to this plan was exhibited in November 2020 to remove the applicability of this plan from the Mamre Road Precinct. This amendment is yet to be determined and may impact the determination of this application.	Noted. It is proposed that the applicable Local Contributions Plan at the time of determination will apply to the AIE SSD Stage 1 development with subsequent stages subject to the relevant Local Contributions Plan applicable at time of determinations.
2.6	It is requested that the applicant and DPIE in combination discuss local contributions with Councils' City Planning – Contributions Team as there is a suggestion that a planning agreement might be pursued. The intended contribution pathway would need to be discussed and agreed to prior to determination of the application. "	Mirvac has entered into conversations with DPIE's Infrastructure Contributions and Agreements team in respect to satisfying Clause 2.28 of the Industry & Employment SEPP and planning for future infrastructure services and delivery to the new industrial precinct. Given the Aerotropolis SIC has been on exhibition, Mirvac intends to use the SIC as a foundation for satisfactory arrangement discussion related to the SIC. It is intended that a VPA to satisfy Clause 2.28 will be executed prior to determination of this application to provide a contribution to regional infrastructure provision, commensurate with the size of the land, scale of the development and the demand anticipated to be generated on these infrastructure services. Mirvac has requested a meeting with Council's City Planning - Contribution Team to discuss local contributions and are awaiting confirmation of meeting date.
2.7	"The Sydney Water letter dated 22/2/2021 confirms that the site is ultimately to be serviced by the Upper South Creek Advanced Water Recycling Centre. In the interim, from 2024, it is likely sewer from the site will be pumped to the St Marys Wastewater Treatment Plant. However, servicing prior to this is unknown/unconfirmed and	Mirvac have received a commercial offer from Sydney Water to design / approve / construct / maintain / operate and decommission a temporary wastewater Interim Operating Procedure (IOP) consisting of a holding tank and pump out arrangement within the AIE.

	negotiations are ongoing. This should be clarified, and a servicing strategy confirmed for occupation prior to 2024 as it must be demonstrated that sufficient servicing is available, or can be made available, prior to determination of this application. "	Sydney Water have confirmed that the AIE can be serviced for potable water via connection to existing infrastructure within Mamre Road subject to upstream potable water upgrades currently under construction by others.
2.8	"The AIE Stage 1 - Indicative Stage 1 Utilities Plan shows what appears to be a wastewater storage tank/pump well within the proposed stormwater basin. This will need to be amended. Further, the interim operating procedure (IOP) has not been finalised for the proposed development and is unknown. "	Council is correct in that a temporary underground wastewater tank and pump well is proposed to be located under the berm of the estate basin. We note that the estate basin is not proposed to be dedicated to Council and that the temporary underground wastewater storage tank and pump well will be decommissioned and removed once the AIE wastewater infrastructure is connected to the ultimate Sydney Water infrastructure. As noted above, Mirvac have received a commercial offer from Sydney Water to design / approve / construct / maintain / operate and decommission a temporary wastewater Interim Operating Procedure (IOP) consisting of a holding tank and pump out arrangement within the AIE.
2.9	The 'Aspect Industrial Estate - Noise and Vibration Impact Assessment' (610.19127-R02 v1.4) prepared by SLR Consulting Australia Pty Ltd dated 10/2/2021 identifies there will be significant elevated levels of construction and operational noise impact to receivers. Reasonable and feasible mitigation measures recommended in the NVIA will need to be assessed prior to the issue of a construction certificate to determine Source, Pathway and at receiver treatments to be installed. This should be reflected within any conditions of consent imposed if the application is favourably determined. "	Construction Noise and Vibration mitigation measures are proposed to be detailed within a Construction Noise and Vibration Management Plan (CNVMP) to be prepared post approval and approved by the Secretary prior to commencement of construction. Feasible and reasonable mitigation measures for the concept masterplan components of the SSD would be defined during subsequent stages of the development when details of the future tenants and operational requirements are known.

