23 August 2021

TfNSW Reference: SYD21/00981/01
Departments Reference: SSD-25725029

Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Rebecka Groth

Dear Ms Groth

REQUEST FOR SEARS - ARDEX WAREHOUSE AND MANUFACTURING FACILITY- 657-769 MAMRE ROAD - KEMPS CREEK

Reference is made to the Department's correspondence dated 11 August 2021, requesting Transport for NSW (TfNSW) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Secretary's Environmental Assessment Requirements (SEARs).

TfNSW has reviewed the submitted scoping report and other supporting documentation and provides the following advice for consideration to the draft SEARs in **Attachment A – Key Issues.**

Due to the Covid-19 Pandemic, counts undertaken at the moment may not be representative. Alternative approaches to understand the impact of Covid-19 on traffic patterns should be discussed with TfNSW.

It is suggested the applicant meet with TfNSW to discuss these issues and the options available prior to undertaking a traffic impact assessment.

If you have any further questions, Ms Laura van Putten would be pleased to take your call on (02) 8849 2480 or please email development.sydney@rms.nsw.gov.au. I hope this has been of assistance.

Yours sincerely

Pahee Rathan
A/ Senior Manager Land Use Assessment West & Central

Attachment A – Key Issues

Transport and Accessibility

Provide a transport and accessibility impact assessment, which includes, but is not limited to the following:

1. Details of all traffic types and volumes likely to be generated by the proposed development during construction and operation, including a description of haul route origins and destinations, including:

    a. Daily inbound and outbound vehicle traffic profile by time of day and day of week (if travel patterns differ across the week) broken down per vehicle types;

    b. Site and traffic management plan which includes details of all traffic types and volumes likely to be generated by the proposed development during construction and operation and awaiting loading, unloading or servicing, including predicted haulage routes, including over size over mass vehicles, and consider any impacts to the state road network (i.e. where the haulage route meets the state road);

    c. Details of the origin/destination of dangerous goods movements to/from the site (if any);

    d. Detailed plan of proposed layout of internal road network to demonstrate that the site will be able to accommodate the most productive vehicle types and parking on site in accordance with the relevant Australian Standard and Council's Development Control Plan;

    e. demonstrate compliance with the Western Sydney Employment Area State Environmental Planning Policy, Part 6; clause 33C; Development within the Mamre Road Precinct; specifically:
        i. integration with the Mamre Road Precinct dedicated freight corridor (DFC), including provision for access from the DFC to the entire estate. The applicant should continue to liaise with TfNSW to ensure the DFC is incorporate;

    f. Plans detailing how the proposed development connects to adjoining sites to facilitate their future development for their intended purposes;

    g. Provide a swept path analysis in accordance with Austroads turning templates to demonstrate that the largest vehicle likely to utilise the access can enter and exit the driveway in a forward direction and manoeuvring throughout the site;

h. An assessment of the forecast impacts on traffic volume generated on road safety and capacity of road network including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model as prescribed by TfNSW. The traffic modelling should consider the scenarios of year 2026, 2031, 2036. These should include, but not be limited to:
    i. Mamre Road at Bakers Lane (Aldington Road); and

i. An assessment of potential impact on load road pavement lifespan including:

    i. Mamre Road.

j. To ensure that the above requirements are fully addressed, an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model. This is to include the identification and consideration of approved and proposed developments/planning proposals/road upgrades in the vicinity. The assessment needs to consider the impact on Mamre Road for the duration of the works because traffic growth in this area is expected to increase more quickly than standard growth rates;

k. Details of road upgrades, infrastructure works, or new roads or access points required for the development;

l. Details of the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand for the proposed development;

m. Measures to integrate the development with the existing/future public transport network;

n. Measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including:
    i. travel demand management programs to increase sustainable transport (such as a Green Travel Plan); and

o. The preparation of a preliminary Construction Pedestrian and Traffic Management Plan (CPTMP) to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:
    i. assessment of cumulative impacts associated with other construction activities (if any);
    ii. an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;

iii. details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;
iv. details of anticipated peak hour and daily construction vehicle movements to and from the site;
v. details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle;
vi. details of temporary cycling and pedestrian access during construction.

2. Traffic Counts:
TfNSW requests that any counts undertaken are not within close proximity to the school holidays/long weekend.

Counts undertaken within close proximity to these events may not indicate normal traffic conditions. Ideally vehicle counts should be undertaken during a typical day, to include Thursday (or Wednesday) and Friday for the study (not near school/public holidays). This will provide the departments with an accurate understanding of the existing traffic conditions and the actual impact of this development application to the surrounding network.

Should the date of the counts be within a week either side of the above events, it will be recommended that new counts are undertaken at more appropriate dates and are to include a breakdown of light and heavy vehicles.

Flooding:
The EIS shall:

- Provide a flood impact assessment to understand the potential impacts of the development on flood evacuation is to be carried out. To assess the impacts of the proposed development, information for pre and post-development scenarios including modelling of the local overland flows are to be provided to allow assessment of the impact of the development.

Statutory and Strategic Framework

The applicant is to demonstrate that the proposal is generally consistent with all relevant environmental planning instruments including:

- State Environmental Planning Policy (Western Sydney Employment Area) 2009 Amendment
- State Environmental Planning Policy (Infrastructure) 2007
- Draft State Environmental Planning Policy (Western Sydney Aerotropolis)
- Mamre Road Precinct Structure Plan (DPIE, June 2020)
- Draft Mamre Road Precinct Development Control Plan
- Draft Western Sydney Aerotropolis Plan

In addition (but not limited to) the following plans and reports:

- Mamre Road Upgrade Strategic Design Report (2016)
- Mamre Road Upgrade Strategic Design Plans
- Southern Link Road Strategic Design Plans
- Future Transport 2056 and supporting plans
- Guide to Traffic Generating Developments (Roads and Maritime Services, 2002).
- NSW Freight and Ports Plan 2018-2023
- Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas.
- Cycling Aspects of Austroads Guides.
- NSW Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources (DIPNR), 2004).
- Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments (Austroads, 2020).
- Australian Standard 2890.3 Parking facilities, Part 3: Bicycle parking (AS 890.3).

Consultation

During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.

In particular you must consult with:

- Transport for NSW

Our reference: ECM Ref: 9692711
Contact: Gavin Cherry
Telephone: (02) 4732 8125

24 August 2021

Department of Planning, Industry and Environment
Attn: Rebecka Groth
Email: rebecka.groth@dpie.nsw.gov.au

Dear Ms Groth,

Response to SEARs: SSD-25725029 ARDEX Warehouse and Manufacturing Facility at 657-769 Mamre Road, Kemps Creek

I refer to the Department's request to provide comments in relation to the above application. Thank you for providing Council with the opportunity to comment.

The following comments are provided for the Department's consideration in relation to this matter.

1. Planning and Design Considerations

- It is noted that this development estate was approved prior to the finalisation of the Precinct Wide DCP (which is still yet to be adopted). As such, the applicant should be requested to demonstrate compliance with the conditions and development arrangement of the preceding SSD determination (as recently modified). This also includes demonstrated compliance with the site specific DCP that was approved by the Department in the preceding SSD determination. Any further concessions that are contrary to the draft exhibited Precinct DCP should not be accepted or supported unless the resulting development demonstrates a superior outcome.

- The proposed building height exceeds the development form envisaged within the Western Sydney Employment Area, or more specifically the Mamre Road Precinct. The elevation drawing suggests a 45m maximum building height with a secondary silo tower at 25m. While the precinct has a site specific DCP approved, the proposed Draft DCP for the entire Mamre Road Precinct establishes maximum building height of 20m where not adjoining rural – residential zoned land. While allowances for taller elements is made in the draft DCP, this is based on specific planning justification and consideration of solar impact and a visual impact analysis. It is also understood that additional height allowance is to acknowledge the different operating requirements of vertical warehousing and allow for a level of flexibility in design to address operational needs however operational needs should not be at the expense of contextual integration. Where suitable and contextual integration cannot be demonstrated, the key consideration under the EP&A Act 1979 concerning suitability of the site for the development cannot be satisfied.

- Any consideration of height beyond 20m must be informed by a detailed visual impact assessment. Due to the potential visual impact that the

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

proposed development will have on the residences of Twin Creeks, as well as the scale and relationship of the proposal to compliant built outcomes in the WSEA Precinct, the proposal is not currently considered appropriate. If pursued, the application will need to clearly outline how the development mitigates the visual impact on Twin Creeks in addition to the surrounding existing and planned landscape.

- While Council does not support 3.75m landscape setbacks between front property boundaries and car parking areas, it is acknowledged that the Department approved this arrangement in the SSD determination. If any exceedance of height is proposed beyond 20m, greater landscape setbacks are required to provide additional tree canopy capability to address the resulting bulk and scale of the built form. This has been adopted within Oakdale West with 6.0m – 7.0m landscape setbacks associated with built form that is in excess of 30m in height.

- The landscaping provided must be dense, with demonstration of continuous canopy tree planting as a layering of canopy between trees within the verge and that planted within the site. The site / lot for the proposed building form is situated on a prominent corner within the estate with car parking across almost the entire extent of both street frontages. The ability to screen and ameliorate the dominance of hard stand and parking as viewed from the streetscape will be a critical aspect in the assessment of the proposal as the outcomes must satisfy the objectives of the landscape provisions.

- Supplementary planting within the site must be provided to break up the mass of hard stand car parking proposed and address Council's Cooling the City Strategy. The plans inserted into the SEAR's statement are not sufficient for adequate review due to the scale and poor quality / resolution. It appears that landscape beds of only 1.0m (or less) are proposed. This is inadequate and landscaping beds must be a minimum of 2m in width. While they have been located at every 10 parking spaces, the locations should be staggered between parking rows to achieve the appearance of continuance canopy spread across the frontages of the development.

- The south eastern corner of the site, adjacent to the intersection has excessive or duplicated hard stand driveways which could be removed via reconfiguration of the car park arrangement. Opportunities to delete the duplicated driveway entirely, or revise to be one – way would allow for a superior landscape outcome at the corner of the site. This should be pursued with the applicant.

- Then implications of the proposed building height with respect to the planned Western Sydney Airport will also need to be considered and addressed within the application.

2. Development Engineering and Traffic Considerations

Stormwater Management

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

- The application shall demonstrate how the development complies with the over-arching estate-based water quality and water quantity requirements.

- The stormwater concept plan shall demonstrate how the development complies with the Mamre Road precinct Draft DCP water quality and water quantity controls for any interim and ultimate developments.

- A water sensitive urban design strategy prepared by a suitably qualified person is to be provided for the site. The strategy shall address water conservation, water quality, water quantity, and operation and maintenance.

- The application shall include MUSIC modelling (*.sqz file) demonstrating compliance with water quality controls of the Mamre Road precinct Draft DCP.

- Penrith City Council will not accept the dedication of any estate water quantity or water quality basins. Any estate drainage basins are to be maintained in perpetuity by the estate. It is Council's preference that all water quantity and water quality treatment be provided on the individual lots. Any on-site detention system or water quality system must be within common property and accessible from the street.

Earthworks

- A site cut / fill plan is to be submitted that includes any retaining walls and batter extents.

- No retaining walls or filling is permitted for this development which will impede, divert or concentrate stormwater runoff passing through the site.

