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Your Ref: SSD 47601708

Catriona Shirley
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Department of Planning and Environment

Via Major Projects Portal

Dear Catriona

Sydney Flight Training Centre – SSD 47601708 – Advice on Environmental Impact Statement

Thank you for your correspondence dated 14 November 2022 inviting the City of Sydney Council (the City) to comment on the proposed development at 28-30 Burrows Road, St Peters. The application seeks consent for the following:

- Construction and operation of a flight training centre within a three-storey building that will comprise the following elements:
 - A flight training hall with eight bays housing flight simulators
 - Emergency procedures facilities
 - Ancillary classrooms, office space, meeting rooms, reception areas, loading docks, plant, and other amenities
- Two new access driveways to the site from Burrows Road
- Removal of eight trees (four street trees and four trees in the north-west corner of the site)
- Associated landscaping works, at-grade parking, and general site improvements
- Business identification and wayfinding signage
- Installation of a new stormwater outlet to Alexandra Canal

It is noted that the proposal includes a landscaped setback from Alexandra Canal generally in accordance with the City's Liveable Green Network controls. It is recommended that an easement for access be created over the setback area should DPE recommend approval. Conditions of consent securing this easement can be provided for your consideration.

City officers have reviewed the submitted Environmental Impact Statement (EIS) and accompanying documents and provide the following comments for your consideration:

1 Architectural quality of the proposed building and design excellence

Generally, the form and massing of the proposed building is acceptable, however, the presentation of the building to Alexandra Canal should be reconsidered in addition to the overall resolution of the building in terms of material relationships, colours, and patterning.

The current scheme presents as a 'front' facing building to Burrows Road while the design to the canal presents as the 'back of house'. The site is located within the

Southern Enterprise Area in the Sydney Development Control Plan 2012 and Alexandra Canal is noted as supporting the Liveable Green Network. The Liveable Green Network aims to create a pedestrian and cycling network that connects people with the city and village centres as well as major transport and entertainment hubs, cultural precincts, parks, and open spaces.

While it is acknowledged that the development provides a landscaped setback to the canal to support the future network, the overall resolution of the canal-facing frontage should be considered as important and exposed as the Burrows Road frontage and should not be designed with 'back of house' finishes. This frontage should be designed with a high degree of architectural resolution and appropriate materials and detailing that will appropriately address future public domain areas when viewed from either side of the canal.

Additionally, similar consideration should be given to the fencing along the landscaped area. A chain mesh or palisade fence is not supported. The submitted drawings have different descriptions, while neither is supported. The fence should be designed to provide security, but it must present as a carefully considered element that relates in scale, design, and materials and which complements the building and the canal. Consideration might be given to using a masonry material as a base with open fencing above.

In regard to the general architectural merit of the proposed building, it is recommended that the facades be rationalised to create a simpler form. Currently, the proposed patterning and changes in the colours of the metal sheeting detract from the strength of the overall design and destroy the potential simplicity of the massing. The following should be addressed:

- The northern elevation should be divided into three elements below the parapet. Two horizontal elements and the full height element at the western end. Two options could be considered:
 - One option is to have one level precast concrete base; the double level above with windows and solid panels and the full height glazed element at the western end.
 - Another option is to have a two-level precast concrete base with openings inserted for windows at the eastern end; a single level above with the band of windows and the full height glazed element at the western end.
- The contrast between the roller doors (Off White) and the walls (Dark Grey) on the south elevation is not supported.
- The eastern and western elevations require the removal of the strips of alternate colours and more careful resolution of how and where the materials change and meet.
- Elements such as:
 - The different coloured vertical strips of prefinished profiled metal sheeting on all elevations are not supported.
 - The dark panels that are randomly introduced and disrupt the overall continuity of the horizontal elements are not supported.
- The current drawings do not show accurate colours of materials. Colours are indicated as off white but are grey in the drawings. Because of the size of the building there needs to be a set of drawings that accurately represent the colours. The palette of dark grey and light grey with the off white provides too great a contrast when it is the same material. Given the size of the development a colour consultant's advice should be considered.

2 Impacts on street trees

The EIS has been accompanied by an Arboricultural Impact Assessment (AIA) report. The AIA notes 17 trees located within and immediately adjoining the site and has outlined that 10 trees will be subject to major encroachments and proposed for removal. The AIA outlines that none of the trees have a high retention value. However, four trees are council street trees, two are mature healthy Broad Leaved Paperbarks and should be of high retention value and prioritised for retention.