2.10	In regards, to the proposed stormwater management strategy, the following matters are raised for further consideration and address: (1) In terms of the water conservation measures, the Civil report includes commitments to meet a minimum of 80% non-potable demand with harvested rainwater. Additional details are required regarding the sizing of the tanks and it is proposed that this would need to be provided with future development applications. "	Refer to responses to Section 1.16 above.
2.11	(2) In relation to the treatment of stormwater for the proposed development, it is proposed that a 1,600m2 bioretention system pre- treated with an Ocean Save OS-2324 would be incorporated. The report proposes to the use of a proprietary filter media called Filterra. It is noted that only 1 GPT is shown but there are 2 inlets into the basin as shown on the drawing. It is also noted that drawing number 18-596-C1012 Issue 3 dated 15/10/2020 indicates that the top water level is 1.25 m above the filter layer as it is located within an OSD basin. This is not supported and needs to be clarified. In relation to the design of the basin, it is considered that a revised full set of engineering plans is required to be provided for review. "	Ocean Protect Ocean Save GPTs have been specified for stormwater runoff directly from Warehouses 1 and 3 (Refer 2100 and 2300 Series drawings). There are 2 inlets into the Filterra material due to the levels across the site however prior to discharging into the Filterra device both inlets discharge into a forebay sump which acts as another form of GPT. Note this forebay is not modelled in Music however PCC treatment rates are achieved with the 1600m2 of Filterra material along with the on lot GPTs. Yes the 100 yr TWL of the OSD basin does overtop the Filterra material however Ocean Protect have clarified this does not affect the performance of the Filterra material as this only occurs during large storm events and is free draining. Previous discussions with Penrith City Council have identified that this concern is primarily in relation to the maintenance implications as a result of 100 yr TWL above filter material. It is noted that the proposed estate basin is not proposed to be dedicated to Penrith City Council and that ownership and maintenance obligations will be by the registered lot proprietor in perpetuity. Ocean Protect can provide certification during detailed design. Note too splitter pits prior to
		Filterra forebays ensure only low flows (3 monthly flows) are directed into Filterra with any large events directly draining into OSD basin. Further

		details can be provided during detailed design.
2.12	(3) In relation to the use of Filterra as an option, following a review of the supporting report provided, and noting that it is more widely permitted in other local government areas, no concerns are raised provided the treatment system is not dedicated to Council for ongoing ownership and maintenance. It would also need to be adequately conditioned to ensure that it was maintained by the developer in perpetuity. Prior to determination of the development proposal, it is suggest that additional details are required on the configuration of the basin, filter media area, depths of inundation etc, species and density of vegetation and provision of GPTs. These details should be included in an updated and full set of drainage plans."	Council's acceptance of Filterra material is noted. It is not proposed to dedicate the basin to Council. This would be owned and maintained by the registered lot proprietor with associated covenants and easements for drainage agreed with Council as part of subdivision. Further detailed documentation to that provided within the AIE SSD civil documentation will be provided to Penrith City Council prior to issuance of Subdivision Works Certificate for the filterra material. It is noted that Mirvac has received a proposal from Penrith City Council to undertake the role of Principal Certifying Authority for the AIE.
2.13	(4) With regards to the compliance with the Draft Mamre DCP Controls, a review of the letter prepared by Ocean Protect and MUSIC model indicates that the water quality requirements outlined in the Draft Mamre DCP are not met. The proposed treatment measures do not meet the flow objectives outlined in the DCP. In this regard, a discussion paper prepared by E2 Design Lab about the Draft Mamre DCP November 2020 controls was submitted in support of the application. The paper includes a discussion of various alternative proposals to meet the DCP requirements. It is further noted that one option included to propose an urban forest within the onsite detention basin which would serve to go some way to meeting the draft controls. In response to this, it is suggested that while the proposed approach may contribute to a reduction in mean annual runoff than the current proposal, it does not meet the Draft DCP interim requirements. Further, it is noted that the supporting engineering	Refer Section 1.16 above and Appendix J of the Amended Development Report.

