23 August 2021

Pamela Morales
Principal Planner
Industry Assessments
Department of Planning, Industry and Environment
Via email:pamela.morales@planning.nsw.gov.au

Pamela,

Comments on Request for Secretary Environmental Assessment Requirements (SEARS) for the First Building Bradfield City Centre at No. 215 Badgerys Creek Road, Bringelly (SSD-25452459)

Thank you for the opportunity to provide comments on the SEARs request for the State Significant Development (SSD-25452459) for the First Building Bradfield City Centre at No.215 Badgerys Creek Road, Bringelly (the site).

It is understood the proponent is seeking to obtain SEARs for the development of the subject site including: a building with an approximate building footprint of approximately 2,500sqm, an internal area of approximately 2,000sqm (GFA), a building height of approximately 18 metres above finished ground level, and will include approximately 60 at-grade parking spaces.

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

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

Yours sincerely

Anthony Pizzolato
Manager, Western Sydney Planning Partnership

Attachment 1 – Detailed comments on SSD-23480429

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

The land has been rezoned a combination of Enterprise and Mixed Use by the Aerotropolis SEPP and the proposal is permissible and generally consistent with the objectives of these zones. It is recommended that specific detailed consideration will be required against the following parts of the Aerotropolis SEPP.

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

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

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

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

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

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

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

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

Part 4 Development controls—general
Concurrence will be needed from Transport for NSW (Clause 29) as transport corridors traverse the subject site.

Part 5 Design excellence
Should the development be designated state significant, a design review process will apply to the development in accordance with Clause 32. Further, if the development meets the following criteria an architectural design competition will be required:

- development in relation to a building that has, or will have, a height above ground level (existing) greater than 40 metres or 12 storeys,
- development with a capital investment value of more than $40 million.

Part 7 Precinct plans and master plans
It is noted that the Aerotropolis SEPP allows for certain development to proceed prior to the finalisation of precinct plans if it meets certain criteria. Clause 42(3) requires the applicant to specifically address whether not the development:

- is consistent with the aims of this Policy,
- will result in further fragmentation of land holdings,
- will hinder the orderly and co-ordinated provision of infrastructure that is planned for the land to which this Policy applies,
- is incompatible with, or will adversely affect, the long-term operations and development of the Airport,
- appropriately takes into account the development and infrastructure in areas adjacent to the development, and
- will be adequately serviced by public utility infrastructure.

Concurrence will also need to be sought from the Planning Secretary (Clause 50) for approval prior to finalisation of Precinct Plans to ensure suitable arrangements have been made for provision of infrastructure to support the development.

Application assessed against the Draft Aerotropolis Precinct Plan

The applicant will need to demonstrate consistency with the Draft Aerotropolis Precinct Plan which sets out a comprehensive range of provisions for development to recognise country, deliver a blue-green infrastructure framework, enable access and movement across the Aerotropolis, deliver high quality built form outcomes, enable social infrastructure to support the community and deliver against a sustainability and resilience framework.

--- END OF COMMENTS ---

23 August 2021

Pamela Morales
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Dear Ms. Morales,

Request for SEARs
First Building Bradfield City Centre (SSD-25452459)

Thank you for your correspondence via Major Projects Planning portal (ref: PAE-25778489) on 10 August 2021, requesting Transport for NSW (TfNSW) to provide input to the Secretary's Environmental Assessment Requirements (SEARs). This response represents the collective views of the transport cluster including Sydney Metro.

The Scoping Report and supporting documents have been reviewed and our suggested requirements are presented under **TAB A** for inclusion into the final SEARs.

Thank you again for the opportunity of providing advice for the above development application. If you require any further information, please don't hesitate to contact Serena Li, Transport Planner, via email at Serena.Li2@transport.nsw.gov.au for assistance.

Yours sincerely,

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

CD21/05616

SEARS INPUT FOR SSD-25452459

Transport, traffic, parking and access (operational and construction)

The EIS must include:

A Traffic and Transport Impact Assessment which provides:

- the predicted transport mode share split for the proposal development
- an analysis of the existing traffic network, including the road hierarchy, current daily and peak hour vehicle movements and existing performance levels of nearby intersections
- a forecast of additional daily and peak hour vehicle movements as a result of the proposal (using SIDRA modelling or similar at 5-year intervals) and identification of potential traffic impacts on road capacity, intersection performance and road safety (including pedestrian and cycle conflict)
- Undertake traffic and network modelling to understand the impacts of the development site and intersections, plus any traffic changes as a result any planned or committed road projects
- Concept Traffic Control Signal (TCS) Plans for any proposed signalised intersections
- proposals to mitigate any traffic impacts, including intersection upgrades to achieve acceptable performance
- details of car parking provision, having regard to relevant parking rates, specifications and standards
- recommendations for car parking rates to reduce private vehicle travel demand and help promote sustainable travel choices such as walking, cycling and public transport over the Medium/Long-term, including options to reduce or repurpose the parking provided during the Interim phase
- details of proposed vehicular access, loading and unloading deliveries and servicing arrangements, and any proposed infrastructure improvements or measures to reduce potential conflicts with pedestrians and cyclists
- provide pedestrian flows, traffic generation including freight and servicing, public transport demands and trip distribution for the proposed development site during both operation and construction phases
- swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site
- details of road upgrades, infrastructure works, or new roads or access points required for the development
- review existing and future bus, rail networks and services planned to service the proposed development site in line with Bradfield's strategic vision and objectives in temporary, short-term and long-term scenarios
- proposals to improve walking and cycling, such as connections into existing walking and cycling networks, high quality end-of-trip facilities and adequate bicycle parking for visitors, employees and residents (provided in accordance with the relevant rates, specifications and standards)
- measures to promote sustainable travel choices for employees, residents or visitors, such as minimising car parking provision, encouraging car share and public

transport, cycling and walking, implementing a Green Travel Plan and providing end of trip facilities. The GTP Should:

- Determine strategies that reduce the proportion of single occupant car travel to/from the site and increase the use of public and active transport travel to the site;
- Identify the party or parties responsible for delivery and implementation of each element of the Travel Plan throughout various stages of the development lifecycle, including for its ongoing implementation, monitoring and review; and
- Provide funding and resourcing for the delivery of those actions, including any ongoing actions required to influence travel demand, and determining an appropriate process for that to occur.

