



# SUBMISSION TO THE DRAFT AEROTROPOLIS PRECINCT PLAN

Prepared for  
**BHL GROUP**  
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*We acknowledge the enduring spirit of Country and the stories, songlines, languages, land, skies and waters that have nurtured the local people here since the beginning of time. We pay our respects to the local peoples of the Wianamatta-South Creek area, including but not limited to the Deerubbin, Dharug, D'harawal and Gundangurra as the traditional and continuing custodians of what we now call Western Sydney, who have cared for their Country for thousands of generations.*

*We also acknowledge the peoples of the Eora, Darkinjung, Wiradjuri and Yuin Nations who hold trade and care responsibilities to the Country upon which the Northern Gateway will be developed. We pay respect to their Elders past, present and emerging and recognise their continuing, living practices, acknowledging the intricate knowledges and kinship relationships they each hold to this Country. They are, and forever will be, embedded within this space.*

*We also acknowledge the many First Nations people who now know this Country as their home and mother and recognise the care-taking relationships they hold here.*

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# 1. INTRODUCTION

This submission has been prepared by Urbis Pty Ltd (**Urbis**) on behalf of BHL Group (**BHL**) as the landowner's development agent in response to the release of the draft Aerotropolis Precinct Plan (**Precinct Plan**).

The site in question is a major landholding located at [REDACTED] Elizabeth Drive, Badgerys Creek (herein referred to as **the site** or **the landholding**). The site is located immediately north of Elizabeth Drive and the Western Sydney International (Nancy Bird Walton) Airport (**WSA**).

BHL commends the NSW Government and the Western Sydney Planning Partnership (**WSPP**) on the release of the draft Precinct Plan as a critical phase in the planning for the Aerotropolis.

BHL welcomes the opportunity to comment on the draft Precinct Plan and are committed to working with the WSPP to deliver the Northern Gateway Precinct and to make certain the early activation and investment in the Aerotropolis. However, to ensure this investment is guaranteed, it is critical that the controls within the draft Precinct Plan provide the right balance between protecting the aspirations for the Western Parkland City and the flexibility sought after by industry.

Employment land uses will form the essential building blocks for the Aerotropolis offering critical off-site support and investment that will ultimately drive the success of the new WSA. It is therefore imperative the draft Precinct Plan is not overly prescriptive and complex such that it would restrict or even prohibit the critical early activation and delivery of enterprise zone land uses.

This submission is a collaboration between the landowner, its development agent and its consultant team which includes; Urbis (Planning and Urban Design), Nettleton Tribe, AT&L, Eco Logical Australia and Stantec (GTA). The project team has been put together based on the team's extensive experience and knowledge of greenfield and industrial master planning across Western Sydney. Each member of the project team is highly qualified to comment on the technical aspects of the draft Precinct Plan. Through its recent project experience, the team is also acutely aware of the technical challenges and brings to the table constructive recommendations that are aimed at assisting the WSPP in finalising the draft Precinct Plan such that it can be a significant, successful and user-friendly guidance document for all future development within the Aerotropolis.

The project team is outlined in Table 1 below:

Table 1 Project Team

Technical Discipline	Consultant
Development Manager	BHL
Strategic Planning and Urban Design	Urbis
Architecture and Master Planning	Nettleton Tribe
Engineering (Civil, Stormwater & Flooding)	A T & L
Biodiversity	Eco Logical Australia
Transport	Stantec (GTA)
European Heritage	Mountains Heritage
Flood Mapping	BMT

The submission has been divided into the following key sections:

- **Summary of Recommendations**
- **The Proposed Masterplan**
- **Key issues and recommendations on the draft Precinct Plans**
- **Conclusion and Next Steps:** Discussion on the appropriate next steps to resolve the draft Precinct Plan.

## **1.1. KEY RECOMMENDATIONS OF THIS SUBMISSION**

BHL makes the following recommendations in respect of the exhibited draft Aerotropolis Precinct Plan that must be addressed prior to finalisation.

1. The Master Plan Guidelines must be released as a matter of priority.
2. The requirements for design excellence must be amended within the Aerotropolis SEPP to ensure that industrial, warehouses and logistics developments are not required to undertake an architectural design competition. A design review panel is considered a more appropriate mechanism to ensure designed excellence for employment land.
3. The WSPP must review the statutory weight applied to the draft Precinct Plan as a matter of priority.
4. The wording of clause 41 of the Aerotropolis SEPP must be revised to remove the potential for the prohibition of development that is not consistent with a Precinct Plan. This could be achieved by:
  - a. Requiring consistency with the objectives of the Precinct Plan or,
  - b. Requiring the consent authority to take the Precinct Plan into consideration before granting consent,
  - c. Including a sub clause which allows development to be inconsistent with the requirements of the Precinct Plan provided it meets the relevant objectives of the control,
  - d. Implementing a requirement for the 'Variation Statement' as defined in the draft Precinct Plan Glossary.

The above recommendations will encourage flexibility through application of a principles-based approach versus reliance on a detailed precinct plan and technical requirements.

5. If the WSPP requires the application of clause 41 as written, it is imperative to remove the fine grain detail shown on the draft Precinct Plan and adopt high level structure plan for each precinct. This approach reflects the NSW Government's approach to Wilton Growth Area which, in our view, sets the benchmark for flexible land use planning.
6. Notwithstanding the above we recommend that the detailed prescriptive requirements and built form parameters be removed from the draft Precinct Plan. To ensure that flexibility is maintained, these controls must be contained in a non-statutory document such as the Stage 2 Development Control Plan (DCP).
7. Ground truthing to inform the draft Precinct Plans must be completed as a matter of priority and Precinct Plans updated and re-exhibited where required. This is essential to provide transparency to the Precinct Plan process.
8. The WSPP must engage with major landowners immediately to ensure site-specific opportunities and constraints are considered in any revisions to the draft Precinct Plan.
9. The draft Precinct Plan must consider implementing a simpler approach similar to the ILP/ Precinct Plans system administered under the Growth Centres SEPP.
10. The draft Precinct Plan must recognise the Aerotropolis will be delivered through development cycles. The WSPP must provide a framework on how the Aerotropolis will evolve over time. This is not evident in the exhibition package and must be addressed.
11. The open space strategy within the draft Precinct Plan must be reviewed and subjected to rigorous and transparent investigation of existing conditions
12. The draft Precinct Plan must adopt a more realistic and rational approach to land use and open space distribution. The location and extent of riparian corridors and requirement for an average 40% tree canopy must not be in conflict with the 24/7 operation of the airport – as identified within the Wildlife Management report



13. That the WSPP and DPIE seek to immediately address the significant risk to airspace operations created by its commitment to a landscape led approach within the 3km buffer. This includes amendment to detailed requirements around water retention, location of drainage basins, rehabilitation of riparian areas and increasing tree canopy coverage to 40%.
14. All unlisted heritage items must be removed from the draft Precinct Plan until they have been appropriately assessed listed in accordance with the relevant statutory process for local or State Heritage items.
15. The WSPP must provide evidence that the land identified within the SEPP is in fact impacted by the 1:100 flood level.
16. If it is the intent for the Environment and Recreation zone to be informed by the 1:100 flood planning level, then this zone boundary must be revised based to reflect actual 1:100 flood zones as indicated in mapping provided by both BHL and the *Wianamatta (South) Creek Catchment Existing Flood Risk Assessment Extract for Liverpool City Council July 2020*
17. The draft Precinct Plan must also be amended to remove the proposed Riparian Park through the centre of the landholding as it significantly impacts upon the efficiency of the proposed Master Plan layout.
18. Finalisation of the draft Precinct Plan must not occur until essential field work/ground truthing is completed to an extent to which it can accurately inform the correct Environment and Recreation zone boundaries and extent of riparian corridors on the site.
19. That the draft Precinct Plan focus Blue-Green Grid outcomes on Cosgroves Creek alone
20. That all reaches shown on Figure 17 as not meeting the definition of a waterway (river) be removed from draft Precinct Plan figures and not be used as the basis for identifying riparian corridors.
21. That the draft Precinct Plan amend the requirement BG1 to retain waterways of Strahler Order 2 and higher in a natural state as follows:  
*"Maintain waterways of Strahler Order 2 and higher in a natural state **where it meets the definition of a river in accordance with the National Resource Access Regulator Guidelines for Controlled Activities on Waterfront Land** including the maintenance and restoration of riparian area and habitat such as fallen debris. If a development is associated with or will affect a **defined waterway-(river)** of Strahler Order 2 or higher, rehabilitate the **defined waterway (river)** to return it to natural state to maintain natural processes and functionality."*
22. Sydney Water must collaborate with the development industry to ensure that the intent of the intended water quality objectives is understood. Sydney Water and DPIE must accept the significant economic impacts associated with solutions as currently identified and provide a more realistic and rational approach.
23. Sydney Water must provide clarification of the simplistic approach used to defining the mean annual runoff volumes.
24. The "Emerging Evidence" as referenced on page 26 of the Interim Report must be documented by Sydney Water so as to articulate the "clear threshold or tipping point".
25. Salinity can exacerbate when over irrigation practices are implemented across areas where the existing the ground water table is high or known salinity issues exist. To meet the Parkland water reductions, Sydney Water have relied on significant irrigation without firstly investigating and upstanding the true impacts of such practices. These investigations must be undertaken immediately to back up the proposed solutions.
26. Any increased targets can only be reasonably achieved by a regional approach which should be funded and maintained by the State and local Governments.
27. Landowners must be allowed to work with Government to firstly understand the objectives of the integrated water cycle management and agree to workable, economical solutions that are evidence based that meets and aligns with the demands of industry.
28. Infrastructure such as drainage and open space, should be confirmed at the development application stage. Details of these types of infrastructure must be removed from the draft Precinct Plan.
29. Undisturbed soil networks must be confined to defined riparian areas and must not impede inefficient building pads that are required for employment land uses.
30. The draft Precinct Plan must adopt a transport strategy that responds to existing conditions within the site, to enable an immediate delivery of the precinct and aligns with the vision of the Western Parkland City.

31. The proposed road reservations within the Precincts Plans are excessive and will undermine the extent of developable area required for industrial and warehouse development.
32. The WSPP and TfNSW must determine the legal status of transport corridors and infrastructure left out of precinct planning despite being zoned Enterprise under the Aerotropolis SEPP.
33. TfNSW must identify the actual land take required for future infrastructure including the M9 Outer Sydney Orbital and Western Sydney Freight Line such that effective Precinct Planning can occur for the residual land.
34. Should TfNSW choose not to identify the actual land take required for all transport corridors then the Aerotropolis SEPP and draft Precinct Plan must identify a clear legal process and requirement for TfNSW to acquire the land identified.
35. It is recommended that the parking lane for collector roads and industrial streets be increased to 3 metres wide. This approach would be consistent with the requirements outlined in Penrith DCP for industrial streets. Such a specific provision should be included in the Stage 2 DCP rather than a Precinct Plan.
36. The draft Precinct Plan must remove detail of land use assumptions and their location from the draft Precinct Plan. Including more detailed land uses within an additional statutory document undermines the flexible land use zones within the Aerotropolis SEPP. Land uses should be dictated by the market, as long as they align with the vision and principles contained in the Precinct Plan.
37. The land use and built form framework must not preclude initial development of the site for warehouse and logistics uses.
38. However, if higher order land uses are envisaged for the subject land early in the Precinct Planning process then the WSPP must advocate for the provision an additional metro station between the Airport Business Park and Luddenham Road.
39. Built form controls relating to site coverage, yield and employment densities are specified as guidelines and as such must be removed from the draft Precinct Plan. Built form controls should be implemented through the *Stage 2 Development Control Plan* (DCP) which will provide the consent authority with guidance on built form controls but also does not overly restrict development to innovate to meet market demands.
40. Building Heights must be dictated by the OLS such that the ultimate height of development is dictated by market/end user requirements.
41. Employment areas must not be required to devote such a significant quantum of land area to open space beyond zones already identified for Environment and Recreation.
42. The location of infrastructure such as drainage and open space must be removed from the draft Precinct Plan and determined by detailed site investigation and ground truthing as to future development requirements.
43. Locations and types of social infrastructure to be provided on a site must be removed from the draft Precinct Plan.
44. Details must be provided as to who will be responsible for maintaining social infrastructure being provided including any land dedication and acquisition requirements.
45. The Precinct Plan must consider site ownership as a significant consideration for delivery and phasing of roads, infrastructure and land uses.
46. The WSPP must drive a significant level of engagement and coordination with agencies and landowners to ensure that critical infrastructure is delivered concurrently to early movers within the Aerotropolis.
47. Sydney Water requirements must be understood and reflected within in the draft Precinct Plan. This includes confirmation of critical road connections so that Sydney Water can finalise servicing and take off arrangements into surrounding land.
48. The WSPP must work with the Department of Planning, Industry and Environment and Penrith City Council to understand the cumulative impacts of infrastructure contributions. If implemented as it currently stands, investment will choose to locate to more attractive cities, such as Melbourne and Brisbane. This is a significant risk to achieving the Western Parkland City vision and ensuring success of the Aerotropolis.



## 2. THE PROPOSED MASTERPLAN

### 2.1. THE SITE

The site is legally described as Lot [REDACTED] in Deposited Plan [REDACTED] (refer **Figure 1**). The 344ha landholding has a 1600m frontage to Elizabeth Drive and is located directly opposite the Western Sydney Airport site within the Northern Gateway precinct. The site is one of largest landholdings within the Northern Gateway precinct. Despite its size the site is significantly encumbered by the proposed M12 Motorway and the future Sydney Metro Western Sydney Airport and the M9 Outer Sydney Orbital transport corridors (approx. 168ha). **Figure 2** illustrates the scale of the landholding overlayed the Sydney and Parramatta CBD's.