	plans are not consistent with what has been discussed in the discussion paper.	
2.14	(5) The discussion paper also included an analysis to demonstrate what would be required to meet the MARV target of 1.9 ML/Ha/yr. The report noted that this could only be achieved onsite through the construction of a 6.5Ha wetland serving largely as an evapotranspiration system with limited outflow. However, no further information was provided on this option. Should alternative options be considered going forward, then I suggest that additional details / updated engineering plans and stormwater report would need to be provided for review. "	
2.15	(6) Council's Waterways Officers are also of the view that there are opportunities to further improve the stormwater strategy, so it has more of a focus on providing for a range of ecological services including integrated water management which maximises the opportunities for rainwater harvesting and reuse as well as passive irrigation as to better contribute to urban cooling and to the Parkland City vison.	
2.16	The SEPP requires a DCP to be prepared, which should be informed by the Draft Mamre Road Precinct DCP as well as the precinct road network traffic modelling, intersection traffic modelling and a Transportation Mobility and Access Plan (TMAP – of the road, path, bicycle and bus network and infrastructure).	A Transport Mobility and Access Plan (TMAP) was provided within attachment 2 of Appendix M of the AIE RTS submission. Refer Section 1.7 above.
	This is required to inform engineering designs and documentation of the precinct road and internal roads and intersections.	

	While the application is accompanied by its own site specific DCP, acceptance of this DCP by the Department should still be informed by the completion of the above Strategic Traffic Plans with respect to the broader precinct and how this sit operates within it. This should also include consideration of the ultimate traffic generation at 2036 and the resulting functionality of the intersection with Mamre Road and the adjoining precinct road network. "	
2.17	The Draft Mamre Road Precinct DCP (MRP DCP) Part 3.4.1 Clause 7 states 'No direct vehicle access to Mamre Road or Southern Link or distributor roads are permitted.' Contrary to the 'Response to Submissions' document by Urbis (Section 4.2), the Draft MRP DCP (Figures 13 & 14) have identified that Access Road 1 and Access Road 3 are High Order Distributor / Collector Roads and as such it is recommended direct vehicle access should be denied.	The finalised MRP DCP Part 3.4.1 Clause 10 states 'Direct vehicle access to Mamre Road, Southern Link Road and distributor roads (Aldington Road/ Abbotts Road) is not permitted.' Access Roads 1 and 3 are identified as a "Collector Industrial Road" in Figure 12 of the finalised MRP DCP, and as such are not subject to the restriction as per the draft DCP.
2.18	The revised Master Plan shows vehicular access, including heavy vehicle access, is proposed onto Access Road 1 (Distributer Road) for warehouses 1, 2, and 8 and is not supported. Alternative vehicular access for warehouses 1 and 2 is available from Access Road 2, with vehicular access to warehouse 8 available from Access Road 4.	Access Roads No.1 and No.3 have been documented in accordance with the road typologies outlined in the finalised MRP DCP as discussed in the Amended Development Report. Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has undertaken extensive consultation in relation to the proposed road network for AIE. A copy of the letters submitted to DPIE on 26 Nevember 2021 and 25 January 2022 are provided within
2.19	"Vehicular access, including heavy vehicle access, is also proposed onto Access Road 3 (Distributer Road) for warehouses 4, 5, 6 & 8 and is also not supported. Alternative vehicular access for warehouses 6 and 8 is available from Access Road 4. Vehicular access for warehouses 4 and 5 shall be a left-in / left-out type arrangement as Access Road 3 requires provision of a central median (Figure 13 and 14 of the MRP DCP). Vehicles leaving warehouses 4	Appendix F1 and Appendix F2 of the Amended Development Report. Mirvac believe this letter and other correspondence submitted to DPIE and TFNSW adequately addresses and closes out items relating to the AIE road network.