A Construction Traffic Management and Pedestrian Management Plan providing but not limited to the following:

- Details of all traffic types and volumes likely to be generated by the proposed development during construction including description of heavy vehicle types, and haul route origins and destinations
- Details of vehicle routes, peak hour and daily truck movements, hours of operation, access arrangements and traffic control measures for all demolition / construction activities
- Traffic, pedestrians and other transport modes including buses, taxis, pedestrians and cyclists and identify options for managing these impacts
- Spoil and material haulage routes (if any) for the overall project and other construction projects (i.e. Sydney Metro WSA)
- Assess peak congestion and intersection performance impacts at local and arterial roads considering cumulative impacts from surrounding development and from concurrent construction sites
- Advise on measures to manage construction impacts on traffic movement, including buses, taxis, pedestrians, cyclists' emergency vehicles and on and off-street parking
- Consult with Sydney Metro and provide an assessment of the likely construction traffic impacts, such as required road / lane closures and diversions, impacts on the timing of other construction activities within this part of the precinct by Sydney Metro.

Staging

The EIS shall set out the construction staging of the proposed development, including the relationship with the construction/delivery of the Metro station and the staging of other relevant works.

Place making outcomes

The EIS shall demonstrate how the proposed development will provide pedestrian connectivity (including through site linkages) providing workers and visitors' access to public transport by designing the site to better respond to local context and increasing opportunities for activation and integration.

Security Impacts

The EIS shall include a Security Risk Assessment (delivered by a suitably qualified and licensed contractor with consideration to the requirements of the NSW Security Industry Act, 1997) to address any impacts of the proposed development and the metro corridor which adjoins the subject site.

Furthermore, demonstrate (where relevant) that the following guidelines have been incorporated in the design:

- Guidelines for Protecting of Critical Infrastructure from terrorism
- NSW Critical Infrastructure Protection Management Framework
- Guidelines of NSW Police Safe Places A Comprehensive Guide for Owners, Operators and Designers.

Statutory and Strategic Framework

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

- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020;
- State Environmental Planning Policy (Major Infrastructure Corridors) 2020;
- State Environmental Planning Policy (State and Regional Development) 2011 – Schedule 5 Sydney Metro-Western Sydney Airport project;
- State Environmental Planning Policy (Infrastructure) 2007;
- Western Sydney Aerotropolis Draft Precinct Plan; and
- Draft Western Sydney Aerotropolis Development Control Plan 2021

Relevant Policies and Guidelines

- Sydney Metro Underground Corridor Protection Technical Guidelines 2021;
- Sydney Metro At Grade and Elevated Sections Corridor Protection Guidelines 2018;
- Future Transport 2056 and supporting plans;
- NSW Freight and Ports Plan 2018 – 2023
- Guide to Traffic Generating Developments (Roads and Maritime Services, 2002)
- EIS Guidelines – Road and Related Facilities (DoPI)
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
- Standards Australia AS2890.3 (Bicycle Parking Facilities)
- Development Near Rail Corridors and Busy Roads – Interim Guideline 2008

Consultation

Consultation is requested during preparation of the EIS with:

- Transport for NSW; and
- Sydney Metro

Pamela Morales
Principal Planner
Industry Assessments
Department of Planning, Industry & Environment

Your reference: SSD-25452459
Our reference: DOC21/686514-4

By email: pamela.morales@planning.nsw.gov.au

Dear Ms Morales,

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

Project: First Building Bradfield City Centre
SSD/SSI application no: SSD-25452459

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

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

We note the Scoping Report (page 17) prepared by Western Parkland City Authority and dated August 2021 states that the Environmental Impact Statement (EIS) will be supported by a Preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR).

Heritage NSW advises that a full archaeological assessment, including test excavations, is required because Aboriginal sites with subsurface potential have already been identified within the project area. Test excavations need to be undertaken as part of the upfront EIS assessment to inform the design and approvals process for the whole area that will be affected by the development. Cumulative impact to the archaeological resource of the Badgerys Creek area will also need to be considered. Any assessments that will be undertaken to inform the EIS, such as geotechnical investigations, must also consider impacts to Aboriginal cultural heritage.

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

Yours sincerely

Jackie Taylor
Senior Team Leader
Aboriginal Cultural Heritage Regulation - South
Heritage NSW
31 August 2021

Enclosure – Attachment A: Recommended SEARs for First Building Bradfield City Centre SSD-25452459 - Aboriginal Cultural Heritage

ATTACHMENT A: HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: First Building Bradfield City Centre
SSD/I #: SSD-25452459

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 for Aboriginal objects 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.

Heritage NSW

Our ref: HMS ID 351

Pamela Morales
Planner
Department of Planning Industry & Environment
GPO BOX 404, PARRAMATTA NSW 2124

By email: pamela.morales@planning.nsw.gov.au

Dear Ms Morales

Request for Secretary's Environmental Assessment Requirements (SEARS) for First Building Bradfield City Centre (SSD-25452459)

Thank you for your referral dated 10 August 2021 inviting SEARS input from the Heritage Council of NSW on the above State Significant Development (SSD) proposal.

The proposed SSD site is in the vicinity of State Heritage Register item Kelvin (SHR 00046), and Church of the Holy Innocents (SHR 02005) a further distance away.

It is recommended that the following heritage SEARS are included:

Heritage and archaeology

a) A Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on the heritage significance of the above SHR items and is to include the following:

- Identification of all heritage items (state and local) within the proposed SSD site and its vicinity including built heritage, landscapes and archaeology, their detailed mapping, and assessment why the items are of heritage significance;
- compliance with relevant Conservation Management Plans;
- the potential impacts of the proposal on heritage items including visual impacts such as impact on views and setting;
- proposed measures to mitigate the impact on the heritage significance or cultural heritage values of the items; and
- justification for any proposed changes to the heritage fabric or landscape elements and why more sympathetic solutions are not viable, including any options analysis.

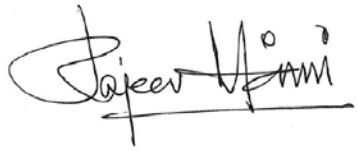
b) If the SOHI identifies impact on potential historical and/or maritime archaeology, an historical and/or maritime archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the guidelines *Archaeological Assessment* (1996) and *Assessing Significance for Historical Archaeological Sites and Relics* (2009). This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be

avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations or salvage programme.

As the proposal may impact local heritage items and items on Section 170 register, consultation should be sought with relevant local councils and government departments.

If you have any questions regarding the above advice, please contact Rajat Chaudhary, Senior Heritage Assessment Officer, at Heritage NSW on 02 9873 8521 or Rajat.Chaudhary@environment.nsw.gov.au.

Yours sincerely



Rajeev Maini
Senior Team Leader
South Assessments
Heritage NSW
Department of Premier & Cabinet
As Delegate of the Heritage Council of NSW
25 August 2021

Our ref: DOC21/700765
Senders ref: SSD 25452459

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

Dear Ms Morales

Subject: Request for SEARs - First Building Bradfield City Centre (SSD-25452459) (Liverpool City)

Thank you for your e-mail received on 10 August 2021, requesting input from Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment (DPIE) on the SEARs for the First Building Bradfield City Centre (SSD-25452459).

EES has reviewed the scoping report prepared by Western Parkland City Authority dated August 2021 and provides the following comments and recommendations 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 the NSW Government water quality and flow objectives (Tables 1 and 2 below) for the Wianamatta-South Creek catchment to achieve the vision for Western Sydney Parkland City.

The water quality and flow objectives were provided to key stakeholders at a workshop on 19 October 2020 and are specified as requirements in the exhibited Draft Aerotropolis Precinct Plan.

Table 1 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

Table 2 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

EES has also developed stormwater management targets that achieve the NSW Government water quality and flow objectives, following the 5-step process outlined in the *Risk-based framework for considering waterway health outcomes in strategic land use planning decisions*. These targets are provided in Tables 3 - 5 (below).

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

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

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

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

Table 3 Stormwater quality targets – Construction Phase

	Construction Phase Target
Total suspended solids (TSS) and pH	All exposed areas greater than 2500 metres must be provided with sediment controls which are designed, implemented and maintained to a standard which would achieve at least 80% of the average annual runoff volume of the contributing catchment treated (i.e. 80% hydrological effectiveness) to 50mg/L Total Suspended Solids (TSS) or less, and pH in the range (6.5–8.5)
Oil, litter and waste contaminants	No release of oil, litter or waste contaminants
Stabilisation	Prior to completion of works for the development, and prior to removal of sediment controls, all site surfaces must be effectively stabilised including all drainage systems. An effectively stabilised surface is defined as one that does not or is not likely to result in visible evidence of soil loss caused by sheet, rill or gully erosion or lead to sedimentation water contamination.

Table 4. Stormwater quality targets – operational phase

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

Table 5. Stormwater flow targets – operational phase

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

Note: Flexibility for showing compliance with the performance criteria has been provided in response to feedback from the urban development industry. Option 1 is primarily based on MARV and is simpler to calculate using industry standard models, whereas Option 1 is based key percentiles of a flow duration curve. Development must comply with either Option 1 or Option 2.

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

Yours sincerely

23/08/21

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

Attachment A – EES Environmental Assessment Requirements

Water and soils
6. The EIS must map the following features relevant to water and soils including: a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method). c. Wetlands as described in s4.2 of the Biodiversity Assessment Method. d. Groundwater. e. Groundwater dependent ecosystems f. Proposed intake and discharge locations
7. The EIS must describe background conditions for any water resource likely to be affected by the development, including: • Existing surface and groundwater. • Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. • Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. • Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government. • Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning

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

Flooding and coastal hazards

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

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

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

End of Submission

Pamela Morales

Subject: RE: NSW Planning, Industry & Environment Request for SEARs SSD-25452459 First Building Bradfield City Centre

From: Cornelis Duba <Cornelis.Duba@endeavourenergy.com.au>
Sent: Saturday, 21 August 2021 9:23 PM
To: Pamela Morales <pamela.morales@planning.nsw.gov.au>
Cc: DPE CSE Information Planning Mailbox <information@planning.nsw.gov.au>
Subject: NSW Planning, Industry & Environment Request for SEARs SSD-25452459 First Building Bradfield City Centre

Hello Pamela

I refer to the your below email of 10 August 2021 regarding the request for the Planning Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development SSD-25452459 First Building Bradfield City Centre for 'Construction, fitout and use of the proposed First Building as an advanced manufacturing research and development facility, including site preparation works, site access and parking, utilities infrastructure and landscaping' at 215 Badgerys Creek Road, Bringelly (Lot 10 DP 1235662) in the Liverpool City Council Local Government Area (LGA). Submissions needed to be made to the Department by 23 August 2021.

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

14. Utilities

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

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

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

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

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

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

- No easements over the site benefitting Endeavour Energy (active easements are indicated by red hatching).
- No existing electricity infrastructure / customer connection.
- Low voltage and 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines to the opposite side of the Badgerys Creek Road frontage.

Subject to 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 SEARs Scoping Report.

> 6.8 Infrastructure and servicing
>
> The First Building will be connected to the potable water and mains electricity supply. Sewage for th Building will be dealt with via an interim servicing arrangement (pump-out system), with services de allow for connection to future mains sewer delivered as part of the broader development of the Brac City Centre. The EIS will address the detailed infrastructure servicing strategy for the proposed development.

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 7.5 'Western Sydney Priority Growth Area' which includes the area covered by the Bradfield City Centre.

- 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 Bradfield City Centre, 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.

In this instance, as shown in the below site plan from Endeavour Energy's G/Net master facility model, the closest existing distribution substation is pole mounted substation no. 1060 (indicated by the symbol) located approximately 118 metres to the north on the opposite of Badgerys Creek Road. Whilst the pole mounted substation is likely to have some spare capacity, it is limited capacity and not intended or capable of supplying a significant urban development.

As well as the capacity / availability 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 will be required but the extent of the works required 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 SEARs Scoping Report.

6.7 Bushfire

The EIS for the First Building will include an assessment of bushfire risk which addresses then requirements of the *Planning for Bushfire Protection 2019*, considering both the existing bushfire risk posed by existing vegetation whilst also noting the more urbanised future context of the Bradfield City Centre.