- The location and height of any retaining walls are to be included. The potential impact of any retaining walls upon future development of adjoining lands is to be considered.

Subdivision Works

- The application is to be accompanied by a subdivision concept plan.

3. Traffic Modelling and Further Precinct Wide Design Considerations

- The development should be supported by a Traffic Impact Assessment of the proposed development, road and footway network, heavy vehicle and light vehicle access, complying number of heavy vehicle parking, loading and manoeuvring areas and complying numbers of light vehicle staff and visitor parking spaces including compliance with Australian Standards, Austroads Guidelines, TfNSW (RMS) Technical Directions / Guidelines and Council's Development Control Plans (DCPs) including DCP C10.

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

- The Traffic Impact Assessment should include the proposed development driveway accesses for heavy vehicles and visitor / staff car parks, sight distance compliances at driveways, arrangements for waste collection vehicles, emergency / fire service vehicles and other service vehicles, accessible parking and at least 1.8 metre wide accessible pedestrian access from the road frontage the office building, and at least 1.5m wide accessible pedestrian access to the car park to others buildings, car parking and bicycle provision numbers and bicycle facilities, electric vehicle charging station provisions and manoeuvring swept turn paths. This should include compliances with Austroads Guidelines, TfNSW (RMS) Technical Directions / Guidelines, AS 2890 including parts 1, 2 & 6, AS 1158, NSW Government Walking and Cycling Guidelines and Council's Development Control Plans (DCPs) including DCP C10.

- The Traffic Impact Assessment and documentation shall include dimensioned plans of the proposed accessible paths of travel, kerb ramps, driveways, access aisles, loading and vehicle swept path manoeuvring areas, parking spaces, accessible parking, sight distance requirements at intersections and driveways including compliance with Austroads Guidelines, TfNSW (RMS) Technical Directions / Guidelines, AS 2890 including parts 1, 2 & 6, AS 1158, NSW Government Walking and Cycling Guidelines and Council's Development Control Plans.

- The entry and exit for any car parking areas to and from a public road is to be separate from any heavy vehicle access. The car park entry/ exit and any conflict with heavy vehicles include emergency/ fire service vehicles and waste collection vehicles should be removed or justified to be limited and managed.

- A minimum of 5% of parking numbers Electric Vehicle Charging Stations (EVCS) should be provided within the car parking areas of the warehouse development. The charging stations are to be designed to accommodate the requirement of commercially available public vehicles and their required connector types (currently known as Type 1 and Type 2 connectors). A minimum of 10% additional car parking spaces should be designed to be readily retrofitted as EVCS parking spaces. The installed EVCS car parking spaces are to be signposted and marked as for the use of electric vehicles only and are to be located as close as possible to the building accesses after accessible parking space priority. EVCS are to be free of charge to staff and visitors.

- Complying numbers of secure, all weather bicycle parking, end of journey facilities, change rooms, showers, lockers should be provided at convenient locations at each warehouse development in accordance with Council Development Control Plan (DCP) C10 Section 10.7, AS 2890.3 Bicycle Parking Facilities and Planning Guidelines for Walking and Cycling (NSW Government 2004).

- Appropriate signage, visible from the public road and on-site is to be installed to reinforce designated vehicle circulation and to direct staff / delivery vehicle drivers / service vehicle drivers / visitors to on-site parking, delivery and service areas.

- The required sight lines around the driveway entrances and exits are not to be compromised by street trees, landscaping or fencing.

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

- Sight distance requirements at verges, footpaths and driveways are to be in accordance with AS 2890.2 Figure 3.3 and Figure 3.4.

- All vehicles shall enter and leave to site in a forward direction.

4. Environmental Management Considerations

Noise Impacts

- An acoustic assessment is required to be submitted as a part of an application to demonstrate that the proposed development will not have any impact on nearby sensitive receivers. This report is to be prepared by an appropriately qualified acoustic consultant, and is to consider noise impacts including, but not limited to:

    - Construction
    - Operation
    - Mechanical plant
    - Vehicular movements
    - Road traffic noise
    - Noise impacts from airport

    Should mitigation measures be necessary, recommendations should be included to this effect. Recommendations and mitigation measures must be shown on all architectural plans.

Air Quality

- An air quality assessment is required to be submitted as a part of an application to demonstrate that the proposed development will not have any impact on the health of nearby sensitive receivers or the environment. This report is to be prepared by an appropriately qualified consultant.

Contamination (SEPP 55)

- The application is to address all relevant requirements under State Environmental Planning Policy 55 Remediation of Land (SEPP 55). Council cannot consent to any development unless these requirements have been satisfied. The application is to demonstrate that the land is suitable for the proposed purpose either by the submission of a statement in the EIS, a Phase 1 Preliminary Site Investigation or Phase 2 Detailed Site Investigation. Any reports need to be completed by a suitably qualified person(s) or company.

Hazardous and Offensive Development (SEPP 33)

- An application is to consider SEPP 33 and provide an assessment of the proposed development with regard to the SEPP.

Waste Management

- A Waste Management Plan is to be provided addressing waste produced during the excavation and construction phases of the development. It should address waste quantities, storage locations and removal.

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

General Environmental Health Impacts

- The environmental impacts associated with the excavation and construction phases of the development need to be addressed, such as water quality, noise, dust/air quality and erosion and sediment control. This can be included in the Statement of Environmental Effects and plans.

Sewerage Infrastructure and Trade Waste Plant

- Provide confirmation that the proposed development will be connected to Sydney Water's reticulated sewer.

Should you wish to discuss any aspect of Council's comments further, please do not hesitate to contact me on (02) 4732 8125.

Yours sincerely

Gavin Cherry
Development Assessment Coordinator

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

26 August 2021

Rebecka Groth
A/Senior Environmental Assessment Officer
Industry Assessments
Department of Planning, Industry and Environment
Via email: rebecka.groth@planning.nsw.gov.au

Dear Rebecka,

Comments for Secretary Environmental Assessment Requirements (SEARS) request for the ARDEX Warehouse and Manufacturing Facility at No's 657-769 Mamre Road, Kemps Creek

Thank you for the opportunity to provide comments on the SEARs request for the State Significant Development (SSD-25452459) for the ARDEX Warehouse and Manufacturing Facility at No's 657-769 Mamre Road, Kemps Creek.

It is understood the proponent is seeking to obtain SEARs for the development of the subject site for the construction and operational use of Warehouse / Industrial facility, to be operated by Ardex.

The Western Sydney Planning Partnership (the Partnership) does not object to the issuing of SEARs. Comments on what should be provided within the Environmental Impact Statement are provided at **Attachment 1**.

I trust this information has been of assistance. If you have any more questions, please contact Kye Sanderson, Senior Planning Officer, Planning Partnership Office on 9274 6180 or via email at kye.sanderson@planning.nsw.gov.au.

Yours sincerely

Anthony Pizzolato
Manager, Western Sydney Planning Partnership

Attachment 1 – Detailed comments on SSD-25452459

Application assessed against the Western Sydney Aerotropolis State Environmental Planning Policy (Aerotropolis SEPP)

While the proposal sits outside the area defined by the Land Application map of the Aerotropolis SEPP, controls regarding airport safeguarding do apply and must be considered by the applicant.

Part 3 Development controls—Airport safeguards
The applicant must ensure that the proposal is consistent with aviation safeguarding requirements contained within the Western Sydney Aerotropolis Planning Package. This includes the Western Sydney Aerotropolis Plan and the Aerotropolis SEPP. More specifically, the applicant must address Section 5 (Safeguarding the 24-hour airport) of the Western Sydney Aerotropolis Plan and Part 3 (Development Controls-Airport safeguard) of the Aerotropolis SEPP.

The site is within the 8 km wildlife buffer zone on the Wildlife Buffer Zone Map of the SEPP and careful consideration must be given to any proposed vegetation or landscaping to minimise wildlife attraction as per Part 3, Clause 21 of the Aerotropolis SEPP.

Wildlife Management
Please note, in accordance with Clause 21(2) of the Aerotropolis SEPP, development consent must not be granted to relevant development on land in the 13 km wildlife buffer zone unless the consent authority—

a) has consulted the relevant Commonwealth body, and
b) has considered a written assessment of the wildlife that is likely to be present on the land and the risk of the wildlife to the operation of the Airport provided by the applicant, which includes—
    i. species, size, quantity, flock behaviour and the particular times of day or year when the wildlife is likely to be present, and
    ii. whether any of the wildlife is a threatened species, and
    iii. a description of how the assessment was carried out, and
c) is satisfied that the development will mitigate the risk of wildlife to the operation of the Airport, including, for example, measures relating to—
    i. waste management, landscaping, grass, fencing, stormwater, or water areas, or
    ii. the dispersal of wildlife from the land by the removal of food or the use of spikes, wire, or nets.

Further, in accordance with Clause 21(4) of the Aerotropolis SEPP, relevant development means development for the following purposes—

- agricultural produce industries,
- aquaculture,
- camping grounds,
- eco-tourist facilities,
- garden centres,
- intensive livestock agriculture,
- intensive plant agriculture,
- livestock processing industries,
- plant nurseries,

- recreation facilities (major),
- recreation facilities (outdoor),
- sewage treatment plants,
- waste or resource management facilities that consist of outdoor processing, storage, or handling of organic or putrescible waste,
- water storage facilities.

Depending on the type of end use sought for the buildings, the above clauses may apply to the relevant development listed above.

Application assessed against the Western Sydney Aerotropolis Plan (WSAP)

The WSAP establishes a vision, objectives, and principles for the development of the Aerotropolis. The Mamre Road precinct is generally identified for industrial (enterprise) uses. Page 70 of the WSAP outlines the key considerations, strategic outcomes and implementation strategies for the Mamre Road Precinct and an assessment of the proposal against this is requested.

An analysis of the proposal should also be given against the Aerotropolis planning principles contained in the Appendix (pages 92-94).

--- END OF COMMENTS ---

Patrick Copas

From: Planning and Safeguarding <planning@wsaco.com.au>
Sent: Monday, 23 August 2021 6:49 PM
To: Rebecka Groth
Cc: Kirk Osborne; Tim Smith
Subject: [SEC=OFFICIAL] ARDEX Warehouse and Manufacturing Facility (SSD-25725029) (Penrith)

Follow Up Flag: Follow up
Flag Status: Flagged

OFFICIAL

Hi Rebecca,

Thank you for opportunity to comment on the SEARs request for State Significant Development Application 25725029 for the proposed warehouse and industrial facility at proposed lot 10, 657-769 Mamre Road Kemps Creek. Western Sydney Airport (WSA) notes that the proposal includes exhaust stacks and landscaping associated with the development, approximately 5.6km away from the Western Sydney International (Nancy-Bird Walton) Airport (WSI). The site forms part of the Mamre Road Precinct, located in the Western Sydney Employment Area, and has been proposed in accordance with *State Environmental Planning Policy (State and Regional Development) 2011*.