	and 5 will be able to turn around at the temporary cul-de-sac at the end of Access Road 3. "	
2.20	"It is acknowledged that the road reserve width of 26.4m (mid-block) for Access Roads 01 & 03 is in accordance the Draft MRP DCP for a Distributer / Collector Road. A central median is to be provided to Access Roads 01 & 03 in accordance with Figure 13 of the Draft MRP DCP. Road pavement and verge widths shall be in accordance with Figure 13 of the Draft Mamre Road Precinct Development Control Plan."	
2.21	It is acknowledged that the road reserve width of 24.0m for Access Road 02 is in accordance the Draft MRP DCP for a Local Industrial Road. Pavement widths and verge widths shall be in accordance with Figure 12 of the Draft Mamre Road Precinct Development Control Plan.	Noted.
2.22	 Recommended Engineering Conditions: - Estate Road 01 shall be designed as a Distributer / Collector Road with a 26.4m wide road reserve (mid block) and 30.6m wide road reserve (at intersections) with associated pavement widths, central median widths and verge widths to be in accordance with Table 9 and Figure 13 of the Mamre Road Precinct Draft Development Control Plan. - Estate Road 02 shall be designed as a Local Industrial Road with a 24m wide road reserve with associated pavement widths and verge widths to be in accordance with Table 9 and Figure 12 of the Mamre Road Precinct Draft Development Control Plan. 	Discussion around conditions has progressed following the receipt of these comments in March 2021.

	 All subdivision works shall be constructed and inspected in accordance with Penrith City Councils Engineering Construction Specification for Civil Works. Council's' specifications set the minimum mandatory inspections for Civil Works. Prior to the dedication of any internal estate roads as public roads to Penrith City Council (as the Roads Authority under the Roads Act), the applicant shall ensure construction of the estate roads has been completed to the satisfaction of Penrith City Council. At the completion of the civil works, the applicant shall ensure all requirements as detailed in Section 2.3 and 2.4 of Council's Engineering Construction Specification for Civil Works, have been completed to the satisfaction of Penrith City Council. 	
3. Transport	for NSW	
3.1	UA stire Transment Considerations	
0.1	Active Transport Considerations	Noted.
5.1	Comments	Noted.
0.1	Comments The Response to Submissions points out "the facility can safely and securely house up to 20 bicycle spaces (under cover). Lockers,	Noted.
0.1	Comments The Response to Submissions points out "the facility can safely and securely house up to 20 bicycle spaces (under cover). Lockers, showers and toilets are provided within the building. The specific	Noted.
0.1	Active Transport Considerations Comments The Response to Submissions points out "the facility can safely and securely house up to 20 bicycle spaces (under cover). Lockers, showers and toilets are provided within the building. The specific location of the bicycle spaces will be finalised as part of detailed design."	Noted.
0.1	Active Transport Considerations Comments The Response to Submissions points out "the facility can safely and securely house up to 20 bicycle spaces (under cover). Lockers, showers and toilets are provided within the building. The specific location of the bicycle spaces will be finalised as part of detailed design." Recommendation	Noted.
0.1	 Active Transport Considerations Comments The Response to Submissions points out "the facility can safely and securely house up to 20 bicycle spaces (under cover). Lockers, showers and toilets are provided within the building. The specific location of the bicycle spaces will be finalised as part of detailed design." Recommendation It is requested that the applicant be conditioned to provide bicycle parking and end of trip facilities in accordance with Australian 	Noted.

	- Locate bicycle parking and storage facilities in secure, convenient, accessible areas close to the main entries incorporating adequate lighting and passive surveillance and in accordance with Austroads guidelines"	
3.2	Green Travel Plan Comment TfNSW notes the Framework Sustainable Travel Plan prepared by ASON Group to support SSD – 10448. A Green Travel Plan (GTP) for the warehouse and distribution buildings and café should be developed in consultation with TfNSW and submitted to TfNSW for endorsement prior to the issue of the first occupation certificate. The Masterplan identifies a further nine warehouse and distribution buildings which will also require GTPs when development consent is requested for these sites. Recommendation The applicant shall prepare a Green Travel Plan in consultation with TfNSW for each of the warehouse and distribution buildings and the café. The applicant shall submit a copy of the final plan to TfNSW for endorsement at development.sco@transport.nsw.gov.au, prior to the issue of the first occupation certificate. The Green Travel Plan should include, but not be limited to: • be prepared by a suitably qualified traffic consultant; • include objectives and staged modes share targets (i.e. site and land use specific, measurable and achievable and timeframes for implementation) to define the direction and purpose of the GTP;	Refer to Attachment N of RTS for Framework Sustainable Travel Plan. This framework was prepared by Ason in consultation with TfNSW prior to lodgement of the RTS. For further details on correspondence, please refer to Appendix F . It is agreed that a Green Travel Plan will be prepared in consultation with TfNSW prior to Occupation Certificate of the first warehouse on AIE. A requirement for a GTP in consultation with TfNSW prior to issue of Occupation Certificate for the first warehouse could be implemented via a condition of consent.

