ATTACHMENT 2

Government Authority Responses to Request for Key Issues

Our reference: 9572916
Contact: Gavin Cherry
Telephone: (02) 4732 8125

19 May 2021

Katelyn Symington
Email: katelyn.symington@planning.nsw.gov.au

Dear Ms Symington

Response to Notification of Request for SEAR's: SSD-18406916– Warehouse and Logistics Estate including Bulk Earthworks, Infrastructure Delivery and Road Access – 1953 – 2109 Elizabeth Drive. Kemps Creek

I refer to the Department's request to provide comments in relation to the above development proposal. 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.

Planning and Orderly Development Considerations

The concept plan in its current form should not be progressed as it does not comply with the aims and objectives of SEPP (Western Sydney Aerotropolis) 2020 (SEPP) and there are key and critical inconsistencies with the Draft Aerotropolis Precinct Plan (APP).

Clause 41 of the SEPP states that Development consent must not be granted to development on land to which a precinct plan applies unless the consent authority is satisfied that the development is consistent with the precinct plan. Clause 42 outlines requirements if development is advanced ahead of a precinct plan applying (which is the current case). This clause still requires aims of the SEPP Policy and fundamental orderly development provisions to be satisfied.

The proposed development scheme has a number of significant inconsistencies with the APP and by virtue of proposed subdivision, the proposal seeks to further fragment the land. It is therefore Council's view that Clause 41 does not apply (as no precinct plan is in place by way of adoption) and Clause 42 cannot be satisfied as the proposal cannot comply with the provisions which act as a prohibition if not met. This would suggest that the proposal cannot advance until a Precinct Plan is in force or alternatively a detailed and comprehensive Master Plan is pursued pursuant to Clause 43 provisions of the SEPP.

The proposed concept plan also disregards the Environment and Recreation Zone (ENV) that has been applied to the site to protect and enhance identified riparian corridors. Not only has has the extent of the ENV zoning not been reflected, but the width and area of open space is substantially reduced which appears on the surface to be an attempt to maximise the developable area of the site for industrial activity at the potential expense of environmental and recreational outcomes.

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While the departures and deviations from the Precinct Plan may be in part suggested on the basis that the existing ecological condition of the corridor is not of high quality, that does not mean that the corridors and the associated open space areas as zoned around them, should not be embellished to provide for the riparian and recreational outcomes identified and required by the Precinct Plan.

It is also noted that a rationalisation or reduction in open space across the Precinct as a whole must be considered have specific regard to the planned employment population of the precinct and their recreational needs. It should not be informed purely by contribution planning and funding limitations. This requires an amendment to the SEPP zoning and adoption of a revised Precinct Plan that addresses this.

Further inconsistencies with the APP that need to be addressed and resolved are:

- The precinct plan sets maximum block sizes of 350m x 350m in the Enterprise zone and 150 X 150 for light industrial activities. It is important to note the use of the term block and not lot. A number of the proposed super lots are significantly inconsistent with this provision.

- The majority of the proposed roads and the resulting subdivision layout fails to create street blocks which in turn creates an inconsistency with the block size requirements of the APP. The intent of the block size requirements are to facilitate active transport and encourage local trips on foot.

- The concept plan only plans for the M12 Motorway and proposes development on land set aside for the Outer Sydney Orbital/Freight Rail. This must be removed as the APP is very clear that development cannot abut the M12 corridor and must be removed from the plans.

- The concept plan is inconsistent with the open space network of the APP with substantial changes to the location, alignment and extent of water course indications as well as the dimensions and depth / width of the riparian corridors. Any development on this site must uphold both the zoning as per the SEPP and the corridor designs indicated in the APP as this site will inform how all other sites along the corridor will respond. Redesign of the Concept Plan is required to achieve consistency with the open space network of the APP and maintain and reflect the zoning within the SEPP instrument. Alternatively the SEPP zoning requirements amendment and the Precinct Plan should in turn respond to this decision.

- The APP also seeks the provision of a neighbourhood centre on the site. The concept plan does not contain provisions for a neighborhood centre and this must be addressed.

- The development form proposed adjoining Twin Creeks. The north east section of the subject site should be excluded or deferred until the Precinct Plan and interface design requirements to residential zoned land is ascertained and confirmed via specific DCP controls.

The proposed development is advancing ahead of the finalisation of strategic plans for the Aerotropolis which are fundamental to the achievement of suitable, orderly and economic development. This is concerning as the strategic planning controls and objectives for the Precinct are not yet confirmed and early

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advancement of development proposals ahead of this process, have the potential undermine the work currently being undertaken. It is appreciated that this is ultimately a matter for the NSW Government to address in the consideration of any SSD application lodged, however Council will maintain that there is a need to consider the appropriateness of this scheme advancing independently, and how such a proposal can be seen to be contextually responsive to existing land attributes and the strategic planning vision for the broader precinct noting the non-compliances and deviations identified above.

Design Excellence and Design Review Panel Requirements

Clause 33 of the SEPP provisions require any State Significant Development (without discretion) to be the subject of a design review panel which is typically via a design competition. There does not appear to be information that suggests that a detailed master plan has been undertaken to inform the spatial arrangement of the development and as a consequence, the relationship of open space, roads, built form and streetscape outcomes. Given the nature of the non-compliances with the Draft APP, a design competition or alternat design jury process is necessary to sufficiently demonstrate why the departures have been proposed, explain what has informed them, and how the departures (which are substantial) deliver superior outcomes to what is envisaged by the APP.

Contributions Planning & Infrastructure

It is requested that the applicant and DPIE in combination discuss local contributions with Councils' City Planning – Contributions. The intended contribution pathway would need to be discussed and agreed to prior to determination of the application.

Engineering and Stormwater Management Considerations

<u>Stormwater</u>

- Stormwater discharge from the site shall comply with the water quality and water quantity controls in the Draft Aerotropolis Precinct Plan and the Stormwater and the Water Cycle Management Study Interim Report – October 2020 by Sydney Water.

- 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.

<u>Mainstream Flooding</u>

- Flood management is to be in accordance with the Draft Aerotropolis Precinct Plan and shall consider the impact of development upon flood events larger than the 1% AEP flood event.

- The 1% AEP flood extents shall align with the SEPP (Western Sydney Aerotropolis) 2020 Flood Map.

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- Council does not support any development within the 1% AEP flood extents of any natural creek system. Any drainage basin including batters shall be located clear of the 1% AEP flood extents of any natural creek system.

- The application must demonstrate that the proposal is compatible with the State Government Floodplain Development Manual.

Local Overland Flow Flooding

- The management of local overland flow flooding shall be in accordance with the Draft Aerotropolis Precinct Plan and the Stormwater and the Water Cycle Management Study Interim Report – October 2020 by Sydney Water.

Traffic Management and Road Design Considerations

The proposal as presented within the SEAR's request will likely result in impacts on the regional and transport corridors and necessary infrastructure that cannot be fully assessed and understood without the finalisation of the regional and precinct planning being completed. This would include traffic modelling (including Macroscopic – Regional Transportation Modelling, Mesoscopic – precinct road network modelling and microscopic – SIDRA intersection modelling), Transportation Management Accessibility Plan, Precinct Development Control Plan DCP), transportation corridor (including M12, rail, Elizabeth Drive) , Aerotropolis planning, road design and infrastructure delivery planning. It is recommended that this work is advanced and finalised so that the outcomes reached can then inform the design and spatial arrangement of development within the precinct.

Further to the above, the following aspects are also identified as warranting further investigation and resolution:-

- The street layout as depicted in the Precinct Masterplan does not comply with the Draft Aerotropolis Precinct Plan. Road patterns and street hierarchy, including road widths, active transport routes, and bus routes shall be in accordance with the Draft Aerotropolis Precinct Plan (November 2020).

- Any development shall consider access to the adjoining lot to the north being Lot 11 DP 594600 (642 Luddenham Road, Luddenham).

- Elizabeth Drive is along its southern boundary and TfNSW have no detailed or confirmed upgrade plans or funding for Elizabeth Drive.

- The M12 dissects through the site and TfNSW have not completed traffic assessments or designs.

- The site has links to Luddenham Road and TfNSW / DPIE / State Gov. have not committed to upgrades of Luddenham Road for Aerotropolis.

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- The site and rail link impacts and connections cannot be addressed until there are final rail link plans and delivery strategy.

- The concept plans include 12m road reserve corridors beneath the M12 for precinct distributor road connections however a corridor which allows for 6m verges, 4.2m shoulders, possibly 1 (but likely 2) x 3.5m lanes each side and a 6m wide centre median is recommended if the proposal advances ahead of the above traffic modelling work.

- There should be a holistic DPIE Transport Management and Accessibility Plan (TMAP) for the Aerotropolis or this precinct that can inform required (and staged) delivery plans for road networks, footpaths, bicyclists, bus services (bus stops an shelters), rail stations and intermodal links / facilities.

- There is a need for DPIE/TfNSW/State Government major road network delivery plan, staging triggers and funding arrangements (including possible developer contributions plans – which are undesirable compared for road delivery compared to road delivery as condition of subdivision development).

- The development shall 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.

- The Traffic Impact Assessment shall 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.

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- 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) are to 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 are to 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 are to 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 shall 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.

- 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.

Environmental Management Considerations

The submitted scoping report generally identifies anticipated environmental impacts and the assessments required to investigate and address those in detail, however the following is identified for specific address:-

- In providing detailed plans and information regarding the cut and fill to be undertaken on site, the EIS will need to inform as to the volume, source and nature of all fill material to be imported to the site and include a Fill Importation Protocol addressing not only the fill material itself but also the environmental mitigation measures required to address impacts from

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associated fill importation, informed by the required associated investigation and assessment reports.

- The Scoping Report identifies key issues and whilst SEPP 55 is identified as being applicable in Table 6, Section 6.1 that lists 'Matters Requiring Further Assessment' doesn't include land contamination as a matter requiring further assessment. This is assumed to be an editorial error as extensive investigations will be required across the site and should contamination and areas of concern be identified, a Remedial Action Plan will need to be included in the EIS.

Biodiversity Considerations

There are areas of the site that are included on the Biodiversity Values Map, indicating that those parts of the site have biodiversity values that are worth protecting. These areas are indicated to be developed into the proposed warehouse and logistics precinct which is concerning and would suggest that the proposal has not responded to key environmental attributes and constraints that apply to the land.

The Project Scoping Report prepared by Urbis dated 30 April 2021 contains comments around the biodiversity impacts of the proposal and how they will be addressed in the future application. The commentary suggests that the applicant will progress immediately to offsetting any biodiversity impacts however this is not appropriate and the first approach must be to conserve unless it is otherwise demonstrated that removal is unavoidable. There is no discussion about how the development will avoid and minimise biodiversity impacts which further suggests the proposal is not responding to key environmental attributes and constraints that apply to the land. This is approach to the Biodiversity Assessment Method which has a clear hierarchy of firstly avoiding impacts, and secondly minimising impacts. Only after the avoid and minimise aspects have been comprehensively explored does offset, the third part of the hierarchy, come into play. As such, the proposal should be reconsidered to protect the biodiversity mapped areas, and avoid biodiversity impacts rather than what is proposed.

In addition to the above, it appears the proposed water quality basins will be located (partly at least) within riparian areas. This civil infrastructure must be removed from these locations and placed above the 1 in 100 year flood level.

Water Quality Management Considerations

In relation to stormwater management, the following information should be submitted for assessment with any future application:-

- A Stormwater Management Strategy for the proposed will need to be prepared by a suitably qualified professional in support of the development. The strategy needs to demonstrate and outline how both surface and groundwater resources will be safeguarded for the duration of the development. This should include details regarding proposed sedimentation and erosion controls as well as to the management of stormwater more generally including, as to how increased volumes, peak flows and pollutants in the increased runoff and outline how stormwater harvesting and reuse will be managed and incorporated. In developing the

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strategy, the proposed water management principles outlined in the Draft Aerotropolis Precinct Plans, and associated Water Cycle and Stormwater Management reports, prepared for the Aerotropolis precincts, should be considered. Details on the proposed ownership and management arrangements of all stormwater treatment assets also need to be detailed in the report.

- In relation to the management of the riparian corridors, the following is identified for address:

    - With regards to the riparian corridors, any changes to existing drainage lines and streams on the site will need to be in accordance with the requirements of the NSW Natural Resources Assess Regulator. However, a focus on the retention of existing drainage lines including any dams is preferred. Further to this, a vegetation management plan which meets the Department's guidelines should be prepared which provides detailed guidance on the management requirements for these areas.

    - Any impacts to existing creeks should be minimised and where possible the preference should be to retain the natural creek lines as well as restore them to the standards recommended by the Natural Resources Assess Regulator.

