



Helipad Penrith Lakes

Construction and operation of a helipad
Part 4 Designated Development Assessment
DA21/15298

June 2022



Published by the NSW Department of Planning and Environment

www.dpie.nsw.gov.au

Title: Helipad Penrith Lakes

Subtitle: Part 4 Designated Development Assessment (DA21/15298)

Cover image: Applicant's previous facility at Granville (Statement of Environmental Effects Nov 2021 by Urbis)

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Glossary

Abbreviation	Definition
Applicant	Heliport Developers Pty Ltd
PLDC	Penrith Lakes Development Corporation Ltd
Council	Penrith City Council
Department	Department of Planning and Environment
DA	Development Application
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
Minister	Minister for Planning
Western Parkland City SEPP	<i>State Environmental Planning Policy (Precincts – Western Parkland City) 2021</i>
Planning Secretary	Secretary of the Department of Planning and Environment

Executive Summary

Urbis, on behalf of Heliport Developers Pty Ltd (the Applicant), is seeking approval for the construction and operation of a helipad facility, including:

- 25 helicopter flights per day between the hours of 5:30am and 10:00pm with operation above this number of flights and outside these hours when undertaking emergency services works (if required)
- demolition of two single storey sheds and integrated hardstand, extending beyond the footprint of the sheds
- new lighting as required for the Final Approach and Take Off (FATO)
- installation of a Jet A1 (Avtur) fuel storage tank.

The application has been amended after public exhibition to reduce the scope of built works and reflect unauthorised works that had been completed on the site by the applicant.

The site is located at Lot 2 DP 1013504 and located at 100 Old Castlereagh Road, Castlereagh, within the Penrith Lakes Scheme. The Scheme has a total area of 1,935 hectares and is located approximately 60 km north-west of the Sydney Central Business District (CBD), 30 km north-west of the Parramatta CBD and 3 km north of the Penrith CBD, in the Penrith local government area. The proposed works and operation of the site is limited to an area of approximately 2.02 hectares within the broader 11.26ha of the total site area.

The proposal is designated development under Schedule 3 of the Environmental Planning and Assessment Regulation 2021. It is also integrated development under section 4.46 of the *Environmental Planning and Assessment Act 1979* as the proposal requires an Environment Protection Licence under the *Protection of the Environment Operations Act 1997* from the NSW Environment Protection Authority (EPA). The EPA has provided its General Terms of Approval (see **Appendix F**).

Community engagement

The application and accompanying documents were exhibited for 49 days between 5 November 2021 and 14 January 2022.

The Department received a total of 241 submissions and advice from eight NSW Government agencies during the exhibition period. Two submissions were received from councils (Penrith City Council (providing comment) and Blue Mountains City Council (objecting)), 220 submissions from community members and 19 submissions from organisations. 200 submissions objected to the proposal, 33 supported it and eight submissions provided comments.

The key issues raised in submissions are land use and permissibility, aviation regulations, site selection and flight paths, noise and vibration impacts, biodiversity, Aboriginal cultural heritage and flooding and hydrology. The Department also received submissions on other issues, which are considered in the assessment. Of the key issues, the most prominent are land use and permissibility, aviation regulations, site selection and flight paths, and noise and vibration.

Land use and permissibility

The Department has considered whether this application should be characterised as a “helipad” or “heliport”; a “helipad” is permissible with consent, a “heliport” is prohibited. The Department considers the critical issue when categorising a facility as a “helipad” is whether it is open to the public. The Applicant has demonstrated the facility would not be open to the public and the Department notes proposed measures to physically restrict the public from accessing the site once it is operational. The Department is therefore satisfied the proposal can be characterised as a helipad and is therefore permissible with consent, subject to restricting public access.

Aviation regulations, site selection and flight paths

The Applicant’s airspace assessment considered potential impacts on the safety and operations of Western Sydney Airport (WSA) and the Royal Australian Air Force (RAAF) Richmond Base. The Applicant selected the Penrith Lakes site because it is not impacted by the limitations imposed by those airports’ airspace requirements. Flight paths will be to the east or west of the helipad, and curve to the south at a distance of 3,500 metres, and provide sufficient clearance from drone operations at the Sydney International Regatta Centre (SIRC). The Department notes proposed flight paths have considered the surrounding residential, commercial and recreational land uses, and would not interrupt or disrupt existing flights at the RAAF Richmond or future WSA, SIRC’s use for sporting events, or community recreation. The Department is satisfied the proposed flight paths would not have adverse impacts to surrounding land uses.

Noise and vibration

The Department considered operational noise and vibration impacts of the proposed helipad and notes noise impacts were the most frequently raised issue in public submissions. The Department engaged an independent acoustic consultant (Rob Bullen Consulting) to assist with its assessment.

The Department used a noise level of 48 dB(A)_{L_{Aeq} 24 hour} as the criterion for acceptable impacts on residential receivers, in the absence of NSW policy or Australian Standards that set specific criteria for helicopter noise. This is consistent with the Department’s independent acoustic advice and corresponds to the Australian Noise Exposure Forecast (ANEF) 13 criterion for receivers newly impacted by aircraft noise, as accepted by the Land and Environment Court in recent hearings related to helipads.

The Applicant revised its acoustic assessment to consider the 48 dB(A)_{L_{Aeq} 24 hour} criterion and respond to the Department’s and the EPA’s preliminary review of this assessment. The revised assessment also includes the results of further acoustic testing of helicopter operations that was attended, and its results verified by Departmental staff and its acoustic consultant. The revised assessment concludes that based on the proposed number of daily flights, the nearest residential property, 450 metres to the east of the site, would experience a noise level of 46 dB(A). The nearest residential zoned land, 1300m to the east, would experience a noise level of 40 dB(A).

To ensure compliance with this criterion during operation, the Department has recommended conditions to ensure the helipad operation is monitored by a suitably qualified acoustic consultant so that the noise criterion is not exceeded and surrounding residential and commercial receivers are not adversely impacted.

Contents

1	Introduction	1
1.1	Introduction	1
1.2	Subject site	1
1.3	Penrith Lakes Scheme	2
1.4	Site history	2
2	Proposal Description	3
2.1	Description of proposed development	3
3	Statutory Context	6
3.1	Consent authority	6
3.2	Designated development	6
3.3	Integrated development	6
3.4	Permissibility	6
3.5	Mandatory Matters for Consideration	6
4	Engagement	11
4.1	Department’s engagement	11
4.2	Summary of submissions	11
4.3	Key issues raised in Government agency advice	12
4.4	Key issues raised in submissions – Local Council	13
4.5	Key issues raised in submissions – community and special interest groups / organisations	13
5	Assessment	17
5.1	Assessment of key issues	17
5.2	Statutory compliance	17
5.3	Aviation regulations, site selection and flight paths	20
5.4	Noise and vibration	23
5.5	Biodiversity	31
5.6	Aboriginal cultural heritage	33
5.7	Flooding and hydrology	34
5.8	Other issues	36
6	Evaluation	45
	Appendices	46
	Appendix A – List of Documents	46
	Appendix B – Consideration of Community Views	47
	Appendix C – Statutory Considerations	52
	Appendix D – Consideration of the <i>Penrith Lakes Development Control Plan 2021</i>	59
	Appendix E – Recommended Development Consent	107

Appendix F – General Terms of Approval	108
Appendix G – Independent Acoustic Expert Report.....	109

1 Introduction

1.1 Introduction

1. This report provides an assessment of a Development Application (DA21/15298) lodged by Urbis Pty Ltd (Urbis) on behalf of Heliport Developers Pty Ltd (the Applicant) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).
2. The application seeks approval for the construction and operation of a helipad facility, including:
 - maximum of 25 flights per day between the hours of 5:30am and 10:00pm, with operation above this number of flights and outside these hours if required when undertaking emergency services works
 - demolition of two single storey sheds and integrated hardstand extending beyond the footprint of the sheds
 - new lighting as required for Final Approach and Take Off (FATO) and
 - installation of small Jet A1 (Avtur) fuel storage tank.

1.2 Subject site

3. The site is legally identified as Lot 2 DP 1013504, located at 100 Old Castlereagh Road, Castlereagh, within the Penrith Lakes Scheme (**Figure 1** and **Figure 2**) (note some mapping software identifies the street address as 89-151 Old Castlereagh Road). The site is located approximately 60 km north-west of the Sydney Central Business District (CBD), 30 km north-west of the Parramatta CBD and 3 km north of the Penrith CBD, in the Penrith local government area.
4. The Penrith Lakes Scheme has a total area of 1,935 hectares with a length of 6.8km along its north-south axis and a width of 3.5km. The subject site is surrounded by two rural residential properties to the east, the Sydney International Regatta Centre to the north, employment zoned land to the south which has been approved for subdivision and earthworks of the future Nepean Business Park, and the Penrith Motorcycle Rider Training Centre to the west. An approximately 630m frontage along Old Castlereagh Road provides access to the site.



Figure 1 | Subject site outlined in red (Source: EIS)

1.3 Penrith Lakes Scheme

5. The Penrith Lakes Scheme (the Scheme) is a 30-year quarrying and rehabilitation proposal being undertaken by the Penrith Lakes Development Corporation (PLDC) in accordance with a Deed of Agreement, dated 11 August 1987 (amended 14 August 1989), with the NSW Government.
6. The Scheme is located within the Nepean River floodplain. It is being transformed from a sand and gravel quarry into a water-oriented recreation park, with land suitable for rural, tourism and employment uses. Quarrying activities on the site ceased in September 2015. Since then, PLDC has been progressively rehabilitating the site.
7. Development on the Penrith Lakes site is governed by State Environmental Planning Policy (Penrith Lakes Scheme) 1989 (Penrith Lakes SEPP). The Penrith Lakes Scheme comprises approximately 80 ha of waterways, 110 ha of parklands, 118 ha of environmental area, 33 ha of employment area and 52 ha of tourism area, and 1,330 ha of unzoned land subject to future land use planning, following the completion of flood investigations and community consultation.

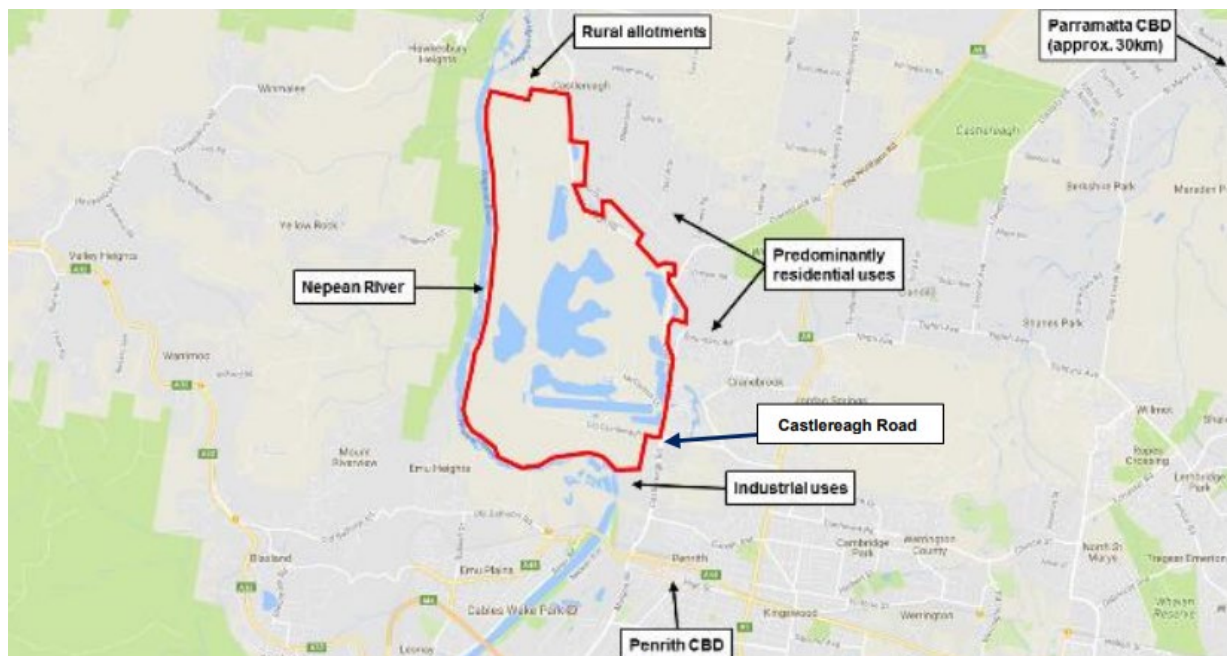


Figure 2 | Penrith Lakes Scheme boundary outlined in red (Source: Nearmap, 2021)

1.4 Site history

8. The site was used for farmland until 1961, when it was acquired by River Sand and Gravel Pty Limited and used for alluvial sand and gravel quarrying. In 1989, the site was acquired by Penrith Lakes Development Corporation (PLDC) and developed into its current commercial/ light industrial land use. It was most recently used as the head office of the PLDC. This use ceased upon purchase by the current owner (the Applicant).

2 Proposal Description

2.1 Description of proposed development

9. The application seeks approval for the construction of a helipad facility including:
 - removal of 12 trees
 - new lighting as required for the Final Approach and Take Off (FATO)
 - installation of small Jet A1 (Avtur) fuel storage tank.
10. A large shed on the site that was formerly used by the Penrith Lakes Development Corporation for machinery storage will be reused as a hangar.
11. The proposed works and operation of the site is limited to an area of approximately 2.02 hectares within the 11.26ha of the total site area. The existing site plan is shown in Figure 3.
12. The application also seeks approval for the operation of the helipad facility, including:
 - maximum of 25 flights per day between the hours of 5:30am and 10:00pm, with operation above this number of flights and outside these hours if required when undertaking emergency services works
 - a 30-metre-wide managed safety zone (during helicopter landing and take-off only) measured from the edge of the FATO area will be implemented during take-off and landing movements. The safety zone will be managed by appropriately qualified staff and will not apply when no helicopters are arriving at or departing the site. The helipad has no public access at all times
 - use by small to medium turbine engine helicopters, limited to the following helicopter types:
 - AS350 squirrel helicopter
 - Bell 206
 - Bell 407
 - AW139, Bell 412, Bell 429 (emergency services helicopters).

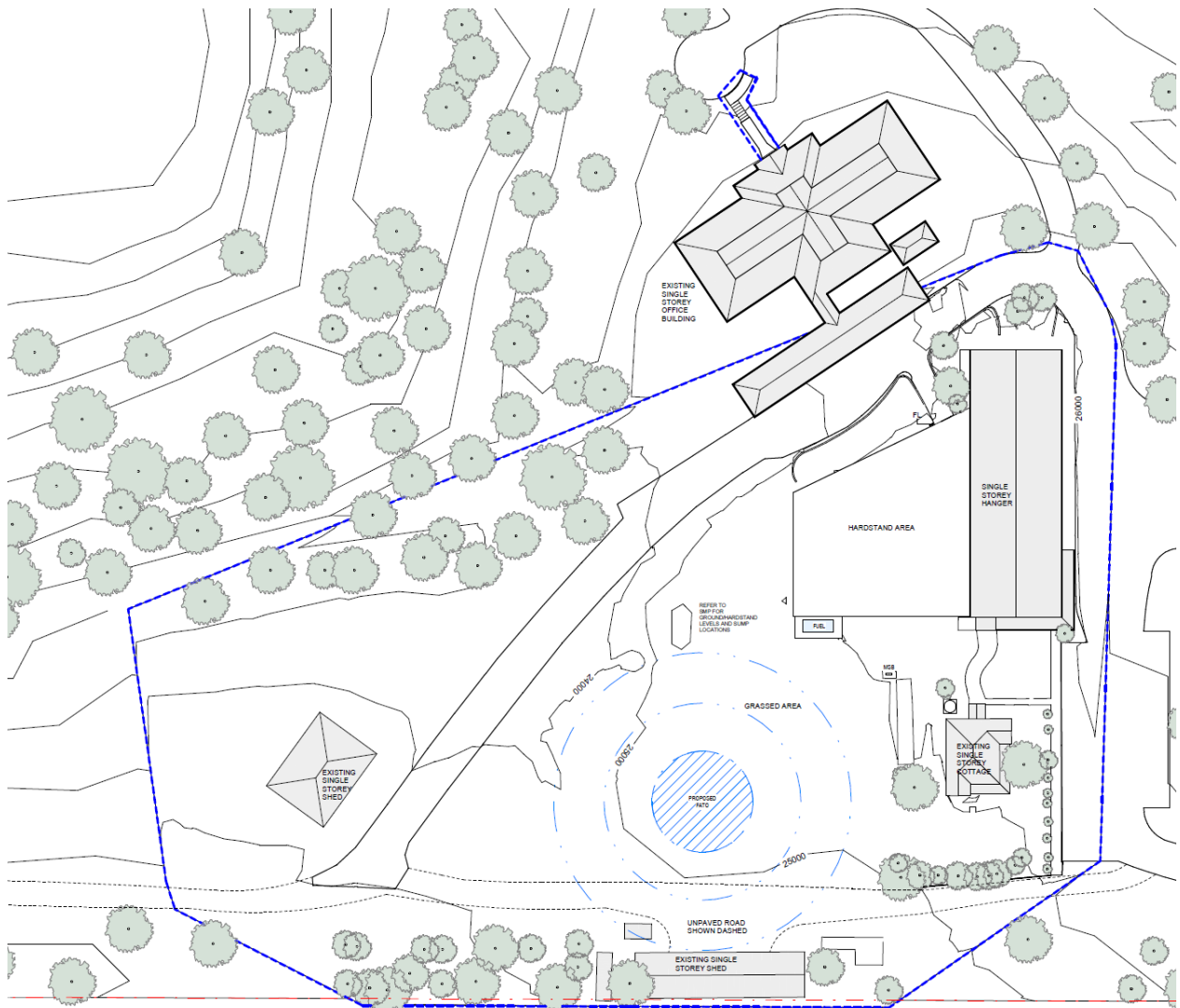


Figure 3 | Proposed site plan (Source: Applicant's revised architectural plans)

13. The Applicant advised the Department on 21 April 2022 that several of the initially proposed building works had been completed without development consent and requested that the development application be amended to exclude those works, as consent cannot be provided retrospectively. The Applicant undertook those works to provide a weatherproof location to store their helicopters, having lost access to their previous location at Granville, which was acquired to construct the Sydney Metro West proposal.
14. The amendment request sought to delete the following works from the application:
 - demolition of two single storey sheds and integrated hardstand extending beyond the footprint of the sheds
 - demolition of one small single storey shed and associated pavement
 - removal of one inground water tank
 - removal of one flood light
 - new concrete hard stand.
15. The Applicant provided engineering certification to confirm that the unauthorised works were construction in accordance with relevant engineering specifications.

16. The Department accepts the amended request as it will allow the application to be considered and determined. The application must consider the ongoing use of these unauthorised works. This inherently requires consideration of their planning merits, as an appropriate course of action for unauthorised building works.
17. The Department therefore assessed the unauthorised works as though they remained part of the application, with the object of the assessment of these works changing from whether they should be permitted, to whether they should be permitted to remain.

3 Statutory Context

3.1 Consent authority

18. In accordance with clause 5.7(a) of the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Western Parkland City SEPP), the Minister for Planning is the consent authority for the application as the site is located on Tourism zoned land. Under the Minister’s delegation dated 9 March 2022, the Independent Planning Commission (Commission) is the consent authority for the development, given there are more than 50 unique public submissions by way of objection.

3.2 Designated development

19. The proposal is designated development under Schedule 3 section 4(2) of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation), as it proposes an aircraft facility for helicopters within 1000 metres of a dwelling not associated with the facility and has an intended use of more than seven flights per week.

3.3 Integrated development

20. The proposal constitutes integrated development under section 4.46 of the Environmental Planning and Assessment Act 1979 (EP&A Act) as the proposal requires an Environment Protection Licence under the Protection of the Environment Operations Act 1997 from the NSW Environment Protection Authority (EPA).
21. EPA provided General Terms of Approval at Appendix F.

3.4 Permissibility

22. The Precincts – Western Parkland City SEPP is the principal planning instrument applicable to this application. The site is zoned Tourism. “Helipad” is development permitted with consent in the Tourism zone. The proposal’s permissibility is discussed at Section 5.2.

3.5 Mandatory Matters for Consideration

23. The following are the relevant mandatory matters for consideration:
 - matters in section 4.15(1) of the EP&A Act
 - relevant EPIs
 - objects of the EP&A Act
 - Ecologically Sustainable Development
 - *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).

Section 4.15 matters for consideration

24. The matters for consideration under section 4.15 of the EP&A Act are addressed in Table 1.

Table 1 | Section 4.15(1) matters for consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided below.
(a)(ii) any proposed instrument	Satisfactorily complies. The Department's consideration of the application against the amendments to the <i>State Environmental Planning Policy (Penrith Lakes Scheme) 1989</i> (now Chapter 5 of the <i>State Environmental Planning Policy (Precincts – Western Parkland City) 2021</i> and draft <i>Remediation of Land State Environmental Planning Policy (draft Remediation SEPP)</i> (now Chapter 4 of the <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>) is provided at Appendix B .
(a)(iii) any development control plan	The Penrith Lakes Development Control Plan Stage 1 was made in November 2021. The Department considered the relevant provision of the Penrith Lakes DCP Stage 1 in Section 5 .
(a)(iii) any planning agreement	N/A.
(a)(iv) the regulations	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications, requirements for notification and fees.
(a)(v) any coastal zone management plan	N/A.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	The application satisfactorily considered and assessed the impacts of development on the natural and built environments, and social and economic impacts in the locality. Consideration of how impacts have been mitigated or conditioned is at Section 5 .
(c) the suitability of the site for the development	The site was previously used for offices and a heavy vehicle and truck storage facility for the Penrith Lakes Development Corporation. The proposed helipad facility is compatible with the surrounding land uses.
(d) any submissions	Consideration has been given to the submissions received at Section 4 and 5 .
(e) the public interest	The proposal will support business and tourist activity in a tourism zoned area and will enable the NSW State Emergency Services to undertake emergency take off and landing to service the community. This proposal is in the public interest.

Environmental Planning Instruments (EPIs)

25. The relevant EPIs are:
- *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* (formerly *State Environmental Planning Policy (Penrith Lakes Scheme) 1989*)
 - *State Environmental Planning Policy (Resilience and Hazards) 2021* (formerly *State Environmental Planning Policy No 33 – Hazards and Offensive Development* and *State Environmental Planning Policy No 55 – Remediation of Land*)
 - *State Environmental Planning Policy (Transport and Infrastructure) 2021* (formerly *State Environmental Planning Policy (Infrastructure) 2007*).
26. The Department is satisfied that the proposal is consistent with relevant requirements of these EPIs as discussed at Appendix C.
- State Environmental Planning Policy (Precincts – Western Parkland City) 2021: Chapter 5 Penrith Lakes Scheme*
27. The proposal is consistent with the aims of the Policy and has been assessed against relevant matters including clause 5.15 regarding land use zones, clause 5.38 regarding flood planning, and Schedule 5 matters to be included in the Environmental Impact Statement.
28. The statutory matters for consideration under Schedule 5(2) for development applications and Part 5.5 additional provisions for zoned land include a requirement for supporting technical reports and plans to address a wide range of environmental and amenity issues including traffic, flood risk and management, water quality, heritage and contamination. The proposal is accompanied by these technical reports.
29. The proposal is consistent with relevant development controls of Chapter 5.
30. The Department exhibited a draft amendment to the *State Environmental Planning Policy (Penrith Lakes) 1989* from 14 April to 26 September 2021. The draft amendment proposed to make a heliport a permissible land use in the Tourism zone. The draft amendment has not yet been finalised.
- State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 3 Hazardous and Offensive Development*
31. Chapter 3 aims to identify proposed development with the potential for significant off-site impacts, in terms of risk and/or offense. As the facility is not classified as potentially hazardous, a Preliminary Hazard Analysis is not required. The proposal assessed the types and proposed quantities of aviation fuel and other dangerous goods to be stored at the site, in accordance with the requirements and criteria set out in *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 (Applying SEPP 33)* (NSW Department of Planning, 2011). The proposal compared the quantities of dangerous goods and the threshold quantities listed in *Applying SEPP 33* to identify whether the storage location or quantity triggers the provisions of Chapter 3. The assessment indicates that the proposed dangerous goods that will be stored do not exceed the *Applying SEPP 33* thresholds. The Department's hazards specialist has reviewed the proposal and confirmed that the proposal does not exceed these thresholds.
- State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 4 Remediation of Land*
32. Chapter 4 requires consideration of contamination and remediation of land in determining development applications. The Applicant has prepared a Preliminary Site Investigation for Contamination which found that whilst widespread contamination at the site was not identified, investigations were not undertaken

near underground fuel tanks identified in the SafeWork NSW records. The Preliminary Site Investigation recommended that a Detailed Site Investigation (Contamination) be undertaken. The Department supports this recommendation and has included a condition to ensure that a Detailed Site Investigation is undertaken prior to the issue of any Construction Certificate.

State Environmental Planning Policy (Transport and Infrastructure) 2021: Chapter 2 Infrastructure

33. Chapter 2 facilitates the effective delivery of infrastructure across the State and lists categories of development defined as traffic generating development that trigger a referral to Transport for NSW (TfNSW) in accordance with clause 2.121 of the SEPP. The proposal is not traffic generating as it is for a helipad and therefore does not require referral to TfNSW as traffic generating development. The Department provided a copy of the proposal to TfNSW for comment, consistent with its approach of seeking comment on development applications from relevant Government agencies. TfNSW provided comments to the Department in December 2021.

Objects of the *Environmental Planning & Assessment Act 1979*

34. Decisions made under the EP&A Act must have regard to the objects as set out in section 1.3 of the EP&A Act. The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent / approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects are considered, to the extent they are relevant.
35. The Department has considered the proposal to be satisfactory with regard to the objects of the EP&A Act, as detailed in Table 2.

Table 2 | Consideration of the proposal against the objects of the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development, and conservation of the State’s natural and other resources	The proposal will support commercial and emergency services used to service the community.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental, and social considerations in decision-making about environmental planning and assessment,	The Department has considered relevant economic, environment and social considerations in Section 5 of this report.
(c) to promote the orderly and economic use and development of land,	The proposal would promote economic use of the land through helicopter services.
(d) to promote the delivery and maintenance of affordable housing,	N/A.
(e) to protect the environment, including the conservation of threatened and other species	The proposal will directly impact 0.10 ha of planted native vegetation which does not conform to a Plant

Objects of the EP&A Act	Consideration
of native animals and plants, ecological communities, and their habitats,	Community Type or Threatened Ecological Community.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	No Aboriginal objects or places are registered within the subject area or identified as being within the subject area.
(g) to promote good design and amenity of the built environment,	The design of the single storey shed and associated pavement will not have an adverse impact on the existing environment.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposed development will ensure proper construction and maintenance of the single storey shed, associated pavement, reinstated landscaping and concrete hardstand. The site will be secured and prevent access from the general public.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department notified the proposed development as outlined in Section 4 , which included consultation with Council and other public authorities and consideration of their responses.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The application was made publicly available on the Department's website and provided to Council and relevant State agencies.

Ecologically Sustainable Development

36. The EP&A Act adopts the definition of Ecologically Sustainable Development (ESD) found in the Protection of the Environment Administration Act 1991. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:
- the precautionary principle
 - inter-generational equity
 - conservation of biological diversity and ecological integrity
 - improved valuation, pricing, and incentive mechanisms.
37. The proposed helipad facility meets the ESD requirements as it does not seek approval for major physical works. Potential impacts of the use of the site would be managed to not pose threats or serious environmental damage to the surrounding area. The proposal would promote a range of social and economic benefits as it would support a growing tourism focused centre within the Penrith Lakes Scheme for future generations. The proposal would not impact threatened flora and fauna species, therefore conserving biological diversity and ecological integrity of the area.

Environmental Planning and Assessment Regulation 2000

38. Subject to other references to compliance with the EP&A Regulation cited in this report, the requirements for an EIS (Schedule 2), notification (Part 6) and fees (Part 15) have been complied with.