- consideration of a staff travel survey and workforce data analysis to inform likely staff travel patterns and resultant travel plan strategies to / from the site;
- implementation strategy that commits to specific actions (including operational procedures to be implemented along with timeframes) to encourage the use of public and active transport and car sharing to discourage single occupant car travel to the site;
- details of bicycle parking and dedicated end of trip facilities including but not limited to lockers, showers and change rooms and e-bike charging station(s) for staff to support an increase in the non-car mode share for travel to and from the site;
- a Transport Access Guide for staff and visitors providing information about the range of travel modes, access arrangements and supporting facilities that service the site;
- a communication strategy for engaging with staff and visitors regarding public and active transport use and car sharing to the site and the promotion of the health and wellbeing benefits of active and non-car travel to the site;
- include a mechanism to monitor the effectiveness of the measures of the plan; and
- the appointment of a Travel Plan Coordinator responsible for implementing the plan and its ongoing monitoring and review, including the delivery of actions and associated mode share targets.

3.3	 "Transport Assessment - Attachment M - Traffic and Transport Memo Comment TfNSW Item 3d – TfNSW has concerns with the approach of the intersection design for the right turn on the northbound approach only accommodating for the expected yield under Stage 1 of this development. The reason TfNSW requests the traffic modelling to consider the cumulative traffic impact of the development in the context of any other known planning proposals and developments in the precinct and surrounds, is to determine the need for upgrades or improvement works including consideration to timing and funding (if required). The main concern is that when the other developments (inclusive of any staged approaches) come online this intersection will need to be adjusted again for another interim solution. This is not considered beneficial to the end user. Recommended that the applicant coordinate with other known developments in the area to come up with the interim solution which could cater for all the developments using the intersection in the interim. " 	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has undertaken extensive consultation in relation to the proposed road network for AIE. A copy of the letters submitted to DPIE on 26 November 2021 and 25 January 2022 are provided within Appendix F1 and Appendix F2 of the Amended Development Report. Mirvac believe this letter and other correspondence submitted to DPIE and TFNSW adequately addresses and closes out items relating to the AIE road network.
3.4	"Comment TfNSW Item 3f – TfNSW notes the comments provided by Asongroup, however in order to identify when the signalisation is needed a Warrant Assessment is required.	A traffic signal warrant assessment has been issued to confirm the traffic signal at the intersection is warranted and provides overview of what criteria is met.

	In addition if the warrant assessment indicates that the connection to the surrounding developments are required, TfNSW is of the view that as per the previous point the applicant should work with other known developments in the area to ensure that the warrants for this intersection are met. Recommendation	
	A traffic signal warrant assessment is to be submitted now as part of this assessment (as outlined in Section 2 of the RMS Traffic Signal Design Manual) to confirm when the traffic signal at the intersection will be warranted and under what criteria is met.	
3.5	Comment TfNSW Item 3g – Further to TfNSW comments provided in the previous submission, when there is no pedestrian activity, an exemption can be requested, so that no installation of lanterns and line marking is required. However it should be noted that the hard infrastructure is still required to be constructed and the geometry is still required for the lanterns and line marking to be included at a later date (if necessary).	Since receipt of this RFI Request for additional information on 29 March 2021, Mirvac has undertaken extensive consultation in relation to the proposed road network for AIE. A copy of the letters submitted to DPIE on 26 November 2021 and 25 January 2022 are provided within Appendix F1 and Appendix F2 of the Amended Development Report. Mirvac believe this letter and other correspondence submitted to DPIE and TFNSW adequately addresses and closes out items relating to the AIE road network.
3.6	Comment TfNSW Item 3h – As previously, advised this Level of Service item got missed out during the review process of the document "Mamre Road Transport and Movement Outcomes". It is strongly advised to have ""LOS C"" or better for upgrading existing and/or new intersections.	As above.