Further Engagement Processes

Engagement with Penrith City Council following the issues of SEAR's is to be pursued via Council's Pre-lodgement Meeting processes. A pre-lodgement meeting can be arranged with key officers involved in the review of SSD applications which will result in detailed advise that can then be tabled with DPIE as evidence of consultation and engagement in the preparation of the final SSD Application. The applicant should be advised that fees apply for this service in accordance with Council's adopted Schedule of Fees & Charges.

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

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Department of Planning, Industry and Environment
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Attention: Katelyn Symington

Dear Ms Symington,

New Request for Advice - 1953-2109 Elizabeth Drive (SSD-18406916) (Penrith)

Thank you for your correspondence via the Major Projects Planning Portal (ref: PAE-18424708) dated 3 May 2021 requesting Transport for NSW to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Secretary's Environmental Assessment Requirements (SEARs).

The proposed development lies within the Western Sydney Aerotropolis. It is understood that the development proposes a 4-Phase Concept Plan and stage one development application (**DA**) which will detail the concept proposal for the site. The proposal seeks consent for bulk earthworks, infrastructure delivery, and road access, in addition to a detailed proposal for the first stage of development for the purpose of a Warehouse and Logistics Estate.

The draft concept plan outlined in the scoping report indicates significant development is being proposed within transport corridors as identified in the Western Sydney Aerotropolis SEPP and the Major Infrastructure Corridors SEPP. TfNSW does not generally support development within the boundaries of these Transport Corridors. Clause 29 of the Aerotropolis SEPP requires concurrence from TfNSW for development within those corridors and is required to consider the implications on the cost of future delivery of the intended infrastructure within the corridor when considering requests for concurrence. Although further detail would need to be provided, it is likely that TfNSW would not support those aspects of the concept plan impacted by the transport corridors and it is advised the concept plan would then need to be amended in consultation with TfNSW and other agencies.

It is also noted that the Concept Plan does not appear to be consistent with the Northern Gateway Precinct Plan that has recently been on exhibition. For example, the draft precinct plan does not include for development within the boundary of the transport corridors. In addition the draft precinct plan includes a number of potential road crossings to Luddenham Road, which have not been identified in the concept plan.

The proposed intensification of development within the subject site will likely generate the need for major new services including new and upgraded road infrastructure that should broadly align with NSW Government plans for the Western Sydney Aerotropolis. A comprehensive analysis of the anticipated infrastructure requirements will need to be undertaken and supported by strategic and detailed transport planning methods to be documented in a Transport Management and Accessibility Plan (TMAP). Initial transport investigations have been completed as part of the Precinct Planning Process, including comparative mode share analysis. Upfront discussions with TfNSW regarding the preparation of the TMAP are strongly recommended.

The transport network within the concept plan should be developed using the criteria for measuring and evaluating the alignment of movement and place both in existing contexts and in comparing future options. Reference should be made to the NSW Government's Movement and Place Framework document. The objectives and principals of the Western Sydney Aerotropolis Planning Package are also key matters for consideration, in particular, the intention to promote walking, cycling and public transport as viable alternatives to reliance on private vehicle use.

TfNSW has prepared a comprehensive set of study requirements relating to both the regional TMAP issues (**Attachment A**) and local transport issues (**Attachment B**).

It is strongly suggested the applicant meet with TfNSW to discuss these issues and the options available prior to any further development of the concept plan or undertaking any transport assessment.

Thank you again for the opportunity to provide feedback on the above development application. Should you require clarification of any issue raised, please don't hesitate to contact Robert Rutledge, Transport Planning Manager, Land Use Planning and Development at Robert.rutledge@transport.nsw.gov.au.

Yours sincerely

20/5/2021

Mark Ozinga
Senior Manager, Land Use Planning & Development
Customer Strategy and Technology

CD21/03171

Attachment A – Strategic Transport Assessment Requirements

Desired Performance Outcome	Requirement	Current Guidelines[1]
1. Environmental Impact Assessment Process The process for assessment of the proposal is transparent, balanced, well focused and legal.	1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). 2. The project will impact matters of national environmental significance (MNES) protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and will be assessed under an Accredited Assessment. The Proponent must assess impacts to MNES protected under the EPBC Act. 3. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.	EPBC Act Environment Assessment Process (SEWPAC, 2010)

[1] Guidelines listed are the current list of guidelines that may be applicable to a Precinct Plan within the Western Sydney Aerotropolis SEPP project. It is the Proponents responsibility to identify, and justify, which guidelines have been applied to a specific project.

2. State Environmental Planning Policy (Western Sydney Aerotropolis) 2020; State Environmental Planning Policy (Major Infrastructure Corridors) 2020 The proposed project (Concept Plan) is described in sufficient detail to enable clear understanding that the project has been developed through an iterative process of impact identification and assessment and project refinement to avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social and economic impact, including its cumulative impacts.	1. The EIS demonstrates proposed development will achieve connectivity, livability, productivity, and sustainability by: a) giving effect to the Greater Sydney Region Plan and Western City District Plan; b) encouraging development that responds to its context and is compatible with the Principles as identified in any EPI; c) recognising and reinforcing the distinctive characteristics of the Western Parkland City; d) adopting the principles set in the Government Architect NSW's Better Placed and Greener Places, The Practitioners Guide to Movement and Place and other supporting guides developed by TfNSW; e) demonstrate how the built form will protect the transport corridors identified in both the Aerotropolis and Major Infrastructure Corridor SEPPs.; f) protecting and enhancing the green and blue assets of the area; g) safeguarding the airport operations of Western Sydney International (Nancy-Bird) Airport(Airport); h) encouraging design that maintains and enhances the character and heritage significance of Aboriginal and European heritage items and heritage conservation areas including: o items identified in the M12 Heritage Assessment. and i) encouraging ecologically sustainable development and reducing the impacts of development on the environment. 2. The EIS must include, but not necessarily be limited to, the following: a) executive summary; b) a description of the project, including all components and activities (including ancillary components and activities) required to construct and operate it; c) a statement of the objective(s) of the project; d) a summary of the strategic need for the project regarding its State significance and relevant State Government policy; e) an analysis of any feasible alternatives to the project; f) a description of feasible options within the project; g) a description of how alternatives to and options within the project were analysed to inform the selection of the preferred alternative / option, including option of maintaining the alignment within the existing corridor where possible, and maximising the separation distances between the rail line and main roads, agricultural enterprises and dwellings; (h) the description must contain sufficient detail to enable an understanding of why the preferred alternative to and options(s) within the project were selected; (i) a concise description of the general biophysical and socio-economic environment that is likely to be impacted by the project (including offsite impacts). Elements of the environment that are not likely to be affected by the project do not need to be described; (j) a demonstration of how the project design has been developed to avoid or minimise likely adverse	State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 Western Sydney Aerotropolis Plan Government Architect NSW's Better Placed and Greener Places Practitioner's Guide Movement and Place Greater Sydney Region Plan Western City District Plan State Environmental Planning Policy (Major Infrastructure Corridors) 2020 NSW Road User Space Allocation Policy, 2021 draft Designing with Country Design Guidelines (Govt Architect)

Desired Performance Outcome	Requirement	Current Guidelines
	k) the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome; l) a statement of the outcome(s) the Proponent will achieve for each key issue; m) measures to avoid, minimise or offset impacts must be linked to the impact(s) they treat, so it is clear which measures will be applied to each impact[2]; n) consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts; o) an assessment of the cumulative impacts of the project taking into account other projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed; p) statutory context of the project as a whole, including: o how the project meets the provisions of the EP&A Act and EP&A Regulation; o State Environmental Planning Policy (Western Sydney Aerotropolis) 2020; o State Environmental Planning Policy (Major Infrastructure Corridors) 2020; and o a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out; q) the environmental impact assessment should provide details regarding the following matters: o a succinct but full description of the project for which approval is sought; o the interface between the various transport corridors identified in the Aerotropolis SEPP including but not limited to the Outer Sydney Orbital (OSO), Elizabeth Drive, M12 corridor, Metro corridor and East West Rail Link in terms of impact on those corridors (as per the heads of consideration in the Aerotropolis SEPP), visual amenity, landscape works, safety etc.; o a description of any uncertainties that still exist around design, construction methodologies and/or operational methodologies and how these will be resolved in the next stages of the project; o a compilation of the outcome(s) the Proponent will achieve; o the reasons justifying carrying out the project as proposed, having regard to the transport; and o economic and social considerations, including ecologically sustainable development and cumulative impacts; r) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software. 3. The proposal must demonstrated how the Sydney Metro - Western Sydney Airport has been considered in the Concept Design e.g. the impact of any proposed civil works or roads. 4. The EIS must only include data and analysis that is reasonably needed to make a decision on the proposal.	Walking Space Guide: Towards Pedestrian Comfort and Safety Cycleway Design Toolbox: Designing for Cycling and Micromobility

[2] Measures proposed to avoid or minimise one impact may cause an unintended impact on another issue. Therefore, these impacts and their interactions need to be analysed and resolved where possible.

Desired Performance Outcome	Requirement	Current Guidelines
3. Assessment of Key Issue – Transport and Accessibility Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact.	1. The level of assessment of likely impacts must be proportionate to the significance of, or degree of impact on, the issue, within the context of the proposal location and the surrounding environment. The level of assessment must be commensurate to the degree of impact and sufficient to ensure that the Department and other government agencies are able to understand and assess impacts. 2. Transport Corridors as identified in any EPI: (a) describe the legislative and policy context, as far as it is relevant to the issue; (c) identify, describe and quantify (if possible) the concurrence provision requirements for development in or adjacent (25m) to transport corridors, including the likelihood and consequence (including worst case scenario) of the impact (comprehensive risk assessment), and the cumulative impacts; (d) demonstrate how potential impacts will be avoided (through design, or construction or operation methodologies); and (e) include a site specific DCP/amendment to the Aerotropolis DCP to identify details for the Concept Plan area including site access, street hierarchy map, servicing, parking and travel demand management. 3. Lot layout are to be shown diagrammatically to a level of detail sufficient for easy interpretation showing how internal roads reflect the Western Sydney Street Design Guide, particularly showing how they incorporate walking, cycling and tree canopy; and how internal roads would connect to the planned or delivered adjacent active transport network particularly along Badgerys and Cosgroves Creeks, the M12 Motorway and Elizabeth Drive.	State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 - Transport Corridors Map Western Sydney Street Design Guide

Concept Plan Multi-Modal Traffic, Transport and Accessibility planning needs The Concept Plan demonstrates network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed including considerations of mode share that increasingly preferences walking, cycling and public transport.	4. Sub-division Plan a) The Sub-division plan should reflect the draft Northern Gateway Precinct Plan and identify a road hierarchy that accommodates all road users that is developed with consideration of the NSW Government Movement and Place Framework. b) The Sub-division layout is to consider (amongst other things) the movement of people and goods via various modes and allocate public road space adequate to accommodate the various needs (as identified in the transport assessment). This will include: i. Future infrastructure requirements to enable safe and efficient movement of buses through the Masterplan area and connectivity to the other parts of the precinct; ii. Demonstrate how the development will facilitate connections to the M12 shared path and future proposed shared paths along the creek proposed under the Aerotropolis Plan; iii. Controls and minimises direct vehicular access to roads with a significant movement function; iv. Address the relevant provisions, goals and objectives in the following: o Sydney Metro At Grade and Elevated Sections Corridor Protection Guidelines (available from sydneymetro.info); and o Development near Rail Corridors and Busy Roads - Interim Guideline 2008; v. Demonstrate that all services (e.g. water, sewer etc) are adequately accommodated pavement design based heavy vehicle load projections from the detailed transport assessment. Note: Subdivision is prohibited in transport corridors under the Major Infrastructure Corridor SEPP. 5. A preliminary Construction Transport Management Framework which shall include: a) A broad principles-based construction transport management framework needs to be prepared in consultation with Transport for NSW; and b) Construction timing and phasing of the project must not impact on the delivery of the Sydney Metro rail corridor, the M12 or the Elizabeth Drive corridor. The EIS and supporting Construction Transport Management Framework (CTMF) must clearly delineate the proposed staging of the concept plan, by phase and anticipated times for the construction of the warehouse and logistics buildings proposed for the entire site to appropriately manage traffic impacts and ensure the timely delivery of each project through successful integration and operation.	NSW Government Movement and Place Framework