4 Engagement

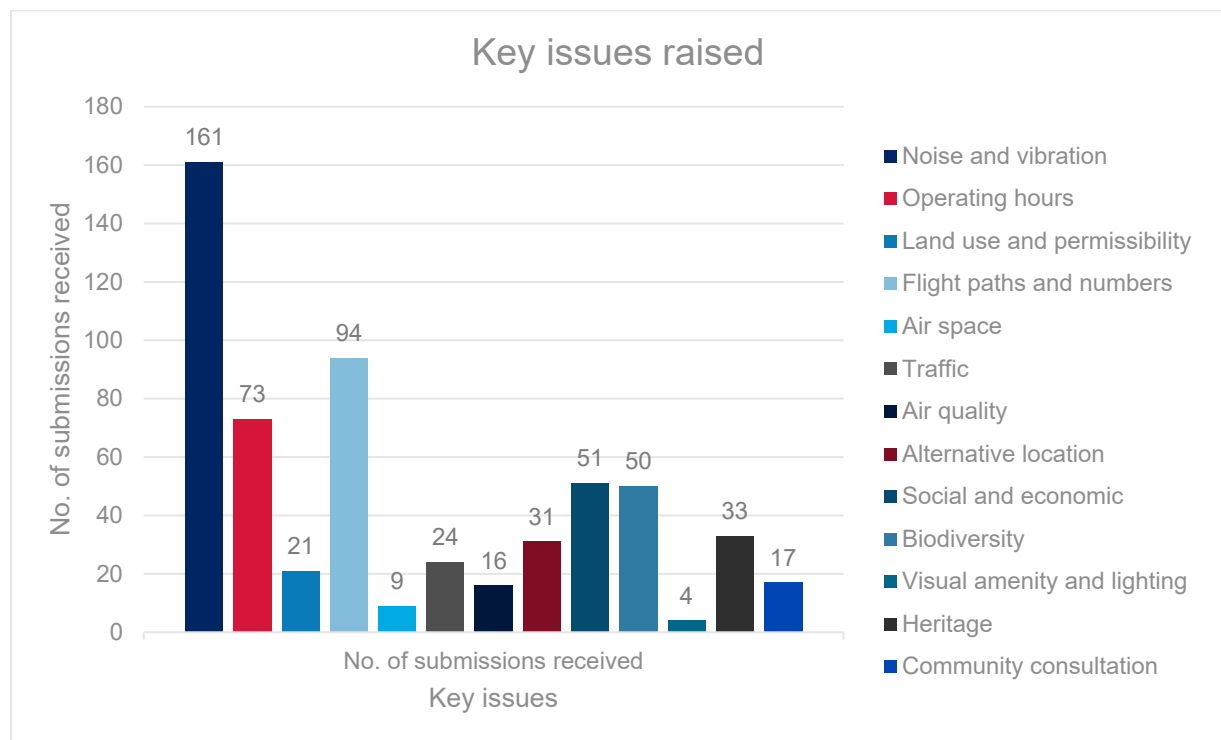
4.1 Department's engagement

39. Under Schedule 1 of the EP&A Act, the Planning Secretary must make the EIS publicly available. The application was made publicly available on the Department's website for 49 days (excluding dates not calculated for the purpose of public exhibition over the Christmas and New Year period) between 5 November 2021 and 14 January 2022. The exhibition of the application was extended due to a technical fault that resulted in the EIS not being on display for three days within the original 28 day duration. The Christmas and New Year period of three weeks between 20 December and 10 January (inclusive) is excluded from the calculation of a period of public exhibition as per Schedule 1(16) of the EP&A Act. As the re-exhibition of the application would have otherwise concluded within the Christmas and New Year period, the exhibition was extended to 14 January 2022.
40. Notification of the public exhibition was advertised in the Penrith Western Weekender on Friday 5 November. Notification of the re-exhibition was also advertised in the Penrith Western Weekender on Friday 17 December. The Department notified Penrith City Council and relevant State agencies.
41. In accordance with clause 78 of the EP&A Regulation, the Department displayed a notice of the proposal on the front fence of the site (facing Old Castlereagh Road) for the duration of EIS exhibition, including the re-exhibition.
42. Due to the timing of the exhibition period and assessment during the COVID-19 pandemic, standard exhibition procedures such as displaying physical copies of the EIS for public inspection at local libraries and council offices, and community information sessions, were unable to proceed in a COVID-safe manner to comply with NSW Government Public Health Orders.
43. The Department undertook a site visit on 18 March 2022 to obtain a comprehensive understanding of the surrounding environment, its sensitivities and issues raised in submissions.

4.2 Summary of submissions

44. During the exhibition period, the Department received a total of 241 submissions, and advice from eight NSW government agencies. Two submissions were received from councils (Penrith City Council and Blue Mountains City Council), 220 submissions from community members which included 15 duplicate individual submissions and five form letter duplicates, and 19 submissions from organisations, which included two duplicates. 200 submissions objected to the proposal, 33 supported it and eight submissions and pieces of advice provided comments. The key issues raised in the submissions include noise and vibration impacts, proposed operating hours, flight paths and numbers, land use and permissibility and air space operations. A summary of the key issues raised in the submissions is provided below in **Table 3** and the key issues raised are assessed in **Section 5**.

Table 3 | Summary of key issues raised in submissions



4.3 Key issues raised in Government agency advice

45. **Department of Primary Industries Fisheries (DPI Fisheries)** noted no dredging or reclamation was required and did not object to the proposal.
46. **Environment Protection Authority (EPA)** sought clarification of nearest sensitive receivers documented in the noise and vibration and air quality assessments. The EPA also advised that the noise and vibration assessment did not assess grounded helicopter maintenance activities and was not prepared in accordance with current versions of regulatory guidelines. Following the receipt of further air quality and acoustic assessment, the EPA provided its General Terms of Approval for the proposal.
47. **Environment, Energy and Science Group (EES)**, now known as the Environment and Heritage Group (EHG) of the Department, raised no concerns about biodiversity. However, EHG contended that the Flood Risk Management Assessment (EIS Appendix L) was inadequate as it did not appropriately address the SEARs (including flood evacuation) or relevant statutory requirements.
48. **Transport for NSW** requested further information on the Applicant's existing operations at Granville, detail of proposed operations at the development site, flooding, land use, traffic and transport.
49. **Department of Defence** did not object to the proposal and requested flying programs be submitted to Air Traffic Control.
50. **Department of Infrastructure, Transport, Regional Development and Communications** commented that the proposal is outside the controlled airspace of Western Sydney International Airport and is unlikely to present a conflict with this airspace.
51. **Airservices Australia** and the **Office of Sport** were also notified of the EIS exhibition but neither agency provided comment.

4.4 Key issues raised in submissions – Local Council

52. **Penrith City Council** noted the proposal's potential to contribute to tourism and emergency services in the area and raised the following issues:
- the acoustic report did not use up to date criteria and contained inaccurate figures for surrounding residential properties and suggested the Department engage an independent acoustic consultant to review the noise assessment
 - the consent authority will need to be satisfied the proposal meets the definition of a 'helipad'
 - the contamination report noted the need for further investigation of potential underground fuel storage tanks
 - suggested conditions if the proposal is recommended for approval.
53. **Blue Mountains City Council** objected to the proposal and questioned the interpretation of proposed land use and permissibility. They also raised concerns on potential impacts to Aboriginal cultural heritage and noise based on flight paths over the Greater Blue Mountains National Park.

4.5 Key issues raised in submissions – community and special interest groups / organisations

54. The key issues raised by the community, special interest groups and private organisations include:
55. **Noise and vibration**
- noise impacts on surrounding residential and recreational areas
 - noise impacts on local schools
 - noise from the proposal coupled with Western Sydney Airport will increase noise in an existing quiet suburb
 - noise measurements and monitoring weren't undertaken at the Waterside estate
 - impacts on human health
 - consistency and validity of acoustic testing and noise limits against noise monitoring
 - acoustic assessment has not considered the *Noise Policy for Industry (2017)*
 - requested long-term background noise monitoring be undertaken and noise criteria be reduced to meet the rural surroundings as criteria used are superseded
 - the timing of background noise monitoring undertaken is inconsistent with the proposed operating hours and additional monitoring needs to be undertaken
 - Waterside estate noise barriers won't be effective against helicopter noise
 - request for acoustic treatment of nearby homes
 - request for a noise management plan to regulate flight numbers, times, paths and recording and monitoring of flight details and
 - request for an independent review of the Applicant's noise and vibration assessment and re-assessment to be undertaken in consultation with community members.

56. Land use and permissibility

- proposed land use does not meet the definition of a 'helipad'
- inappropriate to consider a helipad application when a draft SEPP amendment to allow a 'heliport' as a permissible use is under consideration
- the proposal seeks to establish the existing business's operational activities consistent with the existing EPA licence, which are typical of a 'heliport'
- lack of clarity about the scope of the DA
- proposal incorrectly defined as helipad due to the scale of built works rather than the proposed land use
- questioning how an 'emergency' is defined given the proposal to not require limits on flight numbers or hours in an emergency
- concerns that the operator will undertake helicopter maintenance at the site, which is not a permissible land use under the current zone
- the facility not being open to the public is inconsistent with the proposed land use
- proposed use is inconsistent with the use of Penrith Lakes for parklands
- proposal is incompatible with the use of the Regatta Centre
- suggestions for alternative areas and suburbs to undertake the proposed use, such as Bankstown Airport or the new Western Sydney Airport.

57. Operating hours

- inconsistency between proposed 7:00am – 10:00pm hours of operation and operation beginning at "first light", which could be as early as 5:30am in summer
- proposed operating hours and helicopter movements are inconsistent with the current licence held by the operator
- proposed operating hours will cause disturbance to nearby residents and impact sense of well-being, particularly on the Blue Mountains
- proposed operating hours are excessive and inappropriate for the noise sensitive area.

58. Flight paths and numbers

- lack of details about flight paths over the Blue Mountains
- suggestion for north-south rather than east-west flight paths to avoid residential areas
- suggestion for all take-offs and landings to be to the west
- number of proposed flights needs to be reduced due to proximity to dense residential areas
- proposed flight paths and operating hours will cause disturbance to residents, particularly Waterside Estate
- proposed flight paths would impact the operation of the Sydney International Regatta Centre.

59. Air space

- potential impacts on the World Heritage listed National Park and on the residents of the Blue Mountains Local Government Area have not been considered
- request that helicopters are not permitted to fly over the Blue Mountains National Park
- impacts of rotor wash on the use of the Regatta Centre
- impacts on outdoor-based businesses in the Blue Mountains
- potential clashes with Western Sydney Airport airspace
- facility is not needed for emergency services

- safety of surrounding residents in the event of an incident
- increased joy flights and helicopter tourism would impact significant scenic values from the air on the Greater Blue Mountains World Heritage Area.

60. **Traffic**

- operation of the helipad facility would increase traffic congestion on Castlereagh Road.

61. **Air quality**

- increase in air pollution and emission due to the use of helicopters
- air pollution and emission could cause harm on human health
- the Department should reduce land uses that involve non-essential burning of aviation fuel.

62. **Natural environment**

- potential for fuel spills to impact lakes and Nepean River
- greenhouse gas impacts of helicopter flights
- heat impacts on the Penrith area.

63. **Property impacts**

- helipad operations would affect surrounding land values
- privacy impacts of helicopters flying above properties.

64. **Biodiversity**

- the operation of helicopters could impact the migration, feeding and breeding patterns of birds within the Penrith Lakes area and the Blue Mountains National Park
- tree planting should be required to replace trees removed for the proposal
- there is a risk of birds being killed due to collisions with helicopters
- the operation of helicopters could remove a vast variety of birdlife and wildlife residing in the nearby bushland and wetlands.

65. **Visual amenity and lighting**

- the operation of helicopters would introduce additional lighting and will negatively impact the surrounding locality.

66. **Heritage**

- lack of consultation with the Darug People, traditional owners of the land
- inadequate Aboriginal cultural heritage assessment.

67. **Community consultation**

- concerns were raised regarding the level of community consultation during the development application stage
- lack of consultation with Blue Mountains residents
- the level of community consultation undertaken was not in accordance with the SEARs requirements
- the Applicant's legal advice at Appendix P of the EIS was not publicly available for the entirety of the public exhibition.

68. **Support for proposal**

- proposal could support proposed film studio and local employment
- proposal supports businesses requiring aerial photography and filming
- noise studies and flight path limitations could demonstrate impacts are acceptable
- having local helicopter fleet that can be deployed in emergencies and for other public purposes
- location is suitable as it is distant from housing and flood potential limits more intense urban land uses
- proposal will provide opportunities for scenic flights
- operator is experienced and well-regarded in its industry
- operator's experience in assisting emergency services
- proposal will promote tourism in the Penrith area
- small environmental footprint of helicopters compared to fixed-wing aircraft.

69. The Department considered and responded to these issues in **Section 5** and **Appendix B**.

5 Assessment

5.1 Assessment of key issues

70. In assessing the merits of the proposed subdivision, the Department considered the:
- development application and associated documents (**Appendix A**)
 - submissions received on the proposal
 - relevant EPIs, policies, and guidelines
 - requirements of the EP&A Act.
71. The Department considers the key issues associated with the proposal are:
- statutory compliance
 - aviation regulations, site selection and flight paths
 - noise and vibration
 - biodiversity
 - Aboriginal cultural heritage
 - flooding and hydrology
 - hazards and risk.
72. Each of these issues is discussed below (**Section** Error! Reference source not found. to **5.7**). Other issues considered are discussed at **Section 5.8**.

5.2 Statutory compliance

73. The Department considered the relevant statutory requirements to support the permissibility of the use of the land in accordance with its zoning. The proposal seeks to operate as a helipad on land zoned Tourism.
74. The proposed use meets the objectives of the zone and the Applicant has obtained legal advice to support the permissibility of a helipad operating on tourism zoned land within the Penrith Lakes Scheme.

Tourism zone objectives

75. The objectives of the Tourism zone, as per clause 5.17 of the Western City Parkland SEPP, are to:
- *provide for a variety of tourist-oriented development and related uses*
 - *provide for diverse tourist and visitor accommodation and activities that are compatible with the promotion of tourism in Penrith that utilises the public assets of the Penrith Lakes Scheme*
 - *create an appropriate scale that maintains important views to and from the Nepean River as well as to the Blue Mountains escarpment, while also improving important connections to the Penrith City Centre and the Nepean River.*
76. The Department is satisfied that the proposal will provide a use on the site available to tourists, among other potential users (by prior arrangement). Scenic helicopter flights would provide a different tourist activity to those existing and will promote tourism in Penrith. The proposed built form is of a low scale

and in keeping with the existing surrounding character. It would maintain existing connections to the Penrith City Centre and Nepean River and viewlines to the Blue Mountains.

77. The Department notes that a helipad is a place that is not open to the public, as discussed in **Sections 77 to 85**. A helipad is a permissible use within the Tourism zone. The Western City Parkland SEPP therefore anticipates that this land use, which by definition is not open to the public, may be undertaken in the Tourism zone. The Department is satisfied that use of a helipad that is not open to the public is consistent with the Tourism zone and zone objectives.

Land use permissibility

78. A key consideration of the Department's assessment is whether the application should be characterised as a helipad or a heliport.
79. Chapter 5 of the Western Parkland City SEPP identifies a helipad as permissible with consent and a heliport as prohibited. It adopts the definitions for these land uses provided in the Standard Instrument—Principal Local Environmental Plan:

helipad means a place not open to the public used for the taking off and landing of helicopters

heliport means a place open to the public that is used for the taking off and landing of helicopters, whether or not it includes—

- (a) a terminal building, or
- (b) facilities for the parking, storage or repair of helicopters.

80. The EIS included legal advice obtained by the Applicant to support the argument that the proposed land use is a “helipad” rather than a “heliport”. The advice characterises the intended use of the property as a ‘helipad’, as it would not open to the public. Noting that the main distinction between a “helipad” and “heliport” is whether the property is open to and accessible by the public, the argument cites the NSW Court of Appeal (*Ryan v Nominal Defendant [2005] NSWCA 59*) where the categorisation of what makes a place “open to the public” has been considered. The case noted that:

in the case of a place which is held open by a private owner for the public to enter, the place will be considered to be ‘open to the public’ only if the owner is in fact making it available to the public. The openness is co-ordinate both in scope and in time, with the owner’s invitation. Those who use the place are invitees and unless the invitation is issued indiscriminately to the public at large the place will not be open to the public.

81. The advice notes that a “helipad” is a permissible use with consent in the Tourism zone, which must contemplate the use of a “helipad” by tourists or for tourism purposes. As such to argue that if a “helipad” is used by a tourist it becomes a “heliport”, as it would be ‘open to the public’, would be incorrect, as a helipad, which by definition does not allow public access, is a permissible use in the Tourism zone.
82. The Applicant has proposed operational and practical measures to be undertaken on site to exclude public access to the site. These measures include:
- on-site security measures including fencing and locked access to the site, which can only be opened by the site operators to prevent unauthorised access to the site
 - not operating helicopters from the helipad facility that any member of the public can access, purchase a ticket or board a flight

- exclusive use for the operation of Sydney Helicopters (the Applicant's related business entity that will use the proposed helipad) purposes and restriction of access to the site from other helicopter operators (other than in the event of an emergency)
 - public access to the site restricted to invitation only by Sydney Helicopters.
83. Public submissions and Blue Mountains City Council's submission questioned whether the facility is appropriately characterised as a helipad. Submissions suggested clarification is required on whether the proposed development would be open to the public, as other land uses within the Penrith Lakes site are open to the public. The use of a helipad does not permit public access under the current definition. Submissions noted that the proposed application to relocate the existing business from the helipad facility at Granville to the Penrith Lakes site would not be permissible under the current Tourism zone requirements. The business operated as a heliport at its previous Granville facility, which is not a permissible use within the Tourism zone of the Penrith Lakes site.
84. Submissions also noted that it is inappropriate to consider an application for a helipad when a draft SEPP amendment to allow a 'heliport' as a permissible use is under consideration. While the draft SEPP amendment relates to the same site, it is a separate process that is not directly relevant to this application and does not prevent its determination.
85. The Department agrees that the critical issue to be addressed in determining whether the facility can be categorised as a "helipad" and therefore permissible is whether it is open to the public. The Standard Instrument does not include guidance as to what "open to the public" means. The Department considered the following questions to assist its consideration of whether the proposed development is open to the public:
- **Is the use limited by a class of people?** The use of the site will be limited to Sydney Helicopters staff and clients invited to enter the site by the Applicant by prior arrangement. These clients may include people who charter a helicopter for filming, photography or joyflight purposes. People without invitations by prior arrangement would not be permitted to access the helipad or the services offered within it. The operation would not involve the provision of facilities for the hire of helicopters by other helicopter operators.
 - **Do the users share a characteristic which sets them apart from members of the public generally?** The users of the site will be characterised as clients who undertake a form of business with the Applicant and excludes access by the general public. Users of the site would be people who have pre-arranged bookings with the helipad operator.
 - **What are the steps taken to exclude persons from the place?** The Applicant will retain fencing and locked access on site, to prevent public access. The helipad operator will only allow access to the site by prior invitation.
 - **Are the general public physically obstructed or prevented from having access?** The general public will be physically obstructed from accessing the site through the use of fencing and locked access, which can only be opened by the helipad operator.
86. However, as the characterisation as a helipad is contingent upon public access being prevented, the Department recommends conditions of consent to prevent any such access. These include a requirement for a Plan of Management for the Planning Secretary's approval that commits to business practices consistent with not being open to the public and providing and maintaining security gates and fences.

Consideration of the Penrith Lakes Development Control Plan 2021

87. The Penrith Lakes Development Control Plan 2021 (PL DCP) came into effect on 15 November 2021, during this application's exhibition period. Upon commencement, the PL DCP became a relevant Section 4.15 consideration. The Applicant provided an EIS Addendum that assessed the proposal against the PL DCP. The Department has completed a detailed assessment against the PL DCP controls at **Appendix D**.
88. The proposal meets the planning context and environmental controls in Chapters 2 and 3 of the PL DCP. The built form controls in Chapter 4 and the precinct-specific controls in Chapter 5 anticipate a significantly greater intensity of built form development than that proposed by the current application. These chapters do not provide detailed controls relevant to every type of development permissible on the site.
89. The current proposal involves minor changes to the existing built form upon the site and does not provide public access (noting that the definition of a "helipad" excludes public access). It does not propose subdivision or the more intensive built form anticipated by the urban design and built form controls in Chapter 4. The Department considers that requiring that this proposal meet the urban design and built form controls would be disproportionate to the scale of proposed development. It would also be unreasonable as it would result in an unsuitable built form for the proposed use.
90. Chapter 5 of the PL DCP provides that a master plan is required before any development or subdivision application in the Tourism South precinct (in which the current application is located). Master plans ensure that large and complex development sites that involve subdivision, multiple buildings and/or multiple land uses are developed in an orderly and sequential fashion. This provides adequate infrastructure, services and amenities to support growth, and requires individual development applications to consider the development objectives of the larger precinct.
91. The Department has not required a master plan for this proposal. The proposal does not include subdivision, public access or intensification of the existing built form, and would accommodate a small number of staff and guests. Requiring a master plan would not result in an improved planning outcome to that proposed in the current application and would be unreasonable.
92. Clause 1.8.2 provides that variation of any control of the PL DCP may be considered by the consent authority where an application demonstrates its compliance with relevant objectives. The Applicant's Response to Submissions includes written statements demonstrating how these objectives are satisfied. The Department agrees with these statements and considers that variation to controls that are not directly applicable to the proposed development (i.e. much of Chapters 4 and 5 of the PL DCP) is appropriate.

5.3 Aviation regulations, site selection and flight paths

Site Selection

93. The *Civil Aviation Regulations 1988* is the national regulatory guidance for the use of Helicopter Landings Sites (HLSs). Section 92 (d) requires a person to take-off and land an aircraft in an area that "is suitable for use as an aerodrome for the purposes of the landing and taking-off of aircraft". The Civil Aviation Safety Authority (CASA) provides operating guidelines for establishment and operation of

onshore HLSs (Civil Aviation Advisory Publication (CAAP) 92-2 (2)). The Applicant's assessment has considered those guidelines.

94. While the assessment of this development application does not regulate the proposed helipad's consistency with civil aviation regulations, the Department understands these regulations influenced the proposed helipad's siting and flight paths.
95. The Applicant's airspace assessment has considered potential impacts on the safety and operations of the future Western Sydney Airport (WSA) and the Royal Australian Airforce (RAAF) Richmond Base. This assessment indicates that the proposed site is outside the 'prescribed airspace' of these facilities as defined by the Airports (Protection of Airspace) Regulations 1996. The subject site is in a relatively narrow band to the south of the RAAF Richmond Control Zone (restricted zone 474) and below the controlled airspace, which exists from the surface to 4,500 feet, and to the north of and below any planned flight path airspace for the WSA.
96. Public submissions question why the facility is located within Penrith Lakes and suggest co-location with Bankstown Airport or Western Sydney Airport. The Department must assess the application before it and is satisfied that the Penrith Lakes location avoids prescribed airspace, minimises downwash impacts and avoids residential areas, being more than one kilometre from residential zoned land. The noise impacts on residential and recreational land are assessed in **Section 5.4**.

Proposed flight paths

97. The proposed flight paths are broadly oriented east-west to avoid the WSA and RAAF Richmond prescribed airspace and to be parallel to the SIRC rowing course, to ensure separation and avoid impacts between the proposed flight paths and the SIRC event space.
98. Aircraft will travel in either an east or west direction from the touchdown and lift-off area, then curve to the left or right at a distance of 3,500 metres and will provide sufficient clearance from drone operations for the SIRC. This curving flight path would also avoid direct overflight of the Waterside residential estate, as it curves to the south-east to instead fly directly over less sensitive light industrial land uses. The proposed approach and departure paths and SIRC operations are shown in **Figure 4**.



Figure 4 | Proposed arrival and departure paths (Source: EIS)

99. The east-west flight paths also consider downwash impacts, which is the downward deflection of air caused by the helicopter rotor blade that allows the aircraft to lift and fly. The downward pressure of downwash can be hazardous to nearby people or objects.

100. Due to the location of the proposed site HLS and proposed flight paths traveling east/west, it is expected that downwash from aircraft taking off or hovering would dissipate without causing adverse impacts. The proposed flight paths run parallel to the existing trees lining Old Castlereagh Road, which would assist in dissipating downwash from an operating or hovering helicopter. The proposed east/west flight path orientation with the left/right curvature at 3,500 metres would also ensure there would be no downwash impacts to the SIRC or water related activities undertaken at the lake. The site's distance from current urban and active land uses and inaccessibility to the general public would reduce impacts to potential visitors and road users.
101. Public submissions raised concerns with the proximity of the east-west flight path to residential areas in Cranebrook and suggest a north-south flight path. The Department notes a north-south flight path would conflict with the use of the SIRC and potentially conflict with WSA and RAAF Richmond operations. The Department assessed the noise impacts on Cranebrook residents in **Section 5.4**.
102. The Department notes that the proposed helicopter flights paths would not interrupt or disrupt existing flights for the RAAF Richmond, or future WSA flights, noting that the exact flight paths for WSA are currently under development. The Department considers the proposed flight paths have carefully considered the existing residential, commercial and recreational land uses, their locations and potential impacts, existing air-space restrictions and physical obstructions and is satisfied the flight paths provide an appropriate balance of aviation requirements and amenity protection.

Broader flight paths and impacts of flying over the Blue Mountains

103. The Department notes submissions from Blue Mountains residents and Blue Mountains City Council about potential impacts in urban and national park areas of the Blue Mountains. The Applicant's EIS does not provide details of broader flight patterns beyond the proposed take-off and landing flight paths.
104. The Department notes that after take-off and landing, helicopter flights are primarily regulated by civil aviation requirements.
105. Should the current development application be approved, the consent would have limited ability to control where helicopters could fly upon reaching cruising altitude, noting that the development application relates to the operation of a helipad rather than helicopter operation more broadly, which is not an activity that requires development consent.
106. Civil Aviation Regulations section 157 establishes rules for low flying. Unless in the act of taking off or landing, or under other limited circumstances requiring CASA approval, helicopter pilots must not operate at altitudes lower than 1000 feet above ground level in urban areas and 500 feet in non-urban areas (note that civil aviation regulations use Imperial measurements for altitude). Ground level is the highest point of any object on the terrain within a 300 metre horizontal radius of the helicopter.
107. The Applicant's acoustic report assessed a residential receiver at the Waterside Estate at Cranebrook that helicopters would pass at 1000 feet altitude at a horizontal distance of approximately 250 metres. It found that the noise level at this receiver would be 40 dBA, which is lower than the noise criteria of 48 dBA for residential areas. The Department is unaware of any noise criteria for wilderness areas. The Department is satisfied that this location is a reasonable proxy for locations in the Blue Mountains, which would meet noise criteria even if all flights using the eastern flight path (i.e. the flight path modelled at receiver R1) flew close to a single receiver in the Blue Mountains, which is unlikely.

Ongoing operational management

108. While the Applicant assessed the potential impacts related to air space, the Department considers that a Plan of Management is required for ongoing monitoring and management of operations. A condition is recommended requiring the Applicant to prepare a site specific Plan of Management for the Planning Secretary's approval to comply with the operational requirements of the proposal, relevant legislation, identify and manage risks and ensure environmental safeguards are appropriately implemented and managed. The Plan of Management will also include complaints handling and focus on ongoing performance and monitoring of the facility's operation such as air space, flight paths, operating hours and number of flights undertaken that would affect its amenity impacts on neighbours, particularly in terms of noise. The Plan of Management requirement is based on similar requirements imposed by the Land and Environment Court for other helipads. Subject to these ongoing management measures, the Department is satisfied that proposed flight paths, operating periods and location of the helipad facility would not have major adverse impacts on the surrounding residential and commercial land uses.

5.4 Noise and vibration

109. The development site is surrounded by a variety of land uses including recreational / sports facilities such as the Sydney International Regatta Centre 1.15km north (including Competition Lake located 230 metres north), Penrith Whitewater Stadium 730 metres north, and a proposed golf course to the south-west (assumed to be located 1km south-west; exact distance to be confirmed in a separate planning application). Industrial land uses are located approximately 800 metres south-east, future commercial land is immediately to the south, and existing residential receivers in a subdivision at Waterside Estate 1.1km to the east. There are two residential receivers to the east of the site on Old Castlereagh Road approximately 450 and 600 metres from the site.

Construction noise and vibration

110. The proposal would have minimal noise and vibration impacts during construction. Construction is expected to be completed within seven days.
111. Construction works would involve demolition, vegetation clearance, installation of new lighting required for 'FATO', installation of new above ground aviation fuel tank, and reinstatement works with grass turf.
112. Construction hours are proposed to be:
- Monday to Friday 7am to 6 pm
 - Saturday 8 am to 1 pm
 - no work on Sundays or public holidays.
113. The EPA reviewed the Noise and Vibration Impact Assessment and requested the Applicant prepare the noise assessment in accordance with the Interim Construction Noise Guideline (ICNG) (DECCW, 2009).
114. Public submissions were concerned with the noise levels from plant and equipment during construction at the development site.
115. The Applicant prepared a qualitative noise assessment in accordance with the ICNG. The Applicant's construction noise assessment concluded that due to the distance (over 450 metres) between the proposed construction works and residential receivers on Old Castlereagh Road, and the short-term duration of the work, potential construction noise impacts would be appropriately managed and

minimised by implementing the mitigation measures recommended in the EIS. Mitigation measures proposed include no construction traffic to arrive on site before 7am or leave after 6pm, limiting construction to standard hours, use of quieter plant and equipment and shielding noisy plant from sensitive receivers.

116. The Department considers the proposal's construction noise impacts are manageable and acceptable subject to implementation of the Applicant's mitigation measures and additional measures recommended by the Department requiring community information and complaints procedures.

Operational noise and vibration

117. The proposed development would primarily require management of operational noise and vibration. The Applicant proposes to operate the development site as helicopter-related activities in accordance with Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act). The proposed development is integrated development. An application for an Environmental Protection Licence (EPL) to the NSW Environmental Protection Authority (EPA) would be submitted by the Applicant in accordance with section 53 of the POEO Act.

118. The Applicant proposes to seek approval for operation of the following:

- operating hours from first light to 10pm with the bulk of activities between 8am and 5.30pm
- approximately 5 night flights per week (night flights are classified as flights that occur after last light, based on the time of year this can vary from 6pm to 8pm)
- the following helicopters can use the helipad:
 - AS350 squirrel helicopter (most common type used)
 - Bell 206
 - Bell 407
 - Bell 412 (emergency services helicopter)
 - Bell 429 (emergency services helicopter).

119. This is consistent with the Applicant's EPL for their former Granville facility.

Submissions

120. The majority of public submissions for the proposed helipad operation raised concerns about impacts of noise and vibration (161 in total). Public submissions questioned the validity of acoustic testing and noise limits against noise monitoring undertaken, and requested additional noise monitoring be conducted. Public submissions also requested an independent review of the Applicant's noise and vibration assessment and a revised assessment be conducted.

121. The EPA advised that it does not regulate in-flight aspects of the proposed helipad operation, and its regulatory function is limited to ground maintenance activities. It noted that the noise and vibration assessment did not assess ground helicopter maintenance activities and was therefore not prepared in accordance with regulatory guidelines, which are Interim Construction Noise Guideline (EPA, 2009) and Noise Policy for Industry (2017) for construction and ground maintenance activities respectively. The EPA also sought clarification of nearest sensitive receivers documented in the noise and vibration and air quality assessments.

122. The Department considered issues raised by Penrith City Council regarding outdated noise criteria, inaccurate distances of surrounding residential receivers, and its request that the Department engage an independent acoustic consultant to review the noise assessment (**Section 4.3**).

123. To assist in the consideration and assessment of operational aircraft noise impacts and obtain independent expert analysis of the noise and vibration assessment, the Department engaged independent acoustic expert Rob Bullen Consulting, to undertake a specialist review.
124. The Department notes Blue Mountains City Council's concern regarding potential noise impacts over the Blue Mountains World Heritage Area (see **Section 5.3**).
125. The Department requested further information from the Applicant to address the EPA's comments and to clarify the proposed noise assessment criteria, methodology and the location of sensitive receivers.
126. The applicant provided the EPA's requested information and the EPA has provided its General Terms of Approval for the proposal's required Environment Protection Licence.

Operational helicopter noise criteria

127. The operational noise and vibration assessment exhibited with the EIS was prepared in accordance with the EPA Noise Control Manual. The EPA advised that the EPA Noise Control Manual document is not current and the EPA has no current standard or guideline relevant to in-flight noise as it does not regulate in-flight noise.
128. The Department's acoustic consultant confirmed that there is no current regulatory guideline or standard for in-flight operational helicopter noise and vibration. Instead they recommended a criterion of 48dB(A)LAeq (24 hour) for residential receivers, which reflects superseded guidelines of 55dB(A) with a penalty for the intermittent nature of the noise.
129. The Department notes this recommendation is consistent with noise criteria accepted by the Land and Environment Court in *Nessdee Pty Limited v Orange City Council* [2017] NSWLEC 158 and *Larry Karlos v Tweed Shire Council*; *Matthew Karlos v Tweed Shire Council* [2019] NSWLEC 1418. In both cases, the Court accepted that the appropriate noise criteria for residential receivers not previously subject to aircraft noise is Australian Noise Exposure Forecast (ANEF) 13. This is equivalent to 48dB(A)LAeq (24 hour).
130. Similar to residential receivers, there is no applicable noise criterion for active recreational or commercial receivers. The Department's independent acoustic expert and the Applicant's acoustic consultant established a helicopter noise criterion of 55dB(A)LAeq 24 hour for the Sydney International Regatta Centre and proposed golf course. This 55dB(A)LAeq 24 hour criterion has been used by the Applicant to assess the acceptability of noise and vibration impacts to these recreational commercial facilities.

Revised operational noise assessment

131. The Applicant submitted a revised noise and vibration assessment to the Department on 14 April 2022 in response to the Department's request for further information. The revised assessment provided:
 - clarification on the locations of sensitive receivers
 - assessment of noise and vibration criteria from current EPA guidelines
 - further information on sound exposure levels (SELs)
 - updated on-site verified SEL noise monitoring data at nearest affected sensitive receiver R1 at 47-65 Old Castlereagh Road
 - revised noise modelling based on updated SEL noise monitoring data.
132. Key parameters of the noise model used in the revised assessment include:

- flight paths provided by the Applicant
- the most conservative sound exposure levels (SELs) used for the purposes of this assessment, being those SELs derived from the take off and departures
- a speed of 25 knots as the overflight speed, to model the worst-case scenario.

133. Sensitive receivers identified in the revised noise and vibration assessment are:

- R1 – 47-65 Old Castlereagh Road, located to the east of the helipad – 430m to helipad
- R2 – 39-45 Old Castlereagh Road located to the east of the helipad – 648m to helipad
- C3 – Sydney International Regatta Centre, located to the northwest of the helipad – 1150m from helipad
- R3 – Waterside Estate to the east, past the Old Castlereagh Road residences – 1100m to helipad
- C2 – proposed golf course the south west – approximately 1000m to the helipad (note: the exact distance is unknown as the golf course has not been approved).

134. The locations of sensitive receivers are shown below in Figure 5.



Figure 5 | Proposed helipad location and surrounding sensitive receivers (Source: Applicant’s Noise and Vibration Assessment)

135. The indicative flight path shown in **Figure 6** was used to model predicted noise impacts.



Figure 6 | Typical flight paths (Source: Applicant’s Noise and Vibration Assessment)

136. The operational noise assessment used the SoundPlan noise modelling software, attended on-site noise monitoring conducted on 11 April 2022, and SELs for all proposed helicopters. The SELs were determined by measurements obtained by the Applicant’s consultant at on site testing and confirmed by data from previous proposals and existing product data.
137. The SELs used within the calculation methodology are detailed in **Table 4**. These SELs are at a distance of 30m from the helipad and include the take off and immediate departure. **Table 4** details the SELs used within the calculations, including the SEL for each helicopter at the closest point on the helicopter flight path.

Table 4 | Sound Exposure Levels (Source: Revised Noise and Vibration Assessment)

Helicopter type	SEL at 30m	SEL at R1	SEL at R2	SEL at C1	SEL at R3	SEL at C2
Bell 407	92	82	81	73	77	78
Bell 429	92	82	81	73	77	78
AS350	92	82	81	73	77	78
Bell 206	91	81	80	72	76	77
Bell 412	95	85	84	76	80	81

138. Approximately 95% of Bell 412 utilisation is for emergency services related work.

On-site noise monitoring

139. The Applicant's acoustic consultant conducted on-site noise monitoring during the operation of a AS350 helicopter at the closest sensitive residential receiver 47-65 Old Castlereagh Road Penrith (R1) on 11 April 2022. The weather was clear and sunny with an easterly wind direction.
140. The AS350 helicopter was flown in an eastwardly take off direction, and westwardly landing direction, in a flight path consistent with Figure 6. The Applicant's acoustic consultant had two engineers separately measure the SEL experienced at the receiver location during both take-off and landing events. This process was repeated four times (four landing pass-bys and four take-off pass-bys) to assess consistency with measurements.
141. The Department's planners and acoustic consultant undertook a site visit to verify the SEL measurements. These measurements represent the worst-case scenario for take-off and landing of the most commonly used helicopter for the proposed development.

Maximum flights to achieve acoustic criteria

142. The Department accepts that the primary practical method of controlling in-flight helicopter noise is to restrict the number of flights. This is because the noise source is airborne and moving, so there are few if any barriers between the source and receiver.
143. For the proposed development to comply with the 48dB(A) criterion at the closest residential receiver (R1 at 47-65 Old Castlereagh Road), the revised noise and vibration impact assessment identified the following maximum number of flights during operation:
- 23 flights in the eastern take-off direction for (landing to the helipad from the east) within a 24 hour period with the use of the Bell 206, 407, 429 and AS350 helicopters
 - 23 flights in the western take-off direction (landing to the helipad from the west) within a 24 hour period with the use of the Bell 206, 407, 429 and AS350 helicopters
 - 16 flights within a 24 hour period with the use of the Bell 412 helicopter (primarily used for emergency services related work).
144. The noise and vibration assessment noted the likelihood of 16 Bell 412 commercial helicopter flights within a 24 hour period is extremely remote.
145. **Table 5** and **Table 6** outline the modelled noise levels and criteria compliance at each receiver based on the proposed daily flight numbers.

Table 5 | Predicted Noise Levels – Bell 407, Bell 429, AS350, Bell 206

Receiver	Nearest point along the flight path	Predicted dB(A) Leq24 hour	Criteria dB(A) Leq24 hour	Complies
47-65 Old Castlereagh Road	125m	46dB(A)	48dB(A)	Yes
39-45 Old Castlereagh Road	168m	45dB(A)	48dB(A)	Yes
Sydney International Regatta Centre	568m	37dB(A)	55dB(A)	Yes
Waterside Estate	249m	40dB(A)	48dB(A)	Yes

Proposed Golf Course	385m	42dB(A)	55dB(A)	Yes
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Table 6 | Predicted Noise Levels – Bell 412

Receiver	Nearest point along the flight path	Predicted dB(A) Leq24 hour	Criteria dB(A) Leq24 hour	Complies
47-65 Old Castlereagh Road	125m	48dB(A)	48dB(A)	Yes
39-45 Old Castlereagh Road	168m	46dB(A)	48dB(A)	Yes
Sydney International Regatta Centre	568m	40dB(A)	55dB(A)	Yes
Waterside Estate	249m	44dB(A)	48dB(A)	Yes
Proposed Golf Course	385m	45dB(A)	55dB(A)	Yes

146. The Department acknowledges the Applicant has sought approval for a maximum of 25 flights per day (includes take-off and landing). Based upon the revised noise and vibration assessment, results comply with 48dB(A) LAeq 24hr at the closest residential receiver R1 at 47-65 Old Castlereagh Road. The Department proposes a condition to limit a maximum 23 flights in either direction for Bell 206, 407, 429 and AS350 helicopters, and 16 flights within a 24 hour period with the use of the Bell 412 helicopter.
147. The Department's acoustic consultant reviewed the revised noise and vibration assessment, considering the SELs, noise modelling conducted by the Applicant's consultant, and compliance of the noise criteria set for residential and commercial receivers. Rob Bullen Consulting advised the findings of the noise and vibration assessment are adequate for the proposed development (see **Appendix G**).
148. The Department accepts the Applicant's assessment against the noise criteria. The Department has recommended a condition of the operational noise level from all helicopter movements associated with the helipad must not exceed 48dB(A) LAeq 24hr on any day at any residential receiver.
149. The Department has also recommended a condition for noise verification and monitoring by a suitably qualified acoustic consultant within the first 90 days of operation of the proposed development. Should the noise verification find any non-compliance with noise criteria, the acoustic consultant must submit a report with recommendations to ensure compliance to the Department within 60 days of completing the measurements.
150. The Department's recommended condition requiring the Applicant to prepare a Helipad Operations Management Plan (HOMP) includes requirements for noise management and monitoring.

Operational vibration

151. The Applicant's noise and vibration consultant conducted an operational vibration assessment in accordance with the *Assessing Vibration: a technical guideline* (DECC, 2006) to assess human discomfort caused by vibration generated by the operation of the helicopters. The recommended vibration criteria are provided below in **Table 7**.

Table 7 | EPA recommended vibration criteria

Receiver	Time	RMS acceleration (m/s ²)		RMS velocity (mm/s)		Peak velocity (mm/s)	
		Preferred	Maximum	Preferred	Maximum	Preferred	Maximum
Continuous Vibration							
Residences	Daytime	0.01	0.02	0.2	0.4	0.28	0.56
Commercial		0.02	0.04	0.4	0.8	0.56	1.1
Industrial		0.04	0.08	0.8	1.6	1.1	2.2
Impulsive Vibration							
Residences	Daytime	0.3	0.6	6.0	12.0	8.6	17.0
Commercial		0.64	1.28	13	26	18	36
Industrial		0.64	1.28	13	26	18	36

Note 1: Continuous vibration relates to vibration that continues uninterrupted for a defined period (usually throughout the daytime or night-time), e.g. continuous construction or maintenance activity. (DECC, 2006)

Note 2: Impulsive vibration relate to vibration that builds up rapidly to a peak followed by a damped decay and that may or may not involve several cycles of vibration (depending on frequency and damping), with up to three occurrences in an assessment period, e.g. helicopter movements.

152. All predicted vibration levels associated with the helicopter movements are predicted to be less than 0.2mm/s peak particle velocity (PPV) and comply with the Assessing Vibration: a technical guideline recommended vibration criteria.
153. There were no specific comments from government agencies regarding vibration impacts.
154. Penrith City Council were concerned that vibration monitoring referenced in the EIS is not addressed in the noise and vibration impact assessment.
155. Public submissions related to operational vibration raised concerns on the adequacy of the vibration assessment and vibration impacts at Waterside Estate. The Department accepts the Applicant's predicted vibration levels during operation of the proposed helipad comply with Assessing Vibration: a technical guideline.
156. The Department has recommended conditions to include a complaints management and response procedure within the HOMP. This would include complaints about vibration impacts.

Ground maintenance noise assessment

157. To address the EPA's requirements the Applicant's acoustic consultant conducted a ground maintenance noise assessment in accordance with the relevant *Noise Policy for Industry* (EPA, 2017).
158. Predicted noise levels for maintenance activities at sensitive receivers were predicted based on the following assumptions:
 - on ground helicopter maintenance activities including refuelling and use of hand tools have a Sound Exposure Level of 90dB(A)

- the maintenance activities are continuous during the 15 minute assessment period. No maintenance is to be conducted between the hours of 10pm and 7am
- distances from the proposed development’s ground maintenance and sensitive receivers are the same as those assessed in the operational noise and vibration assessment.

159. Noise levels were assessed against the “evening” time period of 6pm to 10pm as this is the worst time for potential maintenance activities.

160. The predicted noise levels provided in **Table 8**:

Table 8 | Maintenance activities noise levels

Receiver	Predicted dB(A)_{LAeq 15 min}	Criteria dB(A)_{LAeq 15 min}	Complies
47-65 Old Castlereagh Road	<30dB(A)	35dB(A)	Yes
39-45 Old Castlereagh Road	<30dB(A)	35dB(A)	Yes
Sydney International Regatta Centre	<25dB(A)	53dB(A)	Yes
Waterside Estate	<25dB(A)	35dB(A)	Yes
Proposed Golf Course	<25dB(A)	53dB(A)	Yes

161. Predicted noise levels comply with the requirements of the *Noise Policy for Industry*.

5.5 Biodiversity

162. The proposal has been designed to avoid and minimise potential impacts on biodiversity. The design of the proposal has incorporated existing cleared areas as much as possible and minimised the need for clearing and pruning of native vegetation. Other vegetation will be retained, avoiding and minimising direct impacts on biodiversity values where possible.

163. The Applicant prepared a Biodiversity Development Assessment Report (BDAR) in accordance with section 7.9 of the Biodiversity Conservation Act 2016 (BC Act) and Biodiversity Assessment Method (BAM) 2020, Appendix D: Streamlined assessment module – Planted native vegetation.

164. The development site is located in an area comprising primarily planted native vegetation. Remnant vegetation in the development site has historically been cleared and replaced by planted native and exotic species or colonised by exotic grasses. The planted vegetation represents a combination of indigenous native species occurring naturally on the Cumberland Plain and exotic species. Groundcover is dominated by non-native plant species and representative of land that has been modified through clearing and earthworks, resulting in highly modified soil profile and degraded habitat.

165. The development site would require approximately 0.55 ha of vegetation to be cleared. 0.10 ha of this is planted native vegetation. The vegetation does not conform to a Plant Community Type or Threatened Ecological Community. Direct impacts to vegetation occur mainly in areas that were already cleared or comprise exotic vegetation.

166. No threatened flora or threatened fauna species were recorded during biodiversity field surveys within the development site. There was no evidence of threatened species utilising habitat within the development site. There were no stick nests, dreys, hollows, fallen logs or other important habitat features recorded during the field survey. Threatened species were considered unlikely to use habitat within the development site and no threatened species habitat will be removed as a result of the proposed works. Therefore, no species credits and no ecosystem credits are required under the Biodiversity Offsets Scheme (BOS).
167. The development site does not involve impacts to key fish habitat, does not involve harm to marine vegetation, dredging, reclamation or obstruction of fish passage. A permit or consultation under the Fisheries Management Act 1994 (FM Act) is not required. No land listed under Part 7A of the FM Act is present within the development site.
168. Mitigation measures include pre-clearing and fauna management procedures, an unexpected fauna finds protocol, and weed control and management. Specific weed control and management requirements include the removal of any identified high threat weeds in accordance with the Biosecurity Act 2015 and vehicle washdown to prevent spread of soil borne pathogens such as Phytophthora.
169. The Department of Primary Industries Fisheries (DPI Fisheries) notes that no dredging or reclamation was required for the proposed works and had no objection.
170. The Environment and Heritage Group of the Department reviewed the BDAR and raised no comments or concerns in relation to the biodiversity impacts associated with the proposed development. The vegetation on site is planted native vegetation and the BDAR does not identify requirements to offset biodiversity impacts from the proposed development through the purchase and retirement of biodiversity credits.
171. Environment and Heritage Group are satisfied that the proposal will not adversely impact upon the nearby Yellomundee Regional Park (YRP) and Blue Mountains National Park (BMNP). The proposed helipad supports aerial firefighting operations which will support rapid fire response in BMNP and YRP and compliment park management operations.
172. Public submissions related to biodiversity raised concerns on impacts to feeding and breeding of migratory birds within the Penrith Lakes and along the proposed flight paths. The Applicant assessed potential direct and indirect impacts resulting from construction and operation of the development. Construction of the development will be limited to less than three weeks in duration. The BDAR noted potential noise and dust impacts during construction would be sporadic occurring over a short-term period. The BDAR also stated the impact during operation to local habitats via take off/landing would be negligible based upon the limited number of daily and weekly flights and the timeframe for a helicopter vehicle to ascend.
173. Public submissions raised concerns on flight path impacts on biodiversity from flights over and through the Greater Blue Mountains World Heritage Area (GBMWH) (see Section 5.3).
174. The Department considered the biodiversity impacts during construction and operation of the proposed helipad, and notes the proposal does not clear remnant native vegetation or require biodiversity offsets. The Applicant's commitments for managing and reducing biodiversity impacts, including an expected fauna finds protocol, along with the Department's recommended conditions that cleared trees are replaced at a ratio of 2:1 and for pre-clearing procedures, ensure that biodiversity impacts are appropriately managed and minimised.

5.6 Aboriginal cultural heritage

175. The proposal is on the country of the Darug people. The Applicant prepared an Aboriginal Heritage Due Diligence Assessment (ADD) in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW, 2010) to support a request to waive the SEARs' requirement to complete an Aboriginal Cultural Heritage Assessment Report (ACHAR) as the preliminary investigation did not indicate the likely presence of Aboriginal objects on the site.
176. The development site is located in an area comprising mainly planted native vegetation and contains no culturally modified trees due to historic land clearance associated from the former quarry.
177. The proposal area has generally flat topography, rising slightly towards the southern boundary. This local topography has been altered by past earthworks associated from the former quarry. The higher ground on the southern boundary is the original elevation. The flat terrain is consistent with its location on a terrace of the Nepean River.
178. Areas within 200m of the whole or any part of a river, stream, lake, lagoon, swamp, wetlands, natural watercourse or the high-tide mark of shorelines are considered sensitive areas for Aboriginal objects and places. The development site is located approximately 500m north of the current course of the Nepean River. Aerial photography from 1961 shows a natural waterway running in a south-east to north-west direction through development site, with a portion within 200 metres of that waterway.
179. However, previous land uses within the proposal area resulted in minimal potential for Aboriginal objects and archaeological potential:
 - quarrying caused high levels of ground disturbance across most of the proposal area, reducing the potential for Aboriginal objects to be retained
 - construction of the main dwelling, associated sheds, structures and infrastructure caused extensive disturbance to topsoil outside the quarried area, significantly reducing archaeological potential.
180. The ADD included a search of the Aboriginal Heritage Information Management System (AHIMS) carried out on 14 September 2021, for an area of approximately 5km x 5km. The AHIMS search identified no Aboriginal objects or places within the development site, but in the broader search area, 38 Aboriginal objects and no Aboriginal places are registered.
181. The ADD concluded the proposal will not harm Aboriginal objects, as the only proposed activities that will disturb the ground surface were confined to areas previously subject to high levels of ground disturbance. The ground disturbance caused by earthworks associated with the Penrith Lakes Scheme involved quarrying material to a significant depth. The ADD determined there is nil potential for Aboriginal objects to be retained in these areas.
182. The Applicant committed to implementing measures to manage inadvertent impacts including an unexpected archaeological finds procedure and unexpected human remains procedure.
183. Blue Mountains City Council suggested the ACHAR waiver request should not be accepted, and the Applicant should consult with Aboriginal people on this proposal, including on the potential adverse impacts to places and sites of Aboriginal cultural significance within the Blue Mountains World Heritage National Park.
184. Public submissions raised concerns that the potential impacts on the Greater Blue Mountains World Heritage Area have not been considered as increased joy flights and helicopter tourism would impact heritage significant scenic values from the air. The Department acknowledges the community's

concerns that the Applicant's EIS does not provide details of broader flight patterns beyond the proposed take-off and landing flight paths (see **Section 5.3**).

185. Other public submissions were concerned the Applicant did not consult the Aboriginal community and the assessment was desktop without field investigations.
186. The Department consulted EHG on Aboriginal cultural heritage assessment requirements. EHG advised the Applicant should seek advice on Aboriginal cultural heritage matters from a qualified archaeological consultant and refer to Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.
187. The Department accepts the Applicant's conclusion that the development site has nil to low potential for Aboriginal objects and is unlikely to harm Aboriginal objects. The Department acknowledges an ACHAR is not necessary for this development application and considers that the information provided by the Applicant demonstrates this.
188. The Department also notes the Applicant's assessment does not consider impacts on Aboriginal cultural values relating to the Blue Mountains World Heritage Area. The proposal does not include any works within this area that would directly impact any Aboriginal sites. The Department does not have any evidence suggesting that the proposal would have an unacceptable impact on cultural values.
189. The Department supports the Applicant's approach to mitigation and is satisfied with the Applicant's proposed unexpected archaeological finds procedure and unexpected human remains procedure.

5.7 Flooding and hydrology

190. The Applicant's consultant prepared a Floodplain Risk Management Assessment (Appendix L of the EIS) for the development site. Site elevations range from approximately 15 to 26 metres Australian Height Datum (AHD), with terrain sloping away from Old Castlereagh Road. There are existing improvements at the development site, with several structures on the higher elevated section and a hardstand area to the east. The lower areas to the east are densely vegetated and a pond is located on the north-western portion.
191. The Applicant referred to the Nepean River Flood Study (Advisian, 2018) to review existing flood behaviour at the development site. Estimated flood levels were calculated for 1% annual exceedance probability (AEP), 0.2% AEP, 0.1% AEP and Probable Maximum Flood (PMF).
192. The Department has considered clause 5.38 of the Western Parkland City SEPP) (formerly clause 33 of the Penrith Lakes SEPP) (**Appendix C**) and clause 3.1 flood planning and evacuation of the Penrith Lakes Development Control Plan 2021 (**Appendix D**).
193. The development site is located above the flood planning level and not directly affected by flooding except in very rare flood events (i.e. flood events greater than a 0.2% AEP). The proposed development is compatible with the flood hazard of the land.
194. **Figure 7** shows the location of the area of the site proposed for development in relation to the 0.2% AEP flood extent.



Figure 7 | Area of site proposed for development with 0.2% AEP flood extent shaded purple (Source: Applicant's Floodplain Risk Management Assessment)

195. Considering climate change impacts, the site becomes directly affected by the flood hazard in the 0.1% AEP flood event. It is also exposed to extreme high hazard flooding in the PMF which represents a theoretical event with an extremely low likelihood of occurrence.
196. The development site is located above the 1% AEP plus freeboard flood planning level, which contributes to mitigating the risk to property. Potential pollutants such as fuel will also be stored above this level. Access to the development may be cut in more frequent events than the events that would cause the developed area of the site to flood, which will be managed by the existing evacuation procedure for this area.
197. Only minor earthworks are proposed as part of the development, with hardstand replacing several existing structures on site. There is therefore minimal change to both impervious fraction and topography. There is expected to be negligible change to flood behaviour due to the development.
198. The proposed development is unlikely to significantly increase the population on the site compared to previous land uses, particularly in the event of predicted inclement weather, due to the nature of the activities.
199. The Applicant also referred to the Hawkesbury – Nepean Valley Flood Risk Management Strategy. The development site is consistent with the strategy with respect to flood evacuation methodology.
200. EHG reviewed the Floodplain Risk Management Assessment and advised the Floodplain Risk Management Assessment was inadequate. Their review noted the flooding assessment did not address the SEARs, Penrith Lakes SEPP, Penrith Lakes DCP 2021, or requirements for flood emergency management and evacuation.
201. The Department notes the concerns EHG raised regarding the adequacy of the Floodplain Risk Management Assessment and requirements for flood emergency management and evacuation. The Department is satisfied that the Applicant's floodplain risk assessment contains sufficient information to demonstrate the development site is above the flood planning level and does not consider that further

assessment is necessary to assess the proposal against relevant development standards and controls relating to flooding.