2.1 Tree removal – supported

- Tree 1 *Celtis sinensis* (Chinese Hackberry)
- Tree 3 & 11 *Eucalyptus scoparia* Street Trees (Wallangarra White Gum)
- Tree 12 *Allocasuarina littoralis* (Black SheOak)
- Tree 13 *Cupaniopsis anacardioides* (Tuckeroo)
- Tree 14 *Eucalyptus nicholii* (Narrow Leaved Peppermint)
- Tree 15 *Melia azedarach* (White Cedar)
- Tree 16 *Celtis sinensis* (Chinese Hackberry)

The City's Tree Management Team has no objections to the removal of Trees 1, 3, 11 and Trees 12-16. Trees 1 and 16 are environmental weeds and exempt under the City's DCP, Trees 3 and 11 are street trees in significant decline and low retention value and Trees 12-15 are located within the subject site and has a low retention value. All of these trees will be directly impacted by the proposed construction of the facility, demolition and vehicle crossover.

Replacement tree planting is proposed within the site and on the street reserve to compensate for the loss of amenity and canopy resulting from the removal of these trees. The tree species must be selected to provide maximum canopy cover for the street reserve and site, and adequate spacing must be taken into consideration to ensure successful establishment and growth of the new trees. This will provide sufficient canopy cover on this site and street.

2.2 Tree removal – not supported

- Trees 2 & 10 *Melaleuca quinquenervia* (Broad Leaved Paperbark)

The City does not support the removal of Trees 2 and 10 located on the street reserve within or adjacent to the proposed vehicle crossover. These trees are healthy community assets, have a high retention value and contribute to the canopy cover in the area. The removal of high retention value trees should be avoided wherever possible, particularly where their location does not substantially restrict development.

Design modifications of the vehicle crossovers are recommended to allow for the retention of trees 2 and 10. The AIA should also be updated to provide an assessment of the impact of these trees in line with of *Australian Standard 4970-2009 Protection of trees on development sites* and outline recommendation for tree sensitive construction adjacent to trees 2 and 10.

If design modifications of the vehicle crossovers are not possible, tree removal will only be considered if the existing above ground electricity cables are undergrounded (preferred) or changed to aerial bundled cable (as minimum) with additional street trees planted as part of the development work.

3 General site landscaping

See comments below in response to site landscaping, deep soil and canopy coverage.

3.1 Stormwater drainage plan

The submitted stormwater and landscape plans have not been coordinated. One new tree in the Alexandra Canal setback on the southwestern end of the site will be impacted by the proposed 525mm diameter stormwater pip within a 2m wide easement.

Coordination is required between the consulting engineer and landscape architect to resolve tree placement near the drain to ensure no net loss in urban canopy in the setback and amended plans are required.

3.2 Deep soil

Section 5.8.2.5.1 of the Sydney Development Control Plan 2012 (SDCP) requires the provision of deep soil to a minimum of 15% of a site where it is located in the IN1 General Industrial zones with a minimum dimension for deep soil planting is 3m in any direction. Deep soil planting is to be provided in the front building setback and external breakout spaces.

The subject site is 7,961sqm and a review of the submitted landscape plans indicates that deep soil located in the 3 metre setback to Burrows Road that is partially impeded by vertical sun shade screens that overhang, and a 10 metre wide landscape setback to Alexandra Canal is impeded by a stormwater pipe in a 2 metre wide easement on the south western corner of the site (refer to discussion above).

The deep soil plan submitted with the landscape plans states 1473.55sqm deep soil zones or 18.5% of the total site. However, this plan contains errors and requires amendment. It is recommended the following coordination with the consulting engineer regarding drainage design, a review of the deep soil areas be provided that removes all areas less than 3m wide, as per SDCP requirements.

3.3 Landscape design and the liveable green network

A 10 metre landscape setback required by Clause 6.28 of the Sydney Local Environmental Plan 2012 and Section 5.8.3.3 of the SDCP to accommodate a future liveable green network with tree planting, increased biodiversity, habitat, and for a future pedestrian and cycle path. Further, SDCP Clause 4.2.3.5 requires landscaping include plant species local to the Sydney region, that are compatible with the flood risk. For example, dense planting is not to be located in a flow path, the use of water permeable paving for low traffic and pedestrian areas and include water efficient irrigation systems installed below mulch level. A review of shrub and groundcover planting design within the canal setback should be undertaken to ensure that the layout and species are compatible with the flood risk.

The landscape intent is to enhance the appearance of the building and car parking areas without creating opportunities for concealment, clearly delineate paved surfaces of different uses including pedestrian areas, car parking spaces and driveways, and create attractive views to and from the public domain and help reduce the visual bulk and scale of the development.

A review of the submitted supporting documents shows that proposed landscaping of the site is split into three categories: entry, setback, and 'parkland' planting in the 10m setback to the canal. The plant schedule does not include the mature height and spread of the proposed trees and should be amended to include these details. While 44 new trees are proposed using 9 tree species, 3 trees are large sized trees, 2 trees are medium sized, and 1 is a grass species and should be excluded from tree canopy calculations.

3.4 Canal edge

Landscape sections have been drawn incorrectly showing a steeply racked canal edge with approximately half of the 3m future bike path shown in mid-air (landscape section B-B dwg H8-22034-L07[E]). The City's understanding is that the heritage brick wall is slightly angled construction. Further the SDCP controls for the liveable green network is based upon the same and 10 metres from the top edge of the canal, not the toe and the setback measurement should be taken from the top edge of the wall.

3.5 Planting in car parking areas

The planting of trees within the car parking spaces is also recommended to reduce the heat impacts generated by the large hardstand area and spread canopy cover over the site. Section 3.5.2(7) of the Sydney Development Control Plan 2012 provides further recommendations for planting within ground level parking areas.

4 Upgrading of the public domain

No public domain upgrade is shown on the submitted architectural or landscape plans, except for the two new driveways. Due to the size of the proposed development, a public domain frontage upgrade with a new concrete footway and grass verge is required to be incorporated into the development and is to meet the City's standards.

5 Stormwater and flooding

See comments below regarding stormwater and flooding.

5.1 Levels and gradients

Public Domain Levels and Gradients are to be submitted for review and approval with the application. The proposed levels FFL 3.70 +/- 500mm is not acceptable. Evidence must be provided that public domain levels and gradients work with proposed floor levels, entrances and driveways (minimum requirement cross sections through driveways & entrances).

The submission is also to include cross sections through driveways (taken from a minimum of 2.0m within the property to centreline of the road carriageway) to demonstrate compliance with the City's standards and specifications (refer to the Sydney Streets Technical Specifications) and AS/NZS2890.1. regarding transition and ground clearance.

The proposed driveway shall be resized (max 6.0 m) to respond to Swept path diagram and location shall be adjusted to show driveway is within the subject frontage. Cross sections through building entrances are to be taken from inside the building for a minimum of 2.0m to the kerb invert. Existing and proposed boundary levels, top of kerb levels and invert of gutter levels are to be clearly shown.

Longitudinal sections showing existing and proposed boundary levels, top of kerb levels and invert of gutter levels on the same longitudinal section are also required along the front boundary and Flood Planning Level “FPL” must be indicated on the sections.

The submission is to demonstrate that public domain levels and gradients will be reconstructed and that proposed floor levels, particularly at building entrances and driveways have taken into consideration finished public domain levels. Any level changes required to satisfy DDA and flood planning requirements are to be resolved within the property boundary.

5.2 Relocation of Council’s pipeline

It is requested that the applicant confirm that the relocated pipe is outside the zone of influence for all structures on either side (including on neighbouring site). Confirmation is also sought regarding how the existing pits on the north side of Burrows Road will be connected to the diverted pipe. According to City records, they do not connect to the existing pits on the south side of the road.

Identified ground water shall be indicated on the longitudinal section to demonstrate compliance with City’s requirements. The design must address Council’s requirements regarding remediated land within the drainage easement.

5.3 Stormwater Quality Assessment

A certificate and/or report from MUSIC-link and the electronic copy of the MUSIC Model must be submitted for review and approval with the stormwater quality assessment report. The City has adopted MUSIC-link for assessing Water Sensitive Urban Design compliance for developments. A stormwater quality assessment for the proposed development must comply with the City’s specific modelling parameters as adopted in MUSIC-link.

The proposal shall include a catchment plan that is in line with the proposed landscape plan. Stormwater quality assessment report shall be prepared by a suitably qualified practicing civil engineer (NER) and engineer’s details must be included in the MUSIC Link Report. The report comments must include reason for any failed parameters.

5.4 Stormwater drainage concept design

Drainage plans must include a diagram for Zone of Influence of the new DN 525 RCP (scaled detail shall include existing and the proposed footings, all relevant dimensions, and levels). The drainage pipeline system shall be designed to take traffic loadings of heavy maintenance vehicles such as trucks and fully loaded buses and certified by suitable qualified and experienced civil engineer. Access covers shall be per City’s standards and specifications (minimum strength Class D). The pipe shall be class “4” RCP.

5.5 Flood assessment

It is noted that the assessment uses a very localised flood model created for this project. This method is unlikely to be sufficiently detailed to fully represent flood behaviour at the site as it does not represent the rise in water level in Alexandra Canal due to upstream catchment runoff or the potential for overland flow from areas outside the direct catchment to flow to the site in rarer storm events.

The definition of the existing upstream catchment does also not appear to be appropriate for 1% AEP and PMF events (as a minimum, rainfall exceeding the capacity of the drainage system of the M5 operations centre site is likely to flow in part to Burrows Road and not the northern water quality basin).

The flood report also uses excerpts from the M5 interchange EIS flood modelling figures to verify that their localised model is appropriate. The M5 flood model was created using a different approach and for a different purpose than Council's flood model and gives different 1% AEP results in the vicinity of the site for the same pre-M5 interchange scenario.

It is requested that the applicant provide more information to support their flood assessment. This could include a comparison of M5 flood model results to Council flood model results (using results files in GIS) to demonstrate consistency between the models, more detailed figures (using GIS results) from the M5 flood model showing conditions at the site, and additional details showing finished levels around the M5 St Peters Interchange to justify their definition of catchment extents and choice of model extents.

6 Driveway widths

Both vehicle crossovers from Burrows Road appear to be around 15m wide. This is considered excessive given the largest vehicle to be regularly using the property is the 7.7m minibus. Further, the swept paths of the 12.5m fire truck show that a 15m width is not required. Although the wide driveway allows vehicles to enter the site faster than they would otherwise, it is an undesirable outcome for pedestrians walking along Burrows Road. Crossover widths should be reduced to no more than 6m and swept paths be reviewed to ensure driveways do not cause ongoing damage to Council assets.

Further, the proposed two new single direction driveways shown on plans are not supported as they do not meet the City's Standards and Technical Specification requirements due to their proposed location, outline, and width. The driveways should not extend over the site's Road Reserve frontage, in particular the driveway on southern boundary needs to be setback away from site boundary to allow for wing to be located within site frontage, as currently is encroaching on neighbouring property's road reserve frontage.

Additionally, it is recommended that the driveway locations are repositioned so healthy existing street trees are not removed (refer to Section 2 above) and options for utilising existing space in the grass verge provided by three existing vehicular crossovers is investigated.

7 Car parking, bicycle parking and location of end of journey facilities

See below for comments regarding car parking, bicycle parking and end of journey facilities.

7.1 Car parking

The submitted EIS notes that most visitors to the site will be using a shuttle bus service to access the facility. Given this access arrangement, the proposed 35 car parking spaces seems excessive for the 25-32 staff expected to be on site at any one time.

Car parking design should also incorporate motorcycle parking (1 per 12 car spaces) and accessible parking (1 per 20 car spaces or part thereof) as per the SDGP.

7.2 Bicycle parking and end of journey facilities

While the provision of 24 bicycle spaces is acceptable, the submitted architectural drawings do not identify bicycle parking locations. These should be on the ground floor, ramp accessible and close to end of journey facilities. The bicycle parking spaces should be designed as Class 2 storage (secure room/cage) and managed in a way that flight crew and employees are both able to access it.

Additionally, the submitted Transport Study does not specify if any visitor bike parking is to be provided. A small quantity of Class 3 (U rails) should be provided close to the public entrance, as per SDCP guidance.

It is noted that the submitted architectural drawings indicate 24 showers and 3 lockers are provided for end of journey facilities. This is supported.

8 Waste management

The site has adequate storage for the facility as required per the relevant Council guidelines and no design changes are required to accommodate waste generation and collection. Further, the operational waste management plan provided is supported and provides adequate detail for this assessment.

It is requested, however, that a construction and demolition waste management plan is prepared for consideration. The construction and demolition waste and recycling management plan should address the following:

- details regarding how waste is to be minimised within a development during demolition, construction and occupation of quantities and types of materials to be reused or left over for removal from the site;
- details regarding the types of waste and likely quantities of waste to be produced;
- a site plan showing storage areas away from public access for reusable materials and recyclables during demolition and construction; and
- measures to reuse or recycle at least 80% of construction and demolition waste, either on site or diverted for reuse and recycling with receipts sufficient to demonstrate the target will be achieved.

The City requests input on any conditions of consent, should DPE recommend approval for the proposed development.

Should you wish to speak with a Council officer about the above, please contact Marie Burge, A/Area Planning Manager, on 9265 9333 or at mburge@cityofsydney.nsw.gov.au

Yours sincerely,



ANDREW REES

Area Planning Manager

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