Desired Performance Outcome	Requirement	Current Guidelines
Works are compatible with existing infrastructure and future transport corridors as identified in any EPI noting TfNSW is currently working with landowners impacted by the Western Sydney Corridors to address requests for early acquisitions based on hardship.	6. **Strategic Assessment** - Strategic transport modelling utilising existing model resources (i.e. STM, PTPM and STFM data) needs to be conducted to identify growth in transport demands resulting from the future development identified in the Concept Plan, derived from the latest data from Transport for NSW's Transport Performance and Analytics section. The methodology and scope of this strategic assessment and interpretation of the modelling results must be agreed with Transport for NSW. This would need to include verification of the underlying assumptions in the strategic model including land use and future transport projects. Agreement should also be reached on the various modelling scenarios including timing for development staging and ultimate build-out. It is anticipated that modelling should consider the ultimate development year plus 10 years projected growth (e.g. a base case scenario, 2026 with and without development, 2036 with and without development and 2056 with and without development scenarios). Strategic traffic modelling (STFM) based on the STM can be used to identify key routes and intersections likely to be impacted by the growth identified in the concept plan to inform the scope of detailed Operational Modelling (stage 2). The strategic transport evaluation will provide an understanding of the scale of the impacts of the proposed development on the regional transport network in the context of NSW Government plans for the area. This will include the need for road, public transport and active transport connections to the areas immediately surrounding the subject site (active transport internal links align with airport site, M12, Elizabeth Drive and business park station). Discussions should occur with TfNSW, the proponent, their consultants and council(s) to agree the appropriate scope and methodology, land use and network assumptions for this aspect of the investigations before progressing any further. Details of the agreed scope and methodology should be presented to TfNSW for final endorsement before progressing with the strategic assessment. Outcomes of the strategic transport evaluation should also be agreed before progressing with any detailed operational assessment. **Operational Assessment**- Assignment and assessment of trips on the transport network at a mesoscopic level. This should take into account time dynamics of traffic demand and the operation of intersections. Any mesoscopic modelling should be undertaken in accordance with the former Roads and Maritime Services' Traffic Modelling Guidelines with any departures to those guidelines to be agreed in writing by TfNSW. Base models should be validated and calibrated and reviewed by Transport for NSW prior to	

	The electronic files of the modelling must be provided to Transport for NSW for review and validation. 7. **Implementation Plan** - Based on the above strategic and operational assessments, develop an infrastructure schedule and implementation plan that identifies transport interventions, costings, timing, land components, delivery responsibilities and funding mechanisms, in consultation with Transport for NSW and council(s). This needs to include consideration to public transport, active transport as well as freight and private vehicle needs. The implementation plan will need to be reviewed, verified and potentially revised when separate development applications are lodged to ensure it remains valid and effective as development progresses in accordance with any approved concept level development approval. The implementation plan will need to include: i. Preliminary strategic layout plans of identified road/intersection improvements overlayed on a scaled aerial (i.e. identify need for land components to accommodate identified road works). ii. In consultation with Transport for NSW identify future bus routes and bus priority measures needed to meet the public transport access needs of future development. iii. Walking and Cycling: an assessment of the needs for pedestrians and cyclists needs to be incorporated into any recommended infrastructure and service design considerations. In high pedestrian activity areas such as around Metro stations and in key centres, Fruin level of service assessments may be required. Identify the relationship with key active and public transport corridors especially the relationship to future Luddenham Metro Station. iv. In consultation with Transport for NSW, identify and protect the city shaping and city serving corridors identified in overarching SEPPs, strategies and plans. v. Consideration also needs to be given to travel demand management measures (i.e. maximum parking rates in key locations) and access arrangements. This may require identification in a site-specific DCP (or an amendment to the Aerotropolis DCP). 8. **Multi-Modal Transport Management and Accessibility Plan (TMAP)**. A TMAP needs to be prepared that documents the aforementioned Strategic Assessment, Operational Assessment, and Implementation Plan. Note the Implementation Plan would be the basis for discussions on any funding arrangements including works-in-kind agreements.	

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
4. Flood, Hydrology and Geomorphology Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, geomorphological impacts or dam failure.	1. The Proponent must: Provide a flooding assessment for the project that takes into account the outcomes of the M12 Motorway detailed design flood model (and other major infrastructure in the area (Sydney Metro/M12/ Outer Sydney Orbital/ Elizabeth Dr/WSIA) to adequately assess cumulative impacts. Infrastructure NSW is undertaking a regional flood study taking into account the expected development yield under the Western Sydney Aerotropolis Plan.	
5. Visual Amenity The project minimises adverse impacts on the visual amenity of the built and natural environment (including public open space) and demonstrates an integrated approach to landscaping across the development site.	1. Sydney Metro are currently working to integrate their landscape planning with the Landscape-led /Designing for Country approach to achieve the Western Parkland City vision. The EIS and supporting landscape strategy must demonstrate an integrated approach to landscaping across the development site consistent with the Sydney Metro assets and the broader Northern Gateway precinct including, but not limited to: a) the landscape strategy reflect the plant and tree species identified for the broader Northern Gateway precinct in the WSA Precinct Plan; b) include a buffer of landscaping adjacent to improve the visual amenity of the site when viewed from the Sydney Metro corridor by Metro customers and must not interfere with the future operations and maintenance of the Sydney Metro – Western Sydney Airport corridor; and c) landscaping must be consistent with the *Sydney Metro At Grade and Elevated Sections Technical Guidelines* which is available from www.sydneymetro.info.	State Environmental Planning Policy (Major Infrastructure Corridors) 2020 draft Designing with Country Design Guidelines (Govt Architect) Sydney Metro At Grade and Elevated Sections Technical Guidelines Technical guideline for Urban Green Cover in NSW (OEH, 2015)

Desired Performance Outcome	Requirement	Current Guidelines
6. Consultation The project is developed with meaningful and effective engagement during project design and delivery.	1. The project must be informed by consultation, including with relevant State and local government agencies, infrastructure and service providers, special interest and industry groups, affected landowners, businesses and the community. The consultation process must be undertaken in accordance with the current guidelines. 2. The Proponent must document the consultation process, and demonstrate how the project has responded to the inputs received, from TfNSW and Sydney Metro and relevant project teams (including but not limited to Corridor Preservation for Outer Sydney Orbital, the M12 and Elizabeth Drive project teams). 3. The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution. 4. Where the Proponent establishes a Community Consultative Committee (CCC) for the project, the establishment and operation of the CCC must be in accordance with the Department's *Community Consultative Guidelines State Significant Projects {2016}. The CCC must not be the only or primary method of engagement with the community on the project.*	

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
7. Noise and Vibration - Amenity Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.	1. The Proponent must assess construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to sensitive receivers in co-ordination with other SSD and SSI projects in the area. To include small businesses, sleep disturbance and, as relevant, the characteristics of noise and vibration (for example, low frequency noise). 2. The consideration of respite must also include all other CSSI, SSI and SSD projects which may cause cumulative and/or consecutive impacts at receivers affected by the delivery of the CSSI. 3. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required. 4. Development should generally comply with noise and vibrations considerations outlined in the Department's Guideline for "Development Near Rail Corridors and Busy Roads" and ensure that development in not adversely impacted by future infrastructure planned within the transport corridors.	Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZECC, 1990) Assessing Vibration: a technical guideline (DEC, 2006) Interim Construction Noise Guideline (DECCW, 2009) Noise Policy for Industry (EPA, 2017) Construction Noise Strategy (TfNSW, 2017) Rail Infrastructure Noise Guideline (EPA, 2013) NSW Road Noise Policy (DECCW, 2011) Development Near Rail Corridors and Busy Roads – Interim guideline (DoP, 2008) Noise Mitigation Guideline (RMS, 2015) Noise Criteria Guideline (RMS, 2015) NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
8. Sustainability The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.	1. The Proponent must assess the sustainability of the project in accordance with the Infrastructure Sustainability Council of Australia (ISCA) *Infrastructure Sustainability Rating Tool* and recommend an appropriate target rating for the project, including targets and strategies to improve Government efficiency in use of water, energy and transport.	NSW Sustainable Design Guidelines Version 4.0 (TfNSW, 2017) Infrastructure Sustainability Rating Tool Scorecard relating to energy and carbon for large infrastructure projects, ISCA NSW Infrastructure Skills Legacy Programs' training and employment targets (DOI, 2017)

Additional Rreference Tools:

Statutory instruments, strategic frameworks and guidelines that should be referred to in the process of addressing these requirements

- State Environment Planning Policy (Infrastructure) 2007
- Future Transport 2056
- NSW Government Movement and Place Framework
- NSW Road User Space Allocation Policy, 2021
- NSW Freight and Ports Plan 2018-2023
- Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas
- Guide to Traffic Generating Developments 2002 (RTA)
- TDT 2013/04a Guide to Traffic Generating Developments
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Developments
- Technical Direction GTD2020/001 (Excavation adjacent to Transport for NSW Infrastructure)
- RTA Traffic Signal Design Manual
- Heavy Vehicle Access Policy Framework and Last Mile Toolkit
- Providing for Walking and Cycling in Transport Projects Policy, 2021

Attachment B – DA Requirements for Stage 1 Development

Key Issue Transport and Accessibility:

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

- Address the statutory provisions contained in all relevant environmental planning instruments, including:
    - State Environmental Planning Policy (Major Infrastructure Corridors) 2020
    - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020
- Details of all traffic types and volumes likely to be generated by the proposed development during construction and operation, including description of heavy vehicle types, commercial vehicles and haul route origins and destinations. Traffic flows are to be shown diagrammatically to a level of detail sufficient for easy interpretation;
- Daily inbound and outbound traffic profile by time of day and day of week broken down per vehicle types;
- Details of the origin/destination of dangerous goods movements to/from the site (if any)
- Traffic management plan on how to manage number of vehicles likely to be generated during construction and operation and awaiting loading, unloading or servicing that can be accommodated on the site to avoid queuing in the surrounding road network. This to demonstrate how internal and external traffic can be managed in conjunction with existing traffic on site including:
    - investigate the use of vehicles with higher carrying capacity such as PBS combinations, or those enrolled in the Safety, Productivity and Environment Construction Transport Scheme (SPECTS)[1];
- Detailed plan site layout to demonstrate that the site will be able to accommodate the *most productive vehicle types*[2] as well as the worst performing vehicles (sufficient loading/ unloading) and parking on site in accordance with the relevant Australian Standard and the draft Western Sydney Aerotropolis Development Control Plan, 2019;
- Details of the driver facilities provided on site (such as toilets, heavy vehicle rest area and de-coupling area);
- Swept path diagrams to demonstrate the largest vehicles as well as the worst performing vehicles entering, exiting and manoeuvring throughout the site;
- An assessment of the forecasted 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 Transport for NSW. This is to include the identification and consideration of approved and proposed developments/planning proposals/road upgrades in the vicinity including, but not limited to the M12 Motorway, Elizabeth Drive and the Outer Sydney Orbital.

[1] **SPECTS** allows participating heavy vehicles greater network access and the ability to carry more construction materials including spoil and waste. Using vehicles with a higher carrying capacity will reduce the number of heavy vehicle movements for the given freight task. Note that the proposal is within SPECTS approved area. (https://roads-waterways.transport.nsw.gov.au/business-industry/heavy-vehicles/schemes-programs/spects.html)

[2] **Note** that several key corridors within and surrounding Aerotropolis should be designed to accommodate at least PBS2B or PBS3A in some locations. PBS2B or PBS3A vehicles may be required to serve distribution centres (first and last mile access) in this precinct.

Prior to development of the transport and accessibility impact assessment, the applicant must meet with TfNSW to determine the following requirements:

- Intersections to be modelled;
- Scenario years;
- SIDRA model assumptions;
- Traffic counts:
  - Counts are not to be undertaken 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), Friday and Saturday 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;
  - Counts are to include a breakdown of light and heavy vehicles; and
- Due to the Covid-19 Pandemic, counts undertaken at the moment may not be representative. Alternative approaches to traffic counts due to the impact of Covid-19 on current traffic patterns.

- Detail how the proposed development connects to adjoining sites to facilitate their future development for their intended purposes;
- Addresses the relevant provisions, goals and objectives in the following:
  - Development near Rail Corridors and Busy Roads - Interim Guideline 2008; and
  - Sydney Metro At Grade and Elevated Sections Corridor Protection Guidelines (available from sydneymetro.info);
- Demonstrate how the Sydney Metro - Western Sydney Airport has been considered in the Stage 1 DA assessment including;
  - the impact of any proposed civil works or roads[3];
- Measures to integrate the development with the existing/future public transport network including, but not limited to:
  - details of future bus routes through the development, indicative bus stop locations and connecting pedestrian and bicycle routes and paths developed in consultation with Transport for NSW to enable safe, equitable and sustainable access for future workers and visitors;
- Include an assessment of the accessibility and provision of public transport and active transport and how it is impacted by the proposed development;
- Detailed plans of the site access and proposed layout of the internal road and pedestrian network and parking on site in accordance with the relevant Australian Standards, draft Western Sydney Aerotropolis DCP and Council's DCP;
- Measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including:

[3] The Stage 1 DA and supporting plans will need to ensure that any internal roads proposed for vehicular access do not impact on the operations of the Metro corridor which will be at surface grade level (through the site). Level changes along the corridor will be prohibited as this will impact on the at grade corridor levels.