I note the following matters for consideration in relation to this SEARS request:

- **Stakeholder Consultation:** WSA has not been listed a stakeholder for the purposes of consultation. We request that the SEARS lists WSA as a key stakeholder to be consulted in the preparation of the Environmental Impact Statement (EIS).
- **Wildlife Hazards – Landscaping:** No details other than identifying that the landscaping will include native and endemic species is provided. Landscaping does have the potential to attract wildlife. The site is located within the 8km wildlife buffer of the WSI. Accordingly, the landscape plan is to be prepared in consultation with a suitably qualified ecologist to ensure the landscape species selected minimises wildlife attraction and the EIS is to include an assessment of the impact of the proposed landscaping on wildlife attraction.
- **Airspace Operations:** An appropriate assessment on the impact of the development on the Obstacle Limitation Surface (OLS) has not been undertaken. The submitted report incorrectly considers ANEC contours when assessing compliance with clause 33E Airspace operations of the *State Environmental Planning Policy (Western Sydney Employment Area) 2009*. The plans and EIS must include details and an assessment of the height and location of any exhaust stacks and type and velocity of emissions from those stacks on the OLS. Subject to information being providing in relation to the exhaust stacks and any emissions, referral may be required to CASA and Airservices.
- ***State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 (Aerotropolis SEPP):*** In accordance with clause 5(3) of the Aerotropolis SEPP, Part 3 of the Aerotropolis SEPP applies to the subject site. An assessment against the relevant provisions of Part 3 Development Controls – Airport Safeguards of the Aerotropolis SEPP must be undertaken and submitted in support of the application.

If you have any queries or clarifications, please do not hesitate to contact me.

Kind Regards,

Deanne Frankel
Planning Manager
Airport Planning and Design

[redacted]

Our ref: DOC21/702026
Senders ref: SSD 25725029

Rebecka Groth
Energy Resource Assessments
Planning and Assessment Group
Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

Dear Ms Groth

Subject: Request for SEARs - ARDEX Warehouse and Manufacturing Facility (SSD-25725029) (Penrith)

Thank you for your e-mail received on 11 August 2021, requesting input from Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment (DPIE) on the SEARs for the ARDEX Warehouse and Manufacturing Facility (SSD-25725029) (Penrith).

EES notes the subject development forms part of the broader estate known as The Yards, that was approved under SSD 9522 in December 2020, for the purpose of Warehouse, Logistics and Industrial Facilities. It is also noted that SSD 9522 MOD 1 is currently under assessment.

EES has reviewed the scoping report prepared by Willowtree Planning dated 6 August 2021 and provides the following comments below and recommended SEARs at Attachment A.

Biodiversity

Please note in relation to point (4) of the standard EES biodiversity environmental assessment requirements in Attachment A the minimum information and spatial data requirements are in Tables 24 and 25 of the Biodiversity Assessment Method (BAM), and as required more broadly by the revised BAM 2020. Other requirements, such as those relating to the BAM Calculator and Biodiversity Offsets and Agreements Management System (BOAMS), are detailed in various guidelines, practice notes, updates and other advices issued by EES to BAM accredited assessors – see https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/accredited-assessors/assessor-resources.

Waterway health

As set out in the Section 7 Water and Soils in Attachment A, EES recommends that:

The EIS must describe background conditions for any water resource likely to be affected by the development, including:

- *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning.*

In accordance with the *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions*, EES has developed the NSW Government water quality and flow objectives (Tables 1 and 2 below) for the Wianamatta-South Creek catchment to achieve the vision for Western Sydney Parkland City.

The water quality and flow objectives were provided to key stakeholders at a workshop on 19 October 2020 and were included in the exhibited Draft Aerotropolis Precinct Plan. EES has also worked closely with DPIE Place Design and Public Spaces in developing the exhibited draft Mamre Road Precinct DCP and it is expected that the interim objectives in Section 2.6 in the draft Mamre Road Precinct DCP will be superseded by tables 1 and 2 below as follows:

- Page 26, Section 2.6 Integrated Water Cycle Management: Following the description of the flow components the new Table 1 (below) will be added and referred to. Also, 'and baseflow requirements' in the last/following sentence will be deleted.

Table 1 Ambient stream flows and requirements of waterways and water dependent ecosystems in the Mamre Road Precinct

Flow Objectives		
	1-2 Order Streams	3rd Order Streams or greater
Median Daily Flow Volume (L/ha)	71.8 ± 22.0	1095.0 ± 157.3
Mean Daily Flow Volume (L/ha)	2351.1 ± 604.6	5542.2 ± 320.9
High Spell (L/ha) ≥ 90th Percentile Daily Flow Volume	2048.4 ± 739.2	10091.7 ± 769.7
High Spell - Frequency (number/y) High Spell - Average Duration (days/y)	6.9 ± 0.4 6.1 ± 0.4	19.2 ± 1.0 2.2 ± 0.2
Freshes (L/ha) ≥ 75th and ≤ 90th Percentile Daily Flow Volume	327.1 to 2048.4	2642.9 to 10091.7
Freshes - Frequency (number/y) Freshes - Average Duration (days/y)	4.0 ± 0.9 38.2 ± 5.8	24.6 ± 0.7 2.5 ± 0.1
Cease to Flow (proportion of time/y)	0.34 ± 0.04	0.03 ± 0.007
Cease to Flow – Duration (days/y)	36.8 ± 6	6 ± 1.1

- Page 30, Section 2.6.2 Stormwater Quality: Table 6 will be replaced with the new Table 2 below.

Table 2 Ambient water quality of waterways and waterbodies in the Mamre Road Precinct

Water Quality Objectives	
Total Nitrogen (TN, mg/L)	1.72
Dissolved Inorganic Nitrogen (DIN, mg/L)	0.74
Ammonia (NH_3-N, mg/L)	0.08
Oxidised Nitrogen (NOx, mg/L)	0.66
Total Phosphorus (TP, mg/L)	0.14
Dissolved Inorganic Phosphorus (DIP, mg/L)	0.04
Turbidity (NTU)	50

Water Quality Objectives	
Total Suspended Solids (TSS, mg/L)	37
Conductivity (µS/cm)	1103
pH	6.20 - 7.60
Dissolved Oxygen (DO, %SAT)	43 - 75
Dissolved Oxygen (DO, mg/L)	8

EES has also developed stormwater management targets that achieve the NSW Government water quality and flow objectives, following the 5-step process outlined in the *Risk-based framework for considering waterway health outcomes in strategic land use planning decisions*. These targets are provided in Tables 3 - 5 (below) and it is also expected that compliance with these stormwater targets will be included in the Mamre Road DCP as a specific development control.

To assist the applicant, EES has prepared a MUSIC modelling toolkit (Attachment B), which includes:

- Frequently Asked Questions to provide further background and context for the stormwater management targets.
- Construction (Table 1) and operational phase (Tables 2,3) targets for Mamre Road DCP.
- Recommended rainfall and potential evapotranspiration for MUSIC models (Table 4).
- Source Node assumptions for developing MUSIC models under the developed scenario (Table 5).
- Flow Duration Curve Tool for assessing compliance against Stormwater Flow Targets at the development scale (Figure 1, and excel spreadsheet titled 'Flow Duration Curve Development Scale - South Creek – Locked.xlsx').
- MUSIC model file which provides the rainfall, PET and Source Node Assumptions to support assessments and development of WSUD strategies in Wianamatta-South Creek.

It is recommended that above technical information be used in any MUSIC modelling for the development.

It is important to note that the toolkit will be supported by the '*Technical guide to demonstrate compliance with Wianamatta-South Creek waterway health objectives and stormwater management targets'*, which will be publicly released (for consultation) as part of the Aerotropolis DCP planning package.

Table 3 Stormwater quality targets – Construction Phase

	Construction Phase Target
Total suspended solids (TSS) and pH	All exposed areas greater than 2500 metres must be provided with sediment controls which are designed, implemented and maintained to a standard which would achieve at least 80% of the average annual runoff volume of the contributing catchment treated (i.e. 80% hydrological effectiveness) to 50mg/L Total Suspended Solids (TSS) or less, and pH in the range (6.5–8.5)
Oil, litter and waste contaminants	No release of oil, litter or waste contaminants

	Construction Phase Target
Stabilisation	Prior to completion of works for the development, and prior to removal of sediment controls, all site surfaces must be effectively stabilised including all drainage systems. An effectively stabilised surface is defined as one that does not, or is not likely to result in visible evidence of soil loss caused by sheet, rill or gully erosion or lead to sedimentation water contamination.

Table 4. Stormwater quality targets – operational phase

	Stormwater Quality Target – Operational Phase
Gross Pollutants (anthropogenic litter >5mm and coarse sediment >1mm)	90% reduction (minimum) in mean annual load from unmitigated development
Total Suspended Solids (TSS)	90% reduction in mean annual load from unmitigated development
Total Phosphorus (TP)	80% reduction in mean annual load from unmitigated development
Total Nitrogen (TN)	65% reduction in mean annual load from unmitigated development

Table 5. Stormwater flow targets – operational phase

	Stormwater Flow Target – Operational Phase
Option 1: Mean Annual Runoff	
Mean Annual Runoff Volume (MARV)	≤ 2 ML/ha/year at the point of discharge to the local waterway
90%ile flow	1000 to 5000 L/ha/day at the point of discharge to the local waterway
50%ile flow	5 to 100 L/ha/day at the point of discharge to the local waterway
10%ile flow	0 L/ha/day at the point of discharge to the local waterway
Option 2: Flow Duration Curve Approach	
95%ile flow	3000 to 15000 L/ha/day at the point of discharge to the local waterway
90%ile flow	1000 to 5000 L/ha/day at the point of discharge to the local waterway
75%ile flow	100 to 1000 L/ha/day at the point of discharge to the local waterway
50%ile flow	5 to 100 L/ha/day at the point of discharge to the local waterway
Cease to flow	Cease to flow to be between 10% to 30% of the time

Note: Flexibility for showing compliance with the performance criteria has been provided in response to feedback from the urban development industry. Option 1 is primarily based on MARV and is simpler to

calculate using industry standard models, whereas Option 1 is based key percentiles of a flow duration curve. Development must comply with either Option 1 or Option 2.

Should you have any queries regarding this matter, please contact Shaun Hunt, Senior Conservation Planning Officer via shaun.hunt@environment.nsw.gov.au or 02 8275 1617.

Yours sincerely

24/08/21

Susan Harrison
Senior Team Leader Planning
Greater Sydney Branch
Biodiversity and Conservation

Attachment A – EES Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method 2020, including an assessment of the impacts of the proposal (including an assessment of impacts prescribed by the regulations). 2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method 2020. 3. The BDAR must include details of the measures proposed to address the offset obligation as follows: • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired; • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; • Any proposal to fund a biodiversity conservation action; • Any proposal to conduct ecological rehabilitation (if a mining project); • Any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. 4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per the BAM. 5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016.

Water and soils

6. The EIS must map the following features relevant to water and soils including:
    a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
    b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
    c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.
    d. Groundwater.
    e. Groundwater dependent ecosystems
    f. Proposed intake and discharge locations

7. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
    - Existing surface and groundwater.
    - Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
    - Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
    - Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
    - Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning

8. The EIS must assess the impact of the development on hydrology, including:
    a. Water balance including quantity, quality and source.
    b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
    c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
    d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
    e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
    f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
    g. Identification of proposed monitoring of hydrological attributes.

Flooding and coastal hazards

9. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land.
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas)
    d. Flood Hazard.
10. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.
11. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
12. Modelling in the EIS must consider and document:
    a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.

b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.
c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories
d. Relevant provisions of the NSW Floodplain Development Manual 2005.