	TfNSW reiterates they would not support anything less than LoS C for a greenfield site such as this regardless of the abovementioned document. "	
3.7	Comment TfNSW Item 3i – TfNSW notes Ason Group's comments which states that there is adequate capacity to accommodate the worst possible queue length for the northbound right turn movement which shows Level of Service (LoS) E/F. However referring to comment 3 of this letter should this design be considered, TfNSW is of the view that mitigation measures to improve the LoS of this movement should be considered. Recommendation Consideration should be given to mitigation measures to improve the Level of Service of this movement."	As above.
3.8	Comment TfNSW notes that the Road 1 is a "High Order Road" or primary (collector) road as stated in the Mamre Road Precinct DCP. The DCP also states Driveways should be provided from lanes and secondary streets rather than the primary street, wherever practical. In this regard TfNSW would not support multiple access points along the collector road Road 1. In addition the access point to Warehouse 1 carpark is located in close proximity to the proposed signals and would not be supported. Recommendation	As above.

	It is recommended to consolidate individual sites to reduce fragmented road side activity. Site consolidation should keep direct access to the collector roads to a minimum. Reducing conflict points along the collector road will support traffic efficiency and safety. Warehouse 1 has access to the minor road Access Road 1. All accesses to the development should be from this road. "	
3.9	Comment On-street parking should be minimised to allow safer turns of Articulated Vehicles, B-doubles etc and to not obstruct line of sight of these heavy vehicles. Recommendation TfNSW requests the proposed signage and linemarking plans of this industrial estate for review and comment.	Signage and line marking plans for local roads are traditionally developed as part of detailed design works during the Construction Certificate phase and are subject to approval by Traffic Committee. It is recommended that this be conditioned through a suitable Condition of Consent, prior to construction. Alternatively, this is a standard requirement for Construction Certificate.
4. Western Sydney Airport		
4.1	WSA note the following comments in response to the matters discussed at Pages 71 / 72: Wildlife Hazards – Vegetated Areas: The Proponent's response in relation to this matter is based on a yet to be released Landscape Species List by the Western Sydney Planning Partnership. Given that the referenced landscape species list is not certain or imminent, it is suggested as a condition requirement that a wildlife assessment be undertaken to	Noted.

	Ensure that the species list chosen is acceptable from a wildlife attraction perspective. This would provide assurance should the proposal be approved prior to the finalisation of the species list.	
4.2	Wildlife Hazards – Fill: The third point in this response identifies that "Materials covered by a specific NSW EPA Resource Recovery Order and Exemption" could be included in future fill importation. Note that materials covered by resource recovery order are quite broad and could include waste streams such as food and organic waste that may generate landfill gas and therefore these wastes may not be appropriate.	Noted.
4.3	Wildlife Hazards – Waste Storage: The Proponent's commitment that all waste would be stored in enclosed bins should be included as part of any future Conditions of Consent.	Noted.
5. DPIE Waterway Health		
5.1	"E2DesignLab describes an 'advanced WSUD initiative' as an alternative to the current (Sydney Water) Mamre Road strategy. The initiative includes tanks, stormwater harvesting for irrigation on lot and within the E2 zone, wicking beds, centralised storage at the base of on-site detention and urban forest (to increase water demand) within the on-site detention. Prior to DPIE Planning and Assessment determining the SSD application, it is strongly recommended that E2DesignLab provide a detailed technical report outlining the model assumptions and site-specific designs to demonstrate how the advanced WSUD initiatives are delivered on site.	Refer Section 1.16 above and Appendix J of the Amended Development Report.