    - travel demand management programs to increase sustainable transport (Green Travel Plan and specific Workplace Travel Plan[4]) and the provision of facilities to increase the non-car mode share for travel to and from the site.
- Detailed plans of any proposed road upgrades, infrastructure works or new roads required for the development and an assessment of potential impact on load road pavement lifespan; and
- 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:
    - assessment of cumulative impacts associated with other construction activities (if any);
    - an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;
    - details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;
    - details of anticipated peak hour and daily construction vehicle movements to and from the site;
    - details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle;
    - details of temporary cycling and pedestrian access during construction.

Relevant Policies and Guidelines:

- NSW Road User Space Allocation Policy, 2021
- Guide to Traffic Generating Developments (Roads and Maritime Services, 2002).
- RMS Technical Direction TDT 2013/ 04a.
- NSW Freight and Ports Plans 2018-2023.
- Heavy Vehicle Access Policy Framework and Last Mile Toolkit
- Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas.
- Cycling Aspects of Austroads Guides.
- Providing for Walking and Cycling in Transport Projects Policy, 2021.
- 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).
- Building Momentum – State Infrastructure Strategy 2018-2038.

[4] Sydney Metro is being delivered to assist with the realisation of the 30-minute city. As such active transport access to and from the metro stations at Luddenham and Airport Business Park should be encouraged. The EIS and supporting Green Travel Plan and specific Workplace Travel Plan must demonstrate how the new subdivision layout will provide future workers and visitors easy and direct access to the nearby metro stations and wider precinct. Good permeability of the subdivision by walking and cycling should also be provided.

OUT21/6253

Katelyn Symington
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

katelyn.symington@planning.nsw.gov.au

Dear Ms Symington

1953-2109 Elizabeth Drive (SSD-18406916)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 17 May 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
E: Alistair.drew@dpie.nsw.gov.au
M: 0417 626 567

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Knowledge Division
18 May 2021

Our reference: DOC21/354833
Date: 13 May 2021

HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: 1953-2109 Elizabeth Dr, Badgerys Creek
SSD/I #: SSD-18406916

1. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigation in NSW (DECCW 2010), and be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011).
2. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
3. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Heritage NSW.
4. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the ACHAR.
5. 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.
6. 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.

NOTE: The process described in the *Due Diligence Code of Practice for the protection of Aboriginal objects in NSW* (DECCW 2010) is not sufficient to assess the impacts on Aboriginal cultural heritage of Major Projects.

Level 6, 10 Valentine Ave Parramatta NSW 2150 ■ Locked Bag 5020 Parramatta NSW 2124
P: 02 9873 8500 ■ E: heritagemailbox@environment.nsw.gov.au

Katelyn Symington

From: Cornelis Duba <Cornelis.Duba@endeavourenergy.com.au>
Sent: Monday, 31 May 2021 9:54 AM
To: Katelyn Symington
Cc: DPE CSE Information Planning Mailbox; Jeff Smith
Subject: NSW Planning, Industry & Environment Request for SEARS SSD-18406916 1953-2109 Elizabeth Drive
Attachments: SW Work near overhead power lines.pdf; EE FPJ 6007 Technical Review Request Aug 2019.pdf; ENA EMF What We Know.pdf; SW08773 Work near underground assets.pdf; EE Drawing 86232 OH lines minimum clearances.pdf; EE Safety on the job.pdf; EE MDI0044 Easements and Property Tenure.pdf; EE Safety Plumbing.pdf; EE FPJ 4603 Permission to Remove Service July 2007.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Katelyn

I refer to your below email of 21 May 2021 regarding the exhibition of the request for the Planning Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development SSD-18406916 1953-2109 Elizabeth Drive for 'Concept and stage one precinct development including bulk earthworks, infrastructure delivery, road access and detailed design of the stage one precinct for the purpose of a warehouse and logistics estate' at 1953-2109 Elizabeth Drive, Badgerys Creek (Lot 101 DP 848215) in the Penrith City Council Local Government Area (LGA). Submissions needed to be made to the Department by 31 May 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 SSD.

As shown in the below site plans from Endeavour Energy's G/Net master facility model (and extracts from Google Maps Street View) there are:

- No easements over the site benefitting Endeavour Energy (active easements are indicated by red hatching).
- Low voltage and 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines traversing the site including pole mounted substations and extended low voltage overhead service conductors going to the customer connection points for the existing premises. The overhead power lines running parallel to Elizabeth Drive are likely to be affected by the '40 m road Widening Corridor' and the other electricity infrastructure currently servicing the site and going to adjoining property (Lot 62 DP 1087838) are also likely to become redundant electrical assets.

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).

In regard to the low voltage and 11 kV high voltage overhead power lines traversing the site, although not held under easement (as they may only service the sites on which they are located) are protected assets and deemed to be lawful for all purposes under Section 53 'Protection of certain electricity works' of the *Electricity Supply Act 1995* (NSW). Essentially this means the owner or occupier of the land cannot take any action in relation to the presence in, on or over the land of electricity works ie. the electricity infrastructure cannot be removed to rectify the encroachment. These protected assets are managed as if an easement is in place – please refer the below point 'Easement Management / Network Access'.

In accordance with Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', as shown in the following extracts of Table 1 – 'Minimum easement widths', the low voltage and 11kV high voltage overhead power lines require a 9 metre minimum easement width ie. 4.5 metres to both sides of the centre line of the poles / conductors.

Table 1 - Minimum easement widths

	Voltage	Asset Type	Construction	Minimum Easement (m)
Overhead Assets	400V–22kV	Bare Construction	All	9
		ABC		
		CCT		

ABC = Aerial Bundled Cables CTT = Covered Conductor Thick

This easement width in some circumstances may not be warranted ie. depending on the span, type of conductor, access etc. However as a minimum any buildings, structures, etc. whether temporary or permanent must comply with

the minimum safe distances / clearances for voltages up to and including 132,000 volts (132kV) for any building or structure (including fencing, signage, flag poles etc.) whether temporary or permanent must comply with the minimum safe distances / clearances for voltages up to and including 132,000 volts (132kV) as specified in:

- Australian/New Zealand Standard AS/NZS 7000 – 2016: 'Overhead line design' as updated from time to time.
- 'Service and Installation Rules of NSW' which can be accessed via the following link to the Energy NSW website:

https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/service-installation-rules .

As a guide please find attached a copy of Endeavour Energy Drawing 'Overhead Lines Minimum Clearances Near Structures'. These distances must be maintained at all times to all buildings and structures and regardless of the Council's allowable building setbacks etc. under its development controls.

Even if there is no issue with the safety clearances to the building or structure, ordinary persons must maintain a minimum safe approach distance of 3.0 metres to all voltages up to and including 132,000 volts / 132 kV. Work within the safe approach distances requires an authorised or instructed person with technical knowledge or sufficient experience to perform the work required, a safety observer for operating plant as well as possibly an outage request and/or erection of a protective hoarding.

If there is any doubt whatsoever regarding the safety clearances to the overhead power lines, the applicant will need to have the safety clearances assessed by a suitably qualified electrical engineer / Accredited Service Provider (please refer to the below point 'Network Capacity / Connection'. This will require the provision of a detailed survey plan showing the location of the conductors to enable the assessment / modelling of the clearances for which there are software packages available. If the safety clearances are inadequate, either the parts of the building encroaching the required clearances or the overhead power lines will need to be redesigned to provide the required clearances.

The applicant should note the following requirements of Endeavour Energy's 'Property Tenure Guidelines, Provision of Network Connection Services':

7.0 SUBDIVISIONS

Endeavour Energy will require the developer to create all necessary easements, restrictions, rights of access, and positive covenants.

The creation of property tenure is **not** required for any network asset located within a public road (unless it is a temporary road).

7.2 Urban property tenure requirements

Endeavour Energy will require the creation of property tenure for:

- all new transmission, high voltage and low voltage assets; and
- all existing transmission, high voltage and low voltage assets located within the developer's land.

Subject to the foregoing and the following recommendations and comments Endeavour Energy has no objection to the State Significant Development.

- Network Capacity / Connection

Endeavour Energy has noted the following in the Scoping Report.

3.2. STAGE 1 DEVELOPMENT

Table 5 – Proposed Stage 1 – Key Elements & Considerations

Element	Description	Key Design Considerations
Estate Works	Utilities and Services: ▪ Construction of lead in services, utility reticulation and other service infrastructure to provide water, sewer, gas, electricity and telecommunications services to the site.	▪ Essential services and utilities to be provided in accordance with requirements of the relevant utility provider and in consideration of existing infrastructure capacity.

6.1. MATTERS REQUIRING FURTHER ASSESSMENT

6.1.7. Built Environment

6.1.7.3. Utility & Infrastructure Delivery

The EIS will outline the adequacy of the existing portable water, sewer, electricity, and telecommunications infrastructure to accommodate the proposed development, including any necessary upgrades to meet forecasted demand.

In regard to the provision of electricity supply to Western Sydney Priority Growth Area, please refer to Endeavour Energy's:

- The Growth Servicing Plan. This outlines Endeavour Energy's plans to provide 'trunk' infrastructure to service greenfield and infill development areas across Endeavour Energy's franchise area. This plan is based on 10 year Endeavour Energy's Strategic Asset Management Plan and is underpinned by the Australian Energy Regulator's (AER) regulatory determination which will determine the level of capital expenditure that Endeavour Energy is allowed to make over the 2019-2024 regulatory period. It includes Section 7.4 'Western Sydney Priority Growth Area' which includes the area covered by the Elizabeth Enterprise Precinct.

- Distribution Annual Planning Report 2020. This is prepared in accordance with the National Electricity Rules, chapter 5 and identifies future, specific limitations on Endeavour Energy's electricity network and includes planning information for all assets and activities carried out by Endeavour Energy.

These documents are also available on Endeavour Energy's website under 'Home>Network>Network improvement>Network planning' via the following link:

http://www.endeavourenergy.com.au/ .

In regard to electricity distribution within the 1953-2109 Elizabeth Drive, the availability of electricity supply to a site is based on a wide range of factors eg. the age and design of the network; other development in the locality utilising previously spare capacity within the local network; the progress of nearby / surrounding sites including electricity infrastructure works eg. a smaller and isolated development that may not of its own accord require a distribution substation may require a substation to facilitate the development and from which the spare capacity is made available to subsequent nearby development.

Non-urban / above ground areas of the network utilising pole mounted substations have comparatively limited capacity of 25 kilovolt amperes (kVA) up to a maximum of 400 kVA. Padmount substations usually utilised in urban areas can accommodate loads from 315 kVA up to 1,500 kVA (typically 500 kVA). Accordingly there is a significant variation in the number and type of premises able to be connected to a substation ie. a single distribution substation may serve one large building, or many homes.

Whilst there are a number of existing pole mounted substations near the site, they are not intended or capable of providing electricity supply to a significant urban industrial subdivision / development. As well as the capacity

of distribution substations, other factors such as the size and rating / load on the conductors and voltage drop (which can affect the quality of supply particularly with long conductor runs) etc. need to be assessed.

Accordingly an extension and / or augmentation of the existing local network may be required but this will not be determined until a detailed assessment is undertaken. Endeavour Energy's preference is to alert proponents / applicants (and the Department) of the potential matters that may arise as further development of areas continues to occur.

In due course the applicant for the proposed development of the site will need to submit an application for connection of additional load via Endeavour Energy's Network Connections Branch to carry out the final load assessment and the method of supply will be determined. Further details are available by contacting Endeavour Energy's Network Connections Branch via Head Office enquiries on business days on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm or on Endeavour Energy's website under 'Home > Residential and business > Connecting to our network' via the following link:

http://www.endeavourenergy.com.au/ .

Depending on the outcome of the assessment, any required padmount substation/s will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling) by an easement and associated restrictions benefiting and gifted to Endeavour Energy. Please refer to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'.

Advice on the electricity infrastructure required to facilitate the proposed development can also be obtained by submitting a Technical Review Request to Endeavour Energy's Network Connections Branch, the form for which FPJ6007 is attached and further details (including the applicable charges) are available from Endeavour Energy's website under 'Our connection services'. The response to these enquiries is based upon a desktop review of corporate information systems, and as such does not involve the engagement of various internal stakeholders in order to develop a 'Connection Offer'. It does provide details of preliminary connection requirements which can be considered by the applicant prior to lodging a formal application for connection of load.