Figure 1 - The Site & WSAP Structure Plan

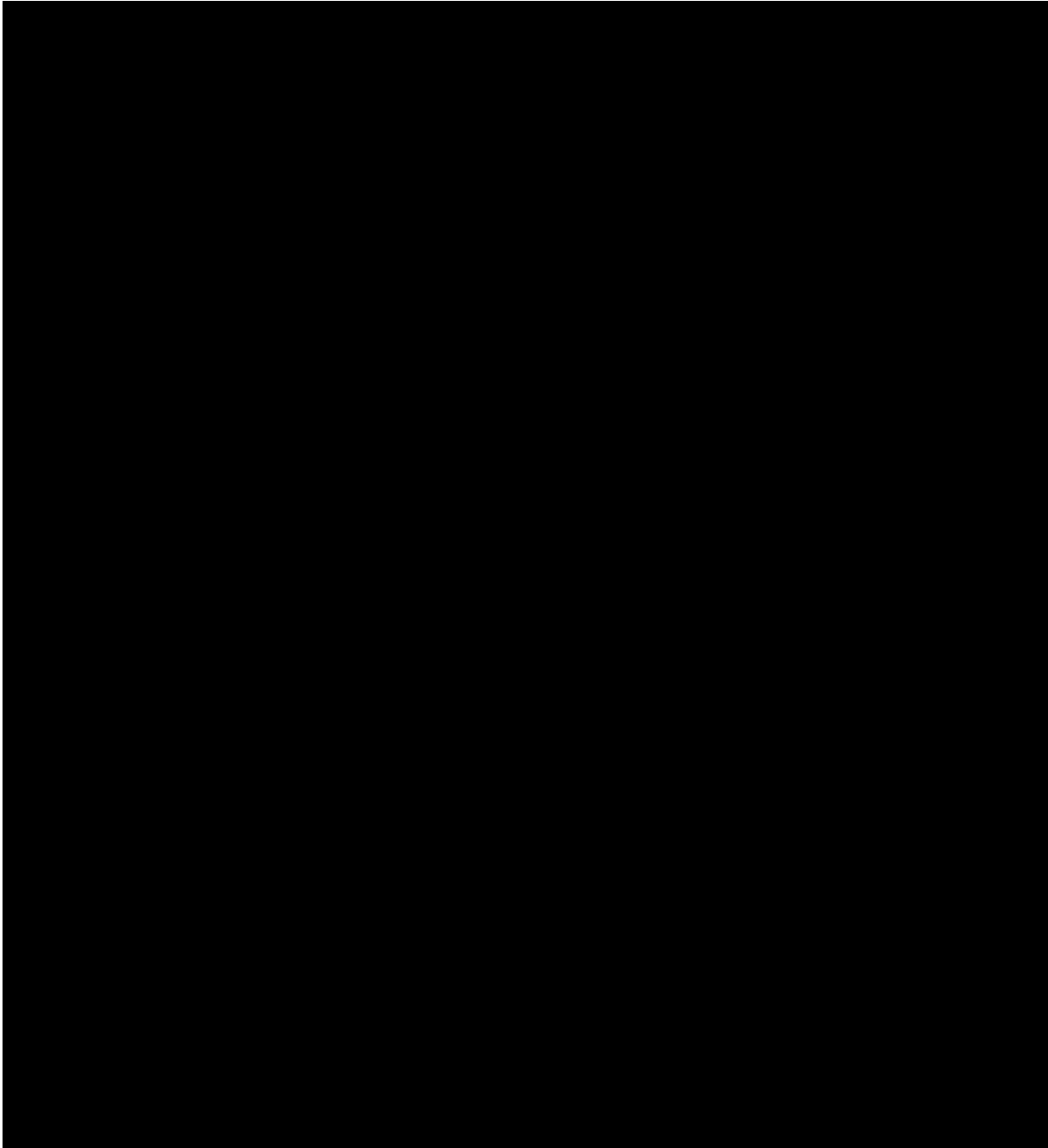
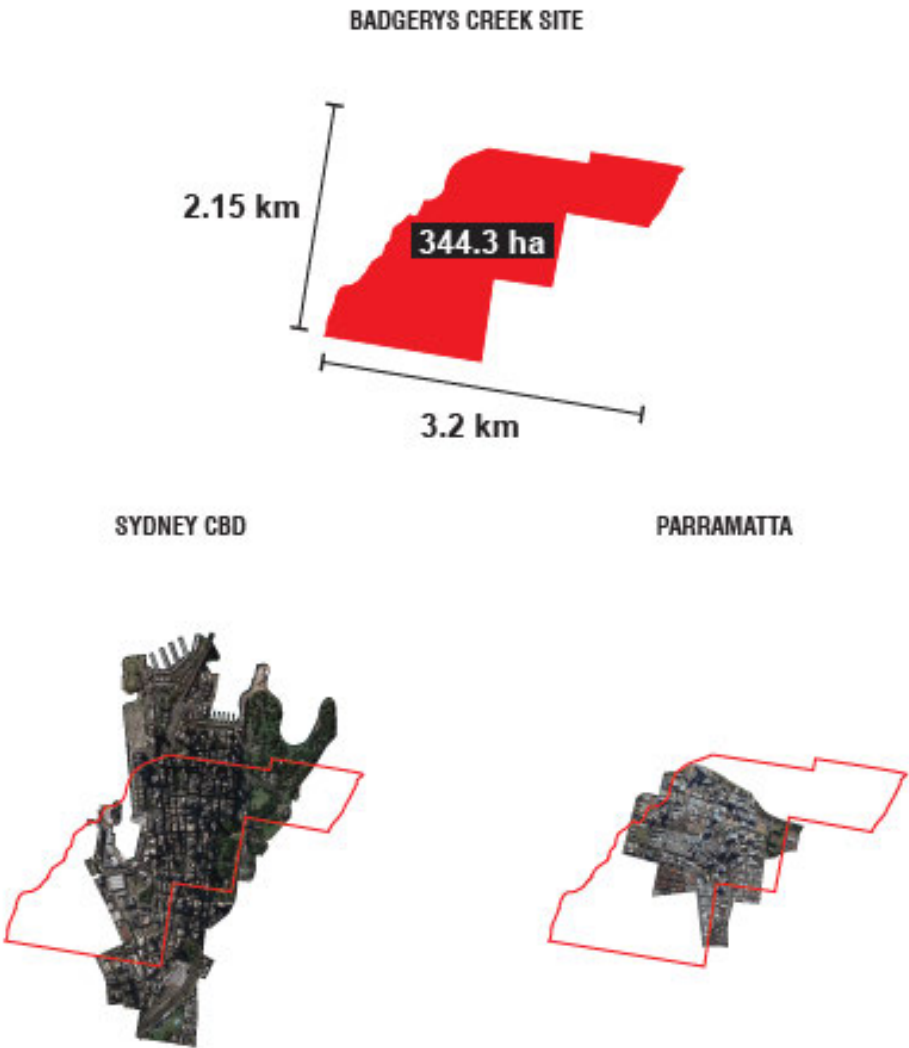


Figure 2 – Site size comparison



Source: OMA

## 2.2. THE PROPOSED MASTER PLAN

In planning for the development of the site extensive ground truthing has been undertaken to determine all known environmental constraints that would impact upon the developable area.

BHL has also continued to refine the Master Plan based on further analysis of these existing constraints and the expected planning framework, desired land uses and timeframes for re-zoning outlined in:

- *Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan Stage 1 – Initial Precincts (LUIIP);*
- *Western Sydney Aerotropolis What We Heard Community Consultation Report;*
- *Western Sydney Aerotropolis Plan (WSAP);*
- *State Environmental Planning Policy (Western Sydney Aerotropolis) (Aerotropolis SEPP); and*
- *Stage 1 Development Control Plan (DCP).*

In refining the master plan BHL has heeded the advice from all levels of government, in particular around the location of noise sensitive land uses. The current master plan therefore focuses on employment land uses that would be consistent with the 'Enterprise Zone'. The initial stages of the Master Plan focus on the development of a Warehouse and Logistics Estate which would leverage of the site's strategic location adjacent to the WSA.

The overall Master Plan envisages an employment driven precinct with a mix of higher order airport related land uses along Elizabeth Drive. The Master Plan is designed to evolve over time, This multi-generational approach would allow for future higher order uses and street grids to evolve over time with the growth and economic influence of the WSA and Aerotropolis.

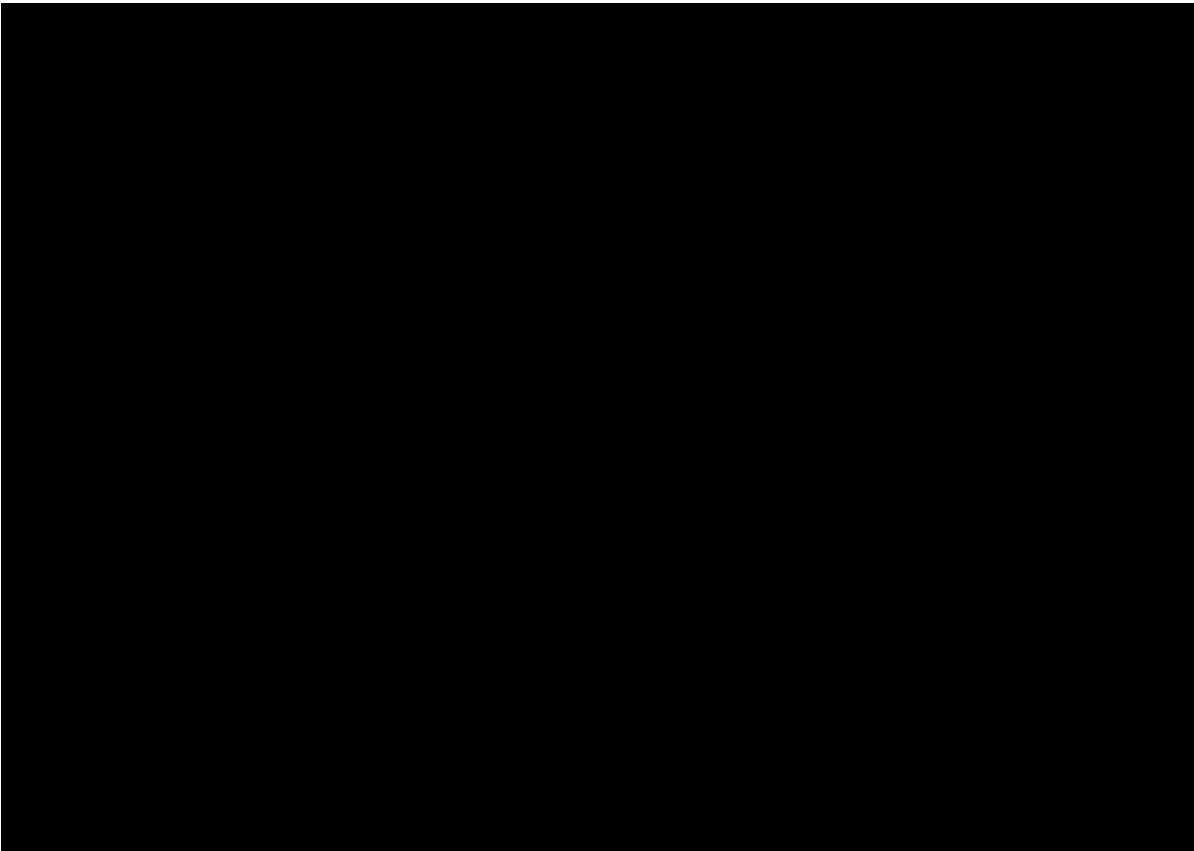
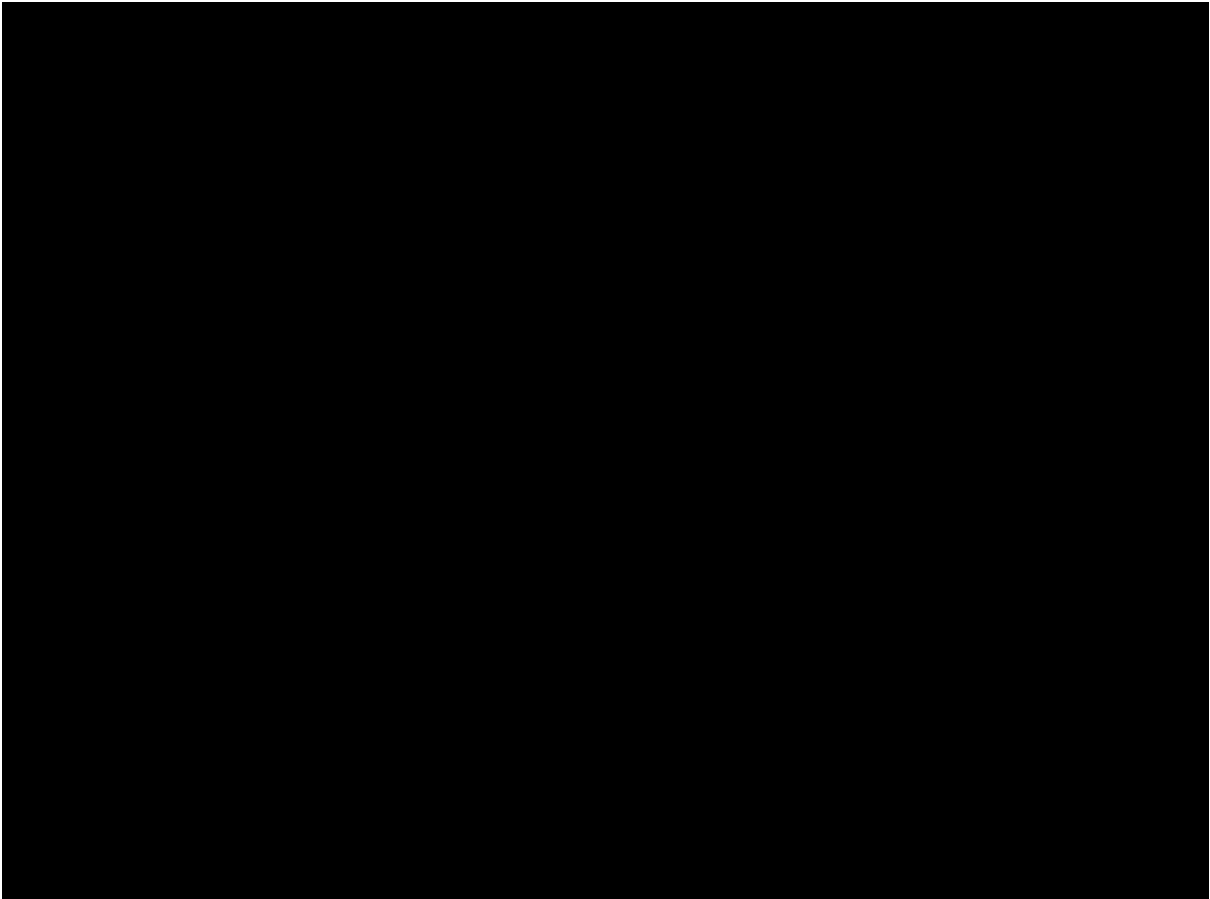
It is BHL's intention that the iterative Master Plan remains consistent with the desired land uses objectives of the draft Precinct Plan. However, in planning for the site, a number of fundamental concerns have arisen relating to the layout, requirements and underlying technical information that has informed the Aerotropolis SEPP and draft Precinct Plan.

Our primary concerns that are expanded upon within this submission include:

- Location and classification of the Environment and Recreation Zone and identified riparian corridors in the Aerotropolis SEPP and draft Precinct Plan,
- Limited supporting evidence of the existing 1:100 flood planning level,
- Conflict between the requirement for undisturbed soils, reduced cut and fill when considering the industry standard for industrial development pads,
- A fine grain 150 x 150 road grid that does not facilitate large and flexible super-lots that can be easily adapted to end user requirements,
- A significant proportion developable area being devoted to open space, permeable areas and roads that significantly impacts on developable area,
- Built form requirements that lack the flexibility to adapt to market requirements.
- No real appreciation of how the M12 will impact the use of land to the north of the corridor.

BHL also notes that the site (excluding transport corridors) remains greater than 100ha and is in single ownership. The site is therefore capable of being Master Planned in accordance with clause 43 of the Aerotropolis SEPP. In this regard, BHL is keen to commence discussions with the WSPP immediately to determine whether the Master Plan Process is the most expedient outcome to achieve early activation of the site. Critical to the Master Plan process are the Master Plan Guidelines which we note have not yet been exhibited by the WSPP. These Master Plan Guidelines must be released as a matter of urgency.

Figure 3 – Master Plan Comparison with draft Precinct Structure Plan



Picture 2 - Draft Precinct Structure Plan

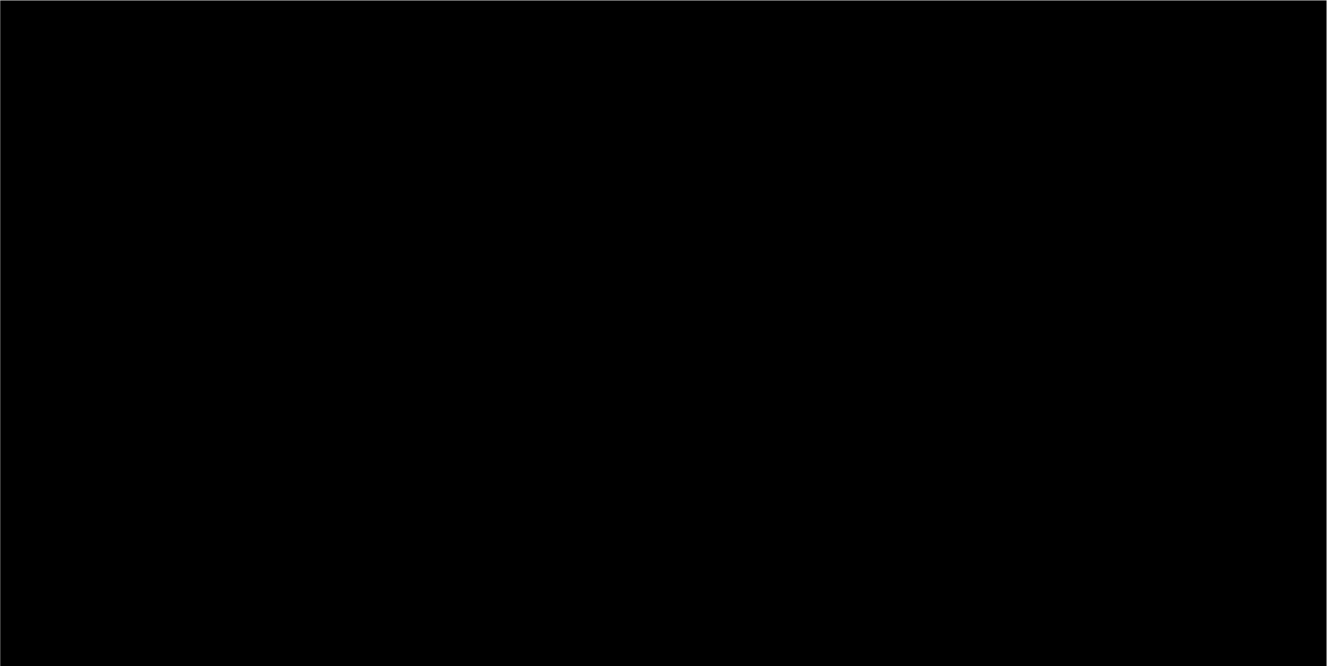
Source: Nettleton Tribe

### 2.2.1. Summary of Key Site Constraints

As part of the ongoing development of the Master Plan, detailed technical analysis and ground truthing of the site has been undertaken. The key constraints are illustrated in **Figure 4** below. Detailed technical analyses have been previously provided to the WSPP at their request to inform precinct planning.

Detailed investigations around existing riparian corridors and flooding have also been provided within previous submissions to the Aerotropolis planning framework. These investigations are discussed in further detail at Section 3.6 of this submission.

Figure 4 – Site Constraints



Source: Nettleton Tribe

### 2.2.2. Connecting with Country

BHL acknowledges the traditional owners of the land and recognises the importance of integrating Country into any future development of this significant landholding which includes two main waterways, Cosgroves and Badgerys Creeks.

BHL supports and is committed to recognising Country through its ongoing master planning work in accordance with the NSW Government Architect draft Connecting with Country Framework. An outline of how BHL's master planning would seek to align with the principles and guidelines for recognising Country within the draft Precinct Plan is provided in Table 2 below.

Table 2 Draft Precinct Plan - Connecting with Country Objectives

Ref	Objective	Proposed Master Plan
1	Connect with Country by identifying and connecting places of Aboriginal significance.	The landholding includes two major creek lines which are identified in the draft Precinct Plan to have moderate to high Aboriginal cultural sensitivity. BHL have also undertaken an Aboriginal Cultural Heritage Assessment (ACHA) for the site. This work will be built upon through further engagement to identify and connect places of Aboriginal significance.

Ref	Objective	Proposed Master Plan
2	Reflect the original landscape of the Cumberland Plain through revegetation techniques informed by Aboriginal knowledge of native flora and planting practices, and the preferred species	Whilst the majority of the site has been cleared for agriculture, there is scope for the original landscape to be reflected through rehabilitation of the main riparian corridors which can be informed by Aboriginal knowledge of native flora and planting practices.
3	Care for Country by creating opportunities for cultural care and land management.	Opportunities for cultural care and land management will be investigated through further engagement with Local Aboriginal Land Council's and traditional owners.
4	Integrate places of Aboriginal significance into the urban structure, urban design and landscape.	Opportunities for integration of any identified places of Aboriginal significance will be investigated through further engagement with Local Aboriginal Land Council's and the traditional owners.
5	Where possible, provide a physical connection between locally and culturally significant places	Opportunities for physical connections between locally and culturally significant places can be investigated should these be identified through the engagement process.
6	Use cultural naming, language and narratives specific to a precinct or local area.	Opportunities for cultural naming, language and narratives specific to the precinct will be investigated through further engagement with Local Aboriginal Land Council's and traditional owners.
7	Identify and integrate Country through the urban design and development process.	BHL plans to engage with Local Aboriginal Land Council's and traditional owners as part of the future development either via the SSDA or Master Plan pathway.
8	Acknowledge local cultural groups in the design and location of cultural facilities and centres	BHL would seek to engage and involve local cultural groups in the design and location of any such facility should it be provided as part of any future development of the site.



### 2.2.3. Alignment with draft Precinct Plan Objectives – Northern Gateway

The proposed Master Plan is consistent with the vision and objectives for the Northern Gateway Precinct set out in Section 2 of the draft Precinct Plan.

Table 3 Northern Gateway Precinct Objectives

Ref	Objective	Master Plan Response
O1	Transform Luddenham, in the vicinity of the approved Sydney Science Park, into a specialised centre and support a cluster of leading science-based business, tertiary institutions and research facilities in the mixed-use centre supported by public transport.	Whilst not relevant to the site, it would support any objective which would prioritise development and infrastructure within the Northern Gateway precinct.
O2	Facilitate a high technology employment precinct in the context of the Aerotropolis, the Western Economic Corridor and the Western Parkland City.	The Master Plan will facilitate the development of a high technology employment precinct which supports this objective
O3	Facilitate a variety of high order employment uses and place-specific residential development in locations that support the principles of transit-oriented development.	The Master Plan will support higher order employment uses along Elizabeth Drive consistent with the role and function of that regional transport corridor.
O4	Provide for a mix of uses to support the specialised centre, including social and educational uses to meet the demand of the residents, workers and tourists.	The site is outside the specialised centre. The Master Plan is aligned with the objectives of the Enterprise Zone and will therefore support the proposed centre hierarchy within the draft Precinct Plan.
O5	Provide for high quality architectural and design outcomes that take advantage of site characteristics and require buildings to face and activate creek lines, contributing to the character of the Precinct.	Design excellence is supported however we question the CIV thresholds set for design competitions within the Aerotropolis SEPP. As written the threshold would trigger any Warehouse and Logistics/Industrial development under the State Significant Development Pathway which is an unacceptable outcome.
O6	Facilitate transport infrastructure to allow for a 30-minute city, including the alignment of centres with public transport infrastructure (such as the Luddenham Metro Station) to create pedestrian oriented environments.	The Master Plan supports the objective to facilitate transport infrastructure to allow for a 30min city. However if higher order uses are required by the draft Precinct Plan then the WSPP must advocate to TfNSW for appropriate public transport connections including consideration of an additional station on the Sydney Metro – Western Sydney Airport which currently traverses the site.
O7	Support connectivity and staging throughout the Precinct, such that it can support temporary uses and develop over time in a manner that	The overall Master Plan demonstrates how land uses can be managed in the north of the precinct. This approach minimises the potential for site isolation whilst allowing for

Ref	Objective	Master Plan Response
	minimises the potential for isolated parts of the Precinct.	temporary and more permanent land uses. BHL is keen to understand the 'actual' land take of the future transport corridors such that it can effectively master plan these areas. It is also noted that the draft Precinct Plan layout conflicts with this objective as it does not demonstrate how it intends to connect isolated parts of the site, in particular the land adjacent to Twin Creeks in the north eastern corner of the precinct.
O8	Protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community.	The Master Plan would protect the future operations of the airport. Noise sensitive land uses have been avoided and the future built form would address relevant requirements relating to airspace operations, wind shear and wildlife incursions. The master plan provides a balanced approach between meeting the requirements of this objective whilst also addressing objectives 9-15.
O9	Preserve and protect the water assets and the landscape ecology.	The Master Plan balances this requirement with the need to ensure a functional layout for the future warehouse and logistics precinct. The removal of farm dams is consistent with the precinct plan and the approach to wildlife management and potential bird strike risk. Significant defined watercourses and their riparian zones are retained and will be enhanced where they meet the relevant NRAR Guidelines and classifications for waterfront land.
O10	Protect Wianamatta-South Creek Corridor, its tributaries and adjacent high quality green space.	Detailed site investigations have been undertaken in relation to the 1:100 flood levels and mapped watercourses and contends that areas on the site outside Cosgroves Creek and Badgerys Creek are not existing Riparian Corridors as they do not meet the NRAR definition of a 'river' and are outside the 1:100 flood level.
O11	Prioritise the restoration and protection of the Wianamatta-South Creek Corridor and Cosgroves Creek catchments by integrating land use and water management.	
O12	Promote the role of water within Wianamatta-South Creek Corridor and Cosgroves Creek to support healthy, liveable and sustainable communities.	
O13	Retain existing soil profiles to the maximum extent possible in streets, parks, floodways and on private land.	Whilst maintaining existing soil profiles in principle is the ideal outcome, the nature of the existing topography overlaid against the

Ref	Objective	Master Plan Response
		proposed use make it extremely difficult to preserve any significant existing soils. With slopes up to 1 in 5 and average slopes of 1 in 10, large footprint warehouses can potentially have 10-15m fall across the pads. Whilst principle based objectives are understood, in some cases it's simply impossible to achieve where the zoned outcomes do not allow it due to slope constraints.
O14	Increase the urban tree canopy to mitigate heat island effect and manage stormwater flows.	The Master Plan would seek a balanced approach to on-site landscaping and urban tree canopy based on future function of the site as a warehouse and logistics precinct. Increase in tree canopy will occur in the Cosgroves and Wianamatta-South Creek corridor and via an appropriate level of street tree plantings
O15	Enhance water retention in the landscape and achieve healthy waterways to facilitate urban cooling.	As noted above the Master Plan will retain defined watercourses. Water retention will be balanced with the wildlife management requirements associated with the WSA.
O16	Support flood management, mitigation and best practice natural drainage solutions.	<p>The proposed Master Plan supports these objectives and has undertaken a detailed investigation of the existing flood characteristics of the site. All development will be outside the 1:100 flood planning level.</p> <p>Natural drainage solutions will be implemented where possible and stormwater infrastructure will be appropriately located and sized to achieve industry standard targets for warehouse and logistics precincts.</p>
O17	Locate and design stormwater infrastructure to be consistent with a landscape-led approach.	

### 3. COMMENTS AND RECOMMENDATIONS ON THE PRECINCT PLANS

The release of the draft Aerotropolis Precinct Plan is welcomed. However, the current state of the draft Precinct Plan is not acceptable and must be amended prior to finalisation.

The Precinct Plan states that it provides *'certainty and flexibility that will enable innovation to thrive in the Aerotropolis underpinned by a landscape led approach.'*

The overall vision for the Aerotropolis is supported however, there are some aspects of the vision that conflict with actual approach taken within the draft Precinct Plan with respect to:

- The beyond business-as-usual landscape led approach,
- Purpose of the precinct plan, and
- Applying the Precinct Plan

We make the following comments in the relation to the Vision, Purpose and Application of the draft Precinct Plan:

- The landscape lead approach of the draft Precinct Plan is in direct conflict with protecting the 24/7 operation of the WSA.
- The draft Precinct Plan document is unnecessarily complex. It contains aspirational objectives and detailed technical requirements that do not enable the flexibility sought by the market to truly embrace the principles of a landscape led approach and connection to Country.
- The Stage1 LUHIP stated that ***'Precinct Planning will allow industry to co-design the shape and form of employment precincts.'*** It is apparent that this engagement and co-design has clearly not occurred within the development of the draft Precinct Plan. If it had, a much clearer and robust appraisal of site constraints would have occurred and would have been reflected in the draft Precinct Plan document.
- BHL is very concerned that comments made in previous submissions and detailed technical analysis undertaken by the development industry have been ignored in favour of the aspirational, urban design led approach within the draft Precinct Plan which is underpinned by overly complex and detailed technical requirements.
- It is apparent that the technical documents and evidence that underpin the draft Precinct Plan fall well short of the high standard to which the development industry is held by local and State Government. This is evident in the identification (and gazettal) of the Environment and Recreation zone which based on flood levels and riparian corridors that have yet to be validated as acknowledged within the *Stormwater and Water Cycle Management Study – Interim Report*.
- BHL is extremely concerned that the Master Plan Guidelines have not yet been released for public comment.
- BHL supports design excellence however questions the CIV thresholds set for within the Aerotropolis SEPP which would trigger a design competition for any warehouse and logistics development over \$40 million noting that the CIV for a State Significant Development these land uses is \$50 million.

The WSPP must recognise the lack of evidence-based planning underpinning the draft Precinct Plan. It must also acknowledge that by applying statutory weight to the draft Precinct Plan as exhibited there will be significant impacts the initial desire for flexible, market driven land use planning.

The following sections provide a detailed response to these matters and requests the WSPP to amend the Precinct Plans based on the specific recommendations.

### 3.1. STATUTORY APPLICATION OF THE PRECINCT PLAN

Urbis has reviewed the statutory planning mechanisms underpinning the draft Precinct Plan. It is our view that the draft Precinct Plan is fundamentally flawed as a statutory planning document for these reasons:

- The draft Precinct Plan, based on the *Aerotropolis Urban Design and Landscape Report*, has little regard to the mechanics, language, operation and hierarchy of statutory planning instruments that are currently administered under the *Environmental Planning and Assessment Act 1979* (EP&A Act 1979)
- The detailed technical requirements within the draft Precinct Plan go well beyond the typical controls that would be included within a statutory document. Ordinarily, detailed requirements for development within the precinct plan are more akin to controls contained within a Development Control Plan (DCP) (a non-statutory document which encourages flexibility).
- The wording of clause 41 of the Aerotropolis SEPP **means that any development that is inconsistent with the Precinct Plan would be prohibited**. The draft Precinct Plan confirms this prohibition noting that it may only be varied via the Master Plan process (sites >100ha) or via a Planning Proposal.
- Prohibition of any development inconsistent with the Precinct Plan places derogates from the 'flexible' land use Zones and wide range of permissible uses identified within the Aerotropolis SEPP. The prohibition of development inconsistent with the draft Precinct Plan also conflicts with the 'flexible and adaptive planning framework' espoused in the Stage 1 LUIIP. We would therefore question its legality. The EP&A Act 1979 makes no provision for a "Precinct Plans" yet it appears to be regarded as something akin to an environmental planning instrument if it seeks to introduce "prohibitions".
- No statutory mechanism has been provided to vary the Precinct Plan. This is despite the glossary identifying a 'Variation Statement' which is defined as

*"A written statement accompanying a DA demonstrating how the objectives and relevant control and/or performance outcome will be achieved if an alternative to the 'benchmark solutions' is proposed."*

- This statement above suggests that the draft Precinct Plan should in fact be akin to a DCP. If that were the case, it seems the most logical and certain.
- If a variation statement is the preferred method to vary the Precinct Plan then it must be a simple process similar to justifying a variation to a DCP. Given the significant number of technical requirements that could be varied within the draft Precinct Plan, a variation statement must not end up being akin to a cl 4.6 variation request which requires extensive examination of up to date case law and assessments and assessment against established legal tests to justify each proposed variation.

The wording of clause 41 of the Aerotropolis SEPP creates a significant jurisdictional issue for the future development of the Aerotropolis. **Rather than seek to prohibit development, the wording of the SEPP must encourage flexibility to vary the Precinct Plan subject to demonstrating consistency with the objectives.** The WSPP must trust the development industry to come up with solutions to achieve the principles and objectives of the draft Precinct Plan.

The prohibition of development, irrespective of whether it is an intended or unintended consequence of the wording of the Aerotropolis SEPP, is an unacceptable outcome given the significant technical requirements within the draft Precinct Plan.

Further concerns arise with the recent announcement of the integration of the draft Design and Place SEPP and draft Urban Design Guideline into the Aerotropolis planning framework. These proposed outcomes will make the planning process significantly more layered and complex and will lead to significant delays in the planning assessment process. These delays will ultimately impact upon the delivery of jobs and early activation of the Aerotropolis.



#### Recommendations:

1. The Master Plan Guidelines must be released as a matter of priority.
2. The requirements for design excellence must be amended within the Aerotropolis SEPP to ensure that industrial, warehouses and logistics developments are not required to undertake an architectural design competition. A design review panel is considered a more appropriate mechanism to ensure designed excellence for employment land.
3. The WSPP must review the statutory weight applied to the draft Precinct Plan as a matter of priority.
4. The wording of clause 41 of the Aerotropolis SEPP must be revised to remove the potential for the prohibition of development that is not consistent with a Precinct Plan. This could be achieved by:
  - a. Requiring consistency with the objectives of the Precinct Plan or,
  - b. Requiring the consent authority to take the Precinct Plan into consideration before granting consent, or
  - c. Including a sub clause which allows development to be inconsistent with the requirements of the Precinct Plan provided it meets the relevant objectives of the control, or
  - d. Implementing a requirement for the 'Variation Statement' as defined in the draft Precinct Plan Glossary.

The above recommendations will encourage flexibility through application of a principles-based approach versus reliance on a detailed precinct plan and technical requirements.

5. If the WSPP requires the application of clause 41 as written, it is imperative to remove the fine grain detail shown on the draft Precinct Plan and adopt high level structure plan for each precinct. This approach reflects the NSW Government's approach to Wilton Growth Area which, in our view, sets the benchmark for flexible land use planning.
6. Notwithstanding the above we recommend that the detailed prescriptive requirements and built form parameters be removed from the draft Precinct Plan. To ensure that flexibility is maintained, these controls must be contained in a non-statutory document such as the Stage 2 Development Control Plan (DCP).

## 3.2. PRECINCT PLAN FRAMEWORK

### 3.2.1. Application of Urban Design/ Precinct Plan Framework

The incorporation of the Growth Centres Commission in the early 2000s streamlined the planning for Western Sydney's Growth Areas. This collaborative process:

- Included State government agencies, local council representatives and where required, major landowners, and
- Enabled the South West and North West Growth Areas to be planned in a manner that allowed for the inclusion of key infrastructure.

A critical element to the success of this process was the development of an Indicative Layout Plan (ILP). The ILP guided the provision of precinct level planning controls (Precinct Plans) that were ultimately embedded within the Growth Centres SEPP. These Precinct Plans included higher order controls such as zoning and land use, as well as development standards relating to building heights, lot sizes, environmental and/or density provisions.

The ILP's were based on detailed technical investigations and ground truthing to understand key opportunities and constraints including:

- Location and alignment of main roads;
- Quantity and distribution of open space;
- Land use allocation;
- Community infrastructure;
- Servicing strategy;
- Water Sensitive Urban Design Strategy; and
- Environmental areas



Important for the development of the ILP was to understand and plan around:

- Major landholdings, particularly if these could influence the delivery of important infrastructure and land uses; and
- Property boundaries to ensure that infrastructure could be delivered in a staged manner.

Despite a strong principles-based approach, we make the following comments in relation to the approach taken by the draft Precinct Plan

- The prescriptive level of detail does not reflect the significant knowledge and learnings derived from planning within the Growth Centres.
- The draft Precinct Plan seeks to provide a very rigid layout over an extensive region without sufficient ground truthing and knowledge of site-specific constraints or opportunities for key urban design elements. History showed that the early ILPs prepared for the Growth Centres were in some instances overly prescriptive that only added to the challenges of attempting to develop land. DPIE at the time subsequently evolved the ILP process to be far more principled based, which through learning and evolution has been most recently reflected in the Wilton approach.
- Releasing the draft Precinct Plan before all detailed ground truthing has been completed for the initial precincts is unacceptable and creates uncertainty for the development industry.
- Cadastre boundaries and ownership patterns have clearly been overlooked in the Precinct Planning process.
- Existing site ownership must be considered in assisting the delivery of infrastructure as well as playing a role in the coordination and development sequencing.
- It is evident there has been a lack of consideration for site specific features such as natural landscape, riparian corridors, flood extents and topography.

It is our view that landowner engagement will enrich site-specific outcomes for the benefit of development and place-based outcomes in the Aerotropolis. This approach would also enable developers and landowners to develop a more detailed understanding of how to implement and integrate the significant and important Connection to Country framework into future development. This localised knowledge is an essential requirement to enable an appropriate level of collaboration with the development industry to ensure the successful delivery and implementation of a Precinct Plan.

### 3.2.2. Role of the Precinct Plan

It is our view that a precinct plan should provide a guide to how development can evolve over time to achieve the 2056 vision of the precinct.

However, the prescriptive nature of the draft Precinct Plan, which includes detailed road grids and land uses, does not allow for the cyclical nature of development and the evolution of the Aerotropolis. We note that to achieve a fine-grained road pattern with higher order uses as shown on the draft Precinct Plan, land surrounding the Western Sydney Airport must undergo several development cycles.

It is our view that the level of detail contained in the draft Precinct Plan including local roads, open space layout (beyond the boundaries of the existing Environment and Recreation Zone) and positioning of local centres diminishes the inherent flexibility offered by the Enterprise Zone.

This approach conflicts with the approach taken by the Aerotropolis SEPP as stated in the Aerotropolis SEPP Discussion Paper

*‘An innovative approach to land use zoning will be applied to precincts throughout the Aerotropolis with **four broad zone types which will allow for greater site design and flexibility** following detailed site investigation.’*

The prescriptive nature of the draft Precinct Plan forces development into specific land use and built form outcomes which contradicts the flexible approach provided by Aerotropolis SEPP. Such a process does not allow for the normal process of land development to evolve over time and adapt to the requirements of the market.

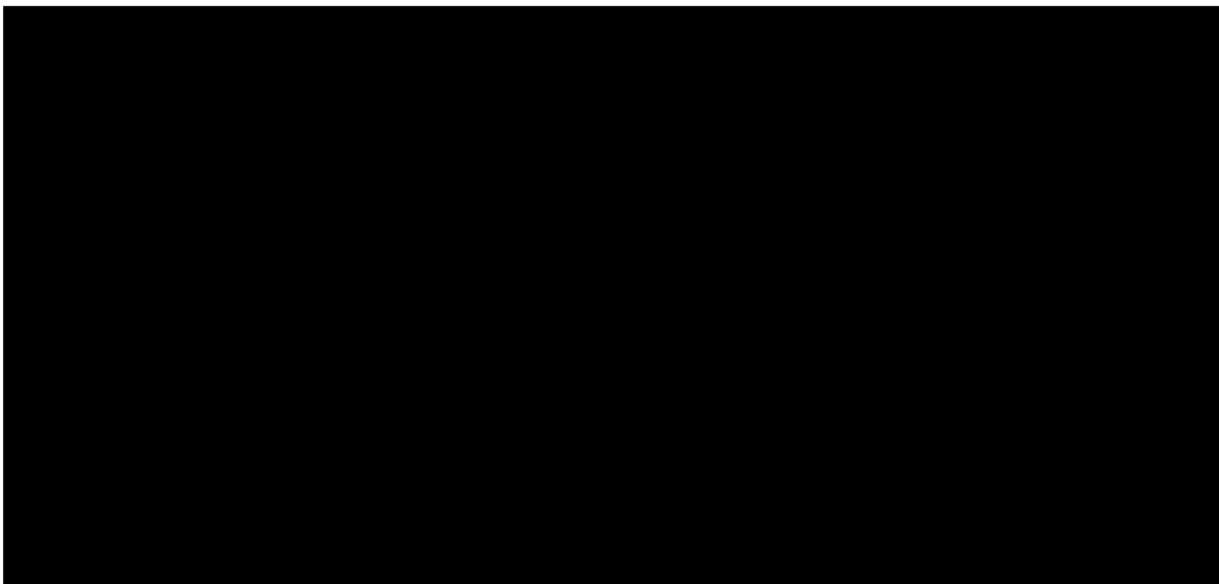
### 3.2.3. Site Specific Outcomes

The diagrams in **Figure 5** highlight a refined approach to applying key principles within the draft Precinct Plan to a site-specific Master Plan informed by detailed technical investigations.

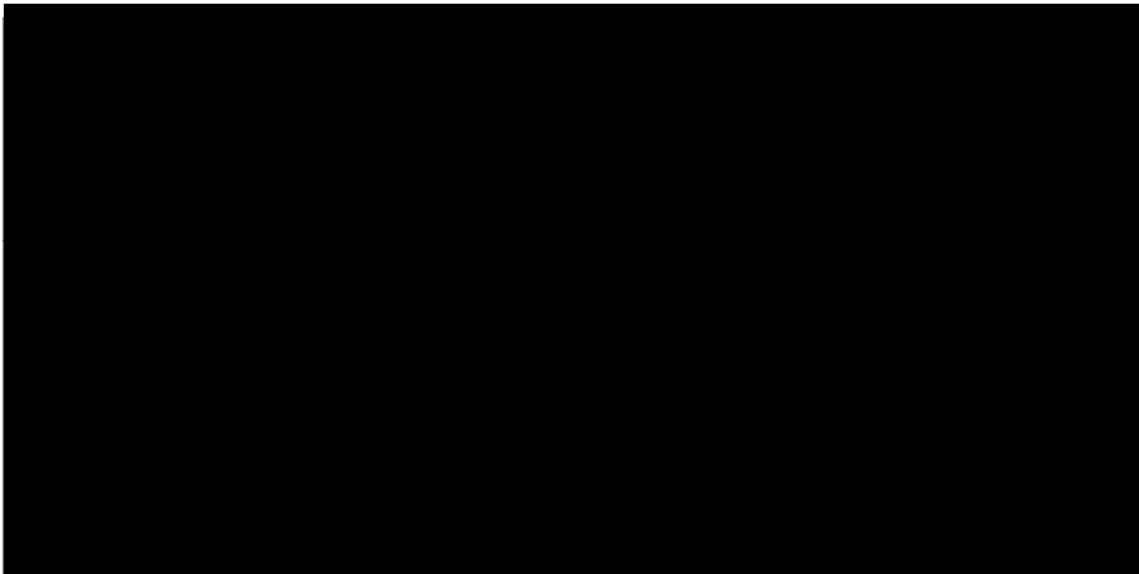
The key aspects of the Master Plan are as follows:

- The Master Plan has been informed by detailed site investigations such as detailed analysis of flooding and riparian corridors which are notably absent from the background information provided to inform the draft Precinct Plan.
- Open space within the Master Plan is based on site investigations and contained around existing riparian corridors of Cosgroves and Badgerys Creek. This facilitates a more linear and efficient master plan layout than the grid envisaged by the draft Precinct Plan.
- The Master Plan demonstrates alignment with the principles of the draft Precinct Plan. It balances a detailed knowledge with a vision for place and consideration for economic drivers and market demands.
- The Master Plan demonstrates how knowledge of these critical localised elements can lead to a different and vastly improved outcome.
- The Master Plan highlights the need to engage with major landowners to enable a better understanding of local site issues and ways to best manage them.

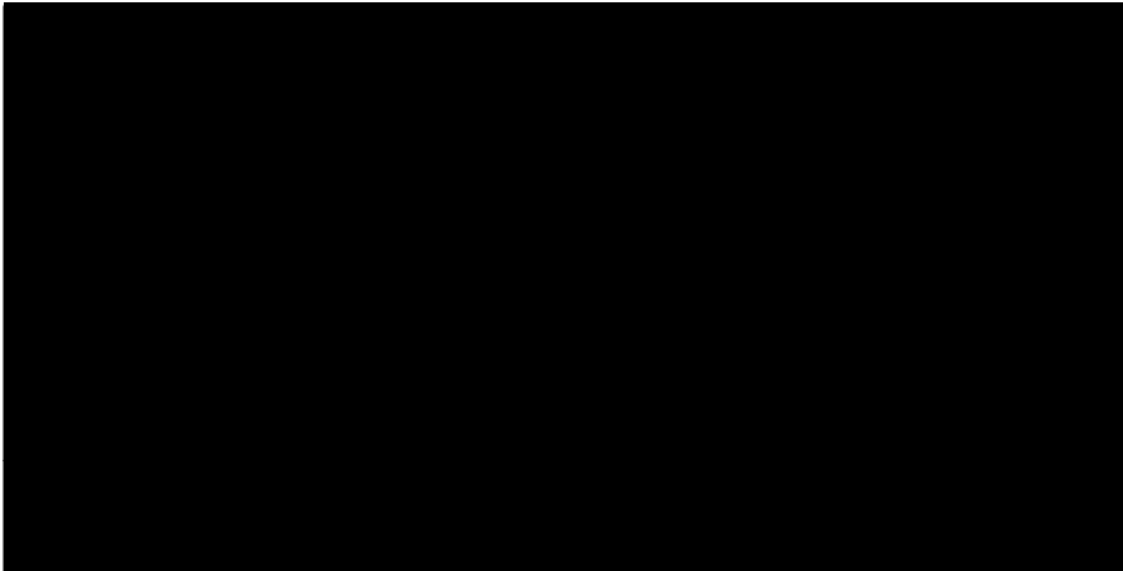
Figure 5 – Precinct Plan Comparison with the proposed Master Plan.



Picture 3- Site Connectivity



Picture 4 - Blue Green Infrastructure



Picture 5 - Local Connectivity & Road Grid

*Source: Nettleton Tribe*

**Recommendations:**

7. Ground truthing to inform the draft Precinct Plans must be completed as a matter of priority and Precinct Plans updated and re-exhibited where required. This is essential to provide transparency to the Precinct Plan process.
8. The WSPP must engage with major landowners immediately to ensure site-specific opportunities and constraints are considered in any revisions to the draft Precinct Plan.
9. The draft Precinct Plan must consider implementing a simpler approach similar to the ILP/ Precinct Plans system administered under the Growth Centres SEPP.
10. The draft Precinct Plan must recognise the Aerotropolis will be delivered through development cycles. The WSPP must provide a framework on how the Aerotropolis will evolve over time. This is not evident in the exhibition package and must be addressed.
11. The open space strategy within the draft Precinct Plan must be reviewed and subjected to rigorous and transparent investigation of existing conditions.

### 3.3. AVIATION SAFEGUARDING

#### 3.3.1. Airport OLS & ANEC Contours

BHL supports the inclusion of specific controls to protect the 24/7 Operation of the airport within Aerotropolis SEPP. Maintaining a curfew free airport with no restrictions on flight paths is essential to the future success of the Aerotropolis.

#### 3.3.2. Wildlife Management

The site is located within the 3km Wildlife Buffer as illustrated on the maps accompanying the Aerotropolis SEPP. Clause 21 of the Aerotropolis SEPP requires that consent must not be granted to development within the 13km wildlife buffer unless *inter alia* it is satisfied that the development will mitigate the risk of wildlife to the operation of the airport relating to:

- Landscaping
- Stormwater, or
- Water areas.

The following comments are made with respect to the approach to management of wildlife impacts to airport operations:

- The *Draft Wildlife Management Assessment Report* (WMAR) identifies a direct conflict between safeguarding the WSA against wildlife strikes and the landscape led vision for the Aerotropolis. This vision includes the rehabilitation of riparian areas, water retention, enhancing biodiversity, establishing an extensive blue-green grid, and increasing tree canopy coverage to 40%.
- As discussed further in Sections 3.6.2 evidence has been provided to the WSPP in previous submissions that the second order stream which runs from Cosgroves Creek through the centre of the site (central riparian corridor) towards Elizabeth Drive (refer **Figure 6**) does not meet the NRAR definition of river (no defined bed or bank).

No additional evidence has been provided within the draft Precinct Plan or accompanying technical studies to substantiate the gazetted Environment and Recreation zone. As stated in the *Draft Water Cycle Management – Interim Report* the above areas are still subject to further investigation.

- Given the proximity to the airport (within the 3km buffer) there is no substantive evidence to suggest that this stream should be retained and enhanced at the expense of the requirements to protect airport operations.
- The WMAR identifies elements of the existing site environment as having a **moderate wildlife risk**. The WMAR also states that the construction of additional permanent water sources, along with the revitalisation of natural water courses, may support large populations of water birds which will require careful locational planning, mitigation and ongoing monitoring.
- We submit that the draft Precinct Plan's aspiration to rehabilitate the central riparian corridor in close proximity to the WSA will create a needless and unacceptable risk to wildlife strike in addition to the significant costs that would be associated with the ongoing management and mitigation of these risks.

Further as indicated in the indicative flight paths within the WSA EIS (**Figures 7 and 8**) aircraft in operating mode 05 will take off to the north east and would bank west or east depending on their destination. This would place some departing aircraft banking over the landholding in proximity to the proposed riparian corridors. We question the intent of protecting this central riparian corridor given its proximity to the western runway and future flight paths.

Figure 6 – Aerotropolis Zoning Map with the subject site outlined.

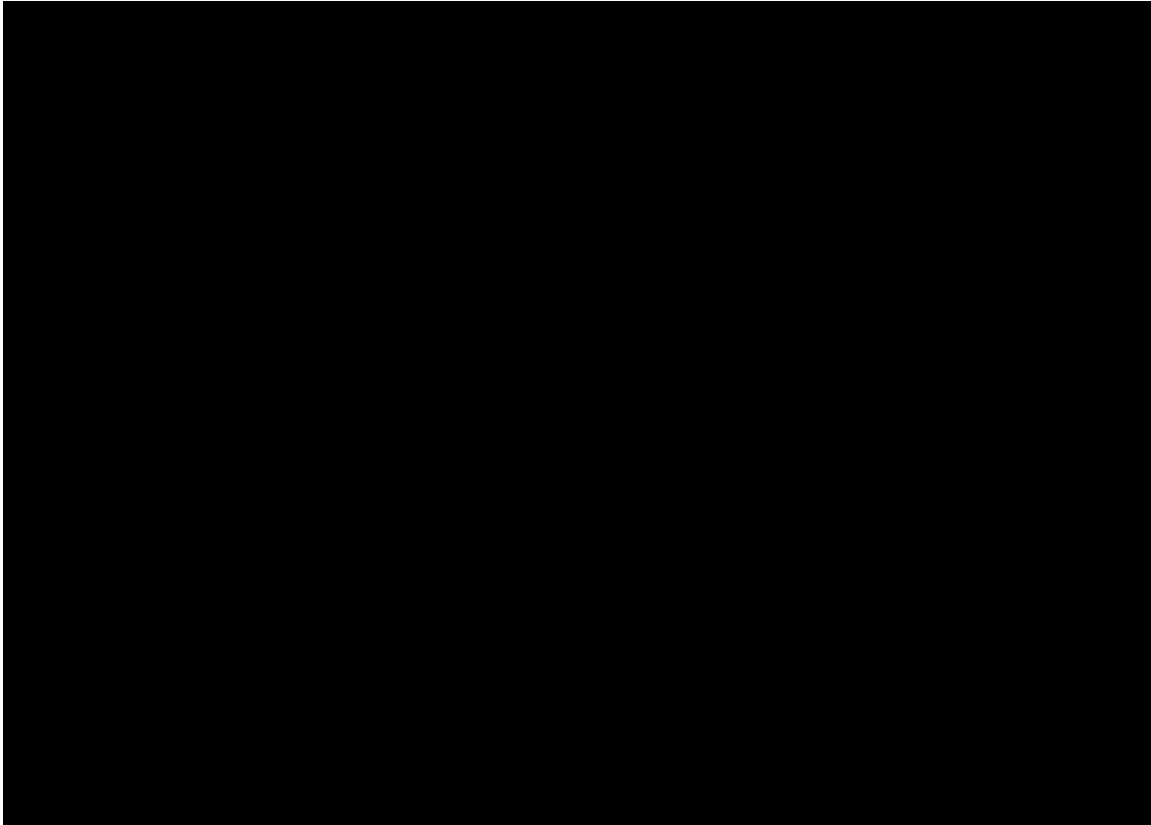
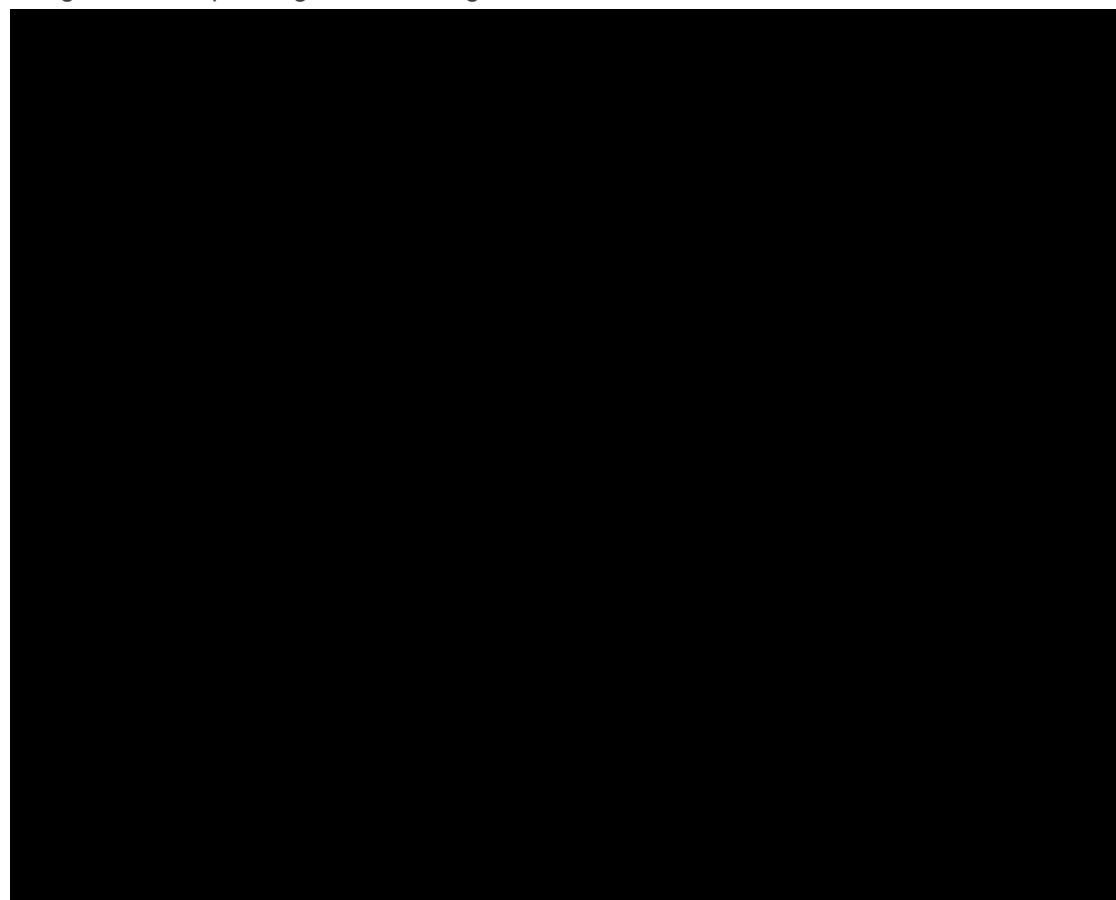
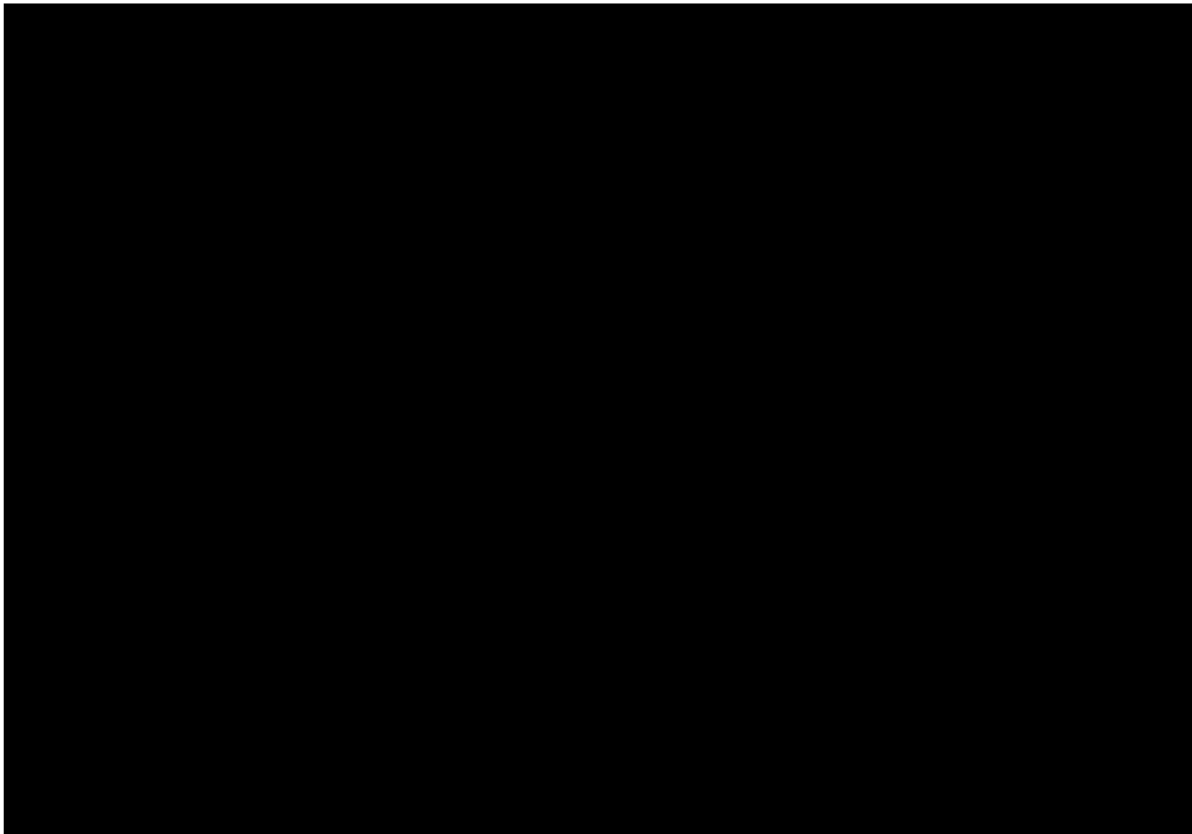


Figure 7 - 05 operating modes – Stage 1 WSA



*Source: Urbis*

Figure 8 - Indicative Flight Paths – 05 Operating Mode



Source: WSA EIS 2015

**Recommendations:**

12. The draft Precinct Plan must adopt a more realistic and rational approach to land use and open space distribution. The location and extent of riparian corridors and requirement for an average 40% tree canopy must not be in conflict with the 24/7 operation of the airport – as identified within the Wildlife Management report
13. That the WSPP and DPIE seek to immediately address the significant risk to airspace operations created by its commitment to a landscape led approach within the 3km buffer. This includes amendment to detailed requirements around water retention, location of drainage basins, rehabilitation of riparian areas and increasing tree canopy coverage to 40%.

### 3.4. HERITAGE

BHL supports an approach which seeks to protect valuable cultural and heritage assets within the Aerotropolis. BHL also supports and commends the WSPP's commitment to establish a framework within the draft Precinct Plan for the recognition of Country and are keen to work with all levels of Government to ensure that their Master Plan provides opportunity for and aligns with the principles and requirements around this framework.

Notwithstanding this, BHL does have concerns around the draft Precinct Plan's mapping and identification of European heritage items on the site. It is important to note that there are no current 'listed items' (local or State) which relate to the landholding.

Despite this, the draft Precinct Plan goes as far as identifying an unlisted heritage item (**Figure 9**) and recommends further heritage assessments be undertaken in respect of its site which comprises the 'McMaster Field Station'.

In reviewing the *Draft Aboriginal and Non-Aboriginal Cultural Heritage Assessment* which has informed the draft Precinct Plan, BHL is concerned that this report identifies the McMaster Field Station and its existing



rural landscape as a contributory element to the wider area. Any move to preserve this aspect would be in direct conflict with the sites Enterprise Zoning. This report is also not clear as to the actual significance of the item, noting in Table 16 that the item (McMaster Field Station/Farm) is identified as 'State' significant where Table 19 identifies it as 'Locally Significant'.

Mountains Heritage have undertaken a detailed Heritage Assessment of the site as part of the development of the Master Plan. Importantly the assessment did not identify the 'unlisted heritage item' shown in **Figure 9**. A significant item was identified on the site, being a group of buildings located just to the east of the proposed M12/Airport access road (refer **Figure 10**). However, it is noted that these buildings are located on a portion of land to be acquired by TfNSW for the M12 Motorway.

Figure 9 – Heritage Map

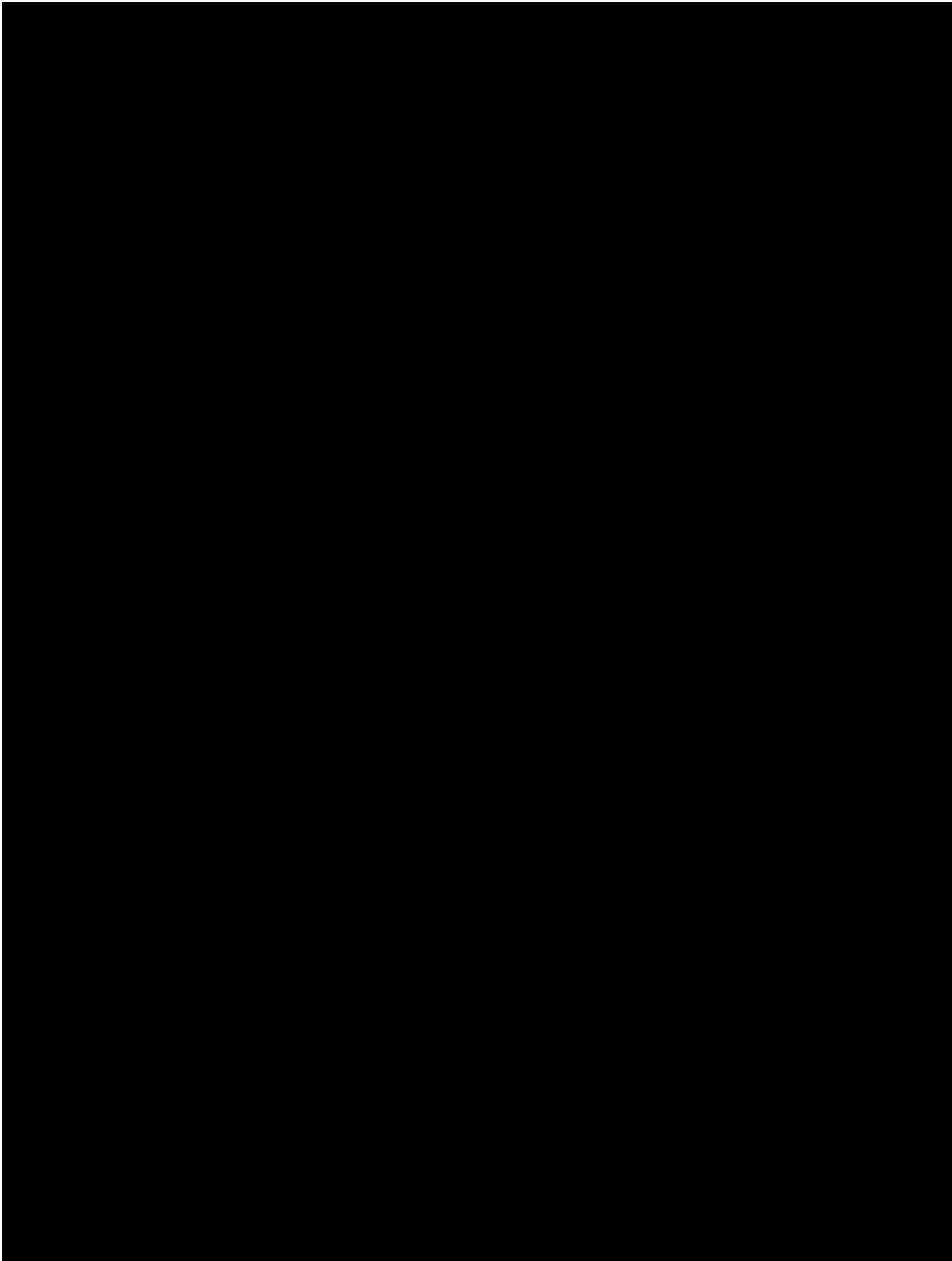
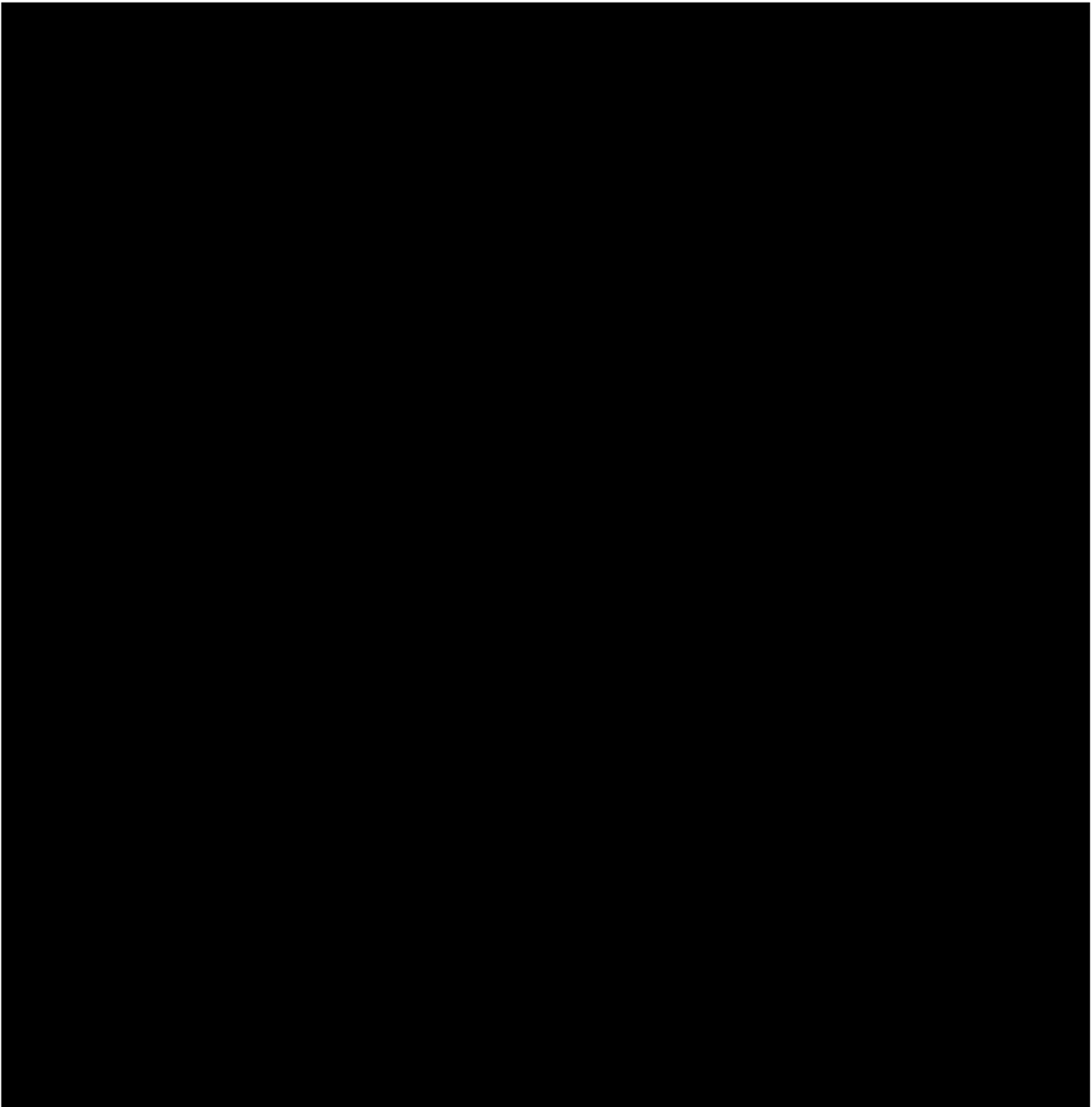


Figure 10 – Heritage Investigations



BHL does not object to the need for further Heritage Assessment as this process has already commenced. However, including these unlisted items within the draft Precinct Plan (a statutory document) undermines the well-established statutory process relating local and State heritage and creates needless uncertainty for landowners as to the ‘actual’ significance of these items.

**Recommendations:**

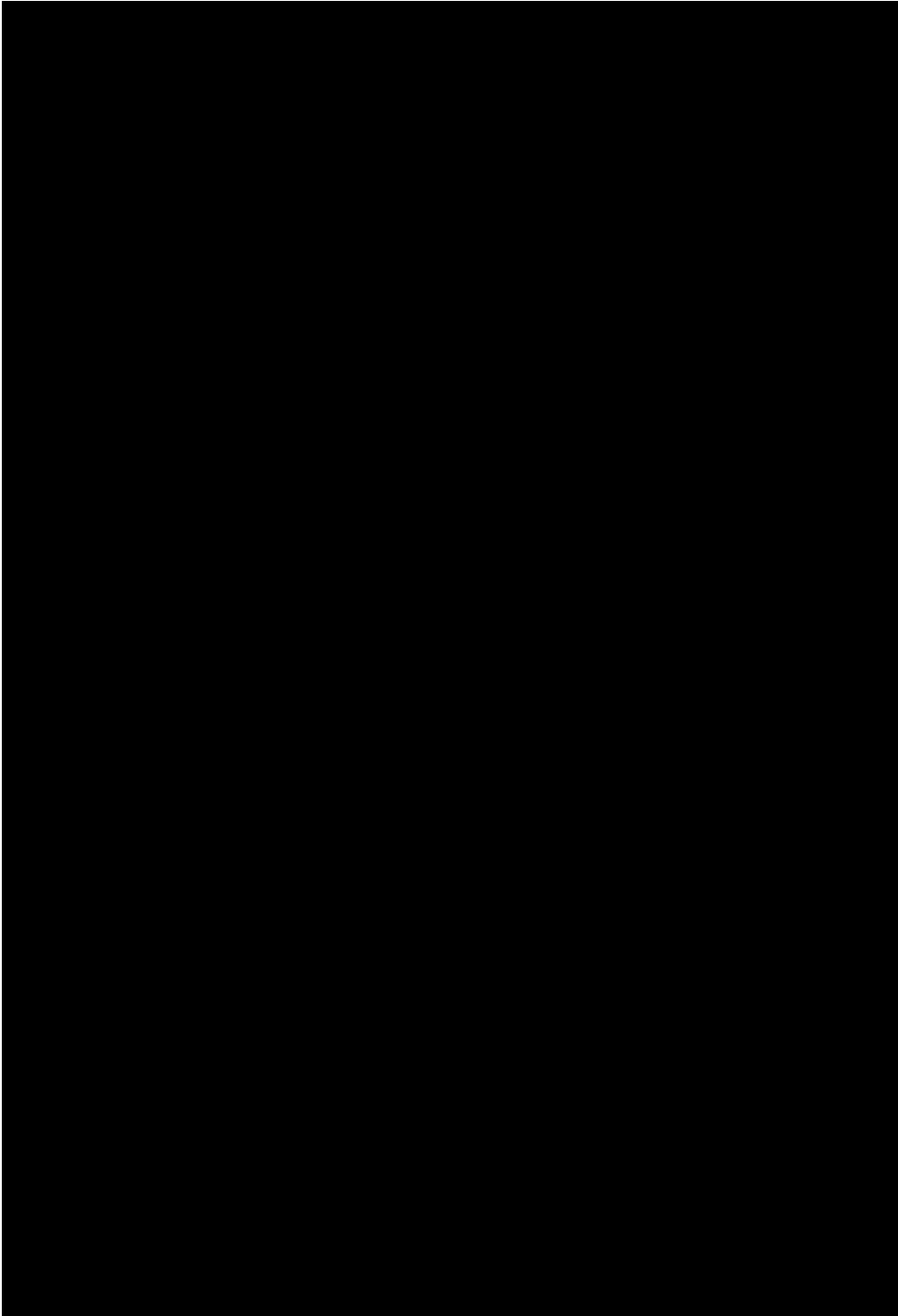
14. All unlisted heritage items must be removed from the draft Precinct Plan until they have been appropriately assessed listed in accordance with the relevant statutory process for local or State Heritage items.

### 3.5. BLUE GREEN INFRASTRUCTURE FRAMEWORK

BHL understands the intention of the WSPP and DPIE to establish a strong and resilient blue green infrastructure framework within the Aerotropolis and the important role that these areas will play to defining a landscape led approach to future development. However, there must be balance between these 'aspirational' objectives and on the ground delivery of land uses within the initial precincts.

As indicated in **Figure 11** below, BHL is committed through the Master Plan to restoring and regenerating the major creek corridors on the site. In addition to this, an additional creek to creek connection is being investigated to connect Cosgroves and Badgerys Creek (**Figure 12**) to be provided in lieu of the central riparian corridor which as noted does not meet the NRAR definition of a river.

Figure 11 – Proposed Master Plan – Cosgroves Creek Riparian Corridor



*Source: Nettleton Tribe*

Figure 12 – Proposed Northern Riparian Corridor



Source: Nettleton Tribe

Notwithstanding the above, we have the following significant concerns in relation to the proposed Blue Green Infrastructure Framework:

- The lack of any evidence to support the ‘environment and recreation’ zone (E&R zone) running through the centre the site.
- That the draft Cumberland Plain Conservation Plan (CPCP) has been relied on by the draft Precinct Plan to justify retention / rehabilitation of environmental zones when the draft CPCP itself relied on the zone boundaries/1:100 flood levels identified within the Aerotropolis SEPP which had yet to be validated. This circular reliance on a set of supporting strategic planning documents without any adequate ground truthing / field validated evidence sets an alarming precedent for future precinct planning.
- Previous submissions by BHL highlighted the fundamental issues around having E&R zone boundaries defined in advance of this field work being undertaken. This was despite the Stage 1 LUIIP and WSAP providing assurance these zone boundaries would be defined during the Precinct Planning process.
- Given that the draft Precinct Plan has been released for exhibition without this fieldwork being complete, there is a real risk that the draft Precinct Plan will be approved by the Minister with minimal changes to the existing E&R zone boundaries. This would then require landowners to undertake their own investigations and justify any changes to this zone through either a lengthy master plan or planning proposal process.

In addition to the key matter identified above BHL is very concerned about the following principles for the Blue Green Infrastructure Framework

- Retention of all Strahler Order 2 waterways in their natural alignment even where they do not meet the NRAR definition of a ‘river’ having neither the existing vegetation nor defined bed or bank to justify their retention - this approach would appear inconsistent with the *Western Sydney Aerotropolis (Initial Precincts) Stormwater and Water Cycle Management Study Interim Report – October 2020*.
- Retention of water within the landscape and the significant amount of pervious area required to achieve Sydney Water objectives for waterway health in the Aerotropolis,
- A requirement for industrial developments to provide an undisturbed soil network in addition to providing a minimum 30% of site area for permeable areas,
- The conflict between water retention and airspace operations identified in s3.3.2,
- The requirement for 40% tree canopy cover across the site not only conflicts with the requirements for wildlife management but it unrealistic. The requirement does not take into consideration the specific requirements for employment land which includes appropriate carriageway widths and large, flexible development pads that can allow for large building envelopes in addition to and sufficient hardstand areas for the manoeuvrability of trucks.

The project consultant team have reviewed the detailed requirements for the Blue Green Infrastructure Framework. Their comments and recommendations are outlined in the following sections.

## 3.6. FLOODING AND WATER CYCLE MANAGEMENT

### 3.6.1. Flood Management

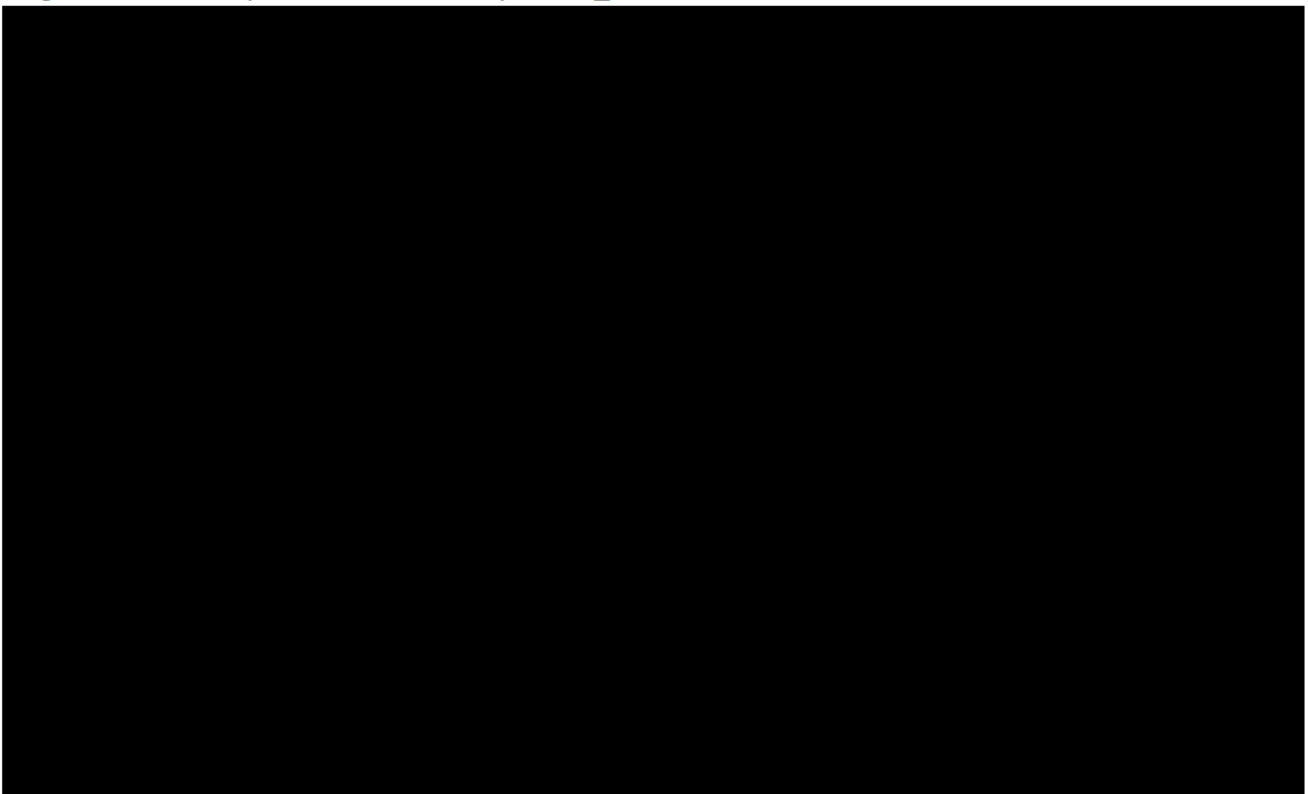
The discussion paper for the Aerotropolis SEPP stated the following in relation to flooding and the Environment and Recreation Zones.

***“The Environment and Recreation Zone will apply to all land affected by the 1:100 chance per year flood planning level.” and***

***“Flood data used to prepare the draft Flood Map and to inform the proposed Environment and Recreation Zone is based on current flood data sourced from Penrith and Liverpool City Councils. Precinct planning will further investigate the flood extent across the Aerotropolis and inform the water cycle management strategy that will confirm land needed for water detention and treatment.”***

An extract of the gazetted Aerotropolis SEPP Flood Map is provided below at **Figure 13**.

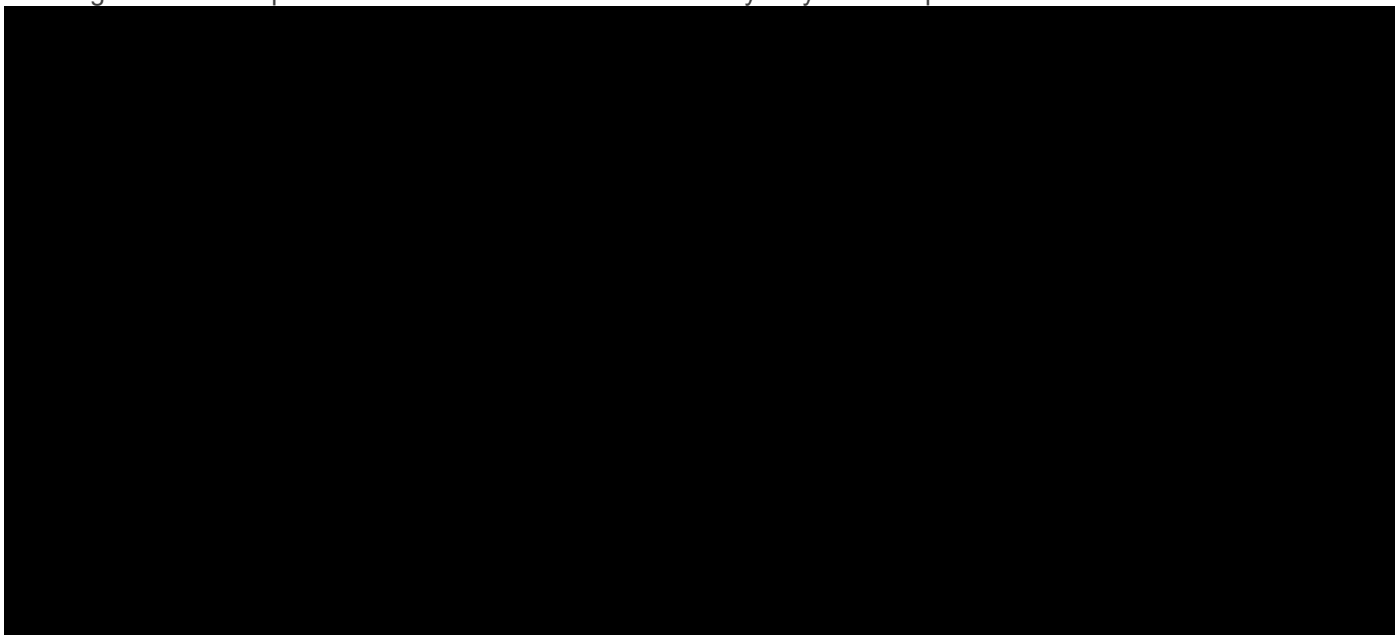
Figure 13 – Aerotropolis SEPP Flood Map – FLD\_001



*Source: Western Sydney Aerotropolis SEPP*

Notwithstanding the 1:100 Flood Extent shown in the Aerotropolis SEPP, it is noted that most recent flood data for Penrith Council, taken from the *Draft South Creek Floodplain Risk Management Study August 2019* (Draft South Creek FRMS), does not include the lower portions of Cosgroves Creek towards Elizabeth Drive (refer **Figure 14**).

Figure 14 - Floodplain between Elizabeth Drive and the Sydney Water Pipeline



Source: Draft South Creek Floodplain Risk Management Study August 2019

BHL remain extremely concerned that the gazettal of the Aerotropolis SEPP including the Environment and Recreation Zone and Flood Planning Maps proceeded based on this existing data. It is even more concerning that subsequent exhibition of the draft Precinct Plan proceeded without the additional detailed flooding studies being finalised and included as part of any exhibition package.

This concern is confirmed by the exhibited *Western Sydney Aerotropolis (Initial Precincts) Stormwater and Water Cycle Management Study Interim Report – October 2020* (Interim Report) which makes multiple references to coordination with a **Flood Risk and Impact Assessment (FRIA)**. This assessment has not been included within the exhibition package despite the Interim Report stating that it is being developed to inform precinct planning (refer relevant extract below).

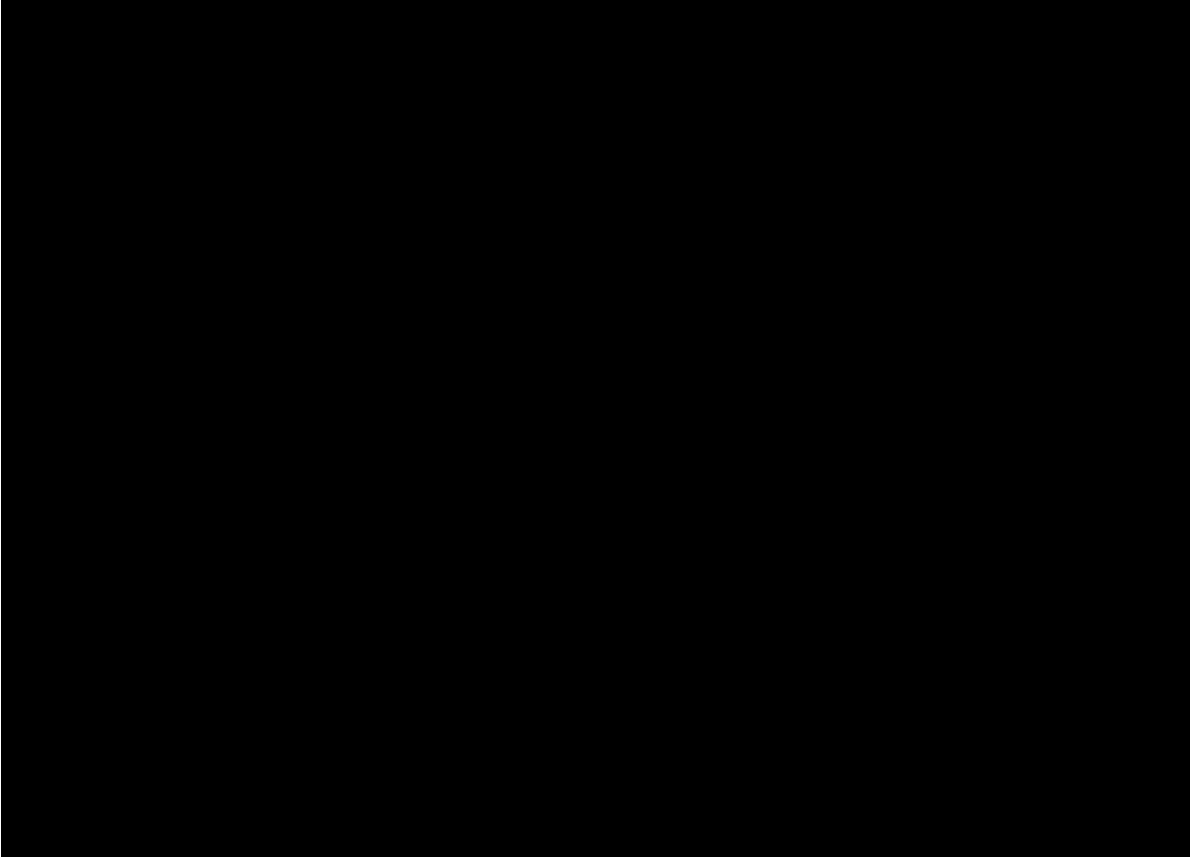
***“A Flood Risk and Impact Assessment (FRIA) is being developed to inform precinct planning for the Aerotropolis. This strategy forms a key component of the broader water cycle management strategy for the catchment developing stormwater flow management objectives, performance outcomes and benchmark solutions in accordance with the Aerotropolis FRIA.”***

BHL is also aware that Liverpool Council recently exhibited the *Wianamatta (South) Creek Catchment Existing Flood Risk Assessment Extract for Liverpool City Council July 2020* (FRIA-Liverpool Extract) which was extracted from broader work on the Wianamatta (South) Creek catchment being undertaken by government. We question why the remainder of this study has not been released publicly given this would likely include the southern reaches of Cosgroves Creek not included in the 2019 Draft South Creek FRMS.

Despite being focused on the Liverpool LGA, the FRIA-Liverpool Extract includes 1:100 flood mapping to the north of Elizabeth Drive (**Figure 15**) which does not pick up the 1:100 land shown in the central portions of the site which are identified in the Aerotropolis Flood Planning Map \_001 (**Figure 13**) and also reflected in the Environment and Recreation Zone (**Figure 6**).

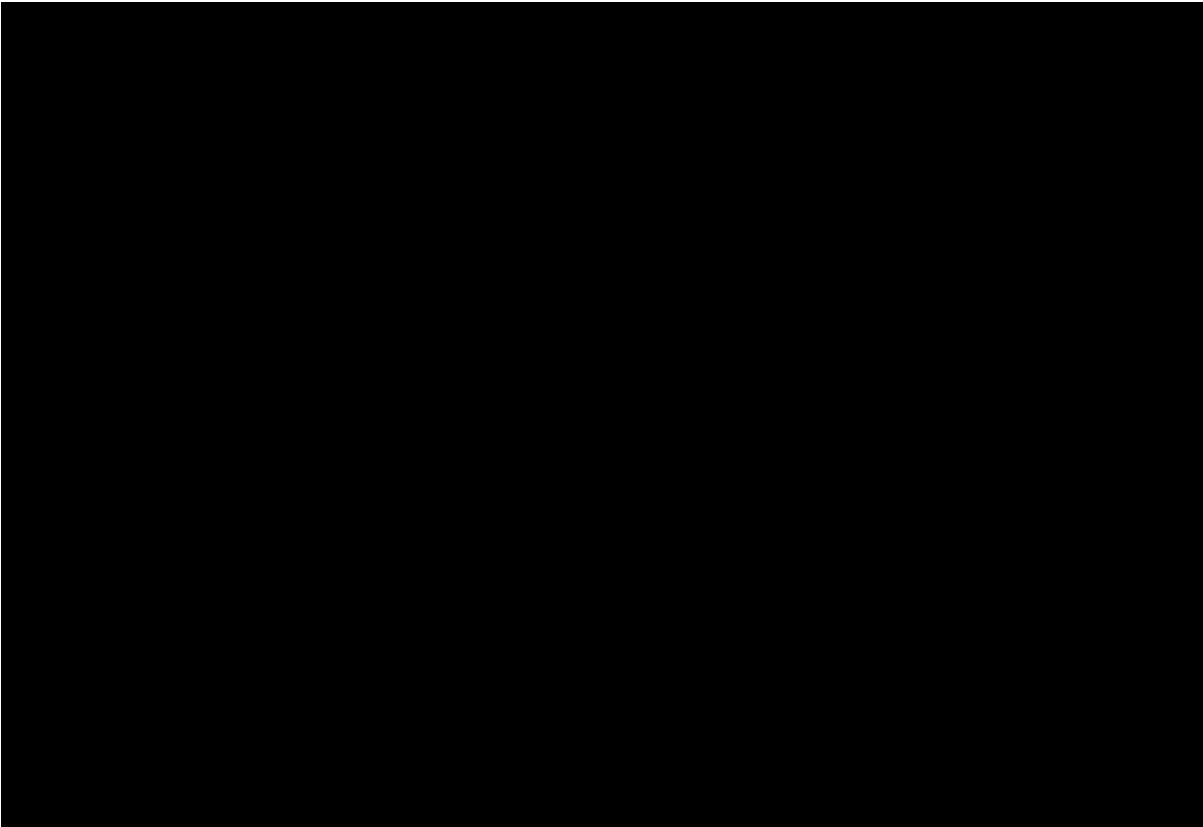


Figure 15 - Wianamatta (South) Creek Catchment – Elizabeth Drive



*Source: Wianamatta (South) Creek Catchment Existing Flood Risk Assessment Extract for Liverpool City Council July 2020*

Figure 16 - Existing Flood Mapping (BMT)



*Source: BMT*

Previous submissions have been made in relation to flooding and given the absence of any up-to-date data, studies to assist the WSPP in its Precinct Planning have been provided. BHL's own flood investigations, undertaken by BMT (**Figure 16**), clearly show that the 1:100 flood planning level is confined to Cosgroves and Badgerys Creeks. BHL's mapping would appear to be consistent with the mapping provided within the FRIA-Liverpool Extract, (**Figure 15**) with **no 1:100 flood levels identified through the centre of the landholding**.

#### Recommendations:

15. The WSPP must provide evidence that the land identified within the SEPP is in fact impacted by the 1:100 flood level.
16. If it is the intent for the Environment and Recreation zone to be informed by the 1:100 flood planning level, then this zone boundary must be revised based to reflect actual 1:100 flood zones as indicated in mapping provided by both BHL and the *Wianamatta (South) Creek Catchment Existing Flood Risk Assessment Extract for Liverpool City Council July 2020*
17. The draft Precinct Plan must also be amended to remove the proposed Riparian Park through the centre of the landholding as it significantly impacts upon the efficiency of the proposed Master Plan layout.

### 3.6.2. Riparian Corridors

Eco Logical Australia (ELA) undertook a ground truthing exercise of existing watercourses in 2018. Experienced assessors validated the top of bank of all watercourses containing a bed and bank. The assessment demonstrated that the majority of drainage lines on the site did not contain a bed and bank. In particular, "Reaches 1A and 2A" illustrated within **Figure 17** did not meet the definition of a river.

The assessment was also provided to the National Resource Access Regulator (NRAR) in March 2020 for their review. NRAR's response (6 March 2020) endorsed ELA's assessment and stated:

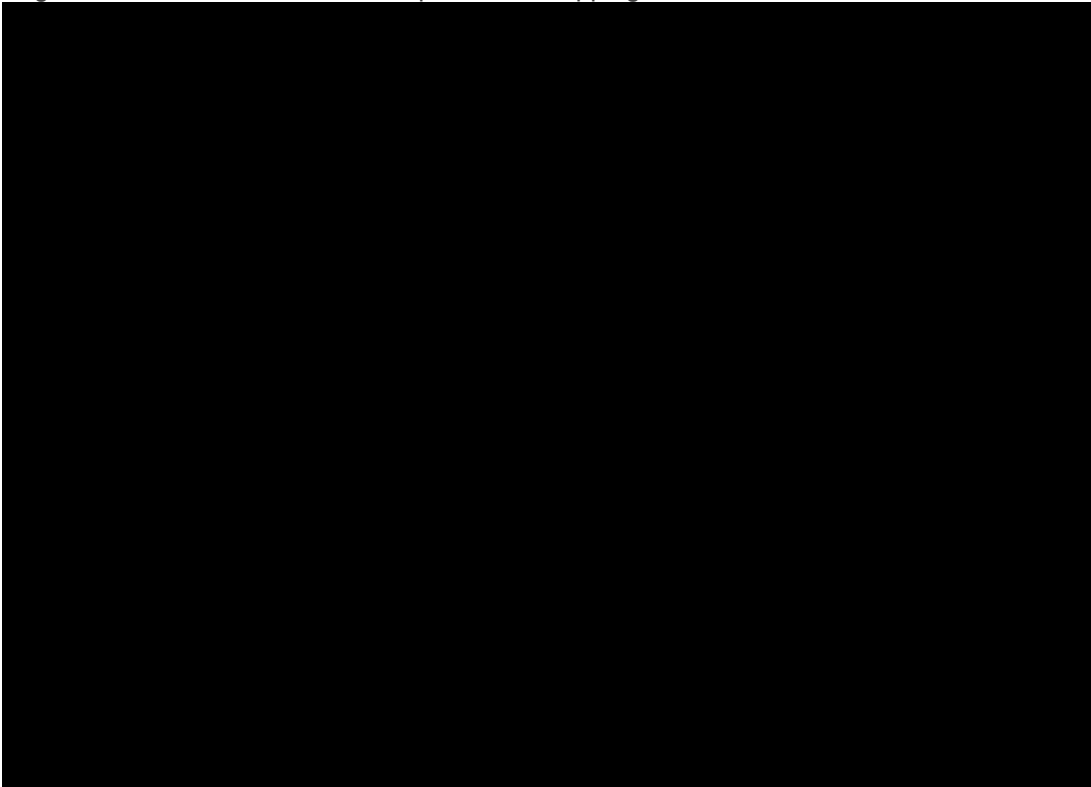
- *"I have reviewed the report title "Riparian Assessment Report Northern Gateway Planning Proposal" Dated August 2018 by ecological Australia". I agree that the evaluation/assessment of the riparian corridor requirements are sound and acceptable in accordance with NRAR guidelines. However, I have concern on the encroachment of the riparian area presented in Figure 9 and must ask why (it) could not be avoided (Urbis Note: this references a previous version of the Master Plan layout).*
- *Please note that the above advice is only a preliminary review of the submitted report and the information provided and must not be considered as an assessment of a development proposal nor can you assume NRAR support of future development proposal as a full assessment and determination can only be made following lodgement of Integrated DA under IDAS or assessment of an SSD.*
- *The advice provided in no way restricts the discretion of NRAR in the assessment and determination of any future application for a proposed works/development on the subject site. Other issues not identified in this advice may emerge during full assessment of the complete application."*

ELA also previously reviewed the draft Western Sydney Aerotropolis Plan which informed the Aerotropolis SEPP, particularly in relation to the areas shown as Environment and Recreation on the Draft Zoning Map. ELA noted that:

*"These areas appear to be based on the Draft Flood Map (1 in 100 Year Flood Area) plus a buffer. ELA noted that these areas coincided with rivers and their buffer zones in relation to Cosgrove Creek, Badgerys Creek and the unnamed tributary to Cosgrove Creek. However where the draft Zoning Maps show the Environment and Recreation Area in other parts of the site, they do not align with existing rivers."*

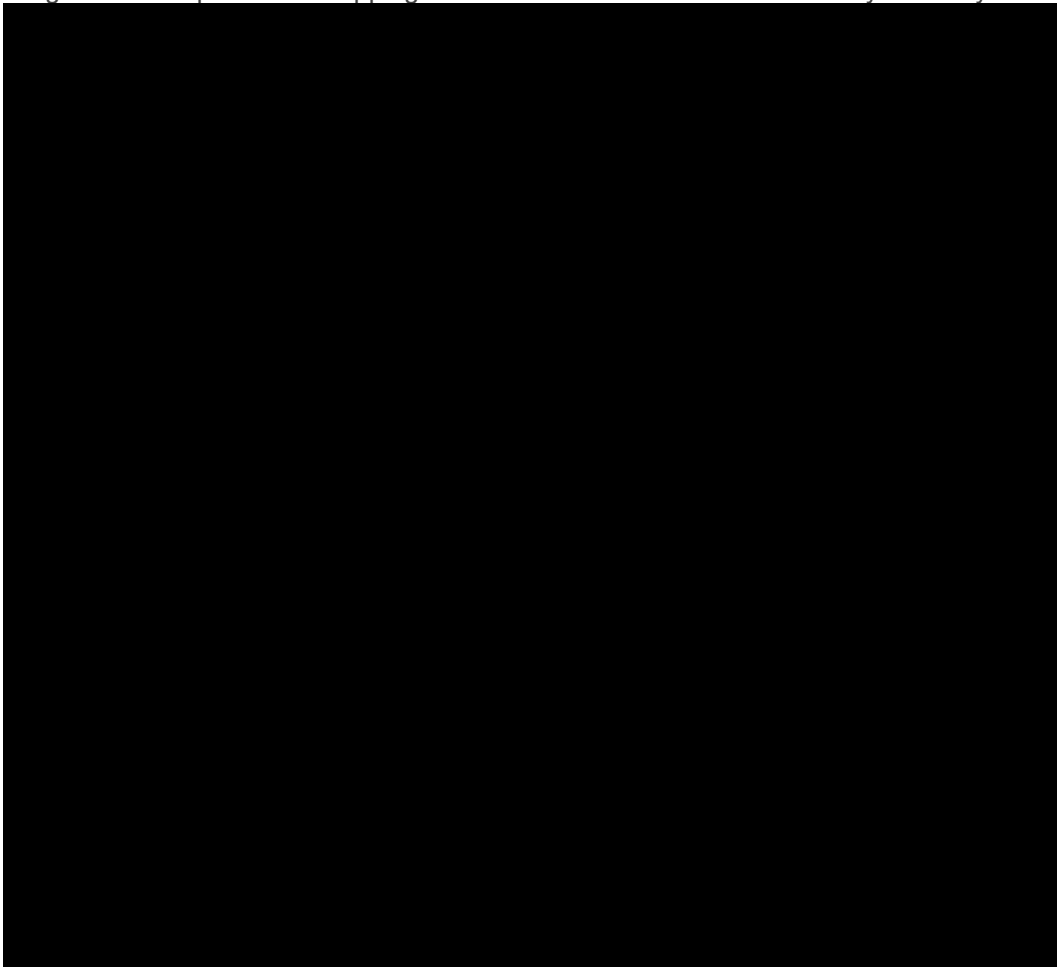
In addition to the above the *Western Sydney Aerotropolis (Initial Precincts) Stormwater and Water Cycle Management Study Interim Report – October 2020* (Interim Report) appears to confirm ELA's top of bank mapping as illustrated in **Figure 18**.

Figure 17 – ELA Assessment – Top of Bank Mapping



*Source: Eco-Logical Australia, 2018*

Figure 18 – Top of Bank Mapping – Draft Precinct Plan Interim Water Cycle Study



*Source: Western Sydney Aerotropolis (Initial Precincts) Stormwater and Water Cycle Management Study Interim Report – October 2020*

Despite the gazettal of the Environment and Recreation Zone within the SEPP we note that the interim report states the following:

- "Waterways across the site are being 'ground-truthed' to determine the presence and extent of riparian lands and those that are to be retained. A riparian corridor strategy is being developed for the Precincts that recommends the retention of waterways based on ground-truthing and consultation with key stakeholders including the NSW Natural Resources Access Regulator.
- A Riparian Corridor strategy is currently being completed that will include top of bank mapping that will inform setbacks for development and stormwater assets:
- Field work is nearing completion. Preliminary mapping has been incorporated into the draft precinct plans as appropriate. Once complete the field validated mapping will advise final recommendations, precinct plans and development controls
- Waterways in the Aerotropolis Initial Precincts are being assessed via a mix of aerial photography, drone photography and ground survey. The creeks that will be assessed are limited to those within the initial precincts and adjoining areas of the Wianamatta-South Creek Precinct. Following field assessment Vegetated Riparian Zones (VRZ) have been assigned to waterways according to those required by NSW Water Management Act 2000. Figure 4-1 shows the waterways that have been assessed including VRZs

It is unacceptable that Riparian Corridors were gazetted within the Aerotropolis SEPP prior to this 'ground truthing' being completed. Further we note that the Interim Water Report intends to rightly base riparian corridors on NRAR Guidelines for Controlled Activities on Waterfront land which is defined as land 40m from the highest bank of a river. This appears inconsistent with the more stringent approach adopted by the draft Precinct Plans to retain all watercourses Strahler Order 2 and above in their natural state irrespective of whether or not they meet the definition of a river.

#### Recommendations:

18. Finalisation of the draft Precinct Plan must not occur until essential field work/ground truthing is completed to an extent to which it can accurately inform the correct Environment and Recreation zone boundaries and extent of riparian corridors on the site.
19. That the draft Precinct Plan focus Blue-Green Grid outcomes on Cosgroves Creek alone
20. That all reaches shown on Figure 17 as not meeting the definition of a waterway (river) be removed from draft Precinct Plan figures and not be used as the basis for identifying riparian corridors.
21. That the draft Precinct Plan amend the requirement BG1 to retain waterways of Strahler Order 2 and higher in a natural state as follows:  
  
*"Maintain waterways of Strahler Order 2 and higher in a natural state **where it meets the definition of a river in accordance with the National Resource Access Regulator Guidelines for Controlled Activities on Waterfront Land** including the maintenance and restoration of riparian area and habitat such as fallen debris. If a development is associated with or will affect a **defined** waterway (river) of Strahler Order 2 or higher, rehabilitate the **defined** waterway (river) to return it to natural state to maintain natural processes and functionality."*

### 3.6.3. Water Cycle Management

AT&L have reviewed the Water Cycle Management objectives and requirements within the draft Precinct Plan and make the following comments.

- It is understood that: 'Sydney Water has developed an approach to summarise the geomorphic conditions of a waterway known as the Urban Streamflow Impact Assessment (USIA). This approach defines the hydrology and hydraulics of baseline and future development scenarios using a combination of 9 common metrics that describe the frequency, magnitude and duration of flow events that support the current instream and floodplain habitat.'
- The USIA (prepared by representatives of Sydney Water / DPIE' - Environment Energy and Science (EES) / WaterNSW / Streamology / CT Environmental) