Your ref: SSD -21342738
File no: MC-21-00003

18 November 2022

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

**Recipient Delivery: Patrick.Copas@planning.nsw.gov.au**

**Attention: Mr Patrick Copas**

Dear Sir

## SSD 21342738 - Eastern Creek Data Centre Expansion at 90 Peter Brock Drive, Eastern Creek

Thank you for your correspondence dated 7 October 2022 requesting our advice for the proposed data centre expansion at 90 Peter Brock Drive, Eastern Creek, which is a State Significant Development proposal under section 4.36 of the *Environmental Planning and Assessment Act 1979.*

The Environmental Impact Statement has been carefully reviewed by our officers and we object to the proposal on the basis of the issues listed in the attachment to this letter.

We request that the applicant comprehensively address these issues and a response to submission be sent back to Council for our further assessment and conditions.

If you would like to discuss this matter further, please contact Judith Portelli, our Manager Development Assessment, on 9839 6228.

Yours faithfully

Peter Conroy
Director City Planning and Development

# Blacktown Council's submission to SSD 21342738 - Eastern Creek Data Centre Expansion at 90 Peter Brock Drive, Eastern Creek

## 1. Planning issues

- There was a recent approval on the site for the partial demolition of the existing data centre and construction of an 8-storey extension with associated works (SPP-19-00009, approved by the Sydney Central City Planning Panel on 25 November 2020). The notice of determination and approved plans can be viewed on the Planning Portal. To date, the consent is yet to be activated pending the applicant's submission to Council in response to the deferred commencement conditions. The cumulative impacts of the approved and proposed developments has not been taken into account in this proposal and need to be taken into consideration by the applicant as well as the determining authority.

  In this regard, the applicant has not adequately demonstrated full and proper consideration conditions in the already issued Sydney Central City Planning Panel approval.

## 2. Drainage engineering issues

1. Please provide a survey for the site in Australian Height Datum (AHD) survey signed (certified) by a registered surveyor. The survey plan will need to show the origin and level of the bench mark used.
2. Engineering plans by Calibre (project no. 21-000038 dated 13 April 2022) are to be amended to include the following:
   i. All OceanGuards are to be clearly notated as "200 micron OceanGuards". Provide a pit schedule clearly identifying pits with and number of OceanGuards.
   ii. Provide a MUSIC catchment plan that shows both the land use and the areas contributing to each specific device. To make this more understandable it may be easier in many cases to split these into two separate plans. Include all bypassing catchments. Ensure that a minimum fraction impervious of 90% is adopted for land-use in the MUSIC model.
   iii. OceanGuards should treat a maximum of 1000 $m^2$ of non-roof areas and 1500$m^2$ of roof areas. All OceanGuards are to be clearly notated as "200 micron OceanGuards".
   iv. OceanGuards treating only surface flows require a minimum clear depth of 500 mm below the grate to any inlet or outlet pipe obvert. OceanGuards treating surface flows and upstream pipe flows require a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated, to the obvert of the outlet pipe. Where these pits are treating upstream pipe flows the inverts of all pipes in and out of the pit are to be shown.

v. Where OceanGuards are designed to treat upstream pipe flows, the invert levels on all pipes discharging to and from the pit are to be clearly shown. Provide a minimum clear depth of 500 mm from the invert of the upstream pipes to be treated to the outlet pipe obvert.

vi. All pits deeper than 1.2 m must provide step irons at 300 cts.

vii. The existing bioretention basin north of the site is proposed to be extended to treat the new Central Office. This existing basin more closely represents a swale and not a bioretention system. Swales as a water quality system modelled in Blacktown have limited pollutant removal capacity. In addition, a check on street view suggests the embankments have not been maintained and water will spill out and either discharge directly to the street or flow parallel to the swale. Consequently, the existing "basin" will need to be reconstructed entirely as a properly functioning bioretention basin that complies with the details in Council's WSUD Handbook. Alternatively, provide a new treatment system separate to the existing system.

viii. In addition to above, detailed investigation is required for the CDS unit upstream of the swale to ensure the GPT is operating efficiently.

ix. The rainwater tanks for the proposed developments for reuse (i.e. toilets, irrigation etc.) are not to be interconnected with the rainwater tank used for cooling the facility's units. Council's position is that the use of rainwater tanks for cooling purposes is not generally supported due to the risk of Legionnaires Disease.

x. The existing stormwater system onsite is proposed to be utilised to cater for portions of the developments. Provide details of all existing stormwater systems on the engineering plans. This includes existing pipes, pits, pipe sizes, pipe connections, GPTs etc. This is to ensure that the existing drainage system can cater for the additional flows from the proposed development.

xi. The internal pipe network is to be designed in accordance with the Council's Engineering Guide for Development 2005 to carry the 5% AEP (20 year ARI) storm flows.

xii. Consider tailwater conditions for all GPTs.

xiii. Drawing C2-01 (C):

    a) The rainwater tanks seem to be capturing roof water as well as stormwater. This is not accepted. Stormwater is not to drain into the rainwater tanks.

    b) Provide details and section of the rainwater tanks.

    c) The outlet to Pit D/4 is to be RCP.

    d) Provide details of the existing street Pit D/4 including levels, (i.e. surface, invert, level of connection etc).

e) Provide a hydraulic grade line analysis for the 1EY and 5% AEP events for the Stormfilter tank outlet discharging into the existing street pit. The false floor of the Stormfilter chambers are to be set at or above the 1EY level in this existing pit D/4 to ensure effective operation of the device.

f) Provide details of the OS0606 GPTs including sections and levels.

xiv. Drawing C2-12 (B):

a) The roof line from the proposed central office seems to be discharging into the stormwater line which eventually discharges into the rainwater tanks. This is not accepted. Stormwater is not to drain to the rainwater tanks. Please clarify. The design is to clearly distinguish between stormwater and roof pipes.

b) Pit 03/3 seems to be discharging into the existing drainage system however the long-section on drawing C4-01 (B) does not extend past Pit 03/2 and does not include the existing drainage system downstream. Provide details of the existing drainage system accordingly.

xv. Drawing C2-14 (C):

a) The 1% AEP flows from the site are to be directed to the OSD. Demonstrate how the surface flows in excess of the pipe capacity are directed to the OSD system.

b) Provide a rainwater tank for the substation to meet minimum of 80% of non-potable water demand. Non-potable demand includes all landscape watering together with all internal uses (i.e. toilet flushing) plus any site-specific uses such as truck washing. Landscaping plans by Studio IZ (issue B dated 4 August 2022) show landscaping surrounding the development. Refer also to Council's WSUD Developer Handbook 2020 Section 11.14 for reuse rates and design guidelines. Amend MUSIC model subsequently.

c) Provide details of the Humes STC2 including calculations, sections and levels to ensure efficient hydraulic capacity and effectiveness of the unit.

d) The outlet to existing pit S/6 is to be RCP.

xvi. Drawing C4-21 (B) and C4-37 (A):

a) The OSD calculation sheet is outdated and no longer used by Council. Please contact WSUD@blacktown.nsw.gov.au to obtain the latest version of the spreadsheet which includes options for a combined OSD and Stormfilter Cartridge system. Provide this spreadsheet electronically to Council for review.

b) The combined OSD and Stormfilter Tank is to be designed in accordance with Council's WSUD Standard Drawings A(BS)175M Sheet 22 of 25.

c) Provide energy dissipators for all inlets in the Stormfilter tanks.

d) Provide metal mosquito proof mesh welded over the access grate(s) into the Stormfilter Chamber. Ensure sufficient gap is provided around the locking area for lifting the grate.

e) Provide a sealed impermeable baffle, or hood set 250 mm upstream of the Stormfilter weir and extending from the sealed underside of the tank to 400 mm below the top of the weir for the 690 mm Stormfilter cartridge, to contain floatables including oil. The Stormfilter weir level is to be set 770 mm above the false floor. Show the baffle clearly on the drawings.

f) The minimum length of the Stormfilter weir is to be designed in accordance with Section 12.11 of Council's WSUD Developer Handbook 2020. Provide calculations of the weir length. Clearly show the weir and impermeable baffle on Plan View and Section 1 drawings on both sheets.

g) On "OSD TANK PLAN" and "SECTION 1", clearly show the 50% AEP and 1% AEP orifice with associated sizes and levels. Provide details for both orifice separately.

h) On Section 1 on both drawings:

1. Provide more levels including surface levels, false floor level, weir level etc.
2. Clearly show the impermeable baffles.
3. Show the energy dissipators for all inlets into the Stormfilter tanks.
4. Indicate the thickness of the false floor level.
5. Provide metal mosquito proof mesh welded over the access grate(s) into the Stormfilter Chamber.
6. Show the step irons at 300 cts and place notes accordingly.
7. Indicate the number and size of the proposed cartridges.

i) Ocean Protect has advised that the maximum storage permitted below the Stormfilter weir to ensure effective operation of the filter cartridges is limited to an equivalent volume derived from 2.0 mm of rainfall (20 $m^3$/Ha) without losses, falling over the site area that drains to the Stormfilter chamber (ignoring any bypass area).

xvii. MUSIC Model:

a) Inspect the existing GPT units on-site and verify the size, hydraulics, treatable flow rates and conditions of the units.

b) The proposed GPT units are to be designed in accordance with Council's WSUD Developer Handbook 2020.

c) Ensure that the entire development area is included in the model. This includes all bypassing catchments.

d) Ensure that the model includes minimum 90% imperviousness.

e) Provide a water quality catchment plan showing plan showing which areas drain to the existing and proposed water quality treatment system and what areas are bypassing treatment.

f) Provide calculations for the rainwater tank including the number of toilets proposed, irrigation areas etc.

3. Flood Impact Statement by Calibre (reference 21-000038 dated 31 March 2022):

   i. Amend the flood model to provide 0.5 m x 0.5 m grid to assess the flood levels and velocities.

   ii. Provide flood maps for the 1% AEP, 0.2% AEP and PMF events for the existing and proposed development conditions.

   iii. In addition to above, provide separate flood difference maps (developed – existing) for the storm events noted above. Include a 0 to 20 mm category with gradations below or above this figure.

   iv. Provide Velocity flood maps for the existing and developed conditions with velocity vectors.

   v. Allow for a maximum isolated rise in flood level of 0.02 m in the 1% AEP event as a result of the development.

   vi. Buildings within the floodplain surrounding the development are to be modelled as full obstructions or raised levels.

   vii. Provide Velocity x Depth (DV) flood maps for the existing and developed conditions.

   viii. The post-development DEM is to be included to accurately represent any proposed ground level changes (i.e. cut and fill areas) in the post development model. This includes fill for areas such as driveways, ramps, stairs etc

   ix. Provide a table in the flood report detailing the mannings ‘n’ values used for the flood model. Allow for a minimum Mannings n generally of 0.05 and a Mannings n of 0.025 for hard paved areas and roadways.

   x. Provide a map showing the TUFLOW model extent, inflow and outflow boundary locations.

   xi. Provide a catchment map showing the upstream catchment areas.

4. Provide the models (i.e., TUFLOW, DRAINS, MUSIC, XP-RAFTS etc) electronically to Council for review.

## 3. Open space maintenance comments

a. The street tree species nominated are to be changed to the existing street tree type in this area – Melaleuca linariifolia

b. A street tree planting details shall be submitted that shows the use of root barriers or root directors. Root barriers are discussed in the Specification Notes of the Landscape Plan. However, we would like a specific tree planting detail that shows the use.

c. An Arboricultural Impact Assessment shall be provided to identify which trees can be retained and protected and which tees will be removed. Unless the applicant can provide a valid reason why this is not required, we cannot provide advice on any existing prescribed tree to be removed.