	In relation to the above comment, it is important to note that the flow duration curve for E2DesignLab's alternative 'advanced WSUD initiative' does not achieve all EES flow objectives – specifically the high and low flow events. "
5.2	"EES also notes that comparisons against compliance are being made against the outputs of two models (Source, MUSIC) rather than from field observations. E2DesignLab acknowledge the potential flaws in comparing MUSIC with Source, however, there is no discussion on the robustness of either the Source and MUSIC models used compared to gauged data i.e. they could both be inaccurate. Prior to determination of the application, it is strongly recommended that compliance be assessed against time series data collected at gauging stations. Gauging station data is available from https://www.waternsw.com.au/waterinsights/real-time-data, and EES can provide the relevant field/observed flow duration curves that should be used. Furthermore, any modelling fassessment should compare pre and post results using the same modelling software.
5.3	"E2DesignLab specifies that water quality concentrations are not a suitable stormwater quality target, and that an alternative should be provided based on load reductions. EES notes this comment, and further highlights that a consultant has been engaged to review suitable stormwater quality targets (metrics) for the Aerotropolis that can be used to show compliance against the objectives. The outcomes can be provided for use in the Mamre Road Precinct. In the interim, EES recommends that E2DesignLab review the guidance released by WaterNSW, which requires proponents to demonstrate

	compliance against water quality concentrations via a Neutral or Beneficial (NorBe) management goal. "
5.4	"EES does not support the applicant's proposed Aspect Industrial Estate (AIE) site specific DCP controls in section 3.6. Integrated water cycle management. The E2DesignLab submission has incorrectly interpreted the objectives as the baseline or pre-development and implies that these should not be used for an urban waterway. It is important for E2DesignLab to note the following in terms of EES work on defining a 'contextually appropriate approach', which is as follows:
	The NSW Government Policy on water quality and waterway health requires that management achieves the community environmental values and uses. EES has undertaken extensive public consultation on the values and uses, including with community, Local Government and stakeholders who have indicated that strategy for stormwater management should ensure naturalised creeks. The objectives provided by EES for 3rd order streams do not reflect a baseline or pre-development context, but rather the (tipping) point or threshold for the urban stream syndrome. "
5.5	The AIE site specific DCP also does not acknowledge EES's previous advice that the interim stormwater targets in the draft Mamre Road DCP will be superseded by EES waterway health objectives (water quality concentrations and flows characteristics).
6. DPIE Agric	culture

6.1	"DPI Agriculture notes that a land use conflict risk assessment has now been undertaken and included in the response to submissions. DPI Agriculture has no further comments to make for this proposed development.	Noted.
7. DPIE Fishe	eries	
7.1	DPI Fisheries is satisfied with the Response to submissions document that addresses the comments made by this Department in the comments on EIS. No further comment is made.	Noted.
8. DPIE EPA		
8.1	"Based on the information provided, the proposal does not appear to require an environment protection licence under the Protection of the Environment Operations Act 1997 (the POEO Act). Furthermore, the EPA understands that the proposal is not being undertaken by or on behalf of a NSW Public Authority nor are the proposed activities other activities for which the EPA is the appropriate regulatory authority. The EPA does not require any follow-up consultation. Penrith City Council should be consulted as the appropriate regulatory authority for the Protection of the Environment Operations Act 1997 in relation to the proposal."	Noted.
9. Heritage NSW ACH		
9.1	"I have reviewed RTS report and the reburial methodology prepared by Artefact Heritage.	Noted.

	Heritage NSW is satisfied with the methodology for the reburial of all salvaged Aboriginal objects within the subject area and has no further comments to make in relation to ACH at this time."	
10. <u>DPIE - EES</u>		
10.1	"EES has reviewed the RtS table prepared by Urbis dated 5 March 2020 makes the following comments;	Noted.
	Flooding	
	EES notes that the consultant has updated the flood impact assessment report as per EES's previous comments, therefore, no further comments are required on this proposal."	