202. Transport for NSW (TfNSW) advised the proposed flood evacuation procedures appear to incorrectly identify primary evacuation routes via the Great Western Highway which includes exiting from the site via a low-lying railway underpass at Penrith. TfNSW recommended the Applicant revisit flood evacuation procedures and consult with NSW State Emergency Service (SES) on the preferred regional evacuation path.
203. TfNSW recommended the Department (or SES) engage a flood expert to review the Applicant's evacuation modelling against the SES requirements for flood modelling and flood evacuation capacity and the flood emergency management plan.
204. Penrith City Council (PCC) advised the Department must determine the appropriate flood planning level (FPL) for the proposed development in accordance with the NSW Flood Prone Land Policy and NSW Floodplain Development Manual (Department of Infrastructure, Planning and Natural Resources, 2005) and in compliance with the Precincts – Western Parkland City SEPP.
205. PCC requested the SES be consulted regarding the suitability of the location. PCC also recommended the SES and Infrastructure NSW be consulted to check the development site can be accommodated within the regional evacuation framework required under the Penrith Lakes SEPP. The Department supports the Applicant's conclusion that the development site is unlikely to be inappropriately affected by flooding, or have a detrimental impact on flooding elsewhere. The part of the site proposed for development is located above the flood planning level and the proposal involves minor earthworks and built form changes that are unlikely to cause significant changes to drainage within Penrith Lakes.
206. The Department accepts that the development site will require evacuation prior to and in the event of very rare to extreme flooding, and notes EHG, TfNSW and PCC comments on this matter. The proposal is for a less intensive development with a lower on-site occupancy than other forms of development anticipated by the LEP and DCP. The Department therefore does not consider that the use of the site would significantly affect the overall flood evacuation of Penrith Lakes.
207. However, the Department considers that the flood evacuation procedures should be further developed to meet EHG's and TfNSW's comments, including the engagement of a flood expert to prepare the Applicant's evacuation modelling against the SES requirements for flood modelling, and flood evacuation capacity and has recommended conditions of consent to that effect.

5.8 Other issues

208. Other issues considered by the Department are assessed in **Table 9**.

Table 9 | Other issues related to the proposal

Issue	Findings	Recommendations
Non-Aboriginal heritage	<p>There are no expected impacts to non-Aboriginal heritage</p> <p>The Western Parkland City SEPP aims to conserve the environmental heritage of Penrith and to conserve the heritage significance of heritage items and heritage conservation areas,</p>	<p>The Department accepts the Applicant's approach in managing potential non-Aboriginal heritage impacts through an unexpected heritage finds procedure.</p>

Issue	Findings	Recommendations
	<p>including associated fabric, settings and views. The development site has not been identified as containing any heritage significance within, or in proximity of, the site. The six heritage items in Schedule 6 of the Precincts – Western Parkland City SEPP (formerly Schedule 3 of the Penrith Lakes SEPP) are not expected to be affected by the proposal as the:</p> <ul style="list-style-type: none"> • distance to the nearest heritage item, being approximately 975m, will not interfere or physically impact with surrounding heritage items • proposed works will not obstruct views or sightlines to and from surrounding heritage items • proposed works will not overshadow surrounding heritage items or items within surrounding heritage conservation areas • proposed works will not alter the existing character of the site against surrounding heritage items or heritage conservation areas. 	
<p>Contaminated soils</p>	<p>Potential contaminated soils in the development site require further investigation</p> <p>Clause 4.6 of <i>State Environmental Planning Policy (Resilience and Hazards)</i> states contamination and remediation must be considered before determining a development application. If land is contaminated, the consent authority must be satisfied the land is suitable for the proposed land use in its contaminated state or will be suitable after remediation.</p> <p>The Applicant undertook a Preliminary Site Investigation (PSI) (EIS Appendix J) to investigate the potential for contamination at the development site and on the need for further investigation and/ or management with regard to the proposal. The PSI was prepared in accordance with applicable guidelines.</p> <p>The development site is understood to have been used for farmland until 1961, at which time it was acquired by River Sand and Gravel Pty Limited and used for alluvial sand and gravel quarrying. These former uses are defined in Table 1 of the <i>Planning Guidelines – Managing Land Contamination</i> (DUAP,1998) as agricultural activities and mining and extractive industries. In 1989 the site was acquired by Penrith Lakes Development Corporation and developed into its current commercial/ light industrial land use.</p>	<p>Penrith City Council noted the PSI identified the potential for underground fuel storage tanks at the development site and a Detailed Site Investigation (Contamination) (DSI) be conducted following the demolition of the site buildings / structures.</p> <p>PCC referred to the adequacy of fill material that may be present in the site in terms of the nature/extent/compliance. PCC stated the importance of past activities on the site being recorded, and that any fill material imported to the site should be certified as controlled fill in accordance with the relevant Australian Standards.</p> <p>PCC recommended the conditions of consent include requirements for further site investigation and, where necessary, remediation and validation.</p> <p>The Department accepts that the results of the current PSI have not identified indicators of</p>

Issue	Findings	Recommendations
	<p>The site's surrounding area has a similar history, with agricultural land use until the 1950's, followed by mining and incorporation into the Penrith Lakes Scheme from the early 1990's.</p> <p>Identified potential sources of contamination at the site include fill, former agricultural and quarrying land uses, hazardous building materials from the buildings and structures on the site, dangerous goods currently stored on site (i.e., flammable liquids, underground tanks and chemical storage) and surrounding (up-gradient) commercial / industrial land uses including service stations, chemical manufacturing and waste generation facilities.</p> <p>The investigation encountered two distinct 'types' of fill across the site. Figure 4 of Appendix J identifies these being 'non-quarried fill' and 'quarried fill.' Non-quarried fill comprises the Old Castlereagh Road easement boundary (including vegetation bordering the road), then from the two single storey sheds west of the single storey cottage, the single storey cottage and large single storey shed in east, then to the single storey office building in the north of the development site. All other areas within the development site are classified as 'quarried fill.'</p> <p>Within 'non-quarried' parts of the site, surface-level fill comprising sands, gravelly sands, silty clays underlying silty / clayey topsoils or asphaltic pavements, were encountered to maximum depths of about 1 metre below the surface. In the 'quarried' parts of the site, material inferred to be possible fill was encountered to significant depths, potentially up to 12.2 metres below existing surface levels. The inferred fill typically comprised layers of sands and clays, with gravel. Various anthropogenic materials were encountered in several test pits including timber, asphaltic concrete, PVC pipe, brick rubble, glass and a possible asbestos containing fibre cement pipe. The fill was underlain by natural alluvial sands and clays. The fill soils at the site have been given a preliminary waste classification of General Solid Waste (non-putrescible).</p> <p>Several fragments of potential asbestos containing material (ACM) were also observed at the surface near site buildings. One potential ACM was collected for site analysis and was tested and found to not be ACM. The investigation noted that regardless it is considered possible that ACM may be present at the development site, particularly within and around site structures.</p> <p>The results of the intrusive soil investigation indicate that levels of contaminants in the</p>	<p>widespread contamination at the development site.</p> <p>The Department also acknowledges that given the reduced sampling density adopted for the PSI, and that investigations have not been undertaken in the vicinity of the underground fuel tanks identified in the SafeWork NSW records, the potential for unidentified contamination pockets cannot be ruled out.</p> <p>The Department supports the Applicant's recommendation for a Detailed Site Investigation (Contamination) (DSI) be conducted at the site following the demolition of the site buildings / structures. The DSI would determine whether the site is suitable for the intended use. The Department is satisfied the site is suitable for its proposed use / can be made suitable subject to remediation.</p> <p>In the event the DSI report determines that levels of contamination on the development site need to be reduced in order for the site to be suitable for the proposed land use, a Remedial Action Plan (RAP) and Site Audit Statements will be required. The RAP and Site Audit Statements will confirm before remediation that the land can be made suitable for its proposed use, and that once remediation is completed that the land has been made suitable for its intended use.</p>

Issue	Findings	Recommendations
	<p>analysed fill and natural soil samples are within the adopted site assessment criteria.</p>	
<p>Soil and water</p>	<p>Surface water run-off will be managed appropriately during construction and operation of the proposal</p> <p>The Department accepts the Applicant’s approach to methodology by referring to the Penrith City Council Development Control Plan (DCP) 2014 and Penrith Water Sensitive Urban Design (WSUD) Policy 2013. The Applicant has considered the requirements of Penrith Lakes DCP 2021 (Penrith Lakes DCP) as Stage 1 of the DCP was finalised in November 2021 (refer to Appendix D for further detail).</p> <p>The proposed stormwater treatment train was modelled in MUSIC (Model for Urban Stormwater Improvement Conceptualisation). Penrith City Council’s MUSIC-Link default nodes were used, to ensure the Event Mean Concentration (EMC) values for different types of catchments were to Council’s standard.</p> <p>The development site is classified “Commercial & Industrial - Alterations and additions where the increase in the roofed or impervious area is equal to or greater than 250 metres”, under Council’s DCP and therefore requires WSUD guidelines to be met.</p> <p>The proposed development is consistent with section 5.38 of the Precincts – Western Parkland City SEPP. The development would not remove riparian vegetation or reduce stability of riverbanks or watercourses. The proposal would not cause avoidable erosion or siltation.</p> <p>Removal of existing ground cover to expose soil is expected during construction of the proposed hardstand area and creates potential for runoff during rainfall events. The Department supports the Applicant’s approach to protect receiving waterways from sediment laden runoff by implementing the strategy outlined in the Sediment and Erosion Control Plan (Appendix I Civil & Stormwater Report Management – Appendix A).</p> <p>Public submissions raised concerns the proposed development would directly and indirectly impact Penrith Lakes and surrounding waterways by the development’s storage of fuel, and the potential for fuel spills contributing to water pollution. Fuel will be stored in self-bunded tanks, minimising the risks of leaks and spills. The Department accepts the Applicant’s approach for self-bunded tanks to</p>	<p>The Department accepts the Applicant’s Stormwater and WSUD strategy (Appendix I – Appendix A) for construction of the development site and notes the Applicant has considered mitigation in accordance with Managing Urban Stormwater: Soils and construction - Volume 1 (Landcom, 2004) (‘Blue Book’).</p> <p>The Department accepts the Applicant’s Stormwater and WSUD strategy for operation of the development site (EIS Appendix I).</p> <p>Penrith City Council provided a copy of its recommended standard engineering conditions of consent which includes stormwater management requirements. The Department has included these standard engineering conditions where applicable.</p> <p>The Department supports the Applicant’s findings that potential impacts to the Sydney International Regatta Centre and the Penrith Lakes is considered negligible providing the Applicant’s Stormwater and WSUD strategy (Appendix I – Appendix B) and the Operation and Maintenance Schedule (Appendix I – Appendix D) is implemented.</p>

Issue	Findings	Recommendations
	<p>store fuel on site. Further detail on this issue in relation to fuel storage above the flood planning level is provided in Section 5.7.</p> <p>Minimal impacts to Sydney International Regatta Centre</p> <p>Stormwater from the development site will be treated in accordance with best practice guidelines, removing sediment, nutrients, and hydrocarbons prior to discharging off site. The quality of the stormwater post development is expected to be improved compared to the existing runoff quality, as the development site will decrease the impervious area, and introduce treatment measures.</p> <p>The site borders the Sydney International Regatta Centre, however stormwater from the site is first intercepted by a large dam that is vegetated around its perimeter with wetland plantings. After at source stormwater treatment via the raingarden, the stormwater will flow via a system of vegetated swales and ponds to the large dam where it will be further filtrated, prior to overflow into the Sydney International Regatta Centre.</p> <p>The source pollution and residual pollution (after treatment) for the development site was modelled in MUSIC assuming pollutant loading typical for an industrial site. The treatment measures shown in the modelling effectively reduce the pollution levels in accordance with Penrith City Council’s pollution removal targets. The treatment measures will also be effective at minimising flow entering Penrith Lakes (the receiving water) by promoting infiltration and reuse.</p> <p>Further, runoff from the development site, once discharged into the existing stormwater network, will enter an existing dam on the property before travelling over 70m to Penrith Lakes (in events where the dam overtops). Therefore the impact on Penrith Lakes, including disturbance of sediments, is considered to be negligible.</p>	
<p>Air quality</p>	<p>Air quality impacts will be negligible during construction and operation</p> <p>The Applicant’s consultant undertook an Air Quality Impact Assessment (AQIA) for the proposal (Appendix O). The Department accepts the Applicant’s approach to conduct a qualitative risk-based assessment of potential air quality emissions during construction of the development site and from the operation of a helipad.</p> <p>There are two sensitive receivers that are rural residential properties located at Old Castlereagh Road east of the development site. The closest sensitive receiver is 470 metres from the</p>	<p>The Environment Protection Authority (EPA) requested further information to confirm whether the location of sensitive receivers at Old Castlereagh Road were considered in the AQIA and identify at what stage of the proposal they would be impacted.</p> <p>The Applicant provided further information to address the EPA’s request. The sensitive receivers at Old Castlereagh Road were</p>

Issue	Findings	Recommendations
	<p>development site, the next closest is 600 metres. Apart from these, the next closest sensitive receptors are located in the residential area approximately 1.2 km to the east of the development site. The land surrounding the development site and the greater Penrith Lakes precinct is flat and does not contain terrain features that may exacerbate air quality impacts from air emissions in the area.</p> <p>Wind data obtained from the Bureau of Meteorology Penrith Lakes Automatic Weather Station located less than 1 km to the northwest shows that the prevailing wind directions are south-south westerly to southerly. With a relatively low frequency of westerly and west to south westerly winds, there is less potential for exposure of the nearest sensitive receptors to the east of the proposal.</p> <p>Background air quality monitoring data was obtained from Penrith Air Quality Monitoring Station (AQMS) and Richmond AQMS.</p> <p>Public submissions raised concerns that the proposed development would increase potential for dust impacts at nearby residences and the Sydney International Regatta Centre. During construction, particulate matter would be mostly generated by demolition and excavation work, materials handling and material storage, along with the operation of on-site machinery. With the implementation of standard dust control measures and vehicle maintenance, the proposal would have a minor impact on local air quality during construction, and the effects on human health would be negligible.</p> <p>The AQIA identified the following sources of air emissions during operation:</p> <ul style="list-style-type: none"> • combustion emissions from helicopters during take-off and landing and while idling • combustion emissions from additional road traffic associated with operations are expected to be low and were therefore not considered further in the AQIA • wind-blown dust from unsealed helicopter landing areas will be minimal at the development site since the landing and take-off area is proposed to be grassed • low level of odour emissions associated with the helicopter emissions, as well as vapours from the handling of fuels are not expected to be noticeable beyond the site boundary or at nearest receptors, and therefore not considered further. 	<p>considered in the AQIA's assessment of potential impacts during construction and operation. The AQIA concluded it is considered highly unlikely that emissions from the development would have any health-related impacts on existing air quality in the area.</p> <p>The Department has recommended a condition requiring all reasonably practicable measures be implemented to minimise the emission of dust and other air pollutants during construction.</p>

Issue	Findings	Recommendations
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The AQIA was based on:

- hours of operation between 06:00 to 22:00 with the majority of the flying occurring between 07:30 to 18:00
- flight paths are to the west and east avoiding the Sydney International Regatta Centre and the Richmond Military airspace to the north of the site
- estimated annual jet fuel consumption for the operations is 250,000L.

Public submissions raised concerns that during operation of the development, emissions from helicopters would contribute to an increase in air pollution. The air quality emissions from the proposed helicopter operations were determined to be of low significance. Helicopter emissions are expected to be well dispersed before reaching the nearest off-site sensitive receptors at distances of 470 metres to 1.2 kilometres. Turbulence created by helicopter blades will contribute to dispersion of engine exhaust emissions. It is considered highly unlikely that emissions from the proposal will have any health-related impacts on existing air quality in the area. The potential magnitude of impacts due to operations is concluded to be negligible.

Hazards and risk

Dangerous goods would be stored and handled in accordance with relevant legislation

An assessment against State Environmental Planning Policy No. 33 (SEPP 33) was prepared, to review the site for potentially hazardous and offensive material. The facility is not classified as potentially hazardous, so a Preliminary Hazard Analysis is not required. The following dangerous goods are proposed to be stored and handled at the site:

The Department notes that the proposal does not trigger former SEPP 33. The Department recommends a condition requiring that all chemicals, fuels, and oils are stored in accordance with relevant Australian Standards and guidelines.

Class	PG	Description	Quantity (kg)
2.1	n/a	Aerosols (i.e. paint, degreasers)	250 kg
3	II	Flammable liquids (Jet A1)	30,000 L / 24,000 kg
3	II & III	Flammable liquids	250 kg

The types and proposed quantities of aviation fuel and other dangerous goods to be stored at the site have been considered in accordance with the

Issue	Findings	Recommendations
	<p>requirements and criteria set out in <i>Hazardous and Offensive Development Application Guidelines – Applying SEPP 33</i> (Applying SEPP 33) (Department of Planning, 2011). The Department’s hazards specialist has reviewed the proposal and confirmed the proposed dangerous goods that will be stored do not exceed the Applying SEPP 33 thresholds.</p>	
<p>Waste</p>	<p>Waste will be managed in accordance with relevant legislation</p> <p>The Applicant assessed the quantities and classification of waste that would be generated from the proposed development, namely construction and operation activities. Construction waste from the demolition and fit-out of the hangar would be stockpiled and appropriately removed by a licenced contractor; waste from operational activities removed from the site in accordance with EPA procedures.</p> <p>The Applicant has committed to waste management measures including waste servicing, waste avoidance, re-use and recycling, communication strategies, signage, monitoring, and reporting in the operational phase of the development.</p> <p>The Department considers waste from construction and operation would be minimal, and without impact if handled appropriately. The Applicant’s proposed waste management measures are supported and no further conditions are required.</p>	<p>The Department requires the Applicant to ensure waste is classified in accordance with the EPA’s <i>Waste Classification Guidelines</i>, with appropriate records retained for audit purposes.</p> <p>Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to a facility that can lawfully accept such waste.</p> <p>The Department supports the Applicant’s recommendation for a hazardous building material (HAZMAT) assessment be conducted for the existing site buildings. Hazardous materials, if present, will need to be removed in accordance with relevant legislation and guidelines prior to demolition.</p>
<p>Visual</p>	<p>Visual impacts of the proposed helipad are negligible</p> <p>The potential visual impacts from construction and operation of the proposed helipad have been considered. The proposed built works would not cause substantial changes or additional impacts to the context or setting of the site. The built works would not increase the height, scale, or bulk of buildings on site, which would change the character and visual accessibility of the site.</p> <p>The Department notes that the take off and landing of helicopters on an open parcel of land cannot be visually screened or hidden. However, the helicopter landing site is centrally located and would not be visible from the adjoining residences and Penrith Lakes to the north. Whilst the take off</p>	<p>The Department has included a condition to ensure that lighting installed at the helicopter landing site and associated structures complies with Australian Standard Control of the obtrusive effects of outdoor lighting AS4282-1997.</p>

Issue	Findings	Recommendations
	<p>and landing of aircrafts would be visible, it is noted that departure and landing activities would be completed in a few minutes.</p> <p>Impacts from lighting and light spill at the helicopter landing site and from the helicopters have been considered. The Department supports the Applicant's commitment to remove an existing flood light at the site, to reduce light spill from the site to adjoining land. A condition is recommended to ensure the operation of the helipad does not create additional light spill.</p> <p>The Department considers the proposed helipad facility is of a small scale and would be sympathetic to the existing context of the Penrith Lakes Scheme. The overall low visibility of the helipad facility would not cause adverse visual impacts to the existing residential and commercial land uses and the Blue Mountains National Park. The Department is satisfied the visual impacts of the proposed helipad are negligible.</p>	
<p>Traffic and transport</p>	<p>Vehicle movements associated with the proposal would have a negligible traffic impact</p> <p>The potential traffic and transport impacts as a result of the helipad facility operating have been considered. The Applicant assessed the peak traffic generating period of the site and predicted the trips expected to be generated during peak hours. The expected maximum number of peak hour trips generated from customers accessing the site between 8:00am-9:00am and 4:00pm-5:00pm (when the facility opens and closes for the day) is approximately 25.</p> <p>The EIS provided turning circle diagrams to demonstrate that the existing internal road network can accommodate the largest vehicle proposed to service the site.</p> <p>The site contains existing 40 standard car parking spaces and one accessible car parking space, which satisfies the Building Code of Australia requirement for Class 9b buildings of one accessible space for every 50 parking spaces. The Department is satisfied that the existing parking spaces would comfortably accommodate all staff and potential guests at the site, should all 10 staff members and 15 customers be on site, at one given time.</p>	<p>The Department has considered the Applicant's assessment of traffic and transport impacts and is satisfied that the operation of the helipad would not disrupt the existing road and transport network.</p> <p>The Department notes that Castlereagh Road near the site has approximately 30,000 vehicle movements per day. Additional vehicle movements associated with the proposal would have a negligible traffic impact on this road.</p> <p>The Department has recommended conditions of approval related to vehicle movements for flood evacuation (see Section 5.7).</p>

6 Evaluation

209. The Department has assessed the proposal and supporting information on its merits in accordance with:

- the matters in section 4.15(1) of the EP&A Act and relevant EPIs
- objects of the EP&A Act and
- the principles of ecologically sustainable development
- Environmental Planning and Assessment Regulation 2021 (EP&A Regulation).

The Department consulted key NSW Government agencies, local councils and engaged an independent acoustic expert to assist with its assessment of the application.

210. The Department acknowledges public concerns about potential impacts of the development. Key issues for assessment included land use and permissibility, site selection and flight paths, and noise and vibration.

211. The Department assessed the proposal's permissibility within the existing land use against relevant statutory requirements and is satisfied the proposal is a permissible land use.

212. The helipad facility would not impact on safe operations of the nearby Western Sydney Airport (WSA) and the Royal Australian Airforce (RAAF) Richmond Base. The proposed flight paths were selected to avoid impacts on surrounding residential, sporting and commercial land uses. The Department is satisfied the proposed flight paths would minimise adverse impacts to surrounding land uses.

213. The Department is satisfied the proposal can operate with acceptable acoustic impacts on surrounding receivers, and has recommended conditions limiting flight numbers and requiring annual noise verification to maintain acceptable impacts.

214. The Department has assessed the physical works associated with the proposal and considers them acceptable. While the unauthorised building works were removed from the amended application and cannot be retrospectively approved, the Department considers they have planning merit.

215. The Department concludes the impacts of the proposal are acceptable and can be appropriately managed through implementation of the recommended conditions of consent.

216. Consequently, the Department concludes the development is in the public interest and is approvable and recommends the Commission accepts the amended application.

217. This assessment report is hereby presented to the Commission for determination.

Endorsed by:



Glenn Snow
Director
Transport Assessments

Endorsed by:



Erica van den Honert
Executive Director
Infrastructure Assessments

Appendices

Appendix A – List of Documents

The Department relied on the following key documents during its assessment of the proposed development:

Environmental Impact Statement

- *Environmental Impact Assessment: Proposed Helipad 89-151 Old Castlereagh Road, Castlereagh*, prepared by Urbis and dated 25 October 2021.

Submissions

- All submissions received from members of the public, community groups, relevant public authorities and councils.

Response to Submissions

- *Response to Submissions: DA21/15298 Penrith Lakes Helipad*, prepared by Urbis and dated February 2022.

Amendment Request

- *DA21/15298 – Penrith Lakes Helipad | Revised Proposal Scope*, prepared by Urbis and dated 21 April 2022
- Revised architectural plans, all prepared by WMK and dated 28 April 2022:
 - 21080-DA001(C) – Existing Site Plan
 - 21080-DA100(C) – Demolition Plan
 - 21080-DA101(C) – Proposed Plan
- Inspection Certificate, prepared by Algorry Zappia and Associates and dated 21 April 2022.

Other Information

- *DA21/15298 – 100 Old Castlereagh Road, Castlereagh – Request for additional information*, prepared by Urbis and dated 21 December 2021 – provided an assessment against the *Penrith Lakes Development Control Plan 2021* and provided further air quality assessment
- *Sydney Helicopters 89-151 Old Castlereagh Road, Castlereagh – Noise Impact Assessment revision 2*, prepared by Acoustic Logic and dated 13 April 2022.

All documents relied upon by the Department during its assessment of the application can be viewed at: <https://www.planningportal.nsw.gov.au/daex/under-consideration/extension-exhibition-development-application-helipad-penrith-lakes>.

Appendix B – Consideration of Community Views

Issue	Consideration
<p><u>Statutory considerations</u></p> <ul style="list-style-type: none"> proposed land use does not meet the definition of a 'helipad' proposal seeks to establish the existing businesses operational activities consistent with the existing EPA licence, which are typical of a 'helipad' and are not a permissible land use in the current zone proposal incorrectly defined as helipad due to the scale of built works rather than the proposed land use concerns that the operator will undertake helicopter maintenance at the site, which is not a permissible land use under the current zone the facility not being open to the public is inconsistent with the proposed land use inappropriate to consider a helipad application when a draft SEPP amendment to allow a 'helipad' as a permissible use is under consideration lack of clarity about the scope of the DA questioning how an 'emergency' is defined given the proposal to not require limits on flight numbers or hours in an emergency proposed use is inconsistent with the use of Penrith Lakes for parklands proposal is incompatible with the use of the Regatta Centre suggestions for alternative areas and suburbs to undertake the proposed use, such as Bankstown Airport or the new Western Sydney Airport. 	<ul style="list-style-type: none"> The Department considers the proposal meets the definition of 'helipad' subject to restrictions on public access to the site (see Section 5.2). The Department acknowledges that the draft SEPP amendment has not been resolved, but does not consider it is directly relevant to this assessment, which considered the current statutory provisions. The scope of the application has been considered as outlined in the EIS and amendment request. The Department understands that emergency provisions give broad scope for helicopter use in response to emergencies. The majority of land in the Penrith Lakes Scheme would be dedicated for public purposes, but the Scheme has always provided for areas of land to be developed. The proposed development site is within the Tourism zone, i.e. land identified for development under the relevant statutory controls. The east-west flight paths avoid the Regatta Centre, and the revised acoustic report demonstrates the helipad would have acceptable impacts. The Department's recommended requirement for a Helipad Plan of Management includes collaboration with the Regatta Centre's operator to minimise impacts during events. The Department acknowledges the suitability of the site for the proposal, noting its relative isolation from sensitive land uses and the lack of significant airspace restrictions from RAAF Richmond and Western Sydney Airport. The application relates to the proposed use for the proposed site. The Department can only consider the proposal before it, not an alternative site for the proposal.
<p><u>Operating hours, flight paths and airspace</u></p> <ul style="list-style-type: none"> inconsistency between proposed 7:00am – 10:00pm hours of operation and operation beginning at "first light", which would be as early as 5:30am in summer proposed operating hours are excessive and are inappropriate for the noise sensitive area. 	<ul style="list-style-type: none"> The Department notes documents submitted to support the proposal have inconsistent operating hours and that "first light" is not a defined time. Accordingly, the recommended hours of operation are 6.00am to 10.00pm daily. The acoustic assessment confirmed that the proposal would meet noise criteria (see Section 5.4). This is expressed as a 24 hour average and doesn't differentiate between daytime and nighttime operation. The EIS outlines that up to five nighttime flights would occur per week.