13. The EIS must assess the impacts on the proposed development on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Consistency with any Rural Floodplain Management Plans.
    d. Compatibility with the flood hazard of the land.
    e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses.
    h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
    i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
    j. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES.
    k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

End of Submission

DOC21/744514

Ms Rebecka Groth
Planning and Assessment Division
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124
Email: rebecka.groth@dpie.nsw.gov.au

BY ELECTRONIC MAIL
31 August 2021

Dear Ms Groth

EPA Submission on Planning Advice Request SSD-25725029 – Ardex Warehouse and Manufacturing Facility - 657-769 Mamre Road, Kemps Creek

I refer to your request to the Environment Protection Authority (EPA) dated 11 August 2021 seeking the EPA's Secretary's Environmental Assessment Requirement (SEAR'S) to assist with the preparation of an Environmental Impact Statement (EIS) for the proposal by Altis Frasers JV Pty Ltd (the proponent) of a warehouse and manufacturing facility at 657-769 Mamre Road, Kemps Creek (the premises), SSD-25725029 (the proposal).

The EPA understands the proposal is for the construction and operation of a warehouse and manufacturing facility for powdered and liquid chemicals.

The EPA understands the proposed facility would include:

- powder and liquids manufacturing plant which would operate on a 24-hour, seven day a week basis;
- manufacture of non-flammable and non-combustible powdered chemicals (including cement, limestone and sand);
- production of approximately 48,000 tonnes of powdered chemicals per year;
- manufacture of water dispersed polymers (emulsion/latex) with or without non-combustible fillers, silicon packing, as well as water dispersion of epoxy resins;
- limited batching of flammable goods under controlled conditions, including use and mixing of solvents;
- production of approximately 25,000 tonnes of liquid chemicals per year;
- warehouse and distribution activities; and
- storage of dangerous goods.

Based on the information provided, the proposal does require an environment protection licence under sections 43, 48 and 55 of the *Protection of the Environment Operations Act 1997* (POEO Act). The activity does appear to trigger the scheduled activities for cement or lime works and chemical

production waste generation in accordance with Schedule 1 of the POEO Act, the activity may tigger additional scheduled activities which the proponent is to determine

The EPA has considered the proposal and provides the information in Attachment A which is required to properly assess the proposal. The EPA's key information requirements for the proposal include an assessment of:

Potential air and odour quality impacts due to construction and operation

- Proposed measures in place to manage odours from the storage of highly chemicals. A sensitive receptor includes a location where people work – thus clarification on the nearest sensitive receptor is required. Adjacent premises must be considered required when assessing project air impacts.
- Benchmark proposed air pollution control and mitigation measures against best available practice.

Impacts on water quality

Wastewater and spill mitigation

- Storage, treatment, sampling and disposal (including wastewaters generated by the wheel wash).
- The mitigation measures proposed to be implemented to prevent and mitigate leaks and spills from the plant and other project operations and activities.
- Appropriate primary and secondary containment systems should be included as a part of the proposal.
- Details of bunding, isolation, overflow prevention and other controls should be provided to demonstrate spill and leak related risks have been appropriate considered and addressed.

Emergency incident management

- Including, but not limited to, fire water containment and fire mitigation systems.

Chemical and dangerous goods storage and handling

- Segregation measures and consideration of maximum quantity(s) able to be stored within compliance with segregation measures.
- Any additional bunding and storage requirements for specific chemicals or dangerous goods.
- Unloading and loading of chemicals and dangerous goods.

Waste management and disposal

- A waste management plan must implement measures to ensure waste is stored appropriately and disposed of lawfully.

Overall the EPA highlights, the type of powder and liquid manufacturing proposed to be conducted at the premises and the proximity of the proposed activity near businesses and sensitive receivers, will require the proponent to demonstrate that the location of the proposed activity is suitable from an operational, environmental and safety management perspective.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment B and any relevant industry codes of practice and best practice management guidelines.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

The proponent should be made aware that any commitments made as part of the approval may also be formalised as approval conditions and may also be placed as formal licence conditions.

The proponent should be made aware that, consistent with provisions under Part 9.4 of the POEO Act the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an Environment Protection Licence.

In addition, as a requirement of a licence, the EPA will require the proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the POEO Act.

If you have any questions about this matter, please contact Rhys Inez on (02) 9995 6359 or via email at rhys.inez@epa.nsw.gov.au.

Yours sincerely

.....

Christine Mitchell
A/Unit Head Regulatory Operations
Environment Protection Authority
(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS FOR

ARDEX Warehouse and Manufacturing Facility - 657-769 Mamre Road, Kemps Creek

How to use these requirements

The EPA requirements have been structured in accordance with the DIPNR EIS Guidelines, as follows. It is suggested that the EIS follow the same structure:

A. Executive summary

B. The proposal

C. The location

D. Identification and prioritisation of issues

E. The environmental issues

F. List of approvals and licences

G. Compilation of mitigation measures

H. Justification for the proposal

A Executive summary

The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

B The proposal

1. Objectives of the proposal

- The objectives of the proposal should be clearly stated and refer to:
  a) the size and type of the operation, the nature of the processes and the products, by-products and wastes produced;
  b) a life cycle approach to the production, use or disposal of products;
  c) the anticipated level of performance in meeting required environmental standards and cleaner production principles;
  d) the staging and timing of the proposal and any plans for future expansion; and
  e) the proposal's relationship to any other industry or facility.

2. Description of the proposal

General

- Outline the production process including:
  a) the environmental "mass balance" for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc); and
  b) any life-cycle strategies for the products.
- Outline cleaner production actions, including:
  a) measures to minimise waste (typically through addressing source reduction);
  b) proposals for use or recycling of by-products;
  c) proposed disposal methods for solid and liquid waste;
  d) air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points;
  e) water management system including all potential sources of water pollution, proposals for re-use;
  f) treatment etc, emission levels of any wastewater discharged, discharge points, summary of options;
  g) explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge; and
  h) soil contamination treatment and prevention systems.
- Outline construction works including:
  a) actions to address any existing soil contamination;
  b) any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site);

c) construction timetable and staging; hours of construction; proposed construction methods; and
d) environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.

- Include a site diagram showing the site layout and location of environmental controls.

Air

- Identify all sources or potential sources of air emissions from the development.
  Note: emissions can be classed as either:
  - *point (e.g. emissions from stack or vent); or*
  - *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*
- Provide details of the project that are essential for predicting and assessing air impacts including:
  a) the quantities and physio-chemical parameters (e.g. concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored;
  b) an outline of procedures for handling, transport, production and storage; and
  c) the management of solid, liquid and gaseous waste streams with potential to generate emissions to air.

Noise and vibration

- Identify all noise sources or potential sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

Water

- Provide details of the project that are essential for predicting and assessing impacts to waters including:
  a) the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on http://www.environment.nsw.gov.au/ieo/index.htm, using technical criteria derived from the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality,* ANZECC 2000);
  b) the management of discharges with potential for water impacts; and
  c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.
- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts e.g. effluent ponds) and showing potential areas of modification of contours, drainage etc.

- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Waste and chemicals

- Provide details of the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises. Waste must be classified according to the EPA's *Waste Classification Guidelines 2014* (as amended from time to time).
- Provide details of liquid waste and non-liquid waste management at the facility, including:
  a) the transportation, assessment and handling of waste arriving at or generated at the site;
  b) any stockpiling of wastes or recovered materials at the site;
  c) any waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site;
  d) the method for disposing of all wastes or recovered materials at the facility;
  e) the emissions arising from the handling, storage, processing and reprocessing of waste at the facility; and
  f) the proposed controls for managing the environmental impacts of these activities.
- The mitigation measures proposed to be implemented to prevent and mitigate leaks and spills from the treatment plant and other project operations and activities.
  - Appropriate primary and secondary containment systems should be included as a part of the proposal.
  - Details of bunding, isolation, overflow prevention and other controls should be provided to demonstrate spill and leak related risks have been appropriate considered and addressed.
- Provide details of spoil disposal with particular attention to:
  a) the quantity of spoil material likely to be generated;
  b) proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil;
  c) the need to maximise reuse of spoil material in the construction industry;
  d) identification of the history of spoil material and whether there is any likelihood of contaminated;
  e) material, and if so, measures for the management of any contaminated material; and
  f) designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- Reference should be made to the guidelines: EPA's *Waste Classification Guidelines 2014* (as amended from time to time)

ESD

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:
  a) an assessment of a range of options available for use of the resource, including the benefits of each option to future generations proper valuation and pricing of environmental resources
  b) identification of who will bear the environmental costs of the proposal.

3. Rehabilitation

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

4. Consideration of alternatives and justification for the proposal

- Consider the environmental consequences of adopting alternatives, including alternative:
  a) sites and site layouts;
  b) access modes and routes;
  c) materials handling and production processes;
  d) waste and water management;
  e) impact mitigation measures; and
  f) energy sources.

- Selection of the preferred option should be justified in terms of:
  a) ability to satisfy the objectives of the proposal;
  b) relative environmental and other costs of each alternative;
  c) acceptability of environmental impacts and contribution to identified environmental objectives;
  d) acceptability of any environmental risks or uncertainties;
  e) reliability of proposed environmental impact mitigation measures; and
  f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

C The location

1. General

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
  a) meteorological data (e.g. rainfall, temperature and evaporation, wind speed and direction);
  b) topography (landform element, slope type, gradient and length);
  c) surrounding land uses (potential synergies and conflicts);
  d) geomorphology (rates of landform change and current erosion and deposition processes);
  e) soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils);
  f) ecological information (water system habitat, vegetation, fauna); and
  g) availability of services and the accessibility of the site for passenger and freight transport.

2. Air

- Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.
- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
  a) temperature and humidity;
  b) rainfall, evaporation and cloud cover;
  c) wind speed and direction;
  d) atmospheric stability class;
  e) mixing height (the height that emissions will be ultimately mixed in the atmosphere);
  f) katabatic air drainage; and
  g) air re-circulation.

3. Noise and vibration

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals. Typically, the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

4. Water

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: http://www.environment.nsw.gov.au/ieo/index.htm should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

5. Soil Contamination Issues

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

D Identification and prioritisation of issues / scoping of impact assessment

- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  a) relevant NSW government guidelines;
  b) industry guidelines;
  c) EISs for similar projects;
  d) relevant research and reference material;
  e) relevant preliminary studies or reports for the proposal; and
  f) consultation with stakeholders.

- Provide a summary of the outcomes of the process including:
  a) all issues identified including local and regional impacts (e.g. increased/ decreased greenhouse emissions);
  b) key issues which will require a full analysis (including comprehensive baseline assessment);
  c) issues not needing full analysis though they may be addressed in the mitigation strategy; and
  d) justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

E The environmental issues

1. General

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions.
- proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

Note: The level of detail should match the level of importance of the issue in decision making which is dependent on the environmental risk.

Describe baseline conditions

- Provide a description of existing environmental conditions for any potential impacts.

Assess impacts

- For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts e.g. assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommissioning if relevant.
- The level of assessment should be commensurate with the risk to the environment.

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Proponents are expected to implement a ‘reasonable level of performance’ to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A ‘reasonable level of performance’ involves adopting and implementing technology and management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:
  a) operational procedures to manage environmental impacts;
  b) monitoring procedures;
  c) training programs;
  d) community consultation;
  e) complaint mechanisms including site contacts;
  f) strategies to use monitoring information to improve performance; and
  g) strategies to achieve acceptable environmental impacts and to respond in event of exceedances.

2. Air

Describe baseline conditions

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data. This description should include the following parameters.

Assess impacts

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (e.g. potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with the EPA.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.
  Note: With dust and odour, it may be possible to use data from existing similar activities to generate emission rates.

Describe management and mitigation measures

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes.

3. Human Health Risk Assessment

- A human health risk assessment must be undertaken in conjunction with the air quality and odour impact assessment.
- The human health risk assessment must be undertaken in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth) and must include:

a) the inhalation of criteria pollutants and exposure from all pathways i.e., inhalation, ingestion and dermal to specific air toxics; and
b) a demonstration of how the waste to energy facility would be operated in accordance with best practice measures to manage air emissions with consideration of the *Environment Protection Authority's NSW Energy from Waste Policy Statement.*

4. Noise and vibration

Describe baseline conditions

- Determine the existing background (LA90) and ambient (LAeq) noise levels, as relevant, in accordance with the NSW Noise Policy for Industry.
- Determine the existing road traffic noise levels in accordance with the NSW Road Noise Policy, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
  a) details of equipment used for the measurements;
  b) a brief description of where the equipment was positioned;
  c) a statement justifying the choice of monitoring site(s), including the procedure used to choose the site(s), having regards to Fact Sheets A and B of the NSW Noise Policy for Industry;
  d) details of the exact location of the monitoring site and a description of land uses in surrounding areas;
  e) a description of the dominant and background noise sources at the site;
  f) day, evening and night assessment background levels for each day of the monitoring period;
  g) the final Rating Background Level (RBL) value;
  h) graphs of the measured noise levels for each day should be provided; and
  i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring.

Assess impacts

- Determine the project noise trigger levels for the site. For each identified potentially affected receiver, this should include:
  a) determination of the project intrusive noise level for each identified potentially affected receiver;
  b) selection and justification of the appropriate amenity category for each identified potentially affected receiver;
  c) determination of the project amenity noise level for each receiver; and
  d) determination of the appropriate maximum noise level event assessment (sleep disturbance) trigger level.
- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Determine expected noise level and noise character likely to be generated from noise sources during:
  a) site establishment;
  b) construction;
  c) operational phases;
  d) transport including traffic noise generated by the proposal; and
  e) other services.

  Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise

sourcelevels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).

- Determine the noise levels likely to be received at the reasonably most affected location(s) (these may vary for different activities at each phase of the development).
- The noise impact assessment report should include:
  a) a plan showing the assumed location of each noise source for each prediction scenario;
  b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site;
  c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc;
  d) methods used to predict noise impacts including identification of any noise models used;
  e) the weather conditions considered for the noise predictions;
  f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario;
  g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived; and
  h) an assessment of the need to include modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry*.
- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
- Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified.
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.
- Where blasting is intended an assessment in accordance with the Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZECC, 1990) should be undertaken. The following details of the blast design should be included in the noise assessment:
  a) bench height, burden spacing, spacing burden ratio;
  b) blast hole diameter, inclination and spacing; and
  c) type of explosive, maximum instantaneous charge, initiation, blast block size, blast frequency.

Describe management and mitigation measures

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential

problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:

a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage;
b) control of traffic (eg: limiting times of access or speed limitations);
c) resurfacing of the road using a quiet surface;
d) use of (additional) noise barriers or bunds;
e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern;
f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension;
g) driver education;
h) appropriate truck routes;
i) limit usage of exhaust brakes;
j) use of premium muffles on trucks;
k) reducing speed limits for trucks;
l) ongoing community liaison and monitoring of complaints; and
m) phasing in the increased road use.

5. Water

Describe baseline conditions

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).
  Note: Methods of sampling and analysis need to conform with an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) or be approved and analyses undertaken by accredited laboratories).
- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: http://www.environment.nsw.gov.au/ieo/index.htm . The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC 2000 *Guidelines for Fresh and Marine Water Quality* (http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government Policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANCECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.

- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. *the Healthy Rivers Commission Inquiries or the NSW Salinity Strategy* (DLWC, 2000) (http://www.environment.nsw.gov.au/salinity/government/nswstrategy.htm).
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the EPA on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are generally only expected to source available data and information. However, proponents of large or high-risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:
  a) lake or estuary flushing characteristics;
  b) specific human uses (e.g. exact location of drinking water offtake);
  c) sensitive ecosystems or species conservation values;
  d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc;
  e) an outline of baseline groundwater information, including, but not restricted to, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment; and
  f) historic river flow data were available for the catchment.

Assess impacts

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act 1997* (i.e. Pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with EPA's guidelines section 'Bunding and Spill Management' at http://www.epa.nsw.gov.au/mao/bundingspill.htm and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.

- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:
  a) will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and
  b) will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.
- Consult with the EPA as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). The EPA will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.
  Note: The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.
- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to e.g. *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), *Guidelines for Fresh and Marine Water Quality* (ANZECC 2000), *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

Describe management and mitigation measures

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (e.g. preparation of contingency plans), appropriate disposal methods, and generation of leachate.
- Describe hydrological impact mitigation measures including:
  a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition);
  b) minimising runoff;
  c) minimising reductions or modifications to flow regimes; and
  d) avoiding modifications to groundwater.

- Describe groundwater impact mitigation measures including:
  a) site selection
  b) retention of native vegetation and revegetation
  c) artificial recharge
  d) providing surface storages with impervious linings
  e) monitoring program.
- Describe geomorphological impact mitigation measures including:
  a) site selection
  b) erosion and sediment controls
  c) minimising instream works
  d) treating existing accelerated erosion and deposition
  e) monitoring program.
- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

6. Soils and contamination

Describe baseline conditions

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

Assess impacts

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:
  a) disturbing any existing contaminated soil;
  b) contamination of soil by operation of the activity;
  c) subsidence or instability;
  d) soil erosion; and
  e) disturbing acid sulfate or potential acid sulfate soils.
- Reference should be made to *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011); *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (EPA, 2015).

Describe management and mitigation measures

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
  a) erosion and sediment control measures;
  b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998); and
  c) proposals for the management of these soils – see *Acid Sulfate Soil Manual* (Acid Sulfate Soil Advisory Committee 1998) and *Acid Sulfate Soils Assessment Guidelines* (Acid Sulfate Soil Advisory Committee 1998).

7. Waste and chemicals

Describe baseline conditions

- Describe any existing waste or chemicals operations related to the proposal.

Assess impacts

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to: the EPA's *Waste Classification Guidelines 2014* (as in force from time to time)
- If the proposal is an energy from waste facility it must:
  - demonstrate that the proposed operation will comply with the NSW EPA's Energy from Waste Policy Statement;
  - describe of the classes and quantities of waste that would be thermally treated at the facility;
  - demonstrate that waste used as a feedstock in the waste to energy plant would be the residual from a resource recovery process that maximises the recovery of material;
  - detail procedures that would be implemented to control the inputs to the waste to energy plant,
  - including contingency measures that would be implemented if inappropriate materials are identified;
  - detail the location and size of stockpiles of unprocessed and processed recycled waste at the site;
  - demonstrate any waste material (e.g. biochar, ash) produced from the waste to energy facility for land application is fit-for-purpose and poses minimal risk of harm to the environment in order to meet the requirements for consideration of a resource recovery order and /or exemption by the EPA;
  - detail procedures for the management of other solid, liquid and gaseous waste streams;
  - describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods; and
  - identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*.

Describe management and mitigation measures

- Outline measures to minimise the consumption of natural resources.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

8. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Assess the impact of the proposal against the long-term air, noise and water quality objectives for the area or region.

- Identify infrastructure requirements flowing from the proposal (e.g. water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (e.g. travel demand management strategies).

F List of approvals and licences

- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water)

G Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).

- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

H Justification for the Proposal

- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT B: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/140
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/#/view/act/1985/14
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/#/view/act/1979/203
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/156
Water Management Act 2000	http://www.legislation.nsw.gov.au/#/view/act/2000/92
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2016)	http://www.epa.nsw.gov.au/air/appmethods.htm http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/#/view/regulation/2010/428
Noise and Vibration	
NSW Noise Policy for Industry	http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise
NSW Rail Infrastructure Noise Guideline (EPA, 2013)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise
Human Health Risk Assessment	
Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)	http://www.eh.org.au/documents/item/916

Waste, Chemicals and Hazardous Materials and Radiation	
Waste	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	http://www.epa.nsw.gov.au/waste/landfill-sites.htm
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
EPA's Waste Classification Guidelines 2014	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery orders and exemptions	http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm
European Unions Waste Incineration Directive 2000	http://ec.europa.eu/environment/archives/air/stationary/wid/legislation.htm
EPA's Energy from Waste Policy Statement	http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.htm
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
Water and Soils	
Acid sulphate soils	
Coastal acid sulfate soils guidance material	http://www.environment.nsw.gov.au/acidsulfatesoil/ and http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm
Acid Sulfate Soils Planning Maps	http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm
Contaminated Sites Assessment and Remediation	
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorglines06121.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdlne.pdf

National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.scew.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	http://www.environment.nsw.gov.au/soils/landandsoil.htm
Managing urban stormwater for the protection of soils	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2000-Concepts.pdf http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3sitei nvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html
Applying Goals for Ambient Water Quality Guidance for Operations Officers - Mixing Zones	Contact the EPA on 131555
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

File ref. no: BFS21/2874
Doc. ref. no: D21/97647
Contact: Manager Infrastructure Liaison Unit

24 August 2021

Rebecka Groth
Dept Planning Industry and Environment

Dear Rebecka,

Re: Input into Secretary's Environmental Assessment Requirements (SEARs) – Ardex Warehouse and Manufacturing Facility (SSD-25725029)

Fire & Rescue NSW (FRNSW) acknowledge correspondence received on 19 August 2021, requesting input into the preparation of the SEARs for Ardex Warehouse and Manufacturing Facility, Lot 10, 657- 769 Mamre Rd Kemps Creek.

Thank you for your request for input to the Secretary's Environmental Assessment Requirements (SEARs) for the above development, by Fire & Rescue NSW (FRNSW).

FRNSW advise that no comment or agency input will be provided at this time.

FRNSW request to be given the opportunity to review and provide comment once the Environmental Impact Statement (EIS) has been developed and is released for exhibition.

If you have any queries regarding the above, please contact the Fire Safety Infrastructure Liaison Unit, referencing the FRNSW file number BFS21/2874. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Fire and Rescue NSW **ABN** 12 593 473 110

Community Safety Directorate
Fire Safety Infrastructure Unit

Locked Bag 12,
Greenacre NSW 2190

T 02 9742 7434
F 02 9742 7483

www.fire.nsw.gov.au

Regards,

Murray Mackne

A/SUPERINTENDENT MURRAY MACKNE
A/Manager Infrastructure Liaison
Community Safety | Fire and Rescue NSW
E: murray.mackne@fire.nsw.gov.au
T: 97427164 | M: 0477740591
1 Amarina Ave, Greenacre, NSW 2190 | Locked Mail Bag 12, Gre

Rebecka Groth
Senior Environmental Assessment Officer
Energy Resource Assessment
Department of Planning, Industry & Environment

By email: rebecka.groth@dpie.nsw.gov.au

Your reference: SSD-25725029
Our reference: DOC21/688707-2

Dear Ms Groth,

HERITAGE NSW – ABORIGINAL CULTURAL HERITAGE REGULATION
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS)

Project: ARDEX Warehouse and Manufacturing Facility
SSD/SSI application no: SSD-25725029

Thank you for requesting our input on the draft Planning Secretary's Environmental Assessment Requirements (SEARs) for the above state significant project.

Heritage NSW has reviewed the available supporting documentation and provides SEARs for the proposed development in relation to Aboriginal cultural heritage matters in **Attachment A**.

These SEARs are provided based on an understanding that the project site has been the subject of a previous Aboriginal cultural heritage assessment as part of SSD-9552 (Proposed Kemps Creek Warehouse and Logistics Hub). A list of Registered Aboriginal Parties (RAPs) has previously been established and we recommend that they continue to be consulted about activities within the development area.

If you have any questions regarding these comments, please contact Sarah Robertson, Archaeologist, at Heritage NSW, on 6229 7088 or via email sarah.robertson@environment.nsw.gov.au.

Yours sincerely

Dr Sam Higgs
Senior Team Leader
Aboriginal Cultural Heritage Regulation - North
Heritage NSW
Date: 26 August 2021

Enclosure – Attachment A: Recommended SEARs for ARDEX Warehouse and Manufacturing Facility SSD-25725029 - Aboriginal Cultural Heritage

ATTACHMENT A: HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: ARDEX Warehouse and Manufacturing Facility
SSD/I #: SSD-25725029

1. The EIS must document and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development within an addendum to existing Aboriginal Cultural Heritage Assessment Report (ACHAR) *Mamre South Precinct State Significant Development – Proposed Warehouse, Logistics and Industrial Facilities Hub: Aboriginal Cultural Heritage Assessment Report* prepared by Biosis and dated 31 July 2020. This needs to include:
    a. a summary of all test and salvage excavations undertaken to date; and
    b. a consideration of whether the test and salvage excavation results require a refinement of the predictive model. If the predictive model has substantially changed, then a new ACHAR and additional Aboriginal consultation with the existing Registered Aboriginal Parties (RAPs) must be undertaken.
2. Consultation with the RAPs that were previously identified for SSD-9552 must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).
3. The EIS must outline the impacts, including possible impacts, of the project on Aboriginal cultural heritage values and the measures proposed to mitigate impacts.
4. The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.
5. The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

NSW RURAL FIRE SERVICE

Department of Planning and Environment (Sydney Offices)
GPO Box 39
Sydney NSW 2001

Your reference: SSD-25725029
Our reference: DA20210812003378-SEARS-1

ATTENTION: Rebecka Groth

Date: Monday 23 August 2021

Dear Sir/Madam,

State Significant Development – Warehouse or Distribution Centre
Request for Secretary's Environmental Assessment Requirements
707A MAMRE RD KEMPS CREEK NSW 2178, 1//DP1018318

Reference is made to correspondence dated 11/08/2021 seeking input regarding the preparation of Secretary's Environmental Assessment Requirements for the above State Significant Development in accordance with the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has reviewed the information provided and advises that a bush fire assessment report shall be prepared which identifies the extent to which the proposed development conforms with or deviates from the relevant provisions of *Planning for Bush Fire Protection 2019*.

For any queries regarding this correspondence, please contact Simon Derevnin on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese
Supervisor Development Assessment & Plan
Built & Natural Environment

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

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

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

27 August 2021

Rebecka Groth
A/Senior Environmental Assessment Officer
Industry Assessments
Department of Planning, Industry and Environment
Rebecka.Groth@planning.nsw.gov.au

RE: Sydney Water input to SEARs for SSD-257250299 at Lot 10 657-769 Mamre Road, Kemps Creek

Thank you for seeking Sydney Water's input on the Secretary's Environmental Assessment Requirements for the abovementioned SSD which proposes the construction and use of a warehouse/industrial facility to be occupied and operated by Ardex, as well as subdivision. Ardex manufactures and supplies products such as adhesive products, grouts, silicone products, sealants, and 'natural stone' products as well as tools. The total GFA of the development is 27,631 m^2. The site forms part of the Kemps Creek Warehouse, Logistics and industrial Facilities Hub being developed under SSD-9522.The proposed development is within the Mamre Road Precinct. We have reviewed the proposal and provide the following comments for your consideration.

- Sydney Water currently has limited potable water services and no existing wastewater services within the vicinity of this development, however, the site is identified in Sydney Water's *Growth Servicing Plan 2020-2025*. As a result of this, Sydney Water will likely provide trunk services to the property within this timeframe. However, interim solutions that are currently planned for the precinct, prior to Upper South Creek Advanced Water Recycling Centre operation, may be unsuitable for waste volumes and types from this development and further information on the proposed developments water demand and wastewater flow needs are therefore required to fully ascertain the nature of this development.
- Sydney Water requires: detailed domestic, industrial water and wastewater demands for the proposed development to accurately plan for timely services for this development.
- **We recommend that the proponent engages a Water Servicing Coordinator to lodge a feasibility application with Sydney Water as soon as possible if they have not done so already, with the requirement to look at servicing options for both ultimate and interim servicing. Lodging the feasibility will enable Sydney Water and the proponent to assess the next steps, investigate solutions as quickly as possible and prevent unnecessary delays. These servicing investigations may be at the proponents' cost.**
- Indicative annual and ultimate stormwater, trade wastewater and water re-use quantities should also be included within the EIS report if applicable.
- SSDA257250299 and SSDA9522 may need to look at the demand holistically across the site to ensure adequate provision and sizing demands. **It is recommended that the proponent engages a Water Servicing Coordinator to facilitate the feasibility process and meetings are held between the proponent(s) and Sydney Water to ensure that Sydney Water's requirements inform all design processes.**

Recycled Water

- Recycled water for non-drinking water uses will be provided in the Mamre Road Precinct. The Integrated Water Servicing Options analysis is currently underway. It will determine the extent to which recycled stormwater is integrated with recycled wastewater.
- Sydney Water is currently preparing a Development Servicing Plan (DSP) for the Mamre Road Precinct. This will include Developer Charges for the provision of recycled water services to the Precinct.

Stormwater

- If Sydney Water is nominated as the trunk drainage manager in the Mamre Road Precinct, then Sydney Water will confirm the requirements for trunk drainage services needed to be delivered before a Section 73 certificate can be issued. This may include trunk drainage channels as well as stormwater treatment and storage to facilitate precinct wide stormwater harvesting integrated with recycled wastewater. We recommend that the proponent discusses this with Sydney Water following the lodgement of the feasibility
- The Integrated Water Servicing Options analysis is currently underway in collaboration with the Department of Planning, Industry and Environment. This analysis will determine the extent to which recycled stormwater is integrated with recycled wastewater

Sydney Water also requests that the Department of Planning, Industry and Environment include the following Secretary's Environmental Assessment Requirements relating to the provision of water-related services for the subject site:

Water-related Infrastructure Requirements

1. **The proponent of development should determine service demands following servicing investigations and demonstrate that satisfactory arrangements for drinking water, wastewater, and recycled water services have been made. Please see Attachment 1 as a guide to complete.**
2. The proponent must obtain endorsement and/or approval from Sydney Water to ensure that the proposed development does not adversely impact on any existing water, wastewater or stormwater main, or other Sydney Water asset, including any easement or property. When determining landscaping options, the proponent should take into account that certain tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided.
3. Strict requirements for Sydney Water's stormwater assets (for certain types of development) may apply to this site. The proponent should ensure that satisfactory steps/measures been taken to protect existing stormwater assets, such as avoiding building over and/or adjacent to stormwater assets and building bridges over stormwater assets. The proponent should consider taking measures to minimise or eliminate potential flooding, degradation of water quality, and avoid adverse impacts on any heritage items, and create pipeline easements where required.
4. As this development creates trade wastewater, Sydney Water has trade wastewater requirements which need to be met. By law, the property owner must submit an application requesting permission to discharge trade wastewater to Sydney Water's sewerage system. The proponent must obtain Sydney Water approval for this permit before any business activities can commence. Given this development comprises industrial operations, wastewater may discharge into a sewerage area that is subject

to wastewater reuse. Please contact Sydney Water's Business Customer Services to send your permit application or to find out more information. They can be contacted at the following email address: businesscustomers@sydneywater.com.au.

Integrated Water Cycle Management

5. The proponent should outline any sustainability initiatives that will minimise/reduce the demand for drinking water, including any alternative water supply and end uses of drinking and non-drinking water that may be proposed, and demonstrate water sensitive urban design (principles are used), and any water conservation measures that are likely to be proposed. This will allow Sydney Water to determine the impact of the proposed development on our existing services and required system capacity to service the development.

If you require any further information, please do not hesitate to contact the Growth Planning Team at urbangrowth@sydneywater.com.au.

Yours sincerely,

Kristine Leitch
Commercial Growth Manager
City Growth and Development, Business Development Group
Sydney Water, 1 Smith Street, Parramatta NSW 2150

Attachment 1

Growth Data Information

This data collected will inform Sydney Water's planning investigations for servicing the proposed development and wider area. Ideally updates should be provided every quarter for each development. Development intel helps to ascertain demonstrated demand and development confidence which supports business cases, planning studies, and commercial opportunities. The data collected will be treated as commercial in confidence. It is understood that the data may indicative only at this stage.

	Ultimate Growth	Ultimate EP (if known)	Number of Stages
Jobs			

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Jobs Numbers										
OR: Jobs in GFA										

High water users
Insert details on any proposed high demand water users (data centres, food production etc)

OUT21/10840

Rebecka Groth
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

rebecka.groth@planning.nsw.gov.au

Dear Ms Groth

ARDEX Warehouse and Manufacturing Facility (SSD-25725029)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 11 August 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

The SEARS should include:

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water).

Any further referrals to DPIE Water and NRAR can be sent by email to landuse.enquiries@dpie.nsw.gov.au. or to the following coordinating officer within DPIE Water:

Alistair Drew, Project Officer- email: Alistair.drew@dpie.nsw.gov.au

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Knowledge Office
17 August 2021

PO Box 398, Parramatta NSW 2124
Level 14, 169 Macquarie Street
Parramatta NSW 2150
www.waternsw.com.au
ABN 21 147 934 787

22 August 2021

Contact: *Justine Clarke*
Telephone: *0457 535 955*
Our ref: *D2021/92919*

Rebecka Groth
Department of Planning, Industry & Environment
4 Parramatta Square
12 Darcy Street
PARRAMATTA NSW 2150

Dear Ms Groth,

ARDEX Warehouse and Manufacturing Facility– Request for SEARs (SSD-25725029)

Thank you for your referral requesting WaterNSW's input into the preparation of Secretary's Environmental Assessment Requirements (SEARs) for the above proposal at 657-769 Mamre Road, Kemps Creek (Lot 10). It is understood the proposal seeks development consent for construction and operational use of a proposed Warehouse / Industrial facility, as well as subdivision of the residual Lot 10 to form a separate lot for the proposed facility.

The subject is located south of WaterNSW's Warragamba Pipelines controlled areas corridor, and within the new Kemps Creek Warehouse, Logistics and Industrial Facilities Hub being developed as a joint venture between Frasers and Altis under SSD 9522. The Warragamba Pipelines Corridor contains critical water supply infrastructure transporting raw water from Warragamba Dam to the Prospect water filtration plant.

Due to the nature of the proposal and separation from the WaterNSW Warragamba Pipelines Corridor, it is considered that the project is unlikely to have an impact on WaterNSW lands, asset or infrastructure. Notwithstanding, WaterNSW requests the Environmental Impact Statement (EIS) includes a Water Cycle Management Strategy, that considers on-lot stormwater management measures and adequate disposal of stormwater without negative impacts downstream.

WaterNSW would appreciate being advised when the EIS is exhibited for further review, and requests the Department continues to consult with us on any development that may impact on our assets, infrastructure or land, using the email address Environmental.Assessments@waternsw.com.au.

If you have any questions regarding this letter, please contact Justine Clarke at justine.clarke@waternsw.com.au.

Yours sincerely

ALISON KNIHA
Catchment Protection Planning Manager

Patrick Copas

From: Cornelis Duba [redacted]
Sent: Sunday, 22 August 2021 9:28 AM
To: Rebecka Groth
Cc: DPE CSE Information Planning Mailbox
Subject: HPE CM: NSW Planning, Industry & Environment Request for SEARs SSD-25725029 ARDEX Warehouse and Manufacturing Facility
Attachments: EE SSD-9522-Mod-1 Kemps Creek Hub.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Rebecka

I refer to the your below email of 11 August 2021 regarding the request for the Planning Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development SSD-25725029 ARDEX Warehouse and Manufacturing Facility for 'Construction and use of a warehouse/industrial facility and subdivision' at 657-769 Mamre Road, Kemps Creek (Proposed Lot 10 in subdivision approved under SSD-9522 of Lot 34 DP 1118173, Lots X & Y DP 421633, Lot 1 DP 1018318, Lot 22 DP 258414) in the Penrith City Council Local Government Area (LGA). Submissions needed to be made to the Department by 24 August 2021.

Endeavour Energy would expect that the Planning Secretary would require the applicant to address utilities as a key issue in the future Environmental Impact Statement, with the following being an example of the 'Utilities' section for other recent notifications received by Endeavour Energy from the Department.

14. Utilities

- In consultation with relevant service providers:
  - assess of the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.
  - identify any infrastructure upgrades required off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained.
  - provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.

The following is a combination of the various requests for SEARs for other State Significant Development referred to Endeavour Energy which attempts to capture are the possible 'Utilities' related matters.

Prepare an Infrastructure Management Plan in consultation with relevant agencies / authorities to:

- *address the existing capacity of the site to service the proposed development and any extension or augmentation, property tenure or staging requirements for the provision of utilities, including arrangements for electrical network requirements, drinking water, waste water and recycled water and how the upgrades will be co-ordinated, funded and delivered on time and be maintained to facilitate the development; and*
- *identify the existing infrastructure on the site or within the network which may be impacted by the construction and operation of the proposal and the measures to be implemented to address any impacts on this infrastructure.*

Endeavour Energy believes that either of the foregoing would adequately require the applicant to investigate and address in utilities required for the State Significant Development.

Please refer to the attached copy of Endeavour Energy's submission made to the Department via the Major Projects Portal on 1 May 2021 regarding State Significant Development SSD-9522 Kemps Creek Warehouse, Logistics and Industrial Facilities Hub MOD 1 - Changes to Lot 5 for 'Modification of the site layout to accommodate changes to Lots 5-8' at 657-769 Mamre Road, Kemps Creek (Lot 34 DP 1118173, Lots X & Y DP 421633, Lot 1 DP 1018318, Lot 22 DP 258414). The advice provided in Endeavour Energy's previous submissions essentially remain valid.

Endeavour Energy has noted the Request for SEARs Report in regard to addressing the suitability of the site for the development in regard to whether electricity services are available and adequate indicates 'All essential infrastructure services would be augmented accordingly for the proposed development, including water, sewer, electricity and communications'.

From the Proposed Site Plan included in the Request for SEARs Report there does not appear to be any provision made for any padmount substation/s on the site.

Endeavour Energy has noted the following in the Request for SEARs Report.

> **5.12 STATE ENVIRONMENTAL PLANNING POLICY NO. 33 – HAZARDOUS AND OFFENSIVE DEVELOPMENT**
>
> A review of the quantities of Dangerous Goods (DGs) stored at the proposed facility and the associated vehicle movements has been conducted and compared to the threshold quantities outlined in Applying S*tate Environmental Planning Policy (Hazardous and Offensive Development) No.33* (SEPP 33). It is concluded that the threshold quantities for the DGs to be stored and transported are not exceeded; hence, SEPP 33 does not apply to the project.
>
> As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as SEPP 33 does not apply.
>
> An independent assessment will be provided to support the EIS.

Endeavour Energy is aware that under the provisions of SEPP 33 in the preparation of a preliminary hazard assessment electricity infrastructure is not defined / regarded as sensitive land use. However, the electricity infrastructure on or in proximity of the site as well as potentially being damaged by a fire emanating from the storage and use of dangerous goods (which could result in significant power outages as well as other offsite effects), may also be a potential ignition source.

In similar situations the consultants have been requested to specifically address the risks associated with the proximity of the electricity infrastructure ie. detail design considerations, technical or operational controls to demonstrate as required by SEPP33 that the proposed business / development is suitably located and can be built and operated with an adequate level of safety and pollution control.

Irrespective of the class / division and the quantities, any dangerous goods whether combustible and / or flammable should not be stored near electricity infrastructure and increasing the separation distance as far as reasonably possible is recommended.

Endeavour Energy's Mains Design Instruction MDI 0028 'Underground distribution network design' includes the following advice regarding the location of substations near hazardous sources.

> *6.3.7 Substation near hazards*
>
> Substations contain HV and LV electricity, oil, plastics, concrete and other materials. In some situations, a substation can be regarded as a hazardous source, or be susceptible to hazardous sources.
>
> Therefore, substations in or near hazardous areas will be dealt with strictly in accordance with Australian Standards and statutory requirements. The minimum distances to be maintained from hazardous locations are set out in AS 60079.10:2009. Reference will be made to AS 60079.10:2009 and any relevant statutory authority, in determining the siting of a substation when in hazardous locations. Padmount substations in or near hazardous areas, will have stainless steel cubicles as long as they comply with EDI 100 for earthing.

Subject to the foregoing Endeavour Energy has no objection to the State Significant Development.

I appreciate not all the foregoing issues may be directly or immediately relevant or significant to the request for SEARs / Development Application. However in keeping with the Department's aim of earlier and better engagement, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or required electricity infrastructure needed to facilitate the proposed development on or in the vicinity of the site occur.

Could you please pass on a copy of this submission to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified in Endeavour Energy's previous submissions in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

With the COVID-19 health risk a significant number of Endeavour Energy staff are working from home. Access to emails and other internal stakeholders can accordingly be somewhat limited. As a result it may sometimes take longer than usual to respond to enquiries. Thank you for your ongoing understanding during this time.

Kind regards
Cornelis Duba
Development Application Specialist
Network Environment & Assessment
[redacted]
51 Huntingwood Drive, Huntingwood NSW 2148
www.endeavourenergy.com.au

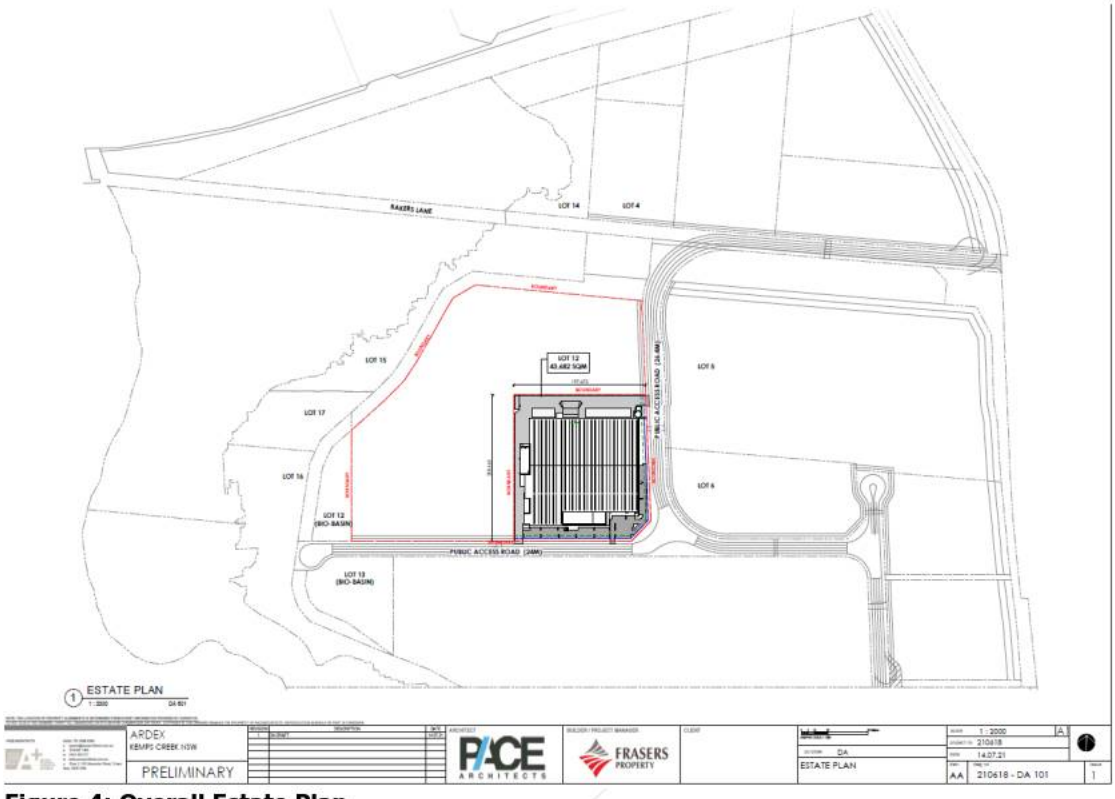


Figure 4: Overall Estate Plan

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. In addition it must be recognised that the electricity network is constantly extended, augmented and modified and there is a delay from the completion and commissioning of these works until their capture in the model. Easements benefitting Endeavour Energy are indicated by red hatching. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the *Electricity Supply Act 1995* (NSW).

The Secretary
NSW Department of Planning, Industry and Environment

1 May 2021

ATTENTION: Bianca Thornton

Dear Sir or Madam

I refer to the Department's attached email of 28 April 2021 regarding State Significant Development SSD-9522 Kemps Creek Warehouse, Logistics and Industrial Facilities Hub MOD 1 - Changes to Lot 5 for 'Modification of the site layout to accommodate changes to Lots 5-8' at 657-769 Mamre Road, Kemps Creek (Lot 34 DP 1118173, Lots X & Y DP 421633, Lot 1 DP 1018318, Lot 22 DP 258414). Submissions need to be made to the Department by 13 May 2021.

Please refer to the previous submissions made by Endeavour Energy to the Department by email on:

- 9 July 2019 for the Notice of Exhibition for State Significant Development SSD 9522 Kemps Creek Warehouse, Logistics and Industrial Facilities Hub at 657-769 Mamre Road, Kemps Creek (Lot 34 DP 1118173, Lots X & Y DP 421633, Lot 1 DP 1018318, Lot 22 DP 258414) comprising site-wide earthworks, infrastructure and internal road network; construction and operation of 11 warehouses (165,186 m2 GFA); 816 parking spaces; and subdivision;

- 27 August 2020 regarding the Response to Submissions (RtS) for State Significant Development SSD-9522 at 657-769 Mamre Road, Kemps Creek (Lot 34 DP 1118173, Lots X & Y DP 421633, Lot 1 DP 1018318, Lot 22 DP 258414) for the Kemps Creek Warehouse, Logistics and Industrial Facilities Hub being the development of a warehouse, logistics and industrial facilities hub including construction and operation of eight warehouses comprising 166,225 m2 of floor space, 744 parking spaces and 17-lot Torrens Title Subdivision.

Notwithstanding the proposed modifications the recommendations and comments provided therein remain valid.

The applicant will need to contact Endeavour Energy's Network Connections Branch (via Head Office enquiries on business days from 9am - 4:30pm on telephone: 133 718 or (02) 9853 6666) who are responsible for managing the conditions of supply with the developer and their Accredited Service Provider (ASP) if this Development Application:

- Includes any contestable works projects that are outside of any existing approved / certified works.

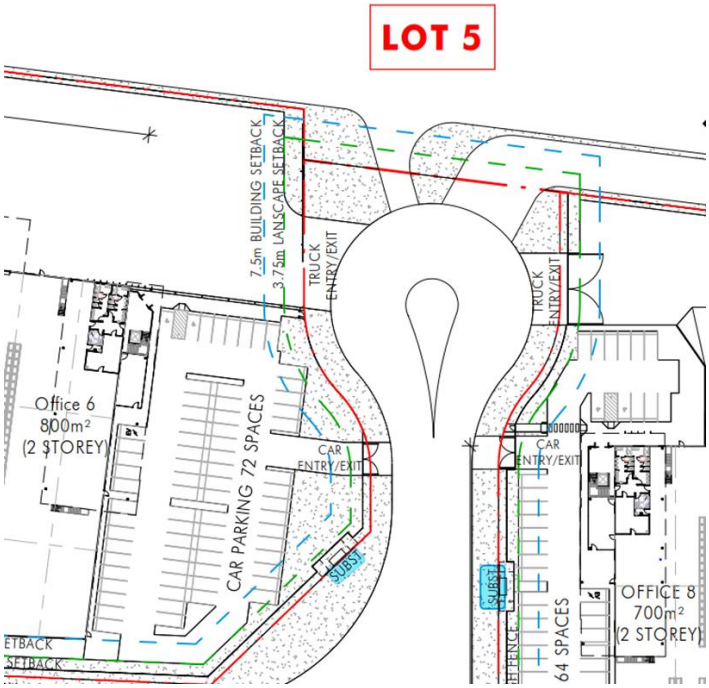
- Results in an electricity load that is outside of any existing Supply / Connection Offer requiring the incorporation of the additional load for consideration. This is due to load being based on a desktop assessment using an After Diversity Maximum Demand (ADMD) where demand is aggregated over a large number of customers providing an ADMD for the site / per lot. Depending on the actual development proposed for the site, the ADMD provided may not be sufficient.

51 Huntingwood Drive, Huntingwood, NSW 2148
PO Box 811, Seven Hills, NSW 1730
T: 133 718

endeavourenergy.com.au

ABN 11 247 365 823

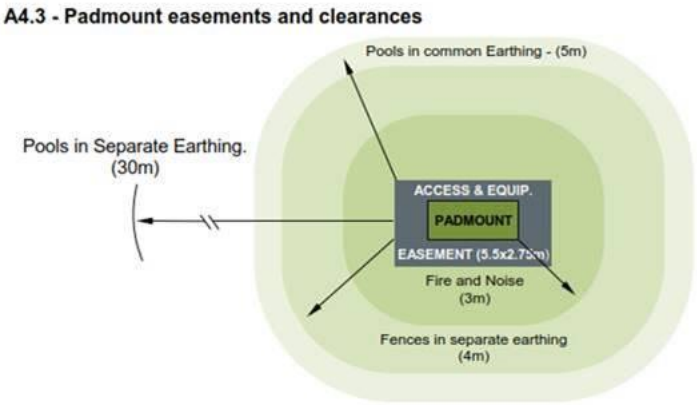
Endeavour Energy has noted that as shown in the following extract of Site Plan (Warehouse 6 & 8) provision has been made for two padmount substations.



From Endeavour Energy's perspective the fact that provision is being made for a padmount substation is a positive. Endeavour Energy's general requirements is for a padmount substation to be at ground level and have direct access from a public street (unless provided with appropriate easements for the associated underground cables and right of access).

As shown in the following extract of Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', Figure A4.3 'Padmount easements and clearances', padmount substations require:

- Easement with a minimum size of 2.75 x 5.5 metres (single transformer).
- Restriction for fire rating which usually extends 3 metres horizontally from the base of the substation footing / plinth and 6 metres vertically from the same point.
- Restriction for swimming pools which extends 5 metres from the easement (which is usually not required for non-residential development).



The easement should not cross property boundaries but the restriction/s may affect any adjoining property provided they are able to be registered on the title to that property. In addition the following matters also need to be considered in regard to the fire restriction:

- Personnel access doors and fire exit doors to a building are not permitted within the fire restriction area.
- Gas mains/pipes shall not pass through the fire restriction area.

- A 10 metre clearance distance shall be maintained between substation and fire hydrants, booster valves, and the like in accordance with AS2419.1 'Fire hydrant installations System design, installation and commissioning' as updated from time to time.
- Consideration should be provided to the appropriateness of the landscaping relative to the fire restriction for the substation. Any landscaping that potentially could transfer / provide connectivity for flame or radiant heat from a fire in the substation to a dwelling or building should be avoided.
- The storage of and / or use of flammable, combustible, corrosive or explosive material within the fire restriction should be avoided.

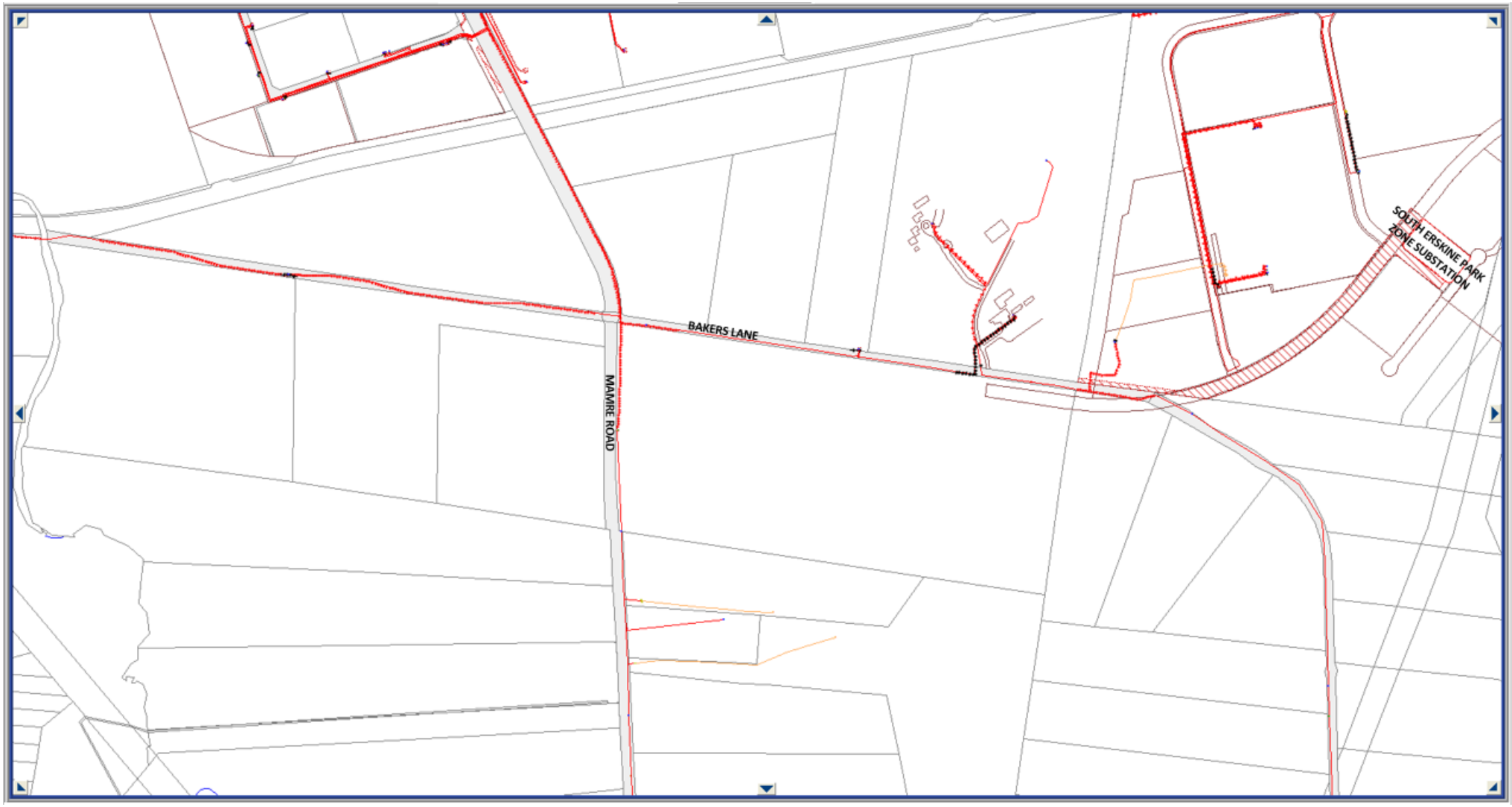
Generally it is the Level 3 ASP's responsibility (engaged by the developer) to make sure that the substation location and design complies with Endeavour Energy's standards the suitability of access, safety clearances, fire ratings, flooding etc. As a condition of the Development Application consent Council should request the submission of documentary evidence from Endeavour Energy confirming that satisfactory arrangements have been made for the connection of electricity and the design requirements for the substation, prior to the release of the Construction Certificate / commencement of works.

Subject to the foregoing Endeavour Energy has no objection to the Development Application.

Could you please pass on a copy of this submission to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

With the easing of the current COVID-19 health risk, whilst a significant number of Endeavour Energy staff are returning to the office they are at times still working from home. Although working from home, access to emails and other internal stakeholders can still be somewhat limited and as a result it may take longer than usual to respond to enquiries. Thank you for your ongoing understanding during this time.

Yours faithfully
Cornelis Duba
Development Application Specialist
Network Environment & Assessment
[redacted]
[redacted]
51 Huntingwood Drive, Huntingwood NSW 2148
www.endeavourenergy.com.au



Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. In addition it must be recognised that the electricity network is constantly extended, augmented and modified and there is a delay from the completion and commissioning of these works until their capture in the model. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the *Electricity Supply Act 1995* (NSW).


Mamre Rd
Erskine Park, New South Wales
Google
Street View
Mamre Rd
Google
Image capture: Aug 2020 © 2021 Google Australia Terms Privacy Report a problem