Alternatively the applicant should engage an Accredited Service Provider (ASP) of an appropriate level and class of accreditation to assess the electricity load associated with the proposed development. The ASP scheme is administered by Energy NSW and details are available on their website via the following link or telephone 13 77 88:

https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/asp-scheme-and-contestable-works .

Endeavour Energy is urging applicants /customers to engage with an Electrical Consultant prior to finalising plans to in order to assess and incorporate any required electricity infrastructure. In so doing the consideration can also be given to its impact on the other aspects of the proposed development. This can assist in avoiding the making of amendments to the plan or possibly the need to later seek modification of an approved development application.

- Network Asset Design

Endeavour Energy's Company Policy 9.2.5 'Network Asset Design', includes the following requirements for electricity connections to new urban subdivision / development.

5.11 Reticulation policy

5.11.1 Distribution reticulation

In order to improve the reliability performance of and to reduce the operating expenditure on the network over the long term the company has adopted the strategy of requiring new lines to be either underground cables or where overhead is permitted, to be predominantly of covered or insulated construction. Notwithstanding this strategy, bare wire overhead construction is appropriate and permitted in some situations as detailed below.

In areas with the potential for significant overhanging foliage, CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown branches and debris than bare conductors. CCT must only be used in treed[2] areas as the probability of a direct lightning strike is low. In open areas where the line is not shielded from a direct lightning strike, bare conductors must generally be used for 11kV and 22kV reticulation.

Non-metallic Screened High Voltage Aerial Bundled Cable (NMSHVABC) must be used in areas which are heavily treed and where it is not practicable to maintain a tree clearing envelope around the conductors.

[2] A "treed" area is one with a substantial number of trees adjacent to the line, in each span. In these situations CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown

5.11.1.1 Urban areas

Reticulation of new residential subdivisions will be underground. In areas of low bushfire consequence, new lines within existing overhead areas can be overhead, unless underground lines are cost justified or required by either environmental or local council requirements.

Where underground reticulation is required on a feeder that supplies a mixture of industrial, commercial and/or residential loads, the standard of underground construction will apply to all types of load within that development.

Where ducting is used, adequate spare ducts and easements must be provided at the outset to cover the final load requirements of the entire development plan.

Extensions to the existing overhead 11kV/22kV network must generally be underground. Bare wire will be used for conductor replacements and augmentations except in treed areas where CCT or NMSHVABC must be used.
Extensions to the existing overhead LV network and augmentations must either be underground or ABC. Conductor replacements greater than 100m in route length must utilise aerial bundled cable.

- Bushfire

Endeavour Energy has noted the following in the Scoping Report.

6.1.9. Hazards and risks

6.1.9.1. Bushfire

The majority of the site is identified as Vegetation Category 2 bushfire prone land. Small areas along the eastern and western boundaries are identified as Vegetation Category 1 bushfire prone land. A Bushfire Protection Assessment report would be prepared for the site to identify appropriate bushfire risks and protection.

The overall proposal may therefore require referral to the Rural Fire Service. Consideration will be given to bushfire management in the design of the concept plan.

Although commercial and industrial uses are not covered by Chapters 5 to 7 of NSW Rural Fire Service 'Planning for Bush Fire Protection 2019' (PBP), the aim and objectives of PBP still need to be considered and a suitable package of bush fire protection measures should be proposed commensurate with the assessed level of risk to the development. PBP provides the following advice regarding electricity services:

5.3.3 Services – Water, electricity and gas

Intent of measures: *to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.*

Table 5.3c

Performance criteria and acceptable solutions for water, electricity and gas services for residential and rural residential subdivisions.

	PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
	The intent may be achieved where:	

ELECTRICITY SERVICES	› location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	› where practicable, electrical transmission lines are underground;
		› where overhead, electrical transmission lines are proposed as follows:
		  › lines are installed with short pole spacing of 30m, unless crossing gullies, gorges or riparian areas; and
		  › no part of a tree is closer to a power line than the distance set out in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.

The following is an extract of Endeavour Energy's Company Policy 9.1.1 Bushfire Risk Management:

9.1.1 BUSHFIRE RISK MANAGEMENT

1.0 POLICY STATEMENT

The company is committed to the application of prudent asset management strategies to reduce the risk of bushfires caused by network assets and aerial consumer mains to as low as reasonably practicable (ALARP) level. The company is also committed to mitigating, the associated risk to network assets and customer supply reliability during times of bushfire whilst achieving practical safety, reliability, quality of supply, efficient investment and environmental outcomes. The company is committed to compliance with relevant acts, regulations and codes.

Accordingly the electricity network required to service the proposed development must be fit for purpose and meet the technical specifications, design, construction and commissioning standards based on Endeavour Energy's risk assessment associated with the implementation and use of the network connection / infrastructure for a bushfire prone site. In assessing bushfire risk, Endeavour Energy has traditionally focused on the likelihood of its network starting a bushfire, which is a function of the condition of the network. Risk control has focused on reducing the likelihood of fire ignition by implementing good design and maintenance practices. However the potential impact of a bushfire on its electricity infrastructure and the safety risks associated with the loss of electricity supply are also considered.

- Flooding and Drainage

Endeavour Energy has noted the following in the Scoping Report.

6.1.6. Water

6.1.6.1. Flooding & Riparian Corridor

The Site is situated between two principal catchments in Western Sydney – Cosgroves Creek and Badgerys Creek, located within the South Creek catchment, a major waterway that drains a large portion of western Sydney. South Creek discharges to the Hawkesbury River to the north, near Windsor.

Hydrological modelling has previously been undertaken by Cardno in March 2019 who assessed both the pre- and post-development flooding impacts to the site. Whilst the site is subject to low-level flooding along the Cosgroves Creek corridor, it is generally not impacted in flooding events. Further consideration of the flood levels post development will be obtained once a finalised concept plan has been detailed.

The electricity network required to service an area / development must be fit for purpose and meet the technical specifications, design, construction and commissioning standards based on Endeavour Energy's risk assessment associated with the implementation and use of the network connection / infrastructure for a flood prone site. Risk control has focused typically on avoiding the threat, but where this is not possible, reducing the negative effect or probability of flood damage to assets by implementing good design and maintenance practices.

Distribution substations should not be subject to flood inundation or stormwater runoff ie. the padmount substation cubicles are weatherproof not flood proof and the cable pits whilst designed to be self-draining should not be subject to excessive ingress of water. Section 7 'Substation and switching stations' of Endeavour Energy's Mains Construction Instruction MCI 0006 'Underground distribution construction standards manual' provides the following details of the requirements for flooding and drainage in new padmount substation locations.

7.1.6 Flooding and drainage

Substations are to be located such that the risk of flooding or stormwater damage is minimal.

As a minimum the level at the top of the transformer footing, HV and LV switchgear, shall not be lower than the 1:100 year flood level.

All drains within the substation site area or in the vicinity shall be properly maintained to avoid the possibility of water damage to Endeavour Energy's equipment.

In areas where, as determined by the Network Substation Manager, there is a high water table or a heightened risk of flooding, indoor substations will not be permitted.

All materials used in the construction below the substation (ground level) shall be capable of withstanding prolonged immersion in water without swelling or deterioration.

Figure 51 - Example substation raised above 1:100 flood level

- Easement Management / Network Access

The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the landowner:

- Not install or permit to be installed any buildings, structures or services within the easement site.
- Not alter the surface level of the easement site.

- Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.

Endeavour Energy's preference is for no activities or encroachments to occur within its easements. However, if any proposed works (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load or asset relocation project) will encroach / affect Endeavour Energy's easements or protected assets, contact must first be made with the Endeavour Energy's Easements Officer, Jeffrey Smith, on business days on direct telephone 9853 7139 or alternately email Jeffrey.Smith@endeavourenergy.com.au or Easements@endeavourenergy.com.au .

Please find attached for the applicant's reference copies of Endeavour Energy's:

- General Restrictions for Overhead Power Lines.
- Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' which in Section 5.14 'Encroachments on overhead line easements' deals with activities / encroachments within easements.
- 'Guide to Fencing, Retaining Walls and Maintenance Around Padmount Substations' in regard to the padmount substation sites that will be required to facilitate the proposed development.

It is imperative that the access to the existing electrical infrastructure on and in proximity of the site be maintained at all times. To ensure that supply electricity is available to the community, access to the electricity infrastructure may be required at any time. Restricted access to electricity infrastructure by maintenance workers causes delays in power restoration and may have severe consequences in the event of an emergency.

This is particularly important where there are poles or towers as in the event of fallen conductors, access to the restring overhead power lines will be required by electricity workers with heavy vehicles, machinery and materials essential for restoring electricity supply.

- Earthing

The construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS 3000:2018 'Electrical installations' as updated from time to time. This Standard sets out requirements for the design, construction and verification of electrical installations, including ensuring there is adequate connection to the earth. It applies to all electrical installations including temporary builder's supply / connections.

Inadequate connection to the earth to allow a leaking / fault current to flow into the grounding system and be properly dissipated places persons, equipment connected to the network and the electricity network itself at risk from electric shock, fire and physical injury. The earthing system is usually in the form of an earth electrode consisting of earth rods or mats buried in the ground. It should be designed by a suitably qualified electrical engineer / Accredited Service Provider (ASP) following a site-specific risk assessment having regard to the potential number of people could be simultaneously exposed, ground resistivity etc.

For details of the ASP scheme please refer to the above point "Network Capacity / Connection'.

In particular appropriate consideration should be provided to the conductivity of the fencing within the easement where there is a possibility it could act as a conductor of electricity and dangerous currents may be carried along the fence. Where conductive / metal fencing is used it must be appropriately earthed eg. the by the use of isolation panels where the fence enters or exits the easement created by the use of timber posts and/or earth electrode installed adjacent to the easement.

- Vegetation Management

The planting of large trees near electricity infrastructure is not supported by Endeavour Energy. Particularly for overhead power lines, ongoing vegetation management / tree trimming is a significant network cost and falling trees and branches during storms are a major cause of power outages.

The planting of large trees near electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure (including any new electricity infrastructure required to facilitate the proposed development). Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure (at least the same distance from overhead power lines as their potential full grown height) and even with underground cables, be installed with a root barrier around the root ball of the plant.

Landscaping that interferes with electricity infrastructure may become a potential safety risk, cause of bush fire, restrict access, reduce light levels from streetlights or result in the interruption of supply. Such landscaping may be subject to Endeavour Energy's Vegetation Management program and/or the provisions of the *Electricity Supply Act 1995* (NSW) Section 48 'Interference with electricity works by trees' by which under certain circumstances the cost of carrying out such work may be recovered.

- Location of Electricity Easements / Prudent Avoidance

The incorporation of electricity easements into privately owned lots is generally problematic for both Endeavour Energy and the future landowners and requires additional easement management to ensure no uncontrolled activities / encroachments occur within the easement area.

Accordingly Endeavour Energy's recommendation is that whenever reasonably possible, easements be entirely incorporated into public reserves and not burden private lots. Endeavour Energy's preference is to have continuity of its easements over the most direct and practicable route affecting the least number of lots as possible.

This is also in keeping with a policy of prudent avoidance. In practical terms this means that when designing new transmission and distribution facilities, consideration is given to reducing exposure and increasing separation distances to more sensitive uses such as residential or schools, pre-schools, day care centres or where potentially a greater number of people are regularly exposed for extended periods of time.

These emissions are usually not an issue but with Council's permitting or encouraging development with higher density, reduced setbacks and increased building heights, but as the electricity network operates 24/7/365 (all day, every day of the year), the level of exposure can increase.

Endeavour Energy believes that irrespective of the zoning or land use, applicants (and the Department) should also adopt a policy of prudent avoidance by the siting of more sensitive uses eg. the office component of an industrial building, away from and less susceptible uses such as garages, non-habitable or rooms not regularly occupied eg. storage areas in a commercial building, towards any electricity infrastructure – including any possible future electricity infrastructure required to facilitate the proposed development.

Where development is proposed near electricity infrastructure, Endeavour Energy is not responsible for any amelioration measures for such emissions that may impact on the nearby proposed development.

Please find attached a copy of Energy Networks Association's 'Electric & Magnetic Fields – What We Know' which can also be accessed via their website at https://www.energynetworks.com.au/electric-and-magnetic-fields and provides the following advice:

> *Electric fields are strongest closest to their source, and their strength diminishes rapidly as we move away from the source.*

The level of a magnetic field depends on the amount of the current (measured in amps), and decreases rapidly once we move away from the source.

Typical magnetic field measurements associated with Endeavour Energy's activities and assets given the required easement widths, safety clearances etc. and having a maximum voltage of 132,000 volt / 132 kV, will with the observance of these separation distances not exceed the recommended magnetic field public exposure limits.

- Dial Before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the ***Dial Before You Dig*** **1100** service in accordance with the requirements of the *Electricity Supply Act 1995* (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

- Demolition

Demolition work is to be carried out in accordance with Australian Standard AS 2601—2001: 'The demolition of structures' as updated from time to time. All electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works shall be disconnected ie. all electrical apparatus shall be regarded as live until isolated and proved de-energised by approved means.

Depending on the extent of the demolition works, the low voltage service conductor and customer connection may need to be isolated and/or removed during demolition. Please refer to the below point 'Removal of Electricity Supply' for further information.

Appropriate care must be taken to not otherwise interfere with any electrical infrastructure on or in the vicinity of the site eg. streetlight columns, power poles, overhead power lines and underground cables etc.

- Removal of Electricity Supply

Approval for the permanent disconnection and removal of supply must be obtained from Endeavour Energy's Network Connections Branch (contact via Head Office enquiries on business days on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm) by Accredited Service Providers (ASP) with the relevant class of Authorisation for the type of work being carried out. The work could involve:

  - The disconnection and removal of an underground service cable or overhead service line,
  - Removal of metering equipment.

The written request must be submitted to Endeavour Energy using Form FPJ4603 ' Permission to Remove Service / Metering by Authorised Level 2 Accredited Service Provider' which must be accompanied by Notification of Service Works (NOSW) forms provided as a result of service work activity performed by a Level 2 ASP. The retailer must also provide written agreement for the permanent removal of supply.

For details of the ASP scheme please refer to the above point 'Network Capacity / Connection'.

- Site Remediation

Endeavour Energy's Environmental Business Partner Section have advised that the remediation of soils impacted by various forms of electricity infrastructure is not uncommon but is usually not significant eg. transformer oil associated with leaking substations, pole treatment chemicals at the base of timber poles etc. The method of remediation is generally the removal of the electricity infrastructure, excavation of any contaminated soils and their disposal at a licensed land fill. The decommissioning and removal of the redundant electricity infrastructure will be dealt with by Endeavour Energy's Network Connections Branch as part of the application for the connection of load for the new development.

If the applicant has any concerns over the remediation of soils impacted by redundant electricity infrastructure they should contact Environmental Business Partner Section via Head Office enquiries on business days on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm.

- Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. Please find attached copies of Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures .

If the applicant has any concerns over the proposed works in proximity of the Endeavour Energy's electricity infrastructure to the road verge / roadway, as part of a public safety initiative Endeavour Energy has set up an email account that is accessible by a range of multiple stakeholders across the company in order to provide more effective lines of communication with the general public who may be undertaking construction activities in proximity of electricity infrastructure such as builders, construction industry workers etc. The email address is Construction.Works@endeavourenergy.com.au .

- Emergency Contact

In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours / 7 days. Endeavour Energy's contact details should be included in any relevant risk and safety management plan.

I appreciate that 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 and the attached resources 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 current easing of the 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. 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

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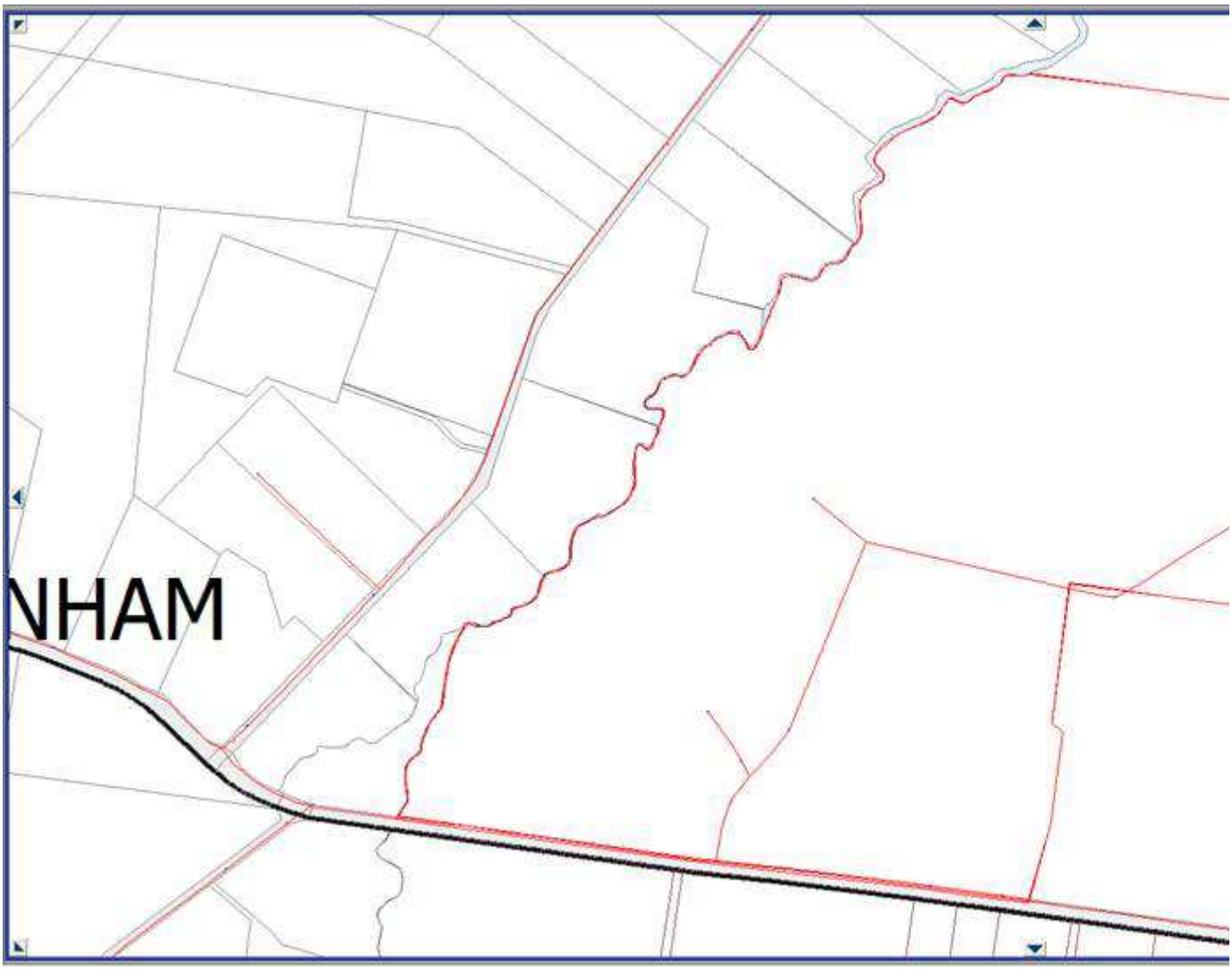
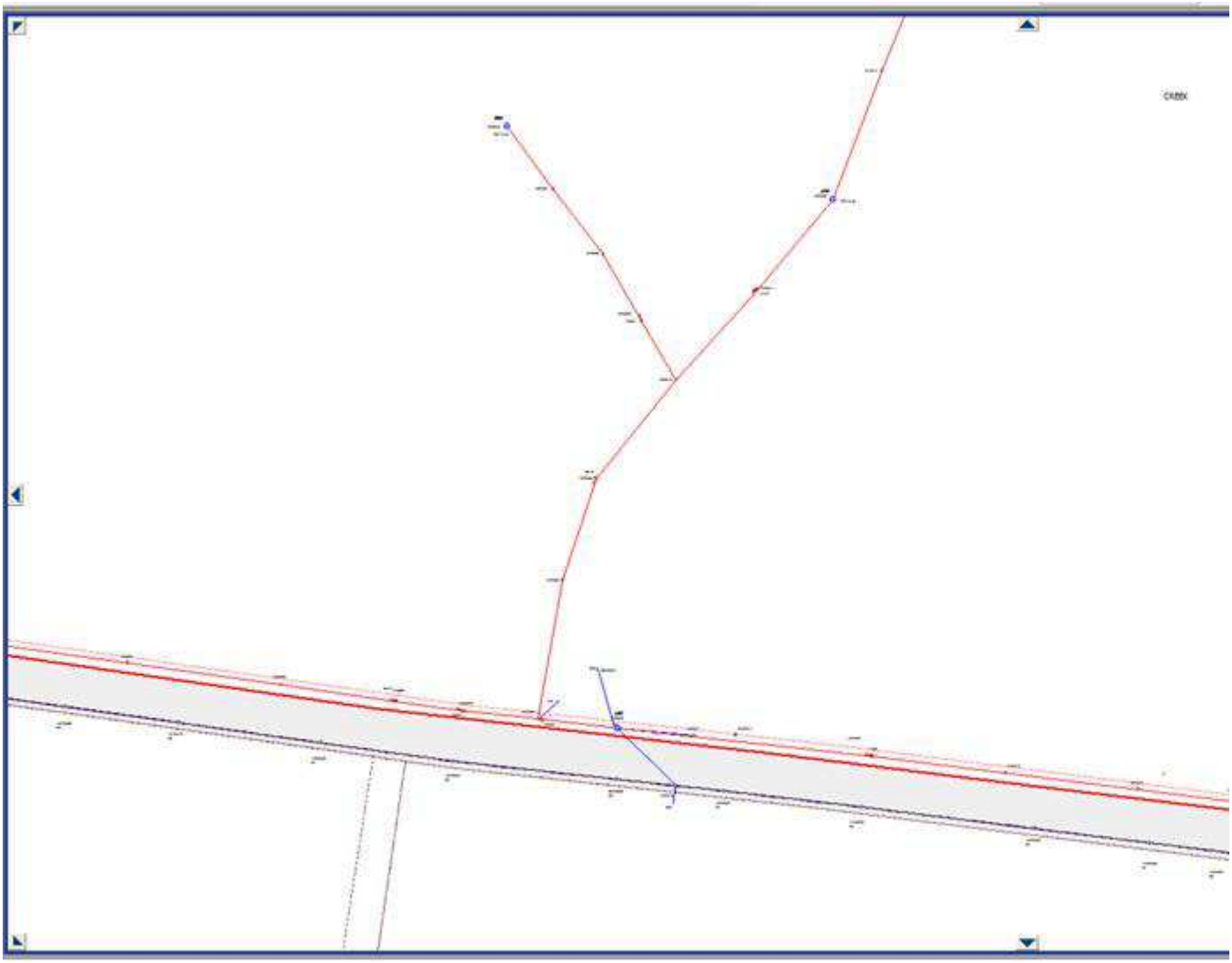





2310 Elizabeth Dr
Badgerys Creek, New South Wales
Google
Street View
Elizabeth Dr
Google

Katelyn Symington

From: Anthony Pizzolato
Sent: Thursday, 20 May 2021 11:33 AM
To: Katelyn Symington
Cc: Kye Sanderson; Fiona Christiansen; Andrew Jackson
Subject: response to request for SEARS for 1953 - 2109 Elizabeth Drive (BHL site)

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Katelyn,

Thank you for the opportunity to provide feedback on a request for SEARs for the proposed staged development of the BHL site situated at 1953-2109 Elizabeth Drive, Badgerys Creek. The Planning Partnership Office (PPO) is responsible for preparing the planning framework for the Western Sydney Aerotropolis including the Northern Gateway Precinct which the subject site forms a part of.

This feedback addresses the proposed staged development structure plan outlined in the scoping report with regard to:

- The Environmental Planning and Assessment Act and Regulations
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020
- The Western Sydney Aerotropolis Plan
- The Western Sydney Aerotropolis Draft Precinct Plan

EPA Act and Regs

- Permissibility of SSD development - Section 4.38(3) of the Act allows that consent for an SSD can be granted if it is PARTLY prohibited by and EPI while Clause 4.38(2) notes that consent cannot be granted if it is WHOLLY prohibited by an EPI. The subject site is zoned a mixture of Enterprise and Environment and Recreation. The proposed development does not have regard to the Environment and Recreation zone on sections of the site where urban development is proposed. These uses are, in the opinion of the PPO, wholly prohibited in the Environment and Recreation zone which means that the consent could not be granted to the development as per its current layout.
- Development contributions - Clause 271 of the EPA Regs state that DAs must not be determined by the consent authority in the Aerotropolis unless a contributions plan has been approved. A Special Infrastructure Contributions (SIC) and local Section 7.12 plan have been prepared and placed on public exhibition by the NSW Government and Penrith and Liverpool Councils respectively. However, neither of these plans have been finalised meaning that there is no contributions plan currently in place for the Aerotropolis and therefore development applications cannot be determined.
- Consistency with the Western Sydney Aerotropolis Plan (WSAP) and precinct plan - Section 275C of the of the EP&A Regs stipulates that any applications that are submitted are to be accompanied by a report demonstrating consistency with both the WSAP any precinct plan. As outlined under the WSAP and draft Precinct Plan headings below, there are aspects of the proposed development outlined in the scoping study which are inconsistent with the both the WSAP and Precinct Plan. Despite the precinct plan being in draft form, substantial consideration and weighting has to be given, as it has been placed on public exhibition and submissions are being considered.

State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 (Aerotropolis SEPP)

The Aerotropolis SEPP was made in October 2020 and applies to the whole of the Western Sydney Aerotropolis. The Aerotropolis SEPP has rezoned all land in the initial precincts including the Northern Gateway which the subject site forms a part of.

- Land use zones – the Aerotropolis SEPP has rezoned the subject site to a mixture of Enterprise and Environment and Recreation. The Enterprise zone is a flexible zone that allows for a wide range of employment uses and the land uses outlined in the scoping study are generally consistent with this zone. However, the scoping study is inconsistent for the parts of the site that have been zoned Environment and Recreation which are also flood prone and therefore considered not suitable for urban development.
- Statutory weight of the precinct plan – Clause 41 of the Aerotropolis SEPP establishes the requirement that a consent authority must be satisfied that a development is consistent with a precinct plan while clause 42 establishes a pathway for development to progress where there is no precinct plan and the consent authority has considered certain criteria. These clauses give the precinct plan statutory weight, and while the precinct plan has not been finalised it should be given significant consideration and weighting particularly given that the plans have progressed through a period of public exhibition and submissions received are currently being considered.
- Flooding – The Aerotropolis SEPP identifies parts of the site as being within the 1 in 100 year flood planning level. These areas generally align with parts of the site that have rezoned to Environment and Recreation. The PPO has relied on the best available information provided by Council to identify areas that are flood prone. Therefore any development of the site must align with this.
- Design excellence – the Aerotropolis SEPP establishes a framework for achieving design excellence. Development of the scale outlined in the scoping report would meet the criteria for a design review panel (Clause 33) and also be subject to an architectural design competition (Clause 34). Matters for design excellence consideration are detailed in Clause 35 and would require attention by the applicant should the proposal progress.
- Aviation safeguarding – The subject site is located in close proximity to the Western Sydney Airport means that controls relating to airport safeguarding are relevant to the site. These are covered in Part 3 of the Aerotropolis SEPP:
    - Clause 19 Aircraft noise
    - Clause 20 Building wind shear and turbulence
    - Clause 21 Wildlife hazards
    - Clause 22 Wind turbines
    - Clause 23 Lighting
    - Clause 24 Airspace operations
    - Clause 25 Public safety
- Master Plans in the Aerotropolis – Clause 43 of the Aerotropolis SEPP outlines a pathway for Master Plans to be prepared for sites in the Aerotropolis that meet a range of criteria including being 100 Ha or more in size. Based on the level of detail presented in the scoping report and nature of the subject site, the proposal generally appears to sit well within the Master Planning framework . The Master Planning process is expected to provide a more strategic framework for the consent authority to consider aspects of a plan that may vary from a Precinct Plan that applies to the site for example. A Master Plan is prepared by the applicant, assessed and placed on a period of public exhibition and ultimately approved by the Minister for Planning. For this reason, the PPO suggests that a more appropriate framework for the proposal to be considered could be in the form of a Master Plan. Master Planning Guidelines are currently being prepared by the PPO which will set out the requirements for what needs to be included in the Master Plan.

The Western Sydney Aerotropolis Plan (WSAP)

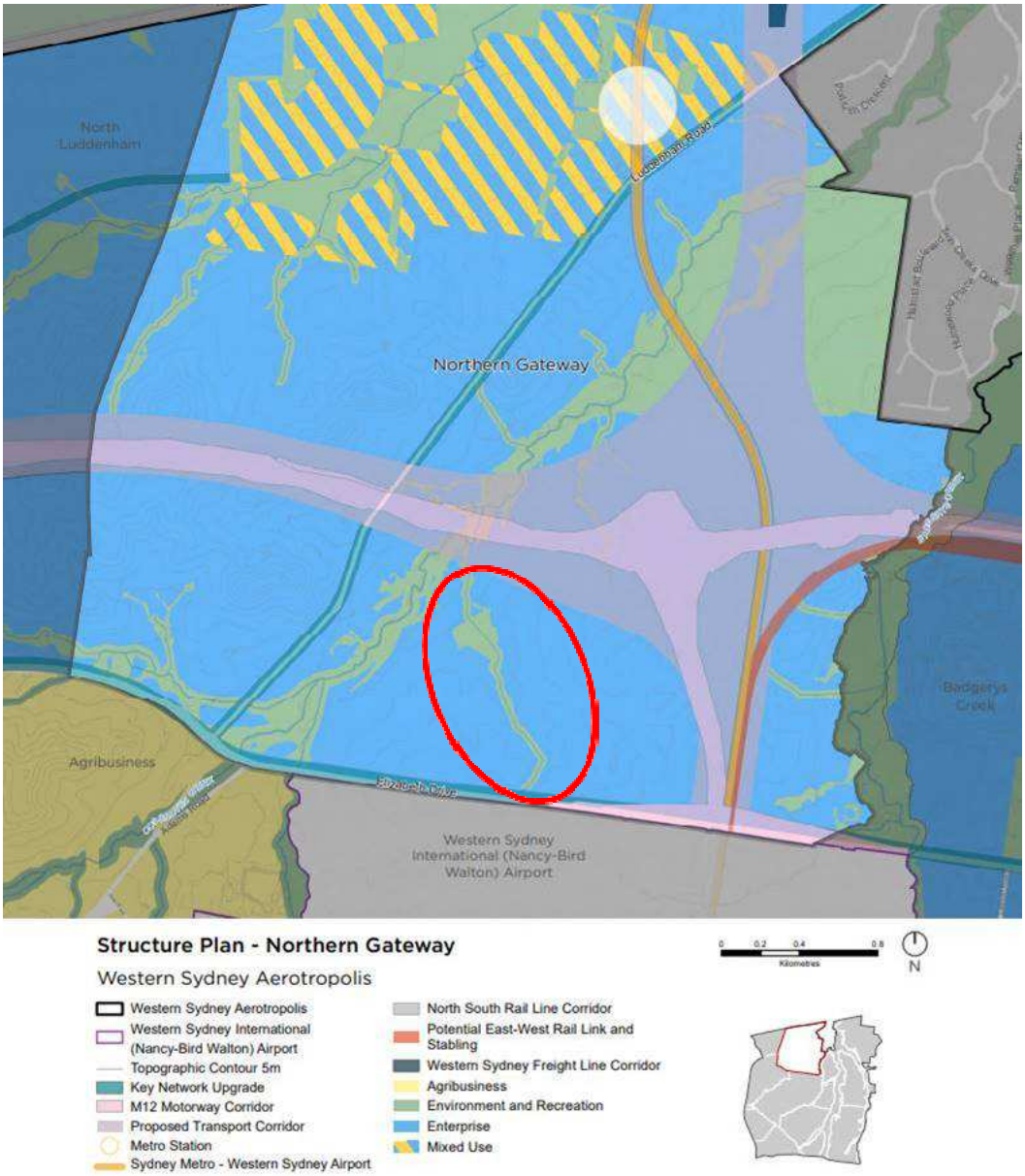
The WSAP was finalised in October 2020 and establishes the strategic framework to guide development in the Aerotropolis. The WSAP outlines broad objectives

- Objective 1 An accessible and well connected Aerotropolis
- Objective 2 High-value jobs growth is enabled, and existing employment enhanced
- Objective 3 Safeguard airport operations
- Objective 4 A landscape-led approach to urban design and planning
- Objective 5 A sustainable, low carbon Aerotropolis that embeds the circular economy
- Objective 6 A resilient and adaptable Aerotropolis
- Objective 7 Infrastructure that connects and services the Western Parkland City as it grows

- Objective 8 A collaborative approach to planning and delivery
- Objective 9 Diverse, affordable, healthy, resilient and well-located housing
- Objective 10 Social and cultural infrastructure that strengthens communities
- Objective 11 Great places that celebrate local character and bring people together

Any proposal for the subject site would need to demonstrate how the proposed development gives effect to each of these 11 objectives, including outlining how any aspects of the proposed plans may differ from the planning framework for the area, to better achieve these objectives.

Land use framework – while the Aerotropolis SEPP is the EPI that gives effect to the rezoning of the site to a mixture of Enterprise and Environment and Recreation, the WSAP also foreshadows these land use zones. As highlighted in the image below, this includes flagging a strip of land running through the subject site as Environment and Recreation. The staged structure plan in the scoping report includes this area as part of the general developable footprint of the site which is inconsistent with the WSAP. Further, the proposed transport corridors running through the site are substantially reduce and also requires concurrence from TfNSW for any planned development in this footprint, as is proposed in the structure plan presented (as per Clause 29 of the Aerotropolis SEPP).



The Western Sydney Aerotropolis draft Precinct Plan

The Western Sydney Aerotropolis draft Precinct Plan (draft Precinct Plan) was placed on a period of public exhibition from December 2020 until 12 March 2021. The draft Precinct Plan complements the Aerotropolis SEPP be providing

the finer grain detail to guide development including identification of additional open space areas and the local street network.

- Weighting of a draft plan – The consideration and weighting to be given to a draft plan varies depending on what stage it has reached in the planning process. Given the draft plans have been exhibited and the PPO is currently considering issues raised in submissions, the PPO is of the view that a relatively higher weighting and consideration of the plans is required by the Proponent. Furthermore, the PPO notes there is planning case law that is relevant to this matter.
- Open space – the draft Precinct Plan proposes an open space network that includes Riparian Linear Parkland, Urban and Pocket Parks, Ridgelines and Hilltop parks and Nature Parks. Parts of the subject site are Riparian Linear Parkland which generally align with parts of the site within the 1 in 100 year flood zone. The scoping study does not include these open space areas, generally presenting a plan with substantially less than what is proposed in the draft Precinct Plan.
- Floor space – The draft Precinct Plan does not identify FSRs for the Enterprise zone. The effective amount of floor space allowed is controlled by other measures such as site coverage, building setbacks, open space, local road network, etc. The scoping report identifies a total FSR of 0.51:1 spread across the site. As the scoping report only identifies the aggregate FSR for developable land across the site (as defined by the applicant), it is unclear how this relates to the amount of floor space that would be enabled by the draft Precinct Plan as the portion of the site identified as developable is less in the draft Precinct Plan. If the floor space proposed is different to what would be allowed by the draft Precinct Plan, this would require some additional consideration of the cumulative infrastructure requirements to support development on the site and around the precinct.
- Block size – the draft precinct plan identifies 150m by 150m block sizes as suitable for the Enterprise zone. The rationale for these block sizes is that they maintain a level of permeability in particular for pedestrians to easily be able to walk around the precinct with points of interest not too far away. The 350m by 350m block sizes laid out in the scoping study significantly depart from the draft Precinct Plan and this street layout. Therefore this does not satisfy the walkability, connectivity and permeability place outcomes envisaged for the Aerotropolis.
- Local centre – The draft Precinct Plan establishes a centres hierarchy for the Aerotropolis. Included in this is a neighbourhood hub on the site. The scoping study does not give consideration to this neighbourhood hub or identify how such a centre may establish and grow over time as the number of workers in the catchment increases.
- Cut and fill – the scoping study identifies the need for bulk earthworks in the range of 6m to 8m of cut and fill to prepare the site for development. The applicant must have regard to the draft Precinct Plan which seeks to deliver a landscape lead approach to development in the Aerotropolis which includes minimising the amount of cut and fill.
- Heritage – The site contains no listed Heritage items. However the Draft Aboriginal and Non-Aboriginal Cultural Heritage Assessment prepared to support the draft Precinct Plan does identify a potential heritage items on the site (listed below). As a part of finalising the Precinct Plan and accompanying amendments to the Aerotropolis SEPP this item may be formally listed as a heritage item. The scoping report does not address this potential heritage item or incorporate it into the proposed structure plan for the site.
    - McMaster Field Station/McMaster Farm - 1853-2109 Elizabeth Drive, Badgerys Creek

In summary, the proposal seeks numerous and significant departures from the strategic planning framework and draft precinct plans for the Aerotropolis. The PPO is of the firm view the proposal cannot be supported in its current form. Furthermore, any departure from draft Precinct Plan or WSAP – as discussed above, are to be justified. Any justification shall adequately outline how the departure can deliver a better social, environmental and economic outcomes than would be the case if the site were developed in accordance with the WSAP and draft precinct plans.

Please reach out if you have any questions regarding the above.

Regards,

Anthony Pizzolato
Manager, Aerotropolis / Planning Partnership
☎ **(02) 9274 6440 / 0419 469 151** ✉:**anthony.pizzolato@planning.nsw.gov.au**
4 Parramatta Square, 12 Darcy St Parramatta NSW 2150

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

6 May 2021

Contact: *Alison Kniha*
Telephone: *0407 088 372*
Our ref: *D2021/54580*

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

Dear Ms Symington

1953-2109 Elizabeth Drive – Request for SEARs (SSD-18406916)

Thank you for your email dated 2 May 2021 requesting WaterNSW's input into the preparation of Secretary's Environmental Assessment Requirements (SEARs) for the above proposal.

WaterNSW owns and manages the Warragamba Pipelines, critical water supply infrastructure located approximately 2.8 km downstream of the development site, with flows towards the Pipelines corridor from the subject site occurring via Cosgrove and Badgerys Creek. The Pipelines convey water from Warragamba Dam to the Prospect Water Filtration Plant and are an integral component of the Sydney drinking water supply system. It is essential this water supply infrastructure is protected from the potential impacts of upstream development.

The development will need to consider the downstream impacts on the Pipelines corridor, specifically surface water flow properties for pre- and post-development scenarios. It is a WaterNSW requirement that post-development flows that enter or are conveyed across the Pipelines corridor must be equal to or less than the pre-development flows for each storm event up to and including 1% AEP event.

WaterNSW requests the following points be included in the SEARs and addressed in the subsequent Environmental Impact Statement (EIS) for the proposal, as this will assist WaterNSW to determine any potential impact on the downstream Warragamba Pipelines Corridor.

- An assessment of the impacts of the proposed development on hydrology. The EIS should include a water balance that models pre- and post-development flows that enter and leave the site, including volume, frequency and quality of discharges.
- The EIS should include a stormwater management strategy that ensures safe and appropriate management and disposal stormwater without negative impacts on downstream or neighbouring allotments.

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 me at alison.kniha@waternsw.com.au.

Yours sincerely

ALISON KNIHA
Catchment Protection Planning Manager

SSD-18406916 | 1953-2109 Elizabeth Drive, Badgerys Creek
Request for SEARs – Corridor Protection Team Comments

Introduction

The following comments are provided by the Corridor Protection Team in response to the Request for SEARs relating to Concept State Significant Development Application (SDSD-18406916) for the subject site at 1953-2109 Elizabeth Drive, Badgerys Creek.

As detailed in the proponent's scoping report, the SSDA will seek Concept Consent for development staging, subdivision design and indicative layout for warehouse and logistics estate across the site. The SSDA will also seek consent for early works across the site and the detailed design and development of a warehouse / office building within the Phase 1 of the development site.

Corridor Protection Background

North South Rail Line

State Environmental Planning Policy (Major Infrastructure Corridors) 2020 (MIC SEPP) was gazetted on 3 July 2020 and zones land for the North South Rail Line (NSRL) corridor to SP2 Infrastructure (amongst other corridors in Western Sydney). The NSRL corridor traverses through the subject site and will be utilised for Sydney Metro – Western Sydney Airport Metro (currently under assessment). It is understood that Sydney Metro have commenced land acquisitions for the corridor.

Outer Sydney Orbital – Stage 1

The Outer Sydney Orbital (OSO) corridor is identified in several strategic government documents. The OSO Stage 1 corridor is proposed to accommodate a motorway and dedicated freight rail line between the North West Growth Area and The Hume Motorway via Western Sydney.

A recommended corridor was exhibited in 2018 alongside the Western Sydney Corridors thar are now protected under the MIC SEPP. The OSO is still under investigation, with adjustments being considered at M12 interchange.

Both the M12 and OSO Stage 1 traverse the subject site. Land identified for the OSO corridor and the M12 are identified on the Transport Corridors map under the State Environmental Planning Policy (Western Sydney Aerotropolis) 2020. Under clause 29 of the Aerotropolis SEPP, the consent authority is to obtain the concurrence of Transport for NSW before granting development consent for works in and adjacent to a transport corridor with a capital investment value of more than $200,000.

Comments to inform SEARs

1. The proponent is to consult with Transport for NSW to achieve a suitable outcome for land identified for the future OSO, as indicated on the Transport Corridors map under the Aerotropolis SEPP. In the Planning Focus Meeting held on 12 May 2021, Transport for NSW highlighted that they could not support the proposal in its current form under clause 29 of the Aerotropolis SEPP.
2. It is noted that a revised Concept Plan has been submitted, which considers the protected NSRL Corridor. Under clause 11 the MIC SEPP, the concurrence of Transport for NSW is required for works involving excavation within or adjacent to a Future Infrastructure Corridor (refer to clause 11 for specific concurrence triggers).
3. The proponent is to demonstrate that the Concept Layout Plan and future anticipated land uses has considered the construction and operational impacts (noise and vibration) of planned future infrastructure.

Our ref: DOC21/398237
Senders ref: SSD 18406916

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

Dear Ms Symington

Subject: Request for SEARs for 1953-2109 Elizabeth Drive, Badgerys Creek (SSD-18406916) (Penrith)

Thank you for your e-mail received on 3 May 2021, requesting input from Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment (DPIE) on the Request for SEARs for 1953-2109 Elizabeth Drive, Badgerys Creek which is located within the Western Sydney Aerotropolis.

EES has reviewed the scoping report prepared by Urbis dated 30 April 2021 and provides the following comments regarding waterway health and recommendations for the major project at Attachment A.

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 water quality (Table 1) and flow objectives (Table 2) for the Wianamatta-South Creek catchment to achieve the vision for Western Sydney Parkland City. EES is also developing technical guidance to demonstrate how development can demonstrate compliance using standard industry models and local climate and stream gauging data.

The water quality and flow objectives are specified as requirements in the exhibited Draft Aerotropolis Precinct Plan and are therefore relevant to the subject SSD.

Table 1 Ambient water quality of waterways and waterbodies in the Western Sydney Aerotropolis

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
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

Table 2 Ambient stream flows and requirements of waterways and water dependent ecosystems in the Western Sydney Aerotropolis

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

Should you have any queries regarding this matter, please contact Marnie Stewart, Senior Project Officer - Planning on 9995 6868 or Marnie.stewart@environment.nsw.gov.au

Yours sincerely

18/05/21

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

Attachment A – EES Environmental Assessment Requirements – 1953-2109 Elizabeth Drive, Badgerys Creek (SSD-18406916) (Penrith)

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, 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 Appendix 11 of 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:
    a. Existing surface and groundwater.
    b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
    c. 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.
    d. 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.
    e. 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)

Katelyn Symington

From: tsmith@wsaco.com.au
Sent: Thursday, 20 May 2021 9:34 AM
To: Katelyn Symington
Cc: Kirk Osborne; Deanne Frankel; DANIEL Grace
Subject: RE: [SEC=OFFICIAL] RE: Planning Focus Meeting 1953 - 2109 Elizabeth Drive

Follow Up Flag: Follow up
Flag Status: Flagged

OFFICIAL

Hi Katelyn,

Thank you for providing the opportunity to provide comments in relation to the proposed Concept / First Stage Detailed Application for 1953 Elizabeth Drive, Badgerys Creek.

Please note our comments below:

- **Airspace Operations (Vertical clearance):**
  - Noting the requirements regarding OLS penetration under the *Airports (Protection of Airspace) Regulations 1996*, intrusions will need to be demonstrated as clear of prescribed airspace. Note that as well as any building elements (including buildings, antennae, and any other structures affected to buildings), this includes any temporary intrusions (e.g. cranes) as well as vertical air emissions from uses (e.g. manufacturing uses). Note that for buildings outside the first stage of development (Warehouse 3A), referral to and assessment by WSA Co. will also be required at these future stages in regards to confirmation of any OLS intrusions.
  - Timeframes should be detailed for subsequent stages of operations. Noting that the Airport will become operational in 2026, confirmation is required of the timeframes for subsequent stages of development at the site.
- **Airspace Operations (Horizontal clearance):** Development is proposed very close to the centreline of the first runway, to the north of Elizabeth Drive at the western edge of Superlot 02. Suggest that further assessment is required of this from a security / safety perspective including an increased setting back to / removal of the westernmost building. An assessment to this effect will need to be included in the future aviation impact assessment. This setback could also respect the High Intensity Approach Lighting (HIAL) and Glide Path Building Restricted Area identified within the Airport Plan.
- **Building Windshear and Turbulence**: A windshear assessment will be required as part of any future SSDA, as parts of the site intersect the 1:35 ratio. This will need to be demonstrated as acceptable, including demonstration of the 1:35 ratio compared to the proposed development.
- **Outer Sydney Orbital:** Development of the site should not prohibit the delivery of the Outer Sydney Orbital (OSO) motorway at a time when it is required. The OSO is a critical piece of infrastructure for access to WSI over the medium and long term horizons, and development which would reduce the ability to deliver this outcome would not be supported.
- **Traffic:**
  - The proponent should continue to work with DPIE and RMS in relation to the design of any intersections on Elizabeth Drive. These should be designed to be compatible with (and not reduce the efficiency of) intersections into the WSI site. These intersections should also be designed to avoid the queueing of vehicles within the Public Safety Area.
  - Construction traffic impacts should be detailed in the SSDA, including potential cumulative impacts of the various projects occurring in this space (including, but not limited to WSI Stage 1, Sydney Metro Western Sydney Airport, the M12 Motorway, as well as private sector projects including those within the Aerotropolis and Mamre Road Precincts).
- **Aircraft Noise**:

- It will need to be demonstrated that uses do not comprise noise sensitive uses under the SEPP and are appropriate for the noise constrained parts of the site. Particular clarity is sought regarding the envisaged higher density mixed uses along the northern side of Elizabeth Drive.
- It is to be demonstrated that uses will comply with Australian Standard 2021: 2015, including in regards to indoor sound levels.

- **Wildlife Attraction / Management:**
  - An assessment of wildlife at the site, including in the private / public domain as well as along vegetation corridors (such as those on the western boundary to Cosgroves Creek) will need to be provided as part of the future SSDA documentation.
  - An assessment of the future uses, including in regards to the design and location of any outdoor waste storage, external handling of any organic or putrescible materials, and the like, is to be included in regards to wildlife attraction.
  - It is to be confirmed that non-putrescible fill will not be utilised on site, which has the potential to attract wildlife.
  - Noting the long term nature of this project an assessment of the wildlife attraction of remaining lots (which may not be developed for some time) will need to be undertaken. This could include measures such as grass seeding to minimise wildlife attraction, as well as timing of these remaining stages to measure the risk.
- **Lighting**: The site includes areas located within Lighting Control Zones A-D, and is wholly situated in the Lighting Intensity Radius area. An assessment of lighting needs to be included in the aeronautical assessment, to demonstrate that proposed lighting at the site is acceptable from an aviation perspective. It should be noted that this assessment would also need to be undertaken in regards to construction lighting.
- **Public Safety:** Assessment should include detail regarding uses of areas included in the Public Safety Area including, where necessary:
  - Demonstration that uses which would result in a high density of persons in the area will be avoided; and
  - Review of outdoor spaces (e.g. breakout areas, queueing on roads, etc) will be avoided in areas subject to the PSA.
- **Glide Path Building Restricted Area:** Assessment should be included in regards to the Glide Path Building Restricted Area, identified in the Western Sydney Airport Plan.
- **Air Quality:** It is to be demonstrated that mitigation measures will be employed which will not result in smoke, dust, steam, gases or other particulate (during both construction and operation) either in a manner which will affect operations over the BHL site, or on to the WSI site.

We are more than happy to discuss any of the above further as required.

Kind regards,

Tim

Tim Smith
Planning Manager

+61 429 008 963
tsmith@wsaco.com.au
PO Box 397 Liverpool NSW 1871

Western Sydney Airport

25 May 2021 Our Ref: 185938

Katelyn Symington
Department of Planning, Industry and Environment
Katelyn.symington@planning.nsw.gov.au

Sydney Water input to SEARs for logistics estate at 1953-2109 Elizabeth Drive (SSD-18406916)

Thank you for seeking Sydney Water's input on the Secretary's Environmental Assessment Requirements for the abovementioned proposal. We have reviewed the proposal and provide the following comments for your consideration.

Sydney Water is working with the proponent under case number 185938 and will continue to do so to provide the required services. We are currently planning to deliver trunk drinking water infrastructure to increase supply to the area which is expected to be operational circa 2022. Wastewater services to accommodate stage 1 of the development are being planned and expected to be delivered by 2026 as part of the commissioning of the Upper South Creek Advanced Water Recycling Centre.

Sydney Water requests that the Department of Planning 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 (if required) services have been made.
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 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