Issue	Consideration
<ul style="list-style-type: none"> • number of proposed flights needs to be reduced due to proximity to dense residential areas • proposed flight paths and operating hours will cause disturbance to residents, particularly Waterside Estate • proposed operating hours will cause disturbance to nearby residents and impact sense of well-being, particularly on the Blue Mountains • proposed operating hours and helicopter movements are inconsistent with the current licence held by the operator • lack of details about flight paths over the Blue Mountains • suggestion for north-south rather than east-west flight paths to avoid residential areas • suggestion for all take-offs and landings to be to the west • proposed flight paths would impact the operation of the Sydney International Regatta Centre • impacts of rotor wash on the use of the Regatta Centre • potential impacts on the World Heritage listed National Park and on the residents of the Blue Mountains Local Government Area have not been considered • request that helicopters are not permitted to fly over the Blue Mountains National Park • impacts on outdoor-based businesses in the Blue Mountains • potential clashes with Western Sydney Airport airspace • facility is not needed for emergency services • safety of surrounding residents in the event of an incident • increased joy flights and helicopter tourism would impact significant scenic values from the air on the Greater Blue Mountains World Heritage Area. 	<ul style="list-style-type: none"> • The Environment Protection Licence is a separate regulatory requirement to the development consent and has different terms. • The EIS includes details of take-off and landing approaches. Flight paths of helicopters beyond this are subject to civil aviation requirements, which are separate to this assessment. • The proposed east-west flight path with take-off and landing from both directions accommodates prevailing winds and reduces impacts on the Regatta Centre. The facility is sufficiently distant from the Regatta Centre to avoid rotor wash impacts (see Section 5.3). • The Department has considered noise impacts on Blue Mountains residents and finds them acceptable (see Section 5.3). • The Department is not aware of any specific guidance on aircraft noise on wilderness areas but notes that the proposal would meet criteria for public open space. • The Applicant would also be subject to civil aviation regulations preventing flying lower than 1000 feet over populated areas and 500 feet over unpopulated areas. They have also committed to ‘fly neighbouring’ procedures which includes avoiding flying directly over residential or other sensitive land uses. • The Department is unable to specify where helicopters are able to fly outside of take-off and landing manoeuvres as these matters are subject to civil aviation regulations. • The Department referred the proposal to Western Sydney Airport and the Department of Defence. Neither organisation raised concerns about airspace conflict. • The Department notes queries about whether the facility is actually needed for emergency services, but this is not a planning consideration. The Department has assessed the proposal against the relevant statutory framework. • Civil aviation regulations impose operational safety requirements on helicopter pilots using the proposed facility. The Department is satisfied the site is sufficiently distant from built up areas to reduce consequences of an incident.
<p><u>Noise and vibration</u></p> <ul style="list-style-type: none"> • noise impacts on surrounding residential and recreational areas • noise impacts on local schools • noise from proposal coupled with Western Sydney Airport will increase noise in an existing quiet suburb 	<ul style="list-style-type: none"> • The Department has assessed the acoustic impacts of the proposal and finds that they are acceptable (see Section 5.4). • The Department engaged independent acoustic consultant (Rob Bullen Consulting) to assist its assessment. • The Proponent revised its noise assessment to address the Department’s required noise criteria,

Issue	Consideration
<ul style="list-style-type: none"> • noise measurements and monitoring weren't undertaken at the Waterside estate • impacts on human health • consistency and validity of acoustic testing and noise limits against noise monitoring undertaken has been questioned • requested long-term background noise monitoring be undertaken and noise criteria be reduced to meet the rural surroundings as criteria used is superseded • the timing of background noise monitoring undertaken is inconsistent with the proposed operating hours and additional monitoring needs to be undertaken • Waterside estate noise barriers won't be effective against helicopter noise • request for acoustic treatment of nearby homes • acoustic assessment has not considered the Noise Policy for Industry (2017) • request for a noise management plan to regulate flight numbers, times, paths and recording and monitoring of flight details • request for an independent review of Applicant's noise and vibration assessment and re-assessment be undertaken in consultation with community members. 	<p>noise measurement metric and to clarify sensitive receivers. This included further helicopter noise testing that was observed by Department staff and its acoustic consultant.</p> <ul style="list-style-type: none"> • The Applicant's additional noise measurements were taken at the nearest residential receiver at 47-65 Old Castlereagh Road. This provided actual helicopter noise data that was then used to model impacts at the Waterside estate. • The noise criteria are an absolute measure and are not relative to background noise. • The Department acknowledges concerns about the effectiveness of existing noise barriers and the requestion to treat homes. As the proposal meets the acoustic criteria, it would be unreasonable to require acoustic treatment. • The Applicant's revised acoustic assessment considers the <i>Noise Policy for Industry</i> in relation to ground-based activities. This is the only component of the proposed operation that this policy regulates. • The Department recommends conditions requiring limiting helicopter operations and noise levels to those in the acoustic report, acoustic monitoring to confirm noise levels and a Helipad Plan of Management including measures to reduce noise impacts and community information and complaints procedures.
<p><u>Traffic</u></p> <ul style="list-style-type: none"> • operation of the helipad facility would increase traffic congestion on Castlereagh Road. 	<ul style="list-style-type: none"> • The Department assessed traffic impacts in Section 5.8 and considers that traffic associated with the facility would have a negligible impact on Castlereagh Road.
<p><u>Air quality</u></p> <ul style="list-style-type: none"> • increase in air pollution and emission due to the use of helicopters • air pollution and emission could cause harm on human health • The Department should reduce land uses that involve non-essential burning of aviation fuel. 	<ul style="list-style-type: none"> • The Department assessed air quality impacts in Section 5.8 and considers that the proposal would not have significant air quality impacts.
<p><u>Natural environment</u></p> <ul style="list-style-type: none"> • potential for fuel spills to impact lakes and Nepean River • greenhouse gas impacts of helicopter flights • heat impacts on the Penrith area. 	<ul style="list-style-type: none"> • The Department's internal hazardous materials specialist has advised that the proposal does not trigger provisions of the former SEPP 33.

Issue	Consideration
	<ul style="list-style-type: none"> The Department recommends a condition requiring all chemicals, fuels and oils are stored in accordance with relevant Australian Standards and guidelines. The Department does not consider that the proposal would have significant impacts on greenhouse gases or heat that would justify specific limits or restrictions on the proposed use to address these impacts.
<p><u>Property impacts</u></p> <ul style="list-style-type: none"> helipad operations would affect surrounding land values concerns were raised regarding pilots and passengers flying directly over surrounding residential properties and compromising visual privacy the operation of helicopters would introduce additional lighting and will negatively impact the surrounding locality. 	<ul style="list-style-type: none"> Impacts on property values are not a planning consideration. The Applicant is subject to civil aviation regulations preventing flying lower than 1000 feet over populated areas and 500 feet over unpopulated areas. The Applicant has committed to 'fly neighbouring' procedures which include avoiding flying directly over residential or other sensitive land uses. The Department is satisfied lighting impacts would be minor and acceptable given the distance to other receivers and has recommended a condition that lighting is in accordance with relevant Australian Standards.
<p><u>Biodiversity</u></p> <ul style="list-style-type: none"> the operation of helicopters could impact the migration, feeding and breeding patterns of birds within the Penrith Lakes area and the Blue Mountains National Park tree planting should be required to replace trees removed for the proposal there is a risk of birds being killed due to collisions with helicopters the operation of helicopters could remove a vast variety of birdlife and wildlife residing in the nearby bushland and wetlands. 	<ul style="list-style-type: none"> The Department accepts the BDAR's conclusion that impacts to local habitats via take off/landing is negligible based upon the limited number of daily and weekly flights and the timeframe for a helicopter vehicle to ascend. The Department is unable to specify where helicopters are able to fly outside of take-off and landing manoeuvres as these matters are subject to civil aviation regulations. The Department recommends a condition requiring replacement tree planting at a ratio of 2:1.
<p><u>Aboriginal cultural heritage</u></p> <ul style="list-style-type: none"> The potential impacts on the Greater Blue Mountains World Heritage Area have not been considered as increased joy flights and helicopter tourism would impact heritage significant scenic values from the air Concerned that the Applicant did not consult with the Aboriginal community and the assessment was desktop without field investigations. 	<ul style="list-style-type: none"> The Department is satisfied the Applicant's assessment meets relevant guidelines. The Department accepts that the proposed site has nil to low potential for Aboriginal objects and the proposal will not harm Aboriginal objects. The Department recommends conditions for an unexpected archaeological finds procedure and unexpected human remains procedure. The Department also recommends a condition that requires contractors attend an Aboriginal cultural heritage induction regarding the above procedures.

Issue	Consideration
<p><u>Community consultation</u></p> <ul style="list-style-type: none"> concerns were raised regarding the level of community consultation during the development application stage lack of consultation with Blue Mountains residents the level of community consultation undertaken was not in accordance with the SEARs requirements the EIS was unavailable on the Department's Planning Portal during exhibition the Applicant's legal advice at Appendix P of the EIS was not publicly available for the entirety of the public exhibition. 	<ul style="list-style-type: none"> The Department is satisfied that the level of community consultation is appropriate for the scale and potential impacts of the proposal. Community consultation included writing to potentially affected property owners, including those within the Waterside Estate, as well as newspaper advertisements. The Department acknowledges that the EIS was unavailable for a period of time during exhibition (see Section 4.1) but notes that the exhibition was extended to 14 January 2022.
<p><u>Support for proposal</u></p> <ul style="list-style-type: none"> proposal could support proposed film studio and local employment proposal supports businesses requiring aerial photography and filming noise studies and flight path limitations could demonstrate impacts are acceptable having local helicopter fleet that can be deployed in emergencies and for other public purposes location is suitable as it is distant from housing and flood potential limits more intense urban land uses proposal will provide opportunities for scenic flights operator is experienced and well-regarded in its industry operator's experience in assisting emergency services proposal will promote tourism in the Penrith area small environmental footprint of helicopters compared to fixed-wing aircraft. 	<ul style="list-style-type: none"> These submissions of support are noted.

Appendix C – Statutory Considerations

The relevant EPIs that apply to the proposed development include:

- *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* (formerly *State Environmental Planning Policy (Penrith Lakes Scheme) 1989*)
- *State Environmental Planning Policy (Resilience and Hazards) 2021* (formerly *State Environmental Planning Policy No 33 – Hazards and Offensive Development* and *State Environmental Planning Policy No 55 – Remediation of Land*)
- *State Environmental Planning Policy (Transport and Infrastructure) 2021* (formerly *State Environmental Planning Policy (Infrastructure) 2007*)

State Environmental Planning Policy (Precincts – Western Parkland City) 2021: Chapter 5 Penrith Lakes Scheme

The proposal is consistent with the aims of the Policy and has been assessed against relevant matters listed for consideration including clause 5.15 regarding land use zones, clause 5.38 regarding flood planning, and Schedule 5 matters to be included in the Environmental Impact Statement.

The statutory matters for consideration under Schedule 5(2) for development applications and Part 5.5 additional provisions for zoned land include a requirement for supporting technical reports and plans to address environmental and amenity issues such as traffic, flood risk and management, water quality, heritage and contamination. The proposal was accompanied by these supporting technical reports.

The proposal is consistent with relevant development controls of this Chapter and can be supported.

The Department has considered the applicable provisions of this SEPP in **Table 10**:

Table 10 | Clause 5.12 Development for the purposes of implementing the Penrith Lakes Scheme

Requirement	Comment
<p>Part 5.2 Development Control</p> <p>5.12. Development for the purposes of implementing the Penrith Lakes Scheme</p> <p>(1) Development for the purposes of implementing the Penrith Lakes Scheme may, with development consent, be carried out on land to which this Policy applies.</p>	<p>The proposed helipad facility is permissible with consent under the Policy and would contribute to implementing the Penrith Lakes Scheme by providing a permissible use in the Tourism zone.</p>
<p>(2) The consent authority shall grant consent to development to which this clause applies unless-</p> <p>(a) the consent authority is of the opinion that the development the subject of the application-</p> <p>(i) does not fully implement the Penrith Lakes Scheme on the land to which the application for development relates,</p>	<p>The proposed helipad facility is considered to further implement the Scheme as it provides for tourist-oriented development and related uses.</p>
<p>(ii) will not ensure the satisfactory implementation of the Penrith Lakes Scheme</p> <p>(iii) is not generally in accordance with the structure plan.</p>	

Requirement	Comment
<p>(3) The consent authority shall not consent to the carrying out of development for the purposes of the Penrith Lakes Scheme unless the person making the application has submitted a statement of the environmental effects of the proposed development containing matters specified in clause 1 of Schedule 2 and addressing the matters specified in clause 2 of that Schedule.</p>	<p>An Environmental Impact Statement has been submitted and adequately addresses the matters specified in clauses 1 and 2 of Schedule 2.</p>
<p>(4) In determining an application to carry out development to implement the Penrith Lakes Scheme, the consent authority shall take into consideration the following matters-</p>	<p>The Study outlines the creation of lakes, recreational land and tourism sites within the Penrith Lakes Scheme.</p>
<p>(a) the Penrith Lakes Scheme Regional Environmental Study</p>	<p>The proposal would provide a tourism use within Penrith Lakes and, subject to management measures, would not detrimentally affect waterways or the quantity or quality of recreational spaces within Penrith Lakes.</p>
<p>(b) the recommendations, if any, of such technical working parties as may be established from time to time by the consent authority</p>	<p>No technical working party was established to make recommendations on this application. The Department's Penrith Lakes Proposal Control Group was consulted and has not made any recommendations regarding the proposal.</p>
<p>(c) the statement of environmental effects accompanying the application</p>	<p>The EIS was reviewed and considered.</p>
<p>(d) the proposed sequence of extraction and rehabilitation</p>	<p>Quarrying activities on site have ceased and the proposed helipad facility will not interfere with current rehabilitation works.</p>
<p>(e) whether the land is to be dedicated to the Crown and, if not, the proposed control and management of the land</p>	<p>N/A.</p>
<p>(f) the management and control of water resources including –</p> <ul style="list-style-type: none"> (i) the source of water in order to fill any lake (including the quality and quantity of water from that source) (ii) water reticulation systems from the Nepean River to any lake, from lake to lake and from any lake to the Nepean River (iii) the quality of water from any lake (including the aquatic ecosystem) (iv) water treatment facilities (v) water depth of any lake (vi) flood control (vii) storm water control (viii) the effect that development would have upon the quantity and quality of the existing groundwater, the level of the existing water table and groundwater movement (ix) lake usage (x) staged development of the lakes and their usage during stage development 	<p>These matters are generally not relevant considerations, particularly given the scale of the proposed built form, which will not result in any significant physical site works.</p> <p>Fuel for the proposed helipad use would be stored above ground and does not pose a contamination risk to any lake. The Department recommends a condition requiring chemicals, fuels and oils to be stored in accordance with relevant Australian Standards and guidelines.</p> <p>The proposal would require flood evacuation procedures to be further developed to manage potential flooding events. This has been included as a condition of consent.</p> <p>The proposal's Stormwater and WSUD strategy and the Operation and Maintenance Schedule implementation would ensure impacts from stormwater on the SIRC and Penrith Lakes are negligible.</p>

Requirement	Comment
<ul style="list-style-type: none"> (xi) the need to monitor the water quality of the lakes having regard to their intended use, and (xii) the effect upon the Hawkesbury/Nepean River system 	
<ul style="list-style-type: none"> (g) The rehabilitation and reconstruction of the land including- <ul style="list-style-type: none"> (i) landscape design (ii) the structural stability and soil compaction of landforms (including, where appropriate, the land shown on the structure plan as future urban) (iii) the stability and impermeability of the Nepean River embankment (iv) soil conservation, and (v) revegetation 	<p>The proposed helipad facility built form is of a minor scale and includes use of existing structures. The proposed built form would not impact the structural stability and soil compaction of landforms and the Nepean River embankment.</p> <p>The Department has included a condition to ensure all cleared trees are replaced at a ratio of 2:1 (i.e. the 12 trees to be removed are replaced by 24 trees).</p>
<ul style="list-style-type: none"> (h) Access to, the supply of water from any existing source to, and the supply of and access to municipal and utility services to, land to which this Policy applies, other than that part of the land the subject of the application 	<p>The EIS advises that existing services are adequate. The proposal does not include significant built works that would increase the existing employee population of the site such that it would require significant augmentation of existing services. A condition is included requiring relevant Sydney Water approvals.</p>
<ul style="list-style-type: none"> (i) Any item of the environmental heritage listed in Schedule 3 	<p>No identified heritage item will be impacted by the proposal.</p>
<ul style="list-style-type: none"> (j) The effect upon a locality, place or building not listed in Schedule 3 having aesthetic, anthropological, archaeological, architectural, cultural, historic, scientific, or social significance or other special value for the present or future generations 	<p>The proposal acknowledges Longs House, which was identified in the draft Penrith Lakes Development Control Plan as potentially containing some heritage significance. The structure would not be impacted by the proposal.</p>
<ul style="list-style-type: none"> (k) The need and frequency to monitor the implementation of the subject development 	<p>Direct monitoring of the implementation of the helipad facility in addition to the existing role of the Department is not necessary.</p>
<p>Part 5.3 Permitted or prohibited development on zoned land</p>	<p>The site is located in the Tourism zone. A helipad is development permissible with consent.</p>
<p>Part 5.5 Additional provisions for zoned land clauses 5.27 to 5.32</p> <p>5.31 Development on land zoned Tourism</p> <p>Development consent must not be granted for development on land zoned Tourism unless the consent authority has considered the following—</p> <ul style="list-style-type: none"> (a) a traffic and transportation plan that includes proposals about the management of traffic impacts caused by the development, 	<p>The EIS includes a traffic and transport assessment demonstrating that the proposal will have an acceptable traffic impacts and does not require specific management measures.</p>
<ul style="list-style-type: none"> (b) if the development involves or is near a heritage item— <ul style="list-style-type: none"> (i) a heritage conservation management plan prepared in relation to that heritage 	<p>N/A</p>

Requirement	Comment
<p>item and approved by the Planning Secretary, and</p> <p>(ii) whether the development is consistent with that plan,</p> <p>(c) whether a stable foundation exists or can be developed for the development,</p>	
<p>(d) whether the existing development platform (including subgrade) can be adequately protected from scour by the discharge of a 1:100 ARI (average recurrence interval) flood event,</p>	<p>The development area is above the 1:100 ARI flood level.</p>
<p>(e) whether the proposed development appropriately allows for potential differential settlement given the existing geotechnical conditions and the proposed foundation and for the geotechnical conditions present at the site to prevent excessive total and differential settlement.</p>	<p>The proposal involves modest built works that would not be subject to differential settlement.</p>
<p>Part 5.6 Miscellaneous provisions</p> <p>5.33 Heritage conservation</p> <p>(1) Objectives The objectives of this clause are as follows—</p> <p>(a) to conserve the environmental heritage of Penrith,</p> <p>(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,</p> <p>(c) to conserve archaeological sites,</p> <p>(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.</p>	<p>The proposed helipad site is not in a conservation area and no items of heritage significance under the Penrith Lakes SEPP are near the site that could be impacted.</p> <p>The assessment considered impacts on Aboriginal objects and Aboriginal places of heritage significance.</p>
<p>(8) Aboriginal places of heritage significance</p> <p>The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance—</p> <p>(a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and</p> <p>(b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.</p>	<p>A due diligence assessment of the site's potential for Aboriginal heritage and the assessment considered the site as containing low potential for heritage significance.</p>
<p>Part 5.38 Flood planning</p>	<p>The development site is located above the flood planning level and not directly affected by flooding in</p>

Requirement	Comment
<p>(1) The objectives of this section are:</p> <ul style="list-style-type: none"> (a) to minimise the flood risk to life and property associated with the use of the land, (b) to allow development on land that is compatible with the land's flood hazard, taking into account proposed changes as a result of climate change, (c) to avoid significant adverse impacts on flood behaviour and the environment. 	<p>frequent or rare flood events. The proposed development is compatible with the flood hazard of the land. The site is directly affected by the flood hazard in the 0.1% AEP flood event.</p> <p>The development site is located above the 1% AEP plus freeboard flood planning level which mitigates the risk to property. Pollutants such as fuel will be stored above this level.</p> <p>The site will require evacuation prior to and in the event of very rare to extreme flooding event. However, the use of the site would not significantly affect the overall flood evacuation of Penrith Lakes.</p>
<p>(2) Development consent must not be granted for development on land to which this Chapter applies that is at or below the flood planning level unless the consent authority is satisfied that the development—</p> <ul style="list-style-type: none"> (a) is compatible with the flood hazard of the land, and (b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and (c) incorporates appropriate measures to manage risk to life from flood, and (d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses, and (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding. 	<p>Parts of the site (i.e. parts of the same lot) are below the flood planning level, but the part of the site proposed for development under this application is above the flood planning level.</p> <p>The Department is satisfied that the proposal meets the requirements of this section.</p>
<p>(3) Development consent must not be granted for development on land zoned Employment, Residential or Tourism unless the consent authority is satisfied that the development will not adversely affect the safe and effective evacuation of the land and the surrounding area.</p>	<p>The proposed use of the site would provide a less intense use (in terms of onsite population) than other permissible uses for the site. The Department is satisfied that the proposal would not adversely affect the safe and effective evacuation of the land through demands on current and future road capacity.</p> <p>The Department has recommended a condition for a revised flood evacuation procedure to be prepared for the facility to ensure the development would provide safe and effective evacuation of the site.</p>
<p>Part 5.7 Urban release areas</p> <p>5.39 Arrangements for designated State public infrastructure</p> <p>(1) The objective of this clause is to require satisfactory arrangements to be made for the provision of designated State public infrastructure before the subdivision of land in an urban release area to satisfy needs that arise from development on the land, but only if the land is developed intensively for urban purposes.</p>	<p>N/A.</p>

Requirement	Comment
<p>(4) This clause does not apply to a development application to carry out development on land in an intensive urban development area if all or any part of the land to which the application applies is in a special contributions area (as defined by section 7.1 of the Act).</p>	<p>The site is not part of a special contributions area.</p>
<p>(35) Public utility infrastructure</p> <p>(1) Development consent must not be granted for development on land in an urban release area unless the consent authority is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required.</p>	<p>The proposed helipad will not give rise to any additional demands for public utility infrastructure.</p>
<p>(36) Development control plan</p> <p>(1) The objective of this clause is to ensure that development on land in an urban release area occurs in a logical and cost-effective manner, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land.</p> <p>(2) Development consent must not be granted for development on land in an urban release area unless a development control plan that provides for the matters specified in subclause (3) has been prepared for the land</p>	<p>The Penrith Lakes Development Control Plan 2021 (PL DCP) came into effect on 15 November 2021, during this application’s exhibition period.</p> <p>Upon its commencement, the PL DCP became a relevant consideration under section 4.15 of the EP&A Act, and the Applicant provided a Response to Submissions that assessed the proposal against the PL DCP.</p> <p>The Department’s assessment against the PL DCP in contained in Appendix D.</p>

State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 3 Hazardous and Offensive Development

Chapter 3 aims to identify proposed development with the potential for significant off-site impacts, in terms of risk and/or offense. As the facility is not classified as potentially hazardous, a Preliminary Hazard Analysis is not required. The proposal assessed the types and proposed quantities of aviation fuel and other dangerous goods to be stored at the site, in accordance with the requirements and criteria set out in *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 (Applying SEPP 33)* (Department of Planning, 2011). The proposal compared the quantities of dangerous goods and the threshold quantities listed in *Applying SEPP 33* to identify whether the storage location or quantity triggers the provisions of this Chapter. The assessment indicates the proposed dangerous goods that will be stored do not exceed the *Applying SEPP 33* thresholds. The Department’s hazards specialist reviewed the proposal and confirmed it does not exceed these thresholds.

State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 4 Remediation of Land

Chapter 4 requires consideration of contamination and remediation of land in determining development applications. The Applicant has prepared a Preliminary Site Investigation for Contamination which indicates that while widespread contamination at the site has not been identified, investigations have not been undertaken in the vicinity of the underground fuel tanks identified in the SafeWork NSW records. The Preliminary Site Investigation recommended that a Detailed Site Investigation

(Contamination) be undertaken. The Department supports this recommendation and has recommended relevant conditions.

State Environmental Planning Policy (Transport and Infrastructure) 2021: Chapter 2 Infrastructure

Chapter 2 facilitates the effective delivery of infrastructure across the State. It lists categories of development defined as traffic generating development that trigger a referral to Transport for NSW (TfNSW) in accordance with clause 2.121 of the SEPP. While the proposal is not traffic generating as it is for a helipad rather than a heliport, and does not require referral to TfNSW, the Department provided a copy of the proposal to TfNSW for comments.

Appendix D – Consideration of the *Penrith Lakes Development Control Plan 2021*

Table 11 | Consideration of the *Penrith Lakes Development Control Plan 2021*

Provision	Complies	Comment
Penrith Lakes context		
<p>2.2 Landscape All development will be consistent with the following planning principles:</p> <ol style="list-style-type: none"> 1. Landscaping promotes understanding of the connection of Aboriginal people to Country and the importance of the site as a meeting place 2. Ensure restoration of the landscape and natural systems of the Western Parkland City 3. Protect and frame the expansive views of the parkland and waterways and the character of Penrith Lakes 4. Integrate landscape design and planning as part of a holistic approach to site development 5. Landscaping is designed appropriate to the context of the wider Penrith Lakes landscape setting and endemic vegetation 6. Ensure development contributes towards the Greater Sydney canopy cover target of 40% by retaining existing trees, where possible, and planting new trees that are supported by sufficient deep soil for canopy growth 7. Ensure sustainable biodiversity and ecological conservation through the protection of watercourses, wetlands and riparian corridors 8. Encourage the use of stormwater and recycled water for maintaining landscaping and minimising the demand on potable water 9. Reinforce the distinct landscape character areas that build on the existing landscape features. 	Yes	<ol style="list-style-type: none"> 1. The proposed development is not located on a site that is of importance as a meeting place for Aboriginal people. 2. The landscape throughout the site is highly disturbed from previous development, and the proposed development would not impact the natural systems of the Western Parkland City. 3. The proposed built form would not obstruct views to parkland and waterways. The character of Penrith Lakes and the above-ground helicopter movements last a few minutes, which would not obstruct existing views. 4. The site has been developed considering landscape design. 5. Landscaping has been designed appropriately in the context of the wider Penrith Lakes setting and endemic vegetation. 6. The Department has included a condition to ensure all cleared trees are replaced at a ratio of 2:1. 7. The proposal would not affect existing watercourses, wetlands or riparian corridors. 8. The proposal would not significantly increase existing demand on potable water. 9. The proposal would not affect the existing landscape character.
<p>2.3 Views and vistas The following planning principles identify the visual planning for Penrith Lakes:</p> <ol style="list-style-type: none"> 1. Protect the Penrith Lakes character of visual openness to the surrounding landscape 	Yes	The proposed helipad facility's built form is of a minor scale and would not compromise Penrith Lakes' existing open visual character.

Provision	Complies	Comment
<p>2. Maintain significant views to the Blue Mountains, escarpment and the surrounding lakes</p> <p>3. Preserve views of important landscape elements and heritage items.</p> <p>The following key view sheds are important to the visual experience of Penrith Lakes and should be protected:</p> <ul style="list-style-type: none"> a) North–south views from Castlereagh Road and Penrith Lakes b) View corridors from Old Castlereagh Road to the Nepean River c) Western view corridor from Lugard Street to the Nepean River d) Views between Penrith Lakes and the Methodist Church Group (including the church, school and cemetery) on Old Castlereagh Road. <p>In order to maintain and protect the views and vistas all development:</p> <ul style="list-style-type: none"> 1. Must not unreasonably obstruct key external views of Penrith Lakes from Castlereagh Road, the Nepean River and the Blue Mountains 2. Is located and designed to minimise impacts on key views and vistas 3. Ensures building design and landscaping plans are to have regard for view corridors and minimise any impacts. 		<p>Existing views to the Blue Mountains, escarpment and the surrounding lakes would not be compromised by the proposed Helipad facility.</p> <p>The proposal would not impact the existing view sheds listed, as the built form is minor in nature and uses existing buildings on site.</p> <p>It also would not obstruct key external views of Penrith Lakes from Castlereagh Road, the Nepean River and the Blue Mountains, as the proposed built form is low in height and of sympathetic bulk and scale. Proposed built form would not create any adverse visual impacts.</p>
<p>2.4 Movement and access</p> <ul style="list-style-type: none"> 1. New roads and connections to improve accessibility and permeability for all users 2. Ensure of a shift towards active transport uses through high-quality and safe pedestrian and cycling access 3. Minimise the visual impact of all access roads, parking areas and services 4. Integrate pedestrian access within primary roads 5. Improve walking and cycling access to and along the river's edge 6. Improve access between adjoining areas within Penrith Lakes. 	N/A	<p>The proposal would not be open to the public and is not be a transport link to other parts of Penrith Lakes. All parking and access roads for staff would be compliant with relevant standards.</p>
<p>2.5 Design excellence strategy</p> <ul style="list-style-type: none"> 1. A design excellence strategy is to be submitted to the consent authority for approval prior to preparation of a master plan. 2. The design excellence strategy will require: <ul style="list-style-type: none"> a) procurement of suitably qualified and experienced urban design, architectural and landscape design professionals to lead the process and ensure the design quality of the master plan b) design review program including frequency of design review coordinated with key hold points in the master plan design process. 	N/A	<p>The proposal does not require a design excellence strategy or satisfy the criteria for NSW State Design Review Panel involvement as the proposal does not include a master plan.</p>

Provision	Complies	Comment
<p>3. The design excellence strategy must be approved prior to any master plan or development consent on land to which this DCP applies.</p> <p>4. The consent authority must consider the recommendations of the NSW State Design Review Panel (SDRP) prior to any development consent.</p>		
3. Environmental considerations		
3.1 Flood planning and evacuation		
<p>Objectives</p> <p>a) Ensure development on the floodplain is consistent with the NSW Government's Flood Prone Land Policy and the principles in the NSW Government's <i>Floodplain Development Manual</i>.</p> <p>b) Minimise flood risk to life of the users of the development in the full range of flooding, including the 5% annual exceedance probability (AEP), 1% AEP, 0.5% AEP, 0.2% AEP and the probable maximum flood (PMF).</p> <p>c) Maintain the flood function of the floodplain to minimise impacts of development on flood behaviour and adverse impacts to community.</p> <p>d) Enable safe evacuation from the land and ensure development does not adversely impact the evacuation capacity of the existing Hawkesbury–Nepean community.</p> <p>e) Allow development that is compatible with the flood hazard and flood function of the land.</p> <p>f) Avoid significant adverse impacts on flood behaviour and the environment.</p> <p>g) Manage changing flood risk due to climate change.</p>	Yes	<p>a) The proposed development is consistent with the NSW Government's Flood Prone Land Policy and principles in the NSW Government's <i>Floodplain Development Manual</i>.</p> <p>b) The development site is located above the flood planning level and not directly affected by flooding in frequent or rare flood events.</p> <p>c) The development site is located above the 1% AEP plus freeboard, which mitigates the risk to property.</p> <p>d) Subject to recommended conditions, the proposed development enables safe evacuation from the land and ensures the development does not adversely impact the evacuation capacity of the existing Hawkesbury–Nepean community.</p> <p>e) The proposed development is compatible with the flood hazard and flood function of the land.</p> <p>f) There is expected to be negligible change to flood behaviour and the environment due to the development.</p> <p>g) Considering climate change impacts, the site becomes directly affected by the flood hazard in the 1 in 1000 AEP flood</p>

Provision	Complies	Comment
		<p>event. It is also exposed to extreme high hazard flooding in the PMF which represents a theoretical event with an extremely low likelihood of occurrence.</p>
<p>1. Development on land below the level of the PMF that will increase the number of people on the land must be consistent with the flood evacuation requirements outlined in Section 3.1.1 of the DCP.</p>	<p>Partial</p>	<p>The Applicant referred to the Hawkesbury – Nepean Valley Flood Risk Management Strategy. The development site is consistent with the strategy with respect to flood evacuation methodology.</p> <p>The proposed development is unlikely to significantly increase people on the land requiring flood evacuation, particularly in the event of predicted inclement weather due to the nature of the activities.</p> <p>Vehicle evacuation will be confirmed in consultation Hawkesbury- Nepean Valley (HNV) Flood Risk Management Directorate within Infrastructure NSW and NSW State Emergency Service.</p>
<p>2. All development that will increase the number of people on the land must submit a flood emergency management plan prepared in accordance with and to demonstrate compliance with flood evacuation requirements in Section 3.1.1 of the DCP.</p>	<p>No</p>	<p>The Department considers the proposal is relatively low risk given the proposed intensity of development and considers this matter can be dealt with by a condition requiring a flood emergency management plan be prepared and approved by the Planning Secretary.</p>
<p>The following controls apply to land below the flood planning level: 3. A flood and drainage investigation that overlays the 20%, 5%, 1%, 0.2% AEP and PMF level and any overland flows must be submitted with a development application. The levels on the survey are required to be verified during construction by a survey certificate.</p>	<p>Yes</p>	<p>The development site is located above the flood planning level plus freeboard. The flood and drainage overlays for 1% annual exceedance probability (AEP), 2% AEP, 0.1%</p>

Provision	Complies	Comment
		and Probable Maximum Flood (PMF) were provided in section 7.2.1 of the EIS and Appendix L Floodplain Risk Management Assessment.
4. The drainage investigation must acknowledge and mitigate the effects of flood on proposed infrastructure.	Yes	Appendix I Civil & Stormwater Report considered the impact of flooding and provides appropriate mitigation measures for the development.
5. Development must not adversely impact flood behaviour for the full range of floods (up to and including the PMF) and is to consider cumulative impacts of development on surrounding land, including: a) loss of flood storage b) loss of or changes to flood flow paths c) acceleration or obstruction of flood flows d) increase in the depth, duration or velocity of floodwaters e) any reduction in flood warning times elsewhere on the floodplain.	Partial	Minor earthworks are proposed with hardstand replacing several existing structures on site. There is minimal change to both impervious fraction and topography and expected to be negligible change to flood behaviour due to the development. Cumulative impacts of the development on surrounding land were not considered in the EIS.
6. The applicant must demonstrate that: a) the development will not increase the flood hazard or risk to other properties b) all structures are designed and constructed to ensure structural integrity up to the 0.2% AEP, taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion. Structural certification must be provided confirming the above c) the proposed building materials are flood-compatible d) the buildings are sited in the optimum position to avoid floodwaters and allow safe flood evacuation e) the development will not expose any occupants of the land to unacceptable levels of risk.	Yes	a) The proposed development is not directly affected by flooding in frequent or rare flood events and becomes directly affected by the flood hazard in the 1 in 1000 AEP flood event. It is exposed to extreme high hazard flooding in the PMF which represents a theoretical event with an extremely low likelihood of occurrence. The development site is located above the 1% AEP plus freeboard which will not increase flood hazard or risk to other properties.

Provision	Complies	Comment
		<p>b) Only minor earthworks are proposed as part of the development, with hardstand replacing several existing structures on site. Fuel will be stored above the flood planning level.</p> <p>c) As above.</p> <p>d) Access to the development may be cut in more frequent events, and this will be managed by the Flood Emergency Management Plan which will be prepared in consultation with the Hawkesbury-Nepean Valley (HNV) Flood Risk Management Directorate within Infrastructure NSW and NSW State Emergency Service. The Flood Emergency Management Plan must be submitted to and approved by the Department prior to operation. This contributes to mitigating the risk to life.</p> <p>e) The proposed development is unlikely to significantly increase people on the site requiring flood evacuation, particularly in the event of predicted inclement weather due to the nature of the activities. There is minimal change to both impervious fraction and topography. There is expected to be negligible change to flood risk due to the development.</p>
<p>7. Development, excluding temporary structures, in high flood hazard areas, floodways and land below the 1% AEP should be avoided.</p>	<p>Yes</p>	<p>The works are located above the 1% AEP plus freeboard which contributes to mitigating the risk to property.</p>

Provision	Complies	Comment
8. Development must demonstrate that any overland flow is maintained for the 1% AEP overland flow.	Yes	The development's overland flow is maintained for the 1% AEP overland flow as all works are above the 1% AEP flood.
9. Consent will not be granted to filling of floodways or high flood hazard areas.	N/A	The development will not result in the filling of floodways or high flood hazard areas.
10. Development shall be consistent with the following guidelines: a) <i>Managing Flood Risk Through Planning Opportunities—Guidance on Land Use Planning in Flood Prone Areas</i> (Hawkesbury–Nepean Floodplain Management Steering Committee) b) <i>Reducing Vulnerability of Buildings to Flood Damage—Guidance on Building in Flood Prone Areas</i> (Hawkesbury–Nepean Floodplain Management Steering Committee) c) <i>Designing Safer Subdivisions—Guidance on Subdivision Design in Flood Prone Areas</i> (Hawkesbury–Nepean Floodplain Management Steering Committee).	N/A	Only minor earthworks are proposed with hardstand replacing several existing structures on site. The proposed works are on land above the flood planning level.
11. Fencing must not impede the flow of floodwaters or increase flood affectation on surrounding land.	N/A	The proposal retains the existing chain wire security fencing.
12. Development must avoid significant adverse effects on the floodplain environment that would cause erosion, siltation, destruction of riparian vegetation or a reduction in the stability of the riverbank or watercourse.	Yes	<p>Minimal built form and works are proposed that would impact the floodplain environment. There is minimal change to both impervious fraction and topography and expected to be negligible change to flood behaviour due to the development.</p> <p>The development would not remove riparian vegetation or reduce stability of riverbanks or watercourses. The proposal would not cause avoidable erosion or siltation.</p>

Provision	Complies	Comment
13. All electrical equipment, power points, wiring, fuel lines, sewerage systems or any other service pipes and connections must be waterproofed, located above the flood planning level, or both.	Yes	The development is located above the 1% AEP plus freeboard which contributes to mitigating the risk to property. Fuel will be stored above the flood planning level.
14. Hazardous or potentially polluting materials must not be stored below the 0.2% AEP level unless adequately protected from floodwaters in accordance with industry standards.	Yes	As above.
15. Adequate flood signage and exits must be installed to facilitate safe and orderly evacuation from flooding without reliance upon the State Emergency Service or other authorised emergency services personnel.	Yes	There is unlikely to be any significant impact on egress and safety in a flood event compared to existing conditions. A condition is recommended requiring flood and exit signage.
16. Fencing must not impede the flow of floodwaters or increase flood affectation on surrounding land.	N/A	No fencing would be installed that would impact the flow of floodwaters or increase flood affectation on surrounding land.
3.1.1 Flood evacuation considerations		
Controls	Yes	
1. Development that will increase the number of people on the land below the probable maximum flood (PMF) level at Penrith Lakes covered by this DCP must be consistent with the Flood Response Guideline (if available), or the objective to achieve early site evacuation and/or non-attendance in the event of a flood or probable flood.		<p>The proposed development is not directly affected by flooding in frequent or rare flood events and becomes directly affected by the flood hazard in the 1 in 1000 AEP flood event. It is exposed to extreme high hazard flooding in the PMF which represents a theoretical event with an extremely low likelihood of occurrence.</p> <p>The Flood Response Guideline is still in preparation.</p> <p>The proposed development is unlikely to significantly increase people on the land requiring flood evacuation, particularly in the</p>

Provision	Complies	Comment
		event of predicted inclement weather due to the nature of the activities.
<p>2. Development consent must not be granted to development on land below the PMF level that will increase the number of people on the land, unless the consent authority is satisfied that:</p> <ul style="list-style-type: none"> a) appropriate systems and processes will be in place to ensure the efficient evacuation of the site and surrounding area and will not adversely impact on the evacuation routes in the Hawkesbury-Nepean Valley floodplain in the event of a flood b) a flood emergency management plan has been prepared. 	Yes	<p>The proposed works are on land above the flood planning level. The development is unaffected up to the 1 in 500 AEP flood event. The site becomes almost completely submerged in the 1 in 1000 AEP event and is subject to extreme high hazard flooding in the PMF.</p> <p>Existing evacuation procedures are compatible with the site and there is unlikely to be any impact on egress and safety in a flood event compared to existing conditions. Vehicle evacuation by Castlereagh Road and the Great Western Highway would be required.</p> <p>A Flood Emergency Management Plan which will be prepared in consultation with the HNV Flood Risk Management Directorate within Infrastructure NSW and NSW State Emergency Service. The Flood Emergency Management Plan must be submitted to and approved by the Department prior to operation.</p>
<p>3. The flood emergency management plan must address the following matters:</p> <ul style="list-style-type: none"> a) an overview of the flood risk and resilience of the site and the surrounding area b) details the requirements for governance and documentation of flood preparedness and response at Penrith Lakes c) measures to be undertaken by occupants of the site to manage the risk to life in the event of a flood d) measures to be undertaken by occupants of the site to ensure the efficient evacuation of people in the event of an early flood warning 	No	<p>A Flood Emergency Management Plan which will be prepared in consultation with the HNV Flood Risk Management Directorate within Infrastructure NSW and NSW State Emergency Service.</p> <p>The Flood Emergency Management Plan must be submitted to and approved by the Department prior to construction.</p>

Provision	Complies	Comment
<ul style="list-style-type: none"> e) immediate flood relief and recovery actions to be undertaken by occupants of the site following a flood event or false alarm of a flood event f) long-term review of systems and processes to ensure the efficient evacuation of the site and recovery measures to be undertaken by occupants of the site following a flood event or false alarm of a flood event. 		
4. Only strata or community title subdivision is permitted, unless measures compliant with provisions 2 and 3 can otherwise be demonstrated.	N/A	A subdivision is not part of the development application.
5. Despite any other provision in the DCP, the consent authority must not grant consent to a development application for development on land below the PMF in the Penrith Lakes precinct unless provisions 1, 2 and 3 are satisfied.	Yes	The Department is satisfied that provisions 1, 2 and 3 are satisfied or can be, subject to conditions of consent.

3.2 Water-sensitive urban design and stormwater management

Objectives

<ul style="list-style-type: none"> a) Ensure that development does not result in the pollution of waterways (including the Nepean River and the lakes). b) Ensure that development does not generate stormwater discharges that exceed the capacity of the drainage network. c) Minimise nuisance flows of stormwater to adjoining properties. d) Minimise hardstand and impervious areas on developed land to minimise run-off. e) Ensure an integrated approach to water cycle management and drought management through the use of water-sensitive urban design principles, including maximising onsite detention and stormwater reuse. 	Yes	<p>The development will protect receiving waterways from sediment laden runoff by implementing the strategy outlined in the Sediment and Erosion Control Plan (Appendix I Civil & Stormwater Report Management – Appendix A).</p> <p>During construction installation of sediment fences to filter runoff from the site, turfing exposed areas immediately after earthworks completion, and installing inlet filter traps existing stormwater pits.</p> <p>A sediment basin is not required for development site as the area of works is less than 2000 m².</p> <p>During construction of the hardstand area, all batters and disturbed ground will be re-vegetated and turfed immediately following</p>
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Provision	Complies	Comment
		<p>completion of works. A portion of the newly turfed areas drains to the raingarden, while the remaining stormwater can be considered as being “not directly connected areas” and will flow over existing stable vegetated areas (buffers) before eventually reaching Penrith Lakes (the receiving water).</p> <p>Prior to operation, a raingarden will be installed to mitigate potential for sediment laden runoff and potential off-site discharge of pollutants entering the stormwater system as shown in (Appendix I – Appendix B Siteworks and Stormwater Management Plan).</p>
<p>Controls</p> <p>a) A stormwater management plan must be submitted with development applications (excluding minor alterations and additions). The plan must provide details of the management of stormwater and the measures proposed to mitigate changes in water quality, run-off volume and peak flow of stormwater on adjoining or downstream sites, both during and after construction. This plan must provide details demonstrating that the drainage systems have adequate capacity.</p> <p>a) The plan is to demonstrate that development can achieve the following:</p> <ul style="list-style-type: none"> • 90% reduction in the post-development mean annual load total gross pollutant (greater than 5 mm) • 85% reduction in the post-development mean annual load of total suspended solids • 65% reduction in the post-development mean annual load of total phosphorus • 45% reduction in the post-development mean annual load of total nitrogen • 90% reduction in free oils and grease with no visible discharge • 75% of all stormwater harvested onsite. <p>b) Modelling for determining the mean annual loads from land use must be undertaken in Model for Urban Stormwater Improvement Conceptualisation (MUSIC) and in accordance with the NSW MUSIC Modelling Guidelines (Greater Sydney Local Land Services). The Penrith City Council MUSIC-link is appropriate for model configuration.</p>	<p>Yes</p>	<p>a) A stormwater management plan has been prepared (Appendix B of Appendix I Civil & Stormwater Report Management) and demonstrates compliance with the relevant annual loads.</p> <p>b) MUSIC modelling was conducted and is provided within Section 2.3 & 2.4 of Appendix I. Penrith City Council's MUSIC-Link default nodes were used, to ensure the Event Mean Concentration values for different types of catchments were to Council's standard.</p> <p>c) Any changes to the flow rate and flow duration within the receiving watercourses as a result of the development are limited to as far as practicable. This has been considered with relevant mitigation measures contained in section 7.1.5 of the EIS and Appendix I. Natural flow paths, discharge</p>

Provision	Complies	Comment
<p>c) Mitigation of changes to the flow rate and flow duration within the receiving waterways as a result of the development is required. Natural flow paths, discharge points and runoff volumes from the site should also be maintained. Where this is not possible, justification of the changes must be provided to the satisfaction of the consent authority.</p> <p>d) The developed 1% AEP peak flow must be reduced to predevelopment flows by incorporating stormwater detention and management devices.</p>		<p>point and runoff volumes from the site will be retained and maintained as far as practicable.</p> <p>d) The works are located above the 1% AEP plus freeboard which contributes to mitigating the risk to property. Pollutants such as fuel will also be stored above this level.</p>
<p>b) Development must be consistent with the following guidelines:</p> <p>a) Penrith City Council's Stormwater Drainage Specification for Building Developments</p> <p>b) Penrith City Council's WSUD Technical Guidelines.</p>	Yes	The civil and stormwater design (Appendix I) of the development is consistent with the relevant guidelines.
<p>c) Stream erosion index for all development must ensure that the post-development duration of stream-forming flows shall be no greater than 3.5 times the predeveloped duration of stream-forming flows.</p>	Yes	Only minor earthworks are proposed, with hardstand replacing existing structures on site. There is minimal change to both impervious fraction and topography and negligible change to flood behaviour due to the development.
<p>d) The following general stormwater provisions apply:</p> <p>a) Run-off must not be discharged into environmentally sensitive areas, including threatened ecological communities.</p> <p>b) Pipe outlets must have stormwater energy dissipaters, except where waters enter a formed channel or similar structure that is unlikely to be damaged by water flowing in at high velocity.</p> <p>c) Permeable ground surfaces are to be maintained, and, where suitable conditions exist, stormwater infiltration must occur onsite.</p> <p>d) The development of any lot must account for the existing drainage arrangements of the area, including any localised ponding, and whether the proposed development is likely to affect:</p> <ul style="list-style-type: none"> • access to the site • drainage on adjoining properties • localised nuisance flooding on adjoining properties • natural overland flow or drainage paths. 	Yes	<p>The additional runoff quantity resulting from the hardstand development is to be compensated for via allowing that runoff to infiltrate through the use of a raingarden and will also be compensated for by harvesting and reusing runoff from an existing impervious roof area. The quality of the hardstand runoff will be treated by the raingarden to remove pollutants such as total suspended solids, total nitrogen, total phosphorous, heavy metals and hydrocarbons.</p> <p>Stormwater management methods are shown on the Siteworks and Stormwater Management Plan (Appendix B of Appendix</p>

Provision	Complies	Comment
<p>Provision must be made in the design of drainage systems for all upstream catchments, including a future connection point and adequate capacity for a fully developed upstream catchment.</p> <p>e) In areas where there is no defined drainage system, the applicant shall liaise with the adjoining owners regarding the construction of a drain or channel to an existing watercourse. This may include the provision of drainage easements.</p> <p>f) Drainage constraints must be assessed in a report prepared by a qualified engineer to ensure that:</p> <ul style="list-style-type: none"> • where capacity may be limited, appropriate drainage measures, including possible onsite detention, is provided • the proposed development will not overload trunk drains during peak storm events or cause localised flooding • if the proposed development will result in additional pollutant loading (and the appropriate licences have been obtained from the relevant government authorities), then those pollutants and run-off will comply with the water quality requirements referred to in this plan • where easements are required across neighbouring properties, the adjoining owners' consent is submitted with the development application. <p>g) If the site does not have access to Penrith City Council's stormwater drainage system, all drainage shall be designed to ensure that the intensity, quantity and quality of surface run-off does not adversely affect downstream properties and watercourses. A legal point of discharge will be required.</p> <p>h) If the site has access to Penrith City Council's stormwater drainage system, all stormwater must be collected from the site, and either be recycled for use or discharged into Council's stormwater drainage system. No stormwater will be permitted to discharge across Council's footways or reserves or to enter adjoining land.</p>		<p>l). The Siteworks and Stormwater Management Plan can achieve all relevant stormwater provisions noted in the Penrith Lakes DCP and complies with Council's stormwater requirements.</p>
<p>e) The following general stormwater provisions apply:</p> <p>a) Adequate stormwater systems must be designed and constructed to ensure that, development does not increase stormwater peak flows in any downstream area, for all rainfall events up to the 1% AEP event.</p> <p>b) Onsite stormwater detention systems cannot include rainwater tanks, water retention basins or dams.</p> <p>c) Detention systems to be designed in accordance with Penrith City Council's Stormwater Drainage Specification for Building Developments.</p> <p>d) Onsite detention systems must be designed using a catchment-wide approach.</p>	<p>Yes</p>	<p>Onsite stormwater detention is not required, as the development site is located outside catchments requiring OSD as per Penrith City Council's Stormwater Drainage Policy 2016.</p>

Provision	Complies	Comment
<ul style="list-style-type: none"> e) Onsite stormwater detention mechanisms must have a maintenance program in place. f) Onsite stormwater detention mechanisms must be placed on the title of the relevant allotment or property to ensure their retention and maintenance. g) Restriction as to user and Positive Covenant must be registered against the title of the relevant allotment or property to ensure their retention and maintenance of onsite stormwater detention. 		
<ul style="list-style-type: none"> f) The following stormwater design standard must be applied: <ul style="list-style-type: none"> a) Any new piped drainage system must be designed to control minor stormwater flows under normal operating conditions for a 20% AEP storm event. b) Any new drainage system must be designed to control major stormwater flows under normal operating conditions for a 1% AEP storm event. 	Yes	The stormwater water management plan and design (Appendix B of Appendix I) complies with the design standard.
<ul style="list-style-type: none"> g) Development must provide an integrated approach to water cycle management that addresses water conservation, efficiency, stormwater management and drainage through a coordinated process. 	Yes	The development meets the relevant water quality and WSUD requirements as per Penrith Council's Water Sensitive Urban Design Policy factsheet, and section C3.2 of the DCP to ensure a design that integrates waster cycle management. Section 1.4.2 of Appendix I provides further information on each of these water quality targets.
<ul style="list-style-type: none"> h) Onsite measures must be implemented to maintain water quality, to control the volume of stormwater run-off and to ensure that the rate at which stormwater leaves the site is at or less than predevelopment volume and rate. 	Yes	The site is expected to be a relatively clean development, with the main contaminant likely to be sediment and hydrocarbons resulting from vehicle movements around the site. These will be mitigated by the raingarden and water cycle management system.
<h3>3.3 Water conservation and reuse</h3>		

Provision	Complies	Comment
Objective a) Ensure development maximises use of non-reticulated water.	Yes	A rainwater harvesting and reuse system will be used for the development. The rainwater runoff from the existing office building roof will be directed to three 25kL rainwater reuse tanks to supply non-potable demands. The system ensures the water reuse requirement of 80% non-potable demand is met.
Controls 1. Development must demonstrate that it meets the following minimum standards under the Water Efficiency Labelling and Standards (WELS) scheme: four-star dual-flush toilets, three-star showerheads, four-star taps (for all taps other than bath outlets and garden taps) and three-star urinals.	N/A	The development does not comprise of elements that would require standards of the WELS scheme.
2. Development must install rainwater tanks to meet 80% of non-potable demand, including outdoor use, toilets and laundry.	Yes	A rainwater harvesting and reuse system will be used for the site to decrease flow volumes leaving the development site. The rainwater runoff from the existing office building roof (a total of 1,117m ²) will be directed to three 25kL rainwater reuse tanks to supply all non-potable demands. This system will ensure that the water reuse requirement of 80% non-potable demand is met.
3. Where cooling towers are used, they must: <ul style="list-style-type: none"> a) connect to a conductivity meter to ensure optimum circulation before discharge b) include a water meter connected to a building's energy and water metering system to monitor water usage c) employ alternative water sources for cooling towers where practical and in accordance with the Public Health Act 2010 and NSW Health guidelines. 	N/A	N/A
4. Water use within open space (for uses such as irrigation, pools, water features, and the like) must be supplied from sources other than potable mains water (for example, rainwater, treated stormwater or greywater) to meet 80% of water use demand.	Yes	The rainwater harvesting and reuse system will meet the 80% of water use demand.

Provision	Complies	Comment
<p>5. Rainwater tanks must be:</p> <ol style="list-style-type: none"> appropriately located and designed (with appropriate types, materials and colours) to minimise the visual impact on any rural, scenic or landscape character of any area integrated into the design of any cluster of buildings during the site planning and design process the percentage of proposed roof area directed to a rainwater tank must be maximised to increase the effectiveness and reliability of the reuse system; tanks must be plumbed into toilets, washing machines, irrigation systems and hose down facilities designed, constructed, or both in accordance with the necessary guidelines to ensure safety and structural stability, including preventing flotation in the event of flooding designed to minimise the entry of contaminants into any water that may be harvested for drinking the design of tank must allow tanks to be cleaned, maintained and de-sludged as required; tanks must have leaf guard and first flush diverter installed. 	Yes	<p>A rainwater harvesting and reuse system will be utilised for the development to further decrease flow volumes leaving the development site. The rainwater runoff from the existing office building roof (a total of 1,117m²) will be directed to three 25kL rainwater reuse tanks and used to supply non-potable demands (including toilet flushing, outdoor irrigation, wash down facilities, etc). Downpipes on the building will be fitted with 'first flush' devices to ensure the first few millimetres of rain (which washes with it the accumulated pollutants on the roof) bypass the tanks, ensuring a high quality of water is available for reuse.</p> <p>Refer to Appendix I of the EIS for further details.</p>
<p>6. Where development consent is required for rainwater tanks, the following requirements apply:</p> <ol style="list-style-type: none"> rainwater tanks must not exceed 3 metres in height above ground level (including stand); centralised systems may be considered on merit rainwater tanks must not collect water from a source other than gutters or downpipes on a building or a water supply service pipe rainwater tanks must be structurally sound rainwater tanks, and any stands for the tanks, must: <ul style="list-style-type: none"> be assembled and installed in accordance with the manufacturer's specifications not rest on a footing of any building or other structure on the property, including a retaining wall freestanding rainwater tanks must be elevated above the 1% AEP flood level or anchored to resist buoyancy and impact forces rainwater tanks must use prefabricated materials or be constructed from prefabricated elements designed and manufactured for the purpose of construction of a rainwater tank rainwater tanks must be enclosed, and inlets screened or filtered to prevent the entry of foreign matter or creatures 	Yes	<p>The rainwater harvesting system complies with the detailed requirements. Any detail regarding finishes will be finalised prior to the granting of a construction certificate. Further information on the rainwater harvesting system is provided in Appendix I.</p>

Provision	Complies	Comment
<ul style="list-style-type: none"> h) rainwater tanks must use a non-reflective finish. Materials and colours should complement those used on the dwelling house and any other buildings on the land i) plastic rainwater tanks are not to be used in bushfire-prone areas. 		
3.4 Tree preservation		
<p>Objectives</p> <ul style="list-style-type: none"> a) Prescribe the trees or other vegetation characteristics that are protected by Clause 21 (Preservation of trees or vegetation) of the Penrith Lakes SEPP. b) Protect existing trees and vegetation and ensure that any new development accounts for existing vegetation in the design and construction of the development. 	Yes	See below.
<p>Controls</p> <ol style="list-style-type: none"> 1. The prescribed trees or other vegetation that are protected by Clause 21 of Penrith Lakes SEPP are: <ul style="list-style-type: none"> a) any tree or other vegetation that has one or more of the following: <ul style="list-style-type: none"> • height greater than 3.5 metres • canopy spread greater than 4 metres • primary trunk diameter greater than 400 millimetres when measured 1 metre above the base of the tree. b) any tree or other vegetation that is, or forms part of, a heritage item or is within a heritage conservation area. 		<ul style="list-style-type: none"> a) The Arborist Report (Appendix F) identifies 12 trees will be removed for the development to enable sufficient clearance for the Final Approach and Take-Off (FATO) area. The site is in an area comprising primarily planted native vegetation. Remnant vegetation has historically been cleared and replaced by planted native and exotic species or colonised by exotic grasses. b) The development site would require approximately 0.10 ha of planted native vegetation to be cleared, which does not conform to a Plant Community Type or Threatened Ecological Community. Direct impacts to vegetation occur mainly in areas already cleared or comprise of exotic vegetation. c) The development will not remove vegetation that is or forms part of a heritage item or is within a heritage conservation area.
<ol style="list-style-type: none"> 2. Development must seek to retain and protect existing trees. Any tree loss shall be offset with replacement plantings at a ratio of at least 2:1 (new to existing). 		The site is located in an area comprising planted native vegetation. Remnant

Provision	Complies	Comment
		<p>vegetation was historically cleared and replaced by planted native and exotic species or colonised by exotic grasses. The planted vegetation is a combination of indigenous native species occurring naturally on the Cumberland Plain and exotic species.</p> <p>The development site would require approximately 0.10 ha of planted native vegetation to be cleared. Direct impacts to vegetation occur mainly in areas that are already cleared or comprise exotic vegetation. Of the 0.55 ha that requires clearing, 0.10ha of planted native vegetation will be cleared, which represents 18% of the proposed direct impacts to biodiversity.</p> <p>Tree removal will be offset with replacement plantings at a ratio of at least 2:1.</p>
3.5 Riparian corridors, lakes and water bodies		
<p>Objectives</p> <ul style="list-style-type: none"> a) Protect water quality and terrestrial and aquatic life forms. b) Minimise disturbance, impacts, or both on riparian corridors, lakes and water bodies and to improve connectivity between riparian areas and native vegetation areas. c) Maintain and improve the hydrological regime of wetlands and water bodies. d) Explore opportunities to rehabilitate riparian corridors and ensure that width, buffers to development, quality of landscape and diversity of vegetation to support principles of ecological sustainability are provided. e) Effectively manage indirect and ongoing impacts of development near waterways to ensure established waterway health targets are achieved and maintained. 	Yes	Refer to below.
<p>Controls</p> <ol style="list-style-type: none"> 1. Development within 40 metres of the Nepean River must be avoided. Where development is unavoidable, the applicant is to demonstrate that potential impacts on water quality, aquatic 	N/A	The development is not within 40 metres of the Nepean River.

Provision	Complies	Comment
habitat and riparian vegetation will be negligible and that the design enhances or restores natural riparian corridor features.		
2. Development must provide a buffer to protect the ecological, hydrological and water quality values of wetlands, lakes and water bodies. The buffer area must be vegetated with native plants that are largely indigenous to the area.	Yes	There is a significant 200 metre buffer between the development site and Penrith Lakes including an existing vegetated buffer on the site's northern border that abuts Penrith Lakes.
3. Activities within the riparian corridor, such as cycleways and paths, detention basins, stormwater management devices and essential services must comply with the riparian corridor matrix in the Natural Resources Access Regulator's Guidelines for controlled activities on waterfront land—Riparian corridors. Activities in the vegetated riparian zone should be avoided, where possible, and must not result in the removal or disturbance of native vegetation.	N/A	N/A
4. A managed buffer zone outside the vegetated riparian zone must be provided, where possible, to provide an additional buffer between development and the vegetated riparian zone. This buffer must be vegetated with native plants that are largely indigenous to the area. Land uses within the managed buffer zone could include roads, paths, playgrounds and stormwater management devices.	N/A	N/A
5. Asset protection zones must be located outside vegetated riparian corridors.	N/A	N/A
6. All riparian corridors must comprise a vegetated riparian zone along each side of the waterway and, where possible, this should enhance or restore remnant native riparian vegetation.	N/A	N/A
7. Appropriate widths for vegetated riparian corridors should follow the Natural Resources Access Regulator's Guidelines for controlled activities on waterfront land—Riparian corridors.	N/A	N/A
3.6 Bushfire management		
Objectives	N/A	N/A
a) Ensure risks to life and property associated with bushfire are appropriately managed.		
b) Minimise the impacts of development in relation to bushfire.		
c) Ensure bushfire risk is managed in connection with the preservation of ecological values.		

Provision	Complies	Comment
Controls		
1. Development must be in accordance with the Rural Fires Act 1997, the Rural Fire Service's Planning for Bushfire Protection (2019) and Australian Standard AS3959—Construction of buildings in bushfire-prone areas.		
2. Development on bushfire-prone land must be accompanied by a bushfire risk assessment report.		
3. Siting of buildings, lot layout and building design must provide for the safety of people and property by mitigating bushfire risk.		
4. Bushfire protection measures must be located wholly within the development site. All proposed asset protection zones must be within the property and incorporated into affected lots, within the existing or proposed road reserve, or a combination of both.		
5. The asset protection zone must be outside areas of ecological value.		
3.7 Heritage conservation		
Objectives <ol style="list-style-type: none"> a) Maintain the significance and setting of heritage items including the relationship between an item and its surroundings. b) Ensure an adequate curtilage and landscaped setting for heritage items. c) Ensure that subdivision of land on which a heritage item is located does not isolate the building from its setting or context, adversely affect its amenity or privacy, or interfere with important view lines. d) Ensure that development is designed to minimise any potential impacts to heritage items. 	N/A	The site does not contain historic heritage items or affect items on neighbouring land (see Section 5.8).
Controls		
1. Development shall be sited and designed to ensure that the visual prominence, context and significance of heritage items and their setting is maintained.		
2. Development in the vicinity of heritage items must be compatible with the historic values of the item.		
3. A heritage impact statement is required where proposed development is located on land containing a heritage item or is located on land adjacent to a listed heritage item.		

Provision	Complies	Comment
4. Proposals for subdivision must include an appropriate setback or curtilage for heritage items which is informed by the recommendations of the heritage impact statement.		
5. Development must protect the views and vistas to heritage items.		
3.8 Aboriginal cultural heritage		
Objectives	N/A	The development site has nil to low potential for Aboriginal objects and will not harm Aboriginal objects. An ACHAR is not required and information provided by the Applicant demonstrates that.
<ul style="list-style-type: none"> a) Preserve and enhance items and sites of Aboriginal cultural and archaeological significance located within Penrith Lakes. b) Ensure all development considers and addresses the potential impacts on Aboriginal cultural heritage significance and potential archaeological sites. 		
Controls		
1. All development is to be informed by an understanding of Country, through consultation with traditional owners.		
2. All development is to be in accordance with the relevant provisions of the National Parks and Wildlife Act 1974 and the (former) Department of Environment, Climate Change and Water's Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales.		
3.9 Contamination		
Objective	Yes	Refer to below.
<ul style="list-style-type: none"> a) Manage and mitigate the impacts of potential contaminated land on development and use of land. 		
Controls	Yes	A preliminary site investigation report has been prepared by Douglas Partners at Appendix J of the EIS.
1. Where development is proposed on land identified as being potentially contaminated, a preliminary site investigation report must be prepared and submitted with a development application.		
2. Where a site has been remediated with the involvement of a NSW Accredited Site Auditor, applications for initial subdivisions or initial use of the land must be supported by a Site Audit Statement, Site Audit Report and any documentation prepared to address the conditions of the Site Audit Statement.	N/A	This would only apply in the event findings of Stage 2 Detailed Site Investigation determine remediation works are required.

Provision	Complies	Comment
3. Should additional potentially contaminating activities be found to have occurred after the issue of the Site Audit Statement (e.g. unauthorised filling activities) or should a Stage 1 Preliminary Site Investigation identify potential or actual site contamination, then a Stage 2 Detailed Site Investigation must be prepared. If remediation works are required, a remedial action plan must be submitted.	Yes	The preliminary site investigation recommended a Detailed Site Investigation (Contamination) (DSI) report be conducted at the development site following the demolition of the existing site buildings / structures.
4. All reports are to be prepared by a suitably qualified land contamination consultant with consideration of the relevant NSW Environment Protection Authority guidelines and the National Environment Protection (Assessment of Site Contamination) Measure.	Yes	The preliminary site investigation was prepared by a suitably qualified consultant in consideration of relevant NSW Environment Protection Authority guidelines and the National Environment Protection (Assessment of Site Contamination) Measure.
5. Prior to granting development consent, the consent authority must be satisfied that the site is suitable, or can be made suitable after remediation, for the proposed use.	Yes	This provision is consistent with clause 7 of SEPP 55. The Department is satisfied the site is suitable for its proposed use / can be made suitable subject to remediation.
3.10 Trading/Operating hours of premises		
Objectives	Yes	The revised acoustic report confirms that the proposal can operate in accordance with noise criteria between the hours of 6.00am and 10.00pm.
<ul style="list-style-type: none"> a) Ensure that the amenity of adjoining properties, especially residential and rural areas, is preserved. b) Ensure development has the flexibility in trading/operating hours to ensure it is competitive and productive. 		
Controls	Yes	Any construction activities required for the helipad facility would be undertaken in the hours specified in the controls. A condition has been included to reflect this.
<ul style="list-style-type: none"> 1. Construction works shall generally be restricted to the following hours: <ul style="list-style-type: none"> a) Monday to Friday, 7 am to 6 pm b) Saturday, 7 am to 1 pm c) Sundays or public holidays, no work. 		
<ul style="list-style-type: none"> 2. The hours of operation for premises involved in any type of employment-generating activity shall be considered on merit, having regard to the potential impact on the amenity of adjoining properties. 	Yes	The hours of operation and associated noise impacts have considered the potential impact on the amenity of the adjoining properties.
3.11 Waste management		

Provision	Complies	Comment
Objectives <ul style="list-style-type: none"> a) Facilitate sustainable waste management practices during the demolition, construction and operational phases of development. b) Minimise the environmental impacts of waste through waste avoidance, minimisation, re-use and recycling. 	Yes	The proposed minor built form and development is not expected to generate a large amount of waste, which can be handled through waste management measures including waste servicing, waste avoidance, re-use and recycling, communication strategies, signage, monitoring, and reporting to be implemented in the operational phase of the development.
Controls <ol style="list-style-type: none"> 1. A waste management plan must be lodged with a development application, including demolition, construction, changes of use or a combination of these. The plan must include details regarding: <ul style="list-style-type: none"> a) the types and volumes of waste and recyclables generated during the demolition, construction and operational phases b) details of onsite storage, treatment of waste, or both during the demolition, construction and operational phases c) disposal of waste generated during the demolition and construction phases that cannot be re-used or recycled d) ongoing management of waste during the operational phase of the development, including collection regime e) waste minimisation techniques, including recycling. 	N/A	<p>The waste expected to be generated would be from demolition and fit-out of the hangar. This would be stockpiled and removed by a licenced contractor, while waste from operational activities would be limited to office waste.</p> <p>As such, it is considered that a waste management plan is not required.</p>
3.12 Noise and vibration		
Objectives <ul style="list-style-type: none"> a) Ensure that development and traffic associated with development do not adversely impact the amenity of surrounding land uses. b) Ensure appropriate noise mitigation measures are incorporated into development. 	Yes	Noise impacts are assessed in Section 5.4 .
Controls	Yes	The primary noise source from the helipad use will be the operation of helicopters.

Provision	Complies	Comment
<p>1. Development must be designed with integrated noise control measures to minimise the impact of noise on adjoining land uses.</p>		<p>Effective noise controls include restrictions on the types of helicopters, flight paths and number and hours of flights. The acoustic report demonstrates these restrictions will result in an acceptable noise impact.</p> <p>Maintenance and refuelling activities will be sufficiently distant and screened from sensitive receivers to minimise noise impacts.</p>
<p>2. Development applications for noise-generating uses must be accompanied by a noise impact assessment from a suitably qualified acoustic consultant that demonstrates compliance with the noise and vibration controls contained within the relevant Australian Standards and State Government Guidelines relating to noise, including but not limited to:</p> <ul style="list-style-type: none"> a) <i>Protection of the Environment Operations Act 1997</i> b) NSW Environment Protection Authority's <i>Noise Policy for Industry</i> c) (former) NSW Department of Environment, Climate Change and Water's <i>NSW Road Noise Policy</i> d) (former) NSW Department of Environment, Climate Change and Water's <i>Interim Construction Noise Guideline</i> e) <i>State Environmental Planning Policy (Infrastructure) 2007</i> f) (former) NSW Department of Planning <i>Development near rail corridors and busy roads – Interim Guideline</i> g) relevant Australian Standards. 	Yes	<p>The application was accompanied by a noise impact assessment by a qualified acoustic consultant. This assessment considers relevant policies and standards, as well as previous guidance from the Land and Environment Court regarding helipad noise.</p> <p>Given the sensitivity of potential noise impacts, the Department engaged an acoustic consultant to review the noise impact assessment. This review is located at Appendix G.</p>
<p>3. When development may have a vibration impact on adjoining land uses, a vibration impact assessment is to be prepared by a suitably qualified consultant and submitted with the development application. This assessment is to be carried out with consideration of the former NSW Department of Environment and Conservation's <i>Assessing Vibration: A Technical Guideline</i> either no impact or that impacts will be mitigated by suitable measures.</p>	Yes	<p>The noise impact assessment also considered vibration and found that the operation of the helipad would meet relevant guidelines.</p>
<p>3.13 Air quality</p>		
<p>Objectives</p> <ul style="list-style-type: none"> a) Ensure air quality is maintained at acceptable levels. b) Minimise the risk of dust or odour impacts on adjoining land uses. c) Ensure emissions are minimised from plant, equipment and machinery. 	Yes	Refer to below.

Provision	Complies	Comment
<p>Controls</p> <p>1. Where development may adversely affect air quality, an air quality impact assessment as prepared by a suitably qualified environmental consultant in accordance with the relevant NSW Environment Protection Authority guidelines, must accompany a development application.</p>	Yes	An Air Quality Impact Assessment (AQIA) was prepared for the application (Appendix O). The report was prepared by a suitably qualified consultant (SLR) and considered relevant guidelines.
<p>2. Development is to provide air quality control measures both during and after construction.</p>	Yes	<p>The AQIA prepared by SLR noted the qualitative air quality impact assessment for the development is of low risk to air quality and health.</p> <p>The construction works for the site development are small and include standard best practice dust controls and management.</p>
4.1 Site Planning		
<p><i>Objectives</i></p> <p>a) Improve the social, economic and environmental sustainability of development.</p> <p>b) Ensure that development addresses the key site planning principles, urban design and design excellence by:</p> <ul style="list-style-type: none"> • responding to the natural topography and landform of the site • protecting areas of scenic or visual importance in the Penrith Lakes • adopting a height, massing and scale that accords with the analysis of the site and minimises visual impact • incorporating safety and security measures within site design • providing for active living and connectivity through the provision of healthy, walkable, green built environments, including quality public open space, community facilities and walkable streets • using, where possible, sustainable materials that minimise impacts on the environment, maintenance and waste • incorporating the principles of universal design to maximise accessibility for all people. 	Yes	The proposed development appropriately addresses the natural topography and landform. Minor built form works retain the existing height and scale of buildings on the site.

Provision	Complies	Comment
Controls	Yes	The proposal includes a site analysis appropriate for the built form and public domain changes proposed.
1) Detailed site analysis is required for lots above 1 hectare or sites that have not been developed previously for urban development.		
2) A view impact analysis will be required for development which impacts the identified view corridors identified in Section 2.3.	Yes	The proposed development retains the site's existing built form scale and is not expected to change any view corridors.
4.2 Building design		
Objectives	N/A	The proposal retains the existing landscaping setting and quality of architecture is appropriate given the development uses and alterations to existing buildings on the site. The site would not be open to the public, so objectives relating to the quality of the urban environment and public realm are not relevant.
a) Ensure building design reflects the landscape setting and the natural environment and minimise the overall bulk and scale of development.		
b) Ensure the materials and finishes provide a high level and quality of architecture.		
c) Ensure new development contributes to creating a visually cohesive urban environment.		
d) Support passive surveillance of the adjoining public realm.		
Controls	Yes	Alterations are designed by an architect.
1) All buildings should be designed to a high architectural standard and be designed by a suitably qualified design expert.		
2) Where a building is more than 60 metres in length, the building is to be separated into at least two parts by a significant recess or proposalion to minimise the mass, bulk and scale of the built form.	N/A	Hangar building is approximately 50 metres in length.
3) Building facades must be articulated with building entries, awnings, porticos, recesses, blade or fin walls, sun shading devices, and proposaling bays or other varying elements as appropriate.	No	The hangar building is the only building on the site that will be altered. This façade treatment is not considered appropriate for the retained industrial form of the hangar building.
4) Buildings are to be sited to frame the street. On corner lots, buildings should be oriented to address all street frontages.	No	N/A.

Provision	Complies	Comment
5) Street-facing elevations and elevations fronting the future Great River Walk are to present a high standard of architectural design with varying materials in combination with landscaping treatments to break up the expanse of large walls.	N/A	N/A.
6) Buildings are to be oriented to ensure prevailing winds over blue-green infrastructure are optimised as a means of providing passive cooling.	No	N/A.
7) Buildings shall be constructed with high-quality materials that integrate with the surrounding landscape and parkland setting.	Yes	Buildings will retain their existing relationship to the surrounding landscape.
8) External materials are to be of light-coloured and non-reflective building materials, and paved surfaces are encouraged.	No	External materials are largely retained and are considered appropriate for the proposed use.
9) The use of sustainable and recycled materials sourced from the region is encouraged.	N/A	N/A.
10) Building services, such as mechanical ventilation, roof plant and lift overrun, must integrate with the facade and building design and must not be directly visible from the public domain.	Yes	The site is distant and screened from the public domain.
11) Blank facades are not permitted along primary and secondary street frontages.	N/A	The hangar building will have blank facades which do not face primary or secondary street frontages as the site is not be open to the public.
12) Applications for large-scale public buildings must demonstrate that buildings have been planned and designed to meet the needs of people with a complex or profound disability.	N/A	N/A.
13) For Tourism zone, there must be a minimum separation of 20 metres between buildings. Reduced separation may be supported where it can be demonstrated that development is consistent with the objectives of this DCP.	No	Separation between existing buildings is less than 20 metres. This is acceptable as buildings are existing and not proposed for demolition.
14) For Tourism zone, building design is to minimise visual impacts and overshadowing on adjoining sites.	Yes	The retained buildings are sufficiently distant from adjoining sites to prevent these impacts.
4.3 Active frontage		
Objectives	Yes	The site will not be available to the public, consistent with its proposed use as a heliport.
a) Promote pedestrian activity and safety in the public domain.		

Provision	Complies	Comment
<ul style="list-style-type: none"> b) Create an attractive streetscape which supports local economies and an activated frontage to the Nepean River. c) Ensure corner lots and street frontages with good physical and visual connections between buildings and the public domain. 		The proposal does not propose development that does not provide active frontages to publicly accessible streets.
Controls	N/A	N/A.
1) Buildings must have openings, including main entries and windows, to the street and public domain that aim to provide activation, passive surveillance and an overlook of the public domain.		
2) Transparency and openings are to be maximised. Buildings must be activated by incorporating glazing, office administration areas, and building entries. Large, blank wall surfaces are not permitted.	No	The proposed hangar and site office have minimal openings. Requiring active facades would serve little purpose as the site does not include public domain areas and would detract from the function of the building.
3) Fire exits and building services elements are to be minimised to the street facade.	N/A	No street façade is proposed.
4) Buildings are to be designed to create an attractive and activated edge to the Nepean River.	N/A	The site is not in close proximity to the Nepean River.
5) Setback areas must provide interest and maximise opportunities for casual surveillance.	N/A	N/A.
6) Development on corner sites and lots with dual street frontage must address both street frontages.	N/A	N/A.
7) Facades must be articulated so that they address the primary and any secondary street frontage and add visual interest.	N/A	N/A.
8) Screening must be provided for any plant and mechanical equipment.	No	<p>The use of plant and mechanical equipment is an intrinsic part of the proposed helipad use and it would not be reasonably practical to screen them.</p> <p>It would serve little planning purpose given the site does not include or immediately adjoin any publicly accessible street or public domain.</p>

Provision	Complies	Comment
4.4 Landscaping and open space		
Objectives	Yes	The minor built form works retain the existing landscape setting and maximise permeable surface areas. They will not substantially affect the existing site's relationship with Country.
<ul style="list-style-type: none"> a) Ensure that landscape planning is informed by an understanding of designing with Country. b) Ensure the landscaping design contributes to the landscape and cultural character of Penrith Lakes and complements and integrates with the building design. c) Maximise permeable surface areas for stormwater management. d) Provide usable and shaded private and communal open space areas which are welcoming, safe and accessible for workers and visitors. e) Support increasing canopy cover to contribute to the Greater Sydney Region Plan's identified target of 40% tree canopy, to help cool the precinct and increase resilience to a changing climate and urban heat effect, add to the urban canopy and green infrastructure amenity. f) Create an integrated network of green infrastructure. 		
Controls	Yes	The built form is minor alterations and additions to existing buildings and structures. The Arboricultural Impact Assessment provided with the EIS provides details on tree removal, protection of retained trees and recommendations for new trees.
1) A landscape plan must be submitted with development applications (excluding minor alterations and additions). Landscape plans must be prepared by a suitably qualified consultant and include proposed trees to be removed, new trees, deep soil areas, and preferred tree species and canopy size. Landscape plans shall include details on areas of public domain, if appropriate.	Yes	The existing > 30% soft landscaping will be retained across the site.
2) For Tourism zone, a minimum of 30% of the site area is to be landscaped.	Yes	The proposal will retain the site's existing landscape setting.
3) Development shall be compatible with the landscape setting of Penrith Lakes.	Yes	The built form will continue to integrate with the existing landscape character.
4) Development must maintain a sense of openness and integrate with the surrounding landscape character.	Yes	12 trees would be removed as these would affect helicopter flight paths. All other trees would be retained.
5) Wherever possible, existing trees, remnant vegetation, environmentally sensitive features or other local character elements are to be retained and incorporated into the landscape setting.	Yes	

Provision	Complies	Comment
6) Development proposals must demonstrate how they are contributing to the 40% tree canopy target in the Greater Sydney Region Plan by preserving existing trees, where possible, and adding to the existing canopy to provide green infrastructure and amenity.	Yes	The majority of trees across the larger site would be retained.
7) Remnant vegetation and riparian areas must be protected and enhanced, where possible. Where land contains remnant native vegetation, a flora and fauna assessment report will be required.	Yes	A BDAR was provided (see Section 5.5).
8) Development must consider and identify opportunities to integrate and connect to the broader green infrastructure network.	No	The EIS did not consider this, but the relatively small scale of works will not detract from the existing green infrastructure network.
9) Development must protect and maintain the cultural landscape setting associated with heritage items.	Yes	The proposal retains the existing landscape setting.
10) Development must provide an appropriate landscape transition to lake foreshore areas, the Nepean River and streets, where relevant.	N/A	N/A.
11) Open space shall be provided that accommodates a range of uses and meets the needs of workers and visitors. It is to be designed to be safe and secure for all users.	N/A	The site will not be open to the public and would attract a small number of workers and visitors.
12) Landscape design shall complement the proposed built form and minimise the impact of scale, mass and bulk of the development in its context. Landscape design must promote environmentally sustainable development principles, including low-water and/or low-maintenance plants and drought-tolerant species, planting native or indigenous plants and using quality, long-lasting materials.	Yes	The existing built form and landscape are largely retained across the site.
13) Landscape design must maximise the area of a deep soil zone to provide sufficient soil depth for roots to allow trees to reach full canopy potential.	Yes	The site will remain a largely unbuilt-upon site with extensive deep soil zones.
14) Consideration is to be given to the connection of irrigation infrastructure to stormwater or recycled water source where open space irrigation is required to contribute to water efficiency and effective stormwater management.	No	The landscaping on the site would continue to not be actively irrigated.
15) Development must maximise permeable design solutions, including permeable paving to minimise stormwater run-off.	Yes	The site would continue to be largely permeable surfaces.

Provision	Complies	Comment
16) Landscape design must be high-quality and create interest and character through measures such as selection of tree species, well-integrated public art, pavement design and other elements.	N/A	The site does not include or immediately adjoin any publicly accessible street or public domain.
17) Landscaping design must be compatible with flood risk.	Yes	The existing landscaping would be retained and not affect existing flood risk.
18) Landscaping must be integrated in the front setback of buildings to provide an attractive outlook, screen buildings, and enhance pedestrian shade and the streetscape.	N/A	N/A.
19) Communal open spaces must incorporate the primary deep soil area where possible.	N/A	No communal open spaces are proposed.
20) Solar access to private open space must be maximised. Communal open space must receive a minimum of three hours of direct sunlight from 9 am to 3 pm on 21 June.	Yes	The proposal does not increase the height or bulk of any buildings on site and will not affect existing solar access.
21) Appropriate shading must be provided so that communal spaces are usable during summer.	N/A	No communal open spaces are proposed.
22) Landscaped walls, including vertical gardens and green roofs, are encouraged. A specialised landscape architect must design any green roofs and must include: <ul style="list-style-type: none"> a) the location of proposed structures b) drainage, irrigation and waterproofing details c) an appropriate selection of plant species and soil details d) an accessibility and management plan outlining the required and ongoing maintenance for the green roof. 	No	No landscaped walls are proposed. These are not considered necessary due to the form and function of the buildings and their lack of interaction with the public domain.
4.5 Deep soil and tree canopy		
Objectives <ul style="list-style-type: none"> a) Provide developments with a high level of amenity and landscape character. b) Retain existing tree canopy and encourage future canopy increase. c) Reduce urban heat and improve resilience by increasing tree canopy as part of development. 	Yes	The proposal largely retains the site's existing vegetation and tree canopy.
Controls <ul style="list-style-type: none"> 1) For Tourism zone, a minimum 20% of the site must be provided as deep soil to allow sufficient area for tree planting. A reduced area of deep soil may be considered, but only where it can be demonstrated that appropriate tree canopy cover will be achieved. 	Yes	The site will remain a largely unbuilt-upon site with extensive deep soil zones.

Provision	Complies	Comment
2) For Employment zone, a minimum of 10% of the site must be provided as deep soil to allow sufficient area for tree planting.	N/A	
3) Deep soil zones must be a minimum of 3 metres wide. Where appropriate, deep soil zones shall be provided in one continuous area.	Yes	Existing deep soil zones are more than three metres wide.
4) Any approved tree clearing must be replaced at a ratio of at least 2:1 (new to existing) to contribute to the 40% tree canopy target in the Greater Sydney Region Plan.	No	The Arboricultural Impact Assessment proposes to replace tree clearing at a ratio of 1:1. The Department recommends a condition requiring a ratio of 2:1.
5) For development applications, the consent authority shall consider: <ul style="list-style-type: none"> a) the proponent's approach to incorporating and protecting existing trees as part of the development design to enhance urban amenity and provide established urban canopy across the development; b) whether an efficient water source for trees has been incorporated into the development design; c) potential opportunities for alternative water supplies, including stormwater capture, sewer harvesting and the like, to ensure adequate soil moisture during warm months and drought conditions; and d) potential impacts on underground services. 	Yes	The proposal largely retains the site's tree coverage and landscaped setting and will not significantly affect retained trees' ability to obtain water.
6) Structural work or excavations that may restrict vegetation growth will not be permitted in deep soil zones (including, but not limited to, car parking and hard paving).	Yes	No such structural work or excavation is proposed.
4.6 Staging		
Objectives <ul style="list-style-type: none"> a) Ensure the orderly development of the land and the timely and efficient delivery of services and infrastructure. b) Provide flexibility for future development and the delivery of development lots within zoned precincts. 	Yes	The proposal is for a single land use and does not include any subdivision of land or significant urban development.
Controls <ul style="list-style-type: none"> 1) Development must ensure that adequate services and public access, including roadways, are provided in the initial stage of development. 	N/A	No additional roadways or public access are proposed or required.

Provision	Complies	Comment
2) Any subdivision or development application for subdivision on land of more than 5,000 m ² is required to submit a staging plan.	N/A	The proposal does not include subdivision of land.
3) The staging plan is to be endorsed by the relevant consent authority.	N/A	No staging plan is considered necessary.
4) Development applications for subdivision must consider road connections and services for the site and surrounding land and demonstrate their adequate provision in the first stage of development.	N/A	The proposal does not include subdivision of land.
5) Development must not result in isolated lots.	N/A	The proposal does not include subdivision of land.
4.7 Public art		
Objectives	N/A	The proposal does not include any publicly accessible land or any significant built form works. Given the lack of public access to the site, requiring public art within the site would serve no planning purpose and would be unreasonable.
a) Integrate urban art within the public domain and key development sites.		
b) Encourage a consistent art and design theme throughout Penrith Lakes.		
c) Enrich the public domain through the installation of artworks in the open space network.		
Controls	No	The proposal does not include any publicly accessible land or any significant built form works. Given the lack of public access to the site, requiring public art within the site would serve no planning purpose and would be unreasonable.
1) A public art strategy must be submitted with any development application on sites of more than 10,000 m ² , within the Tourism zoned land, excluding development applications limited to rehabilitation, temporary uses, or minor alterations and additions.		
2) For Employment zoned land a public art strategy is to be submitted with the initial masterplan.	N/A	
3) The public art strategy is to be relevant and relate to the surrounding area and the broader context of Penrith Lakes and is to address: a) context of precinct within the Penrith Lakes; b) community and public artist engagement; c) location of installations and artwork; d) themes and narrative; e) procurement strategies; f) maintenance strategies; and	No	The proposal does not include any publicly accessible land or any significant built form works. Given the lack of public access to the site, requiring public art within the site would serve no planning purpose and would be unreasonable.

Provision	Complies	Comment
g) decommissioning strategies		
4.8 Access and movement		
Objectives	Yes	The proposal will maintain existing access to the site from Old Castlereagh Road. As the site won't be accessible to the public, the proposal will not increase pedestrian access, but it would not preclude future access if required for future land uses.
<ul style="list-style-type: none"> a) Facilitate access and future connections between adjoining precincts. b) Minimise vehicular access points from Old Castlereagh Road. c) Improve permeability and pedestrian access between precincts, the Nepean River and recreation areas. d) Provide new road connections and walking and cycling connections to service development and minimise conflict between pedestrians and vehicles. e) Regulate the key characteristics of new roads to provide traffic safety and efficient traffic flow, appropriate parking, appropriate pedestrian and cycle paths, and suitable verge and road reserve widths in accordance with each road's function and use within the general road hierarchy. f) Ensure public safety from criminal elements by considering the NSW Police 'Safer By Design' or 'Crime Prevention Through Environmental Design' principles and protocols. g) Minimise construction and maintenance costs and avoid the need for future property acquisition to provide for public roads. h) Maintain flexibility to allow for future changes in land-use patterns. i) Ensure noise from all road and traffic sources is within acceptable limits. j) Incorporate appropriate traffic-calming measures. 		
Controls	Yes	A traffic impact statement was provided and includes a street hierarchy of the local road network and access routes surrounding the site.
1) A traffic and transport plan is to be submitted as part of a development application plan (excluding minor development), detailing site access, movement and management of traffic impacts on the local road network.		
2) A clear street hierarchy must be established using existing public roads (upgraded as necessary) and new collector roads and local streets.	No	No new roads are proposed.
3) Additional access points and driveways from Old Castlereagh Road shall be minimised and allowed only where they are approved as part of the traffic and transport plan prepared for the development.	Yes	The proposal relies on the existing access point from Old Castlereagh Road.
4) Development shall provide new pedestrian connections, as appropriate, to the Nepean River, including new connections from Lugard Street and Old Castlereagh Road.	N/A	The site does not have a river frontage.

Provision	Complies	Comment
5) Roads will be designed to the classification requirements for new developments are set out in Section 10.4 of the Penrith Development Control Plan 2014. Roads are generally to be located above the 1% AEP level and provide rising road access to Castlereagh Road.	N/A	No new roads are proposed.
6) Roads are to be designed in accordance with Penrith City Council's <i>Design Guidelines for Engineering Works for Subdivisions and Developments</i> .	N/A	No new roads are proposed.
7) The road network must be designed to allow efficient access to key destination nodes throughout Penrith Lakes, providing appropriately planned access and egress intersections to the adjoining major road network of Castlereagh Road to distribute traffic demands.	No	No changes to the road network are proposed.
8) Where new streets are proposed, a public domain plan is to be submitted with a development application that details the design, maintenance and management of streets.	N/A	No new streets are proposed.
9) Roads shall be designed in accordance with the following principles: a) Road and lane widths must allow for two-way movement and turning movements of vehicles, including consideration for buses, heavy vehicles, garbage trucks and emergency vehicles; b) Verge widths must be sufficient to meet the requirements for utilities, street tree planting, footpaths, shared paths and urban design outcomes; c) Adequate turning paths must be provided for all vehicles at intersections and for property access; and d) Sufficient width must be provided for drainage functions and water-sensitive urban design measures.	Yes	The traffic and transport assessment demonstrates sufficient turning circles and access for vehicles accessing the site.
10) Development shall, where appropriate, be designed to: a) allow all vehicles to either leave or enter the site in a forward direction b) accommodate heavy vehicle parking and manoeuvring areas c) avoid conflict with staff, customer and visitor vehicular movements d) ensure satisfactory and safe operation with the adjacent road system.	Yes	The existing access to the site meets these controls.
11) The suitability of manoeuvring areas provided for large vehicles is to be designed to comply with Australian Standard – AS2890 series.	Yes	Manoeuvring areas are adequate for the largest vehicle accessing the site.
12) Adequate space is to be provided within the site for the loading, unloading and fuelling (if applicable) of vehicles. These areas must be screened from the road.	Yes	Adequate space screened from the road is available for loading and unloading.
13) New streets are to have a strong landscaped character.	N/A	No new streets are proposed.

Provision	Complies	Comment
14) Verge treatments are to be designed to reflect the intended use of the street activity and function.	N/A	No new streets are proposed.
15) Vehicle and pedestrian entry points are to be appropriately marked and signposted.	Yes	The proposal retains existing entry points which are clearly marked.
16) Paved surfaces must be designed to delineate between different uses, including pedestrian areas, car parking spaces and driveways.	Yes	The existing paving is adequate to delineate between different uses on the site given the lack of pedestrian activity.
17) Development must deliver a permeable and walkable local street network. Pedestrian paths are required on new and upgraded roads.	No	No pedestrian paths are proposed. This is acceptable given public access will not be permitted.
18) Development must ensure that pedestrian and cycle facilities in public spaces are safe, well-lit, clearly defined, functional and accessible to all users.	N/A	N/A.
19) The minimum width is 1.5 metres for pedestrian footpaths and 3 metres for shared cycle/pedestrian paths. All new roads are to include pedestrian footpaths on both sides. Shared paths are encouraged on one side of new roads.	N/A	N/A.
20) Pedestrian paths and cycleways, as well as pedestrian refuge islands, are to be designed so that they are fully accessible by all users in terms of access points and gradients, in accordance with Australian Standard – AS1428 (parts 1 to 4—Design for Access and Mobility).	N/A	N/A.
21) The road cross-sections to be adopted will need to be further developed, with consideration given to land-use planning and support for active transport opportunities.	N/A	N/A.
4.9 Parking		
Objectives	Yes	Parking areas appropriately frame the buildings on the site and provide appropriate vehicular spaces. Retention of the existing parking on site will not affect the visual amenity of the area. The limited site use and lack of public access do not require additional active transport options on the site.
a) Ensure parking areas are well-designed and integrate with development.		
b) Ensure the provision of an appropriate number of vehicular spaces, having regard to the proposed development.		
c) Reduce pedestrian and vehicle conflicts on development sites and the adjoining road network.		

Provision	Complies	Comment
<ul style="list-style-type: none"> d) Minimise the visual impact of onsite parking to maintain the visual amenity of Penrith Lakes. e) Enable the conversion of above-ground parking to other future uses. f) Positively support the complementary use and benefit of public transport and active transport options, such as bicycle lanes and footpaths. 		
Controls	Yes	This use is not specified in Table 2 or the <i>Guide to Traffic Generating Development</i> . The Applicant estimated that 15 parking spaces would be required based on their existing operations at Granville. There are 40 spaces available on the site.
1) Car parking shall generally be provided in accordance with the land uses and rates outlined in Error! Reference source not found.		
2) Unless otherwise stated within this DCP, parking areas within the front setback of the lot must be set behind a landscaped area.	Yes	Parking is not within the front setback of the lot.
3) Unless otherwise stated within this DCP, on-grade car parking shall: <ul style="list-style-type: none"> a) be encouraged where possible to be located on the side or rear of the lot b) be constructed of permeable materials c) provide one large tree for every six car parking spaces d) include fencing or landscaping to improve the visual impact on adjacent areas and allow for safe access to building entry points. 	Partially	The existing parking is at the side and rear of the lot but is not constructed of permeable materials and does not provide trees.
4) Where multilevel car parking is located above ground, ventilation grills or screen devices must be integrated into the facade and design of the building.	N/A	N/A.
5) Parking areas are to be designed in accordance with the relevant Australian Standards.	Yes	Parking space dimensions and design meet relevant standards.
6) Along all public street frontages, multilevel above-ground parking areas are to be laminated or sleeved with another use for a minimum depth of 10 metres—for example, building entry lobbies, retail tenancies and commercial floor space.	N/A	N/A.
7) Temporary above-ground parking areas are to be designed to allow future adaptation to other uses. Ramps should be located internally rather than on the facades of parking structures, and multilevel parking areas should allow ease of adaptation of use.	Yes	Parking areas are not temporary but could be adapted to other uses if the site was redeveloped in future.
4.9.1 Car parking		

Provision	Complies	Comment
4) For land uses not included in Error! Reference source not found. , the nearest equivalent rate would apply as informed by the parking requirements in the RTA's <i>Guide to Traffic Generating Developments</i> , Australian Standard AS2890.1 (Parking facilities—Off-street car parking) and Australian Standard AS2890.2 (Parking facilities, Part 2—Off-street commercial vehicle facilities). In the absence of other information, the applicant shall justify their proposed provision of parking spaces in light of their traffic report and the objectives of Section Error! Reference source not found.	Yes	This use is not specified in Table 2 or the <i>Guide to Traffic Generating Development</i> . The applicant has estimated that 15 parking spaces would be required based on their existing operations at Granville. There are 40 spaces available on the site.
4.9.2 Additional parking requirements		
<i>Bicycle/Motorcycle parking</i> Objective a) Support and promote the demand for active transport, such as bicycling and other active transport options. Controls 1) Development is to provide bicycle parking in accordance with Austroads' <i>Guide to Traffic Management Part 11—Parking Management Techniques</i> . 2) Bicycle parking spaces must comply with Australian Standard 2890.3 (Parking facilities, Part 3—Bicycle parking). 3) For development that facilitates long-term (all-day) parking, end-of-trip facilities are to be provided, including showers, changing rooms, communal bike tools/repair stand and air compression bike pump. 4) Motorcycle parking must be provided based on 2% of the car parking provision. 5) Motorcycle parking spaces must comply with Australian Standard AS2890.1 (Parking facilities—Off-street car parking).	No	The proposal does not include active transport facilities. The Department considers this acceptable given the minor built form works proposed and small worker and visitor population on the site.
<i>Service vehicle parking</i> Controls 1) Service vehicle parking areas must comply with Australian Standard AS2890.2 (Parking facilities, Part 2—Off-street commercial vehicle facilities) and the minimum design vehicle requirements in Error! Reference source not found.	No	The proposal will accommodate a medium rigid vehicle rather than the large rigid vehicle specified by Table 3. The Applicant advises this is the largest vehicle required to service the site.
4.10 Signage		

Provision	Complies	Comment
Objectives a) Ensure that signage is compatible with the building design and landscape character of Penrith Lakes. b) Ensure that signage reflects the nature and scale of the activity conducted on the land.	Yes	Signage on site is of a high quality and reflects the nature of the proposed activity.
Controls 1) The siting and design of all signage are to be sympathetic to the landscaped character of the area and minimise any visual impacts to adjoining properties.	Yes	The signage is discreet and sympathetic to the site's character.
2) All advertising is to be: a) visually interesting b) constructed of high-quality, durable materials c) considered in conjunction with the design and construction of buildings d) restricted to only one sign per street frontage e) contained wholly within the site.	N/A	N/A.
3) Signage proposals are to consider existing signs on buildings as well as the streetscape to ensure that any new signage does not result in visual and physical clutter.	N/A	No other signs are readily visible from the site.
4) Corporate colours, logos and other graphics are to achieve a high degree of compatibility with the architecture, materials, finishes and colours of the building or site to which the sign relates.	Yes	The sign logos and graphics are of a high quality and compatible with the existing buildings and its surroundings.
5) Illuminated signs are generally discouraged, unless it can be demonstrated that the illuminated sign will be minimal and simple and have limited impact on the amenity or landscaped character setting and pedestrians or vehicles.	Yes	Illuminated signs are not proposed.
4.11 Solar access		
Objective a) Protect solar access and minimise overshadowing to public open space, recreation areas, heritage items and adjoining properties.	Yes	The proposal does not change the bulk or scale of existing buildings on the site and is set back from adjoining properties and public open space.
Controls 1) All open space and public recreation areas must achieve a minimum of 3 to 4 hours of solar access from 9 am to 3 pm on 21 June (midwinter).	Yes	While the proposal does not include any public recreation areas, the open space parts of this site will meet this control.

Provision	Complies	Comment
2) Development must not result in any overshadowing to heritage items.	Yes	N/A.
3) For Tourism zone, shadow diagrams for 9 am, 12 pm and 3 pm during the winter solstice are to be submitted with any development application where: a) a building of two storeys or more is proposed b) development adjoins open space, a public recreation area, or a heritage item.	N/A	The proposal does not adjoin public open space, recreation areas or a heritage item.
4.12 Utility services		
Objectives a) Ensure that adequate services are available and provided suitably to facilitate development. b) Ensure that development will not place unreasonable pressure on servicing authorities in terms of timing and extent of supply.	Yes	The site is already adequately serviced due to its previous use.
Controls 1) All development applications are to address the existing and proposed provision of services, utilities, or both to a site and whether there is satisfactory capacity to address the required demand of the proposal.	Yes	The EIS advises that existing services are adequate.
2) All development applications are to provide evidence that arrangements satisfactory to Sydney Water have been made for water supply and sewer services to the development.	Yes	The EIS advises that existing services are adequate.
3) Electricity services are to be provided in accordance with the relevant energy services provider.	Yes	The EIS advises that existing services are adequate.
4) Applicants will be required to obtain a certificate from the energy service provider outlining their notification of arrangements for servicing the site, including the provision of street lighting.	No	The site is already serviced.
5) Electricity infrastructure is to be placed underground and may be in shared trenches and must be safe for extended floodwater immersion when located at or below the flood planning level extent.	N/A	No new electricity infrastructure is proposed.
6) Gas services, when provided, are to be provided in accordance with the requirements of the relevant services provider based on the specific demand by specific users.	N/A	No new gas services are proposed.
7) Gas supply infrastructure, where provided, must be installed underground in shared trenches.	N/A	No new gas services are proposed.

Provision	Complies	Comment
8) Telecommunications services are to be provided in accordance with the requirements of the relevant services provider.	Yes	The site has existing telecommunications services.
9) Telecommunications services shall be funded by the applicant, including completion of consultation and design certification required to provide a ready pit and pipe in accordance with National Broadband Network (NBN) guidelines.	Yes	The site has existing telecommunications services.
4.13 Fencing		
Objectives	Yes	The proposal will retain its existing fencing.
<ul style="list-style-type: none"> a) Address the security needs of developments and avoid unacceptable visual impacts on the streetscape and landscape design. b) Ensure that the design and location of fencing integrates with the development and are suitable for its purpose and setting. c) Ensure that fencing is of a consistent high quality of construction and uses appropriate materials. d) Define site boundaries and give definition to building envelopes. 		
Controls	Yes	The existing fencing is sympathetic to the design of the site as a largely open area.
1) Fencing shall integrate with the overall design of the development and associated security structures, where possible.		
2) The solid component of front fencing must not be higher than 1.2 metres.	Yes	No solid fencing is proposed.
3) The location and design of fences, including the materials used to construct the fencing, should: <ul style="list-style-type: none"> a) be constructed of natural materials and finishes that integrate into the landscape character of Penrith Lakes b) be consistent in design and style with the building c) complement the streetscape, landscaping and open spaces d) maximise natural surveillance from the street to the building and from the building to the street e) not impede the natural flow of stormwater drainage or floodwaters f) not impede servicing and easement requirements for utilities. 	Partially	The existing fencing maintains the existing definition and landscaping of Old Castlereagh Road and allows for natural surveillance and water flow.
4) Fencing along boundaries adjacent to open spaces, including waterways and water bodies, is to integrate with the landscaping of the development.	Yes	The site fencing is sympathetic with the existing semi-rural character of the area.

Provision	Complies	Comment	
5) Fencing is not permitted in setback areas.	Yes	N/A.	
6) Solid, metal sheet fencing is not permitted.	Yes	N/A.	
7) Where site security is required, security fencing shall generally be of an 'open' nature and of a dark colour, such as green or black plastic-coated mesh fencing.	Yes	The existing fencing, which will be retained, is mesh security fencing.	
4.14 Lighting			
Objectives	Yes	Lighting on the site will be limited to helicopter lighting associated with night-time flying. Impacts are expected to be limited and not adversely affect neighbouring receivers.	
<ul style="list-style-type: none"> a) Design and locate general and security lighting that improves the safety, security and amenity of the uses and the public domain. b) Design and locate general and security lighting for business establishments to ensure no adverse offsite impacts, particularly to residential and rural areas. 			
Controls	Yes	A condition has been included to ensure all lighting is to comply with Australian Standard AS4282.	
1) External lighting to comply with Australian Standard AS4282 (Control of the obtrusive effects of outdoor lighting).			
2) Street lighting along internal roads is to be provided in accordance with the Australian Standard AS1158 series (Lighting for roads and public spaces).	N/A		N/A.
3) Lighting design must address NSW Police's principles of 'Crime Prevention Through Environmental Design', having regard to the operating hours of individual tenants and any safety and security issues.	N/A		The site will not be accessible to the public.
4) Adequate lighting must be provided to meet security requirements without excessive energy consumption. Lighting powered by solar batteries or other renewable energy sources is encouraged. The use of sensor lighting, both internally and externally, is encouraged.	N/A	No additional security lighting is proposed.	
5.2 Tourism South precinct			
5.2.1 Land application			
Objectives	Yes	The application proposes a high-quality tourism use that retains the lakeside setting, retains existing views, most trees and built form relationship to Old Castlereagh Road.	
<ul style="list-style-type: none"> a) To provide for high-quality recreation and tourism uses that celebrate the precinct's lakeside setting. b) To ensure development prioritises views to the lake and retains significant trees. 			

Provision	Complies	Comment
<ul style="list-style-type: none"> c) To ensure development creates an attractive arrival to Penrith Lakes, with well-designed buildings that address Old Castlereagh Road. d) To ensure development integrates with its lakeside setting, with generous landscaping, setbacks and views. e) To provide new connections and streets to improve permeability and access to the Regatta Lake. 		
<p>Desired future character All development applications are to demonstrate consistency with the following desired character objectives:</p> <ul style="list-style-type: none"> a) low-scale development fronting the Regatta Lake that responds to its landscape and preserves existing trees where possible b) a generous landscaped buffer along Old Castlereagh Road that provides a sense of arrival, functions as a Gateway to Penrith Lakes and preserves existing trees or plants advanced replacement trees capable of reaching a substantial height and canopy c) preserved north–south views from Old Castlereagh Road to the Regatta Lake through sufficient separation between buildings d) improved permeability and pedestrian access to primary roads, nature trails, the Regatta Lake, and current and future recreational features of Penrith Lakes. 	Partially	No development is proposed fronting the Regatta Lake and pedestrian access will not be provided. The proposal preserves the existing buffer to Old Castlereagh Road and north-south views to the lake.
5.2.2 Tourism South precinct master planning		
<p>Objectives</p> <ul style="list-style-type: none"> a) Ensure that development in the precinct occurs in an orderly manner. b) Ensure that infrastructure, services and amenities are sufficient to support growth and development in the precinct. c) Ensure high quality design. 	Yes	<p>The site is one of three lots that comprise the Tourism South precinct.</p> <p>No subdivision is proposed. This will ensure orderly development that has sufficient infrastructure, services and amenities and an appropriate design quality for the proposed use.</p>
<p>Controls</p> <ul style="list-style-type: none"> 1) Before any development or subdivision application in the Tourism South precinct an adopted master plan for the site is required. 	No	<p>No master plan is proposed.</p> <p>The application proposes a single land use to occupy the site and does not propose subdivision. It is a simpler proposal than other forms of development anticipated by this</p>

Provision	Complies	Comment
		section of the DCP. The Department does not consider that a master plan would result in an improved outcome against the objectives of this section of the DCP. Requiring a master plan would serve little purpose and would be unreasonable.
2) All precinct master plans must be reviewed by the NSW State Design Review Panel (SDRP) to ensure consistency with the design excellence strategy.	No	<p>A design excellence strategy has not been required as the Department does not recommend a master plan for this application.</p> <p>The proposal involves minor changes to the existing built form on the site and the site's function as a helipad would limit its design options. The Department considers that SDRP review would provide little benefit in this case.</p>
3) All development applications are to be generally in accordance with the adopted master plan.	No	The Department does not recommend a master plan for this application.
4) The primary entry to the Tourism South precinct is to be maintained from Old Castlereagh Road. Additional driveways to Old Castlereagh Road should be minimised.	Yes	The proposal retains the existing entry from Old Castlereagh Road and does not propose any additional driveways.
5) The master plan must include a landscape plan prepared by a suitably qualified consultant and include preferred tree species and canopy size. The landscape plan shall include details on areas of public domain within the precinct, where relevant.	No	The Department does not recommend a master plan for this application.
6) The precinct landscape design shall complement the proposed built form and minimise the impact of scale, mass and bulk of the development in its context.	No	No significant landscaping or built form changes are proposed.
7) The landscape design shall maximise permeable design solutions, including permeable paving to minimise stormwater run-off.	Yes	While the Department does not recommend a master plan or landscape plan for this application, the proposal retains generous permeable area to minimise run-off.

Provision	Complies	Comment
8) The master plan must include sufficient pervious ground surface area to allow natural drainage to occur. For instance, permeable paving, gravel decking, garden beds or some combination of these.	Yes	While the Department does not recommend a master plan or landscape plan for this application, the proposal retains generous permeable area to allow natural drainage.
9) The landscape plan developed for the master plan must demonstrate how the development of the precinct will contribute to the 40% tree canopy target in the Greater Sydney Region Plan by preserving existing trees, where possible, and adding to the existing canopy to provide green infrastructure and amenity.	Yes	While the Department does not recommend a master plan or landscape plan for this application, the proposal will retain most existing trees on the site. The Department recommends a condition requiring removed trees are replaced at a ratio of 2:1.
10) When assessing development applications, the consent authority will consider the extent to which the proposed development is consistent with the master plan, including cumulative and precedent implications for the planned infrastructure, and services and amenities provision.	N/A	The Department does not recommend a master plan for this application.
11) The applicant must, to the consent authority's satisfaction, demonstrate that any proposed variations to the general arrangement of the master plan are consistent with the precinct's desired future character.	N/A	The Department does not recommend a master plan for this application.
5.2.3 Subdivision design		
Objectives	N/A	No subdivision is proposed.
<ul style="list-style-type: none"> a) Preserve and retain significant environmental and cultural features of the site, such as view sheds, existing vegetation, riparian corridors and heritage items. b) Create the opportunity for individual design solutions and innovative and efficient subdivision layout. c) Minimise the number of road entry points to Old Castlereagh Road, thereby allowing more efficient traffic management. d) Support the evacuation system established in the Penrith Lakes as outlined in Section 3.1.1 – Flood evacuation considerations. 		
Controls	N/A	No subdivision is proposed.
1) Only strata or community title subdivision is permitted, unless measures compliant with flood evacuation provisions outlined in Section 3.1.1 can otherwise be demonstrated.		
5.2.4 Building height		

Provision	Complies	Comment
Objectives <ul style="list-style-type: none"> a) Ensure building heights respond to the site's topography, natural features and view sheds. b) Provide an appropriate height transition and step down with the topography, with lower buildings fronting the Regatta Lake. c) Preserve views from Old Castlereagh Road to the Regatta Lake. d) Ensure building heights sit below the tree canopy and preserve significant vegetation views. 	Yes	No changes to existing building heights proposed and therefore their existing relationship to the site's topography, natural features, view sheds or the Regatta Lake will be retained.
Controls <ul style="list-style-type: none"> 1) Figure 4 (of this DCP) shows the maximum building heights. The predominant maximum building height is 22 metres, with the exception of land depicted in Figure 4 that is within 50 metres of the precinct boundary, which has a maximum height of 10 metres. 	Yes	The hangar building (the tallest building on the site) will retain its existing height of 6.15 metres.
<ul style="list-style-type: none"> 2) Development is to step down with the topography and present with a lower building height along the northern edge fronting the Regatta Lake. <p>Note - building height is to be measured from final approved ground level.</p>	No	Retained existing building heights do not step down with the topography.
5.2.5 Floor space ratio		
Objectives <ul style="list-style-type: none"> a) Provide sufficient area for open space and landscaping. b) Achieve attractive streetscapes and reduce overall bulk and scale. 	Yes	The proposed development retains sufficient area for a future open space and landscaping.
Controls <ul style="list-style-type: none"> 1) The maximum floor space ratio for a building on any lot is not to exceed 1.25:1. 	Yes	The proposal has a gross floor area of approximately 3,020m ² and a site area of approximately 11.25 hectares, resulting in an FSR of 0.03:1.
5.2.6 Site coverage		
Objectives <ul style="list-style-type: none"> a) Maximise open space and landscaped area. b) Minimise stormwater run-off. c) Ensure sufficient area for landscaping, including deep soil and retention of vegetation. d) Ensure appropriate bulk and scale of development. 	Yes	The proposal will retain existing open space, minimise run-off, and provide sufficient area for deep soil landscaping.

Provision	Complies	Comment
Controls 1) Site coverage for a lot is not to exceed 50%.	Yes	Given the low FSR, site coverage does not exceed 50%.
2) A minimum of 30% of the lot area is to be landscaped.	Yes	The retained existing landscaping covers significantly more than 30% of the lot area.
3) A schedule (table) showing the site coverage and landscape area should be submitted with the development application or included on the site plan.	No	The proposal clearly meets the site coverage and landscape area. A schedule is not necessary to demonstrate this.

5.2.7 Building setbacks

Objectives a) Ensure buildings are appropriately sited to preserve mature trees and, where possible, existing vegetation. b) Enhance the landscape setting, provide area for vegetation and open space, and protect views.	Yes	The reuse of existing buildings retains most mature trees on site and the site's landscape setting, vegetation, open space and view corridors.
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Controls 1) Building setbacks are to be in accordance with the standards outlined in Table 4 (of this DCP). Table 4 Building setback requirements (Tourism South precinct)	Yes	Existing buildings meet these setbacks.
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Location	Distance (m)
Old Castlereagh Road	10
Lot Side boundary	5
Lot Rear boundary	5
Precinct boundary (unless already provided by other setbacks)	5

Appendix E – Recommended Development Consent

Appendix F – General Terms of Approval

Appendix G – Independent Acoustic Expert Report