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.

- 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.

Earthing systems 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'.

- 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.

- 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.

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 (less than 400 millimetres below ground level) 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.

Endeavour Energy's recommendation is that existing trees which are of low ecological significance in proximity of overhead power lines be removed and if necessary replaced by an alternative smaller planting. Any planting needs to ensure appropriate clearances are maintained whilst minimising the need for future pruning.

- 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.

- 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.

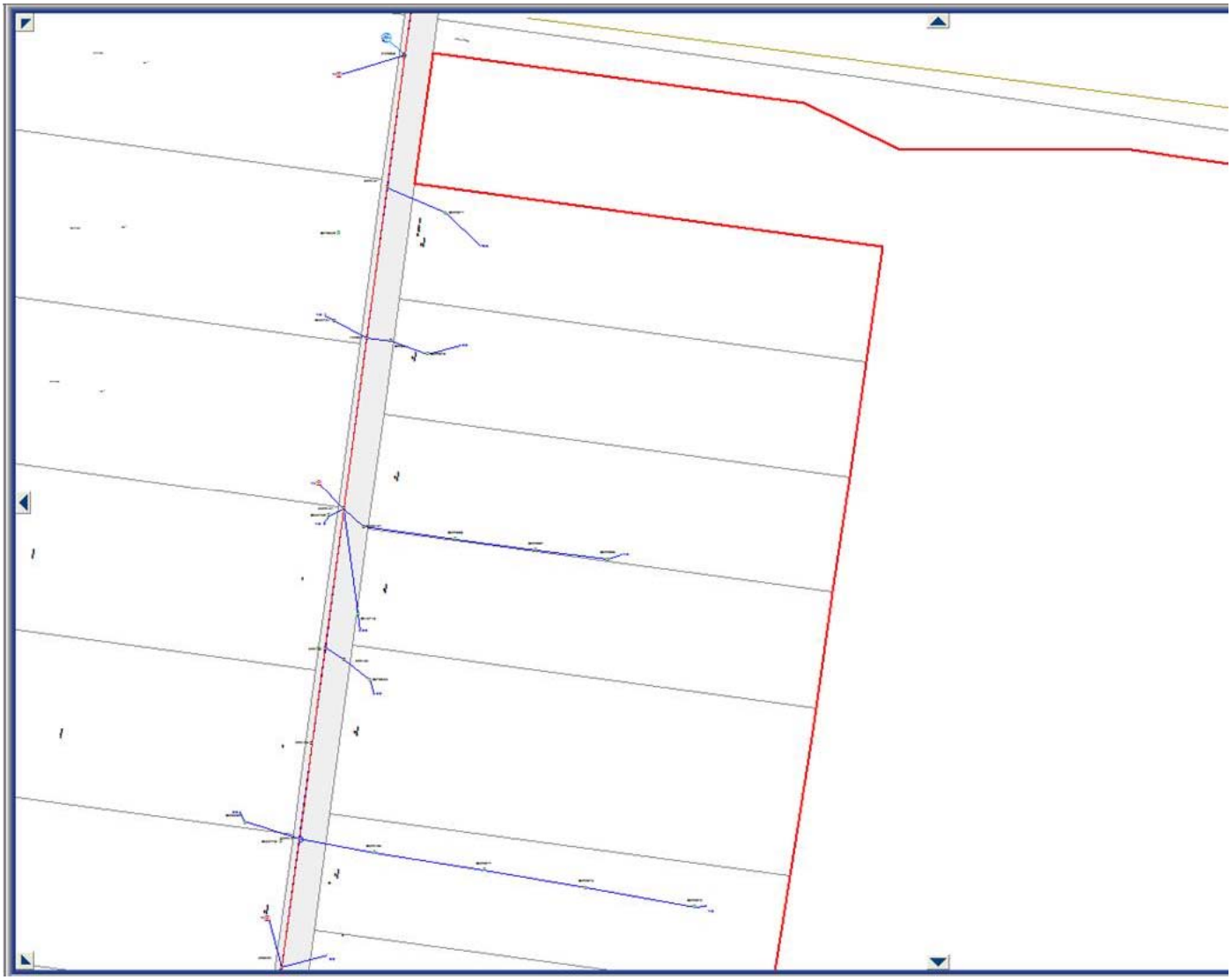
Could you please pass on a copy of this submission and the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal

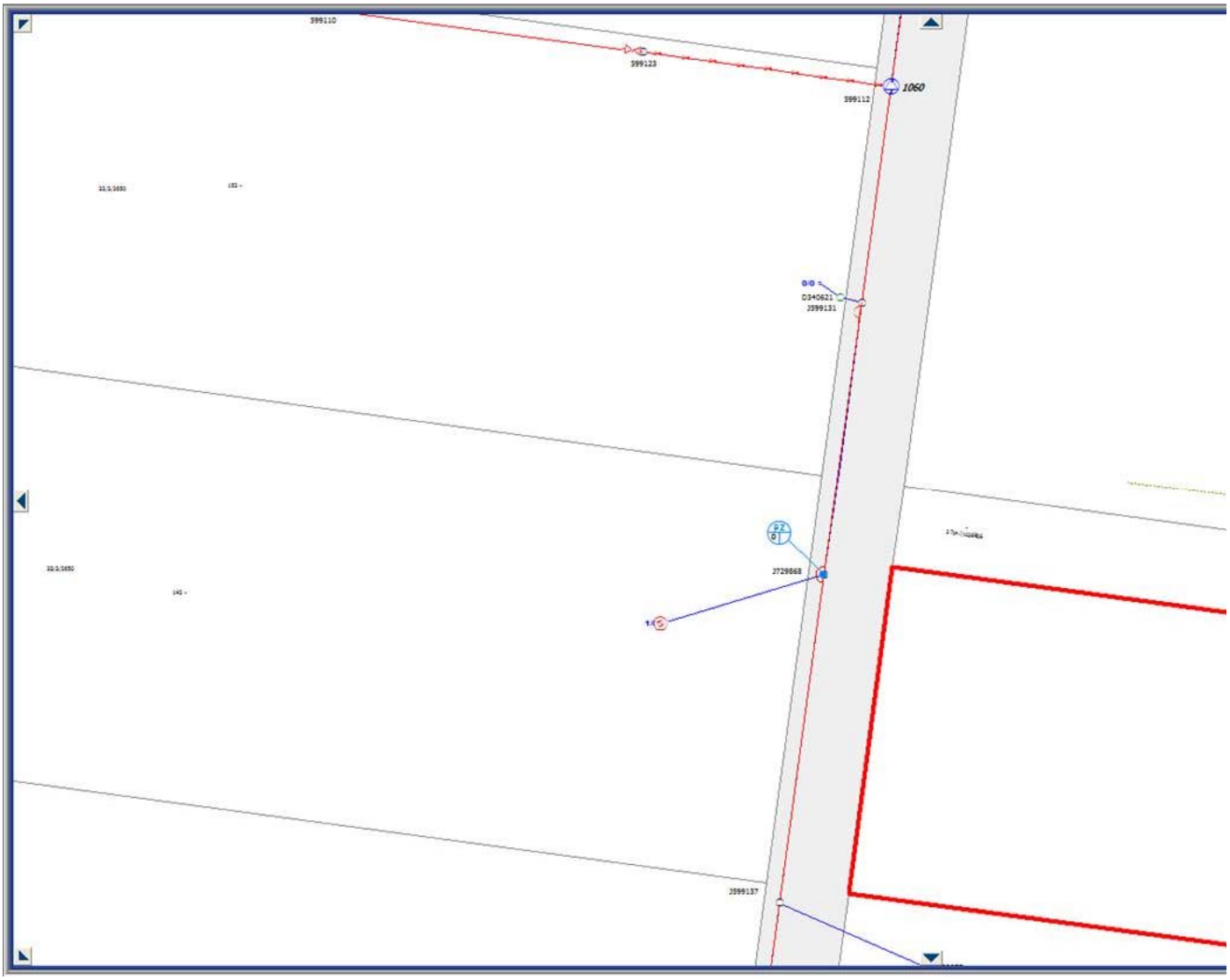
notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

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

Kind regards

Cornelis Duba
Development Application Specialist
Network Environment & Assessment
M: 0455 250 981
E: cornelis.duba@endeavourenergy.com.au
51 Huntingwood Drive, Huntingwood NSW 2148
www.endeavourenergy.com.au





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


215 Badgerys Creek Rd
Bringelly, New South Wales
Google
Street View
Google

23 August 2021

Pamela Morales **SW ref: 191553**
Principal Planner
Industry Assessments
Department of Planning, Industry and Environment
pamela.morales@planning.nsw.gov.au

RE: Sydney Water input to SEARs for SSD-25452459 First Building Bradfield City Centre at 215 Badgerys Creek Road, Bringelly

Thank you for seeking Sydney Water's input on the Secretary's Environmental Assessment Requirements for the abovementioned SSD which proposes development within Lot 10 DP 1235662. This application proposes an advanced manufacturing research and development facility, including site preparation, site access and parking, utilities infrastructure, landscaping and other ancillary works. The proposed building will have an approximate footprint of 2,500m^2 and internal area of approximately 2,000m^2 (GFA), a building height of approximately 18 metres above finished ground level and will include approximately 60 at-grade parking spaces. The total site area that is the subject of this SSD application, including the access road, is approximately 3 hectares.

We note that the total site, covering a total of 114.9ha sits predominantly within the Aerotropolis Precinct with some land within the Wianamatta-South Creek Precinct to which we have not yet received a masterplan for this proposed development. SSD-25452459 specifically relates to an area only within the Aerotropolis Core. Sydney Water is currently planning trunk infrastructure and the new Upper South Creek Advanced Water Recycling Centre to service demands across the Aerotropolis Precincts. We have reviewed the proposal and provide the following comments for your consideration.

Water and Wastewater Servicing

- Sydney Water currently has limited drinking water services and no existing wastewater services within the vicinity of this development. The site is however within Sydney Water's *Growth Servicing Plan 2020-2025* (Sydney Water Growth Servicing Plan) which shows the current planning status and anticipated timescales for trunk services.
- Attachment 2 shows anticipated trunk infrastructure for the Aerotropolis precinct and in particular regard to proximity to this development. These maps were issued in March 2021 and Sydney Water will be refining these services as more robust servicing intel is provided.
- **In order for Sydney Water to plan for timely services for this development, we require a proposed breakdown of the ultimate and annual growth numbers and this should be included within the feasibility application currently open under Case Number 191553. An example of the level of data we require is included in Attachment 1.** Sydney Water requires detailed domestic, industrial water and wastewater demands for the proposed development to accurately plan for interim and ultimate services for this development and the wider masterplan.
- Indicative stormwater, trade wastewater and water re-use quantities should be included within the EIS report where applicable.

- **It is recommended that the proponent engages a Water Servicing Coordinator to facilitate the feasibility discussions, and that meetings are held between the proponent and Sydney Water to ensure that Sydney Water's requirements inform all design processes.**

Interim Services

- Sydney Water is investigating accelerated and interim servicing options in line with developer interest in the area. To do this, we require both ultimate and annual demand projections.

Recycled Water

- Recycled water will be provided to service the Aerotropolis precinct, including Bradfield.
- The Proponents should demonstrate that provisions have been made within the development for connection to a recycled water supply. The development will be required to pay any relevant charges associated with the provision of a recycled water supply.

Stormwater

- Regional stormwater infrastructure is to be delivered in the Aerotropolis precinct and will service Bradfield. This infrastructure will be operated and maintained by a trunk drainage manager, to be nominated by the Minister for Water, Property and Housing.
- Development in the Aerotropolis must be appropriately integrated with regional stormwater infrastructure for the effective management of urban stormwater runoff at a catchment scale. All regional stormwater infrastructure and trunk drainage infrastructure is to be designed to the satisfaction of the trunk drainage manager. Proponents are required to demonstrate that satisfactory arrangements have been made for the transfer of regional stormwater infrastructure and trunk drainage lands to the trunk drainage manager upon completion of works.
- Development will be required to pay any relevant charges or contributions for the delivery and ongoing maintenance of this infrastructure.
- Sydney Water has prepared the Aerotropolis Integrated Water Management Strategy to establish the preferred water cycle management approach for the Aerotropolis. Proponents should reference this strategy when developing stormwater management measures. Development must demonstrate consistency with this strategy and provide evidence of compliance with NSW Government waterway health objectives for the Wianamatta-South Creek catchment.
- Proponents are instructed to request via their feasibility or a Notice of Anticipated Requirements from Sydney Water to obtain detailed requirements for trunk drainage and stormwater management.

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

Water-related Infrastructure Requirements

1. The proponent of the development should determine service demands following servicing investigations and demonstrate that satisfactory arrangements for drinking

water, wastewater, and recycled water services have been made. Please see Attachment 1 as a guide to complete.

2. The proponent must obtain endorsement and/or approval from Sydney Water to ensure that the proposed development does not adversely impact on any existing water, wastewater or stormwater main, or other Sydney Water asset, including any easement or property. When determining landscaping options, the proponent should take into account that certain tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided.
3. **Advice is sought from the Western Sydney Planning Partnership Office/DPIE to understand the alignment of this development with the Aerotropolis Planning Packages including the WSAP, Precinct Plans, SEPP and DCP.**
4. 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.
5. 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

6. 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.

Should you require any further information, please do not hesitate to contact the Growth Planning Team at urbangrowth@sydneywater.com.au. The proponent should contact their Account Manager, madeline.rincheval@sydneywater.com.au to discuss servicing data requirements.

Yours sincerely,

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

Attachment 1

Growth Data Information

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

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

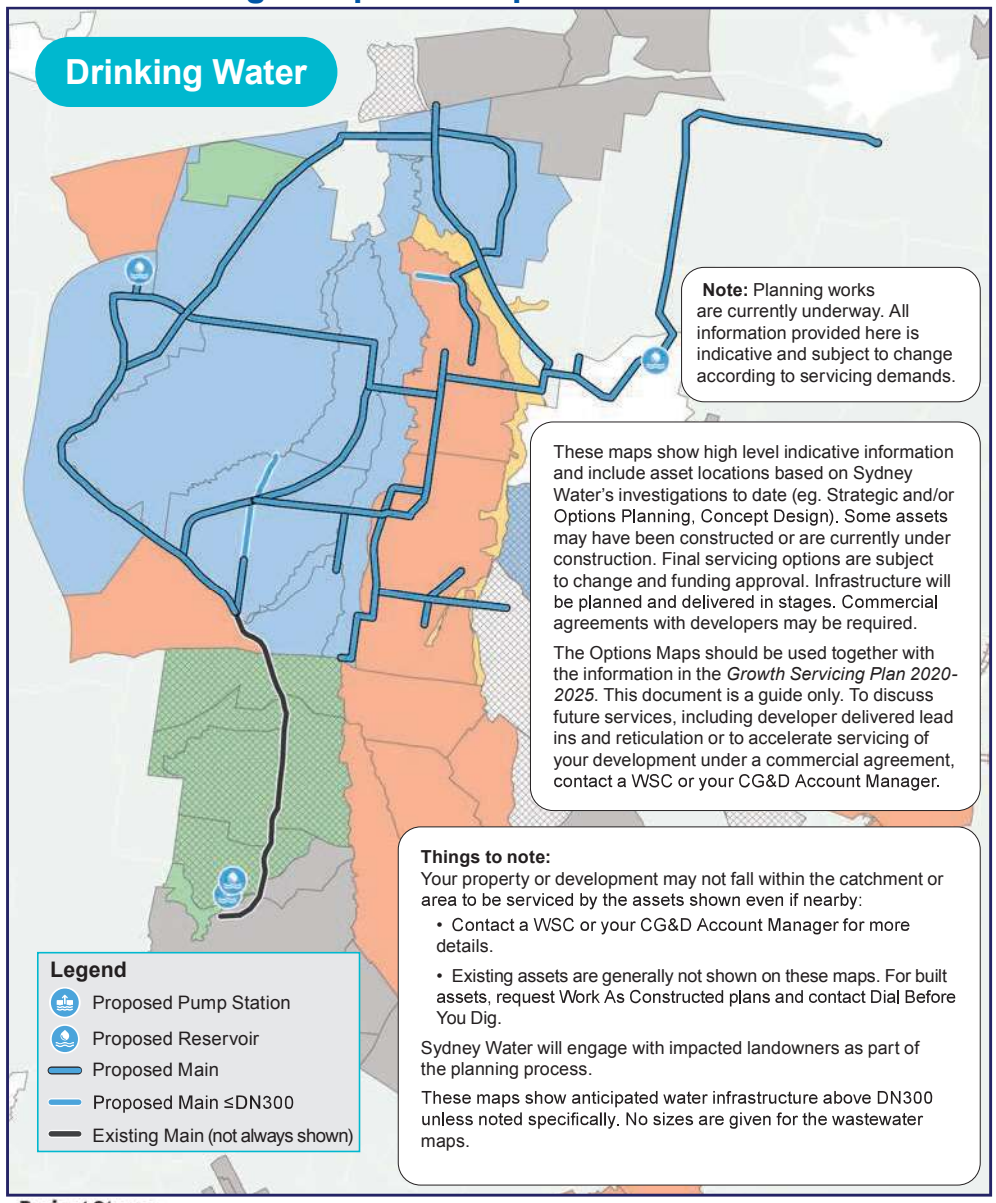
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Jobs Numbers										
OR: Jobs in GFA										
Plus: High water demand users (volumetric)										

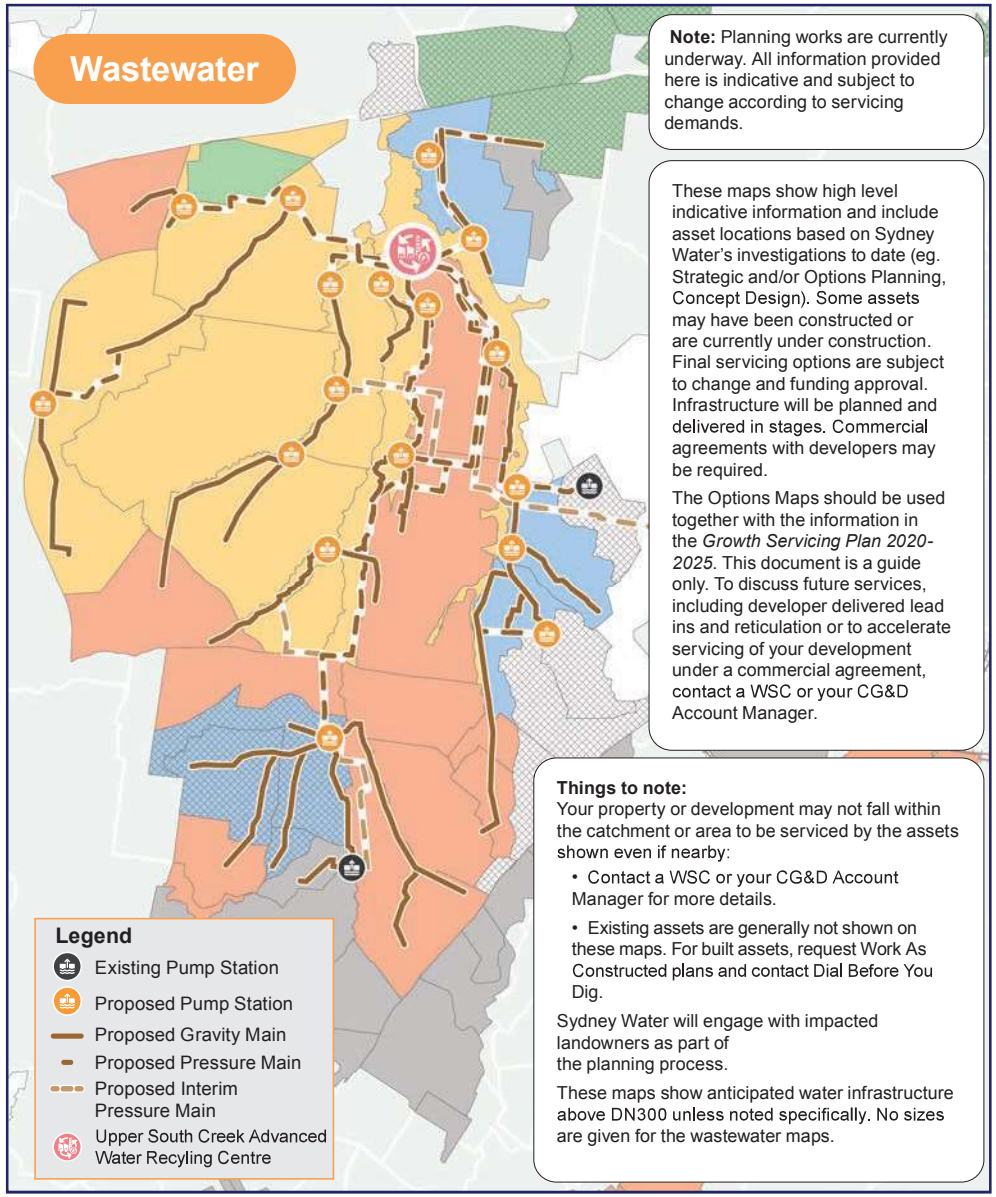
High water users
Insert details on any proposed high demand water users (data centres, food production etc)

Where there is more than one stage of a development, please complete a separate form for each.

South West Region Options Map

Accurate as at 10 March 2021





Project Stages

Strategic Planning → Option Planning → Concept Planning → Design & Deliver

Adequate existing trunk capacity | Limited existing trunk capacity | Growth precinct boundary

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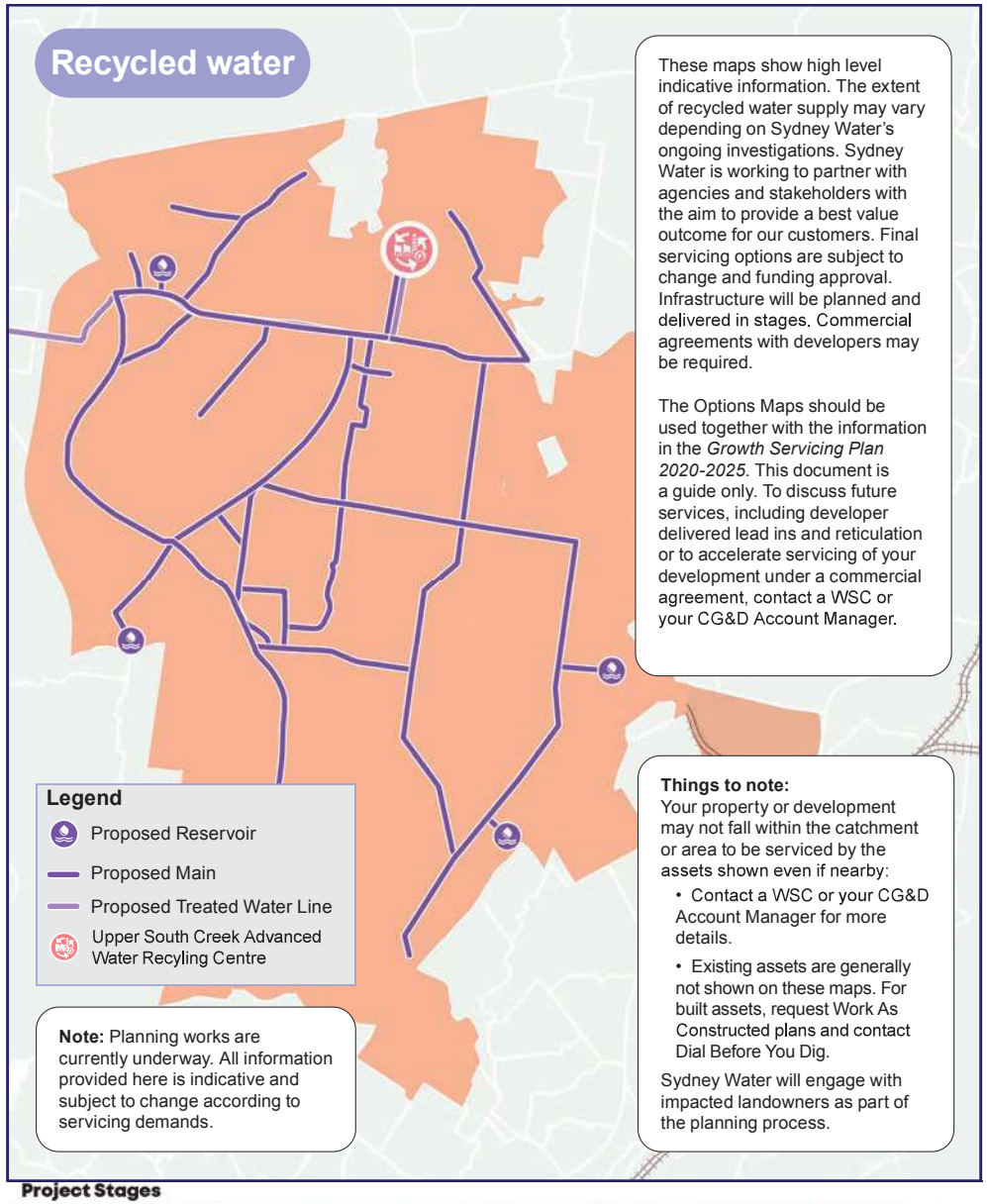

Project Stages

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Disclaimer: While Sydney Water has made every endeavour to provide information that is up to date, these Options Maps can be affected by many factors and are provided as a guidance only. Sydney Water makes no representation, warranty, undertaking or guarantee (express or implied) that the information in the Growth Servicing Plan (GSP) - Options Maps are accurate or reliable. Any use or reliance on these maps is taken at your own risk. To the extent permitted by law, in no event will Sydney Water be liable for any loss, cost, expense, claim, liability or damage arising from or in connection with the information provided in the GSP Options Maps.

Pamela Morales

Subject: RE: [SEC=OFFICIAL] RE: Request for Advice on SEARs - First Building Bradfield City Centre (SSD-25452459) (Liverpool City)

From: tsmith@wsaco.com.au <tsmith@wsaco.com.au>
Sent: Tuesday, 24 August 2021 2:01 PM
To: Pamela Morales <pamela.morales@planning.nsw.gov.au>
Cc: Kirk Osborne <kosborne@wsaco.com.au>; Deanne Frankel <dfrankel@wsaco.com.au>
Subject: RE: [SEC=OFFICIAL] RE: Request for Advice on SEARs - First Building Bradfield City Centre (SSD-25452459) (Liverpool City)

OFFICIAL

Hi Pamela,

Thank you for the opportunity to comment in relation to the application for the First Building Bradfield City Centre, located at 215 Badgerys Creek Road, Bringelly.

We understand that the proposal is for construction, fitout and use of the proposed First Building as an advanced manufacturing research and development facility, including site preparation works, site access and parking, utilities / infrastructure, landscaping / public domain, signage and other ancillary works.

Principally, we would seek to understand how this proposal relates to the Master Planning process being undertaken for the larger site, given that this development has been designed within a larger coordinated site context. Further information should be provided to this effect, so that a full assessment can be undertaken.

We note the following considerations which warrant review in any future State Significant Development Application:

Area	Comments
General Comments	As the *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020* applies to the site, an assessment must be undertaken against the objectives and provisions of the SEPP, with particular focus on Part 3 of the SEPP. An Aeronautical Impact Assessment may be required in relation to this application.
	Page 14 of the request identifies that this development application will be undertaken separately to the master planning process, however that a future Master Plan will incorporate the location of the first building. Further information regarding the relationship of this application to the forthcoming master plan would allow for a full assessment, particularly in relation to aviation safeguarding impacts which are of a cumulative nature.
Wildlife Hazards	Given that the site is within the 0-3km wildlife buffer under clause 21 of the Aerotropolis SEPP, consideration is to be given to the landscape species selected, to ensure that wildlife attraction risk is adequately addressed. Details on site wide landscaping / management are to be provided.
	Any proposed fill is to be detailed, noting fill needs to be non-putrescible.
	Waste Management measures are to be detailed, including measures to mitigate wildlife attraction (e.g. storage of waste indoors).
Lighting	The site is wholly situated in the 6km Lighting Intensity Radius area as prescribed by Clause 23 of the Aerotropolis SEPP. Any proposed lighting at the site is to be detailed, and demonstrated as acceptable in relation to potential aviation impacts.

Airspace Operation	The proposal will need to assess the development's potential impacts on the OLS, during construction and operation. It should be noted that the *Airports Act 1996* covers any intrusions into prescribed airspace, which could include: a. constructing permanent structures, such as buildings, into the protected airspace; b. temporary structures such as cranes protruding into the protected airspace; or c. activities causing non-structural intrusions into the protected airspace such as air turbulence from stacks or vents, smoke, dust, steam or other gases or particulate matter. If it is likely that any of the above components would result in an impact on protected airspace, then approval will need to be obtained in accordance with the *Airports Act 1996* and the *Airports (Protection of Airspace) Regulations 1996*.
Traffic	Construction traffic impacts is to 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, as well as other nearby landowner projects).
	Further information is to be provided regarding the proposed new roads connecting the site to Badgerys Creek Road and the Aerotropolis Core Metro Station, including any upgrades proposed to Badgerys Creek Road.

Tim

Tim Smith
Planning Manager
Airport Planning and Design

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OUT21/10839

Pamela Morales
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

pamela.morales@planning.nsw.gov.au

Dear Ms Morales

First Building Bradfield City Centre (SSD-25452459)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 10 August 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

The SEARS should include:

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

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

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

Yours sincerely

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

File ref. no: BFS21/2872
Doc. ref. no: D21/96705
Contact: Manager Infrastructure Liaison Unit

24 August 2021

Pamela Morales
Principal Planning Officer
Industry Assessments
Department of Planning, Industry and Environment

Dear Pamela,

Re: First Building Bradfield City Centre (SSD-25452459)
Request for agency input into SEARs

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

FRNSW have reviewed the scoping report for the First Building in Bradfield City Centre and advise that no comment or agency input will be provided at this time.

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

If you have any queries regarding the above, please contact the Fire Safety Infrastructure Liaison Unit, referencing the FRNSW file number BFS21/2872. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

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

Community Safety Directorate
Fire Safety Infrastructure Unit

Locked Bag 12,
Greenacre NSW 2190

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F 02 9742 7483

www.fire.nsw.gov.au

Regards,

Murray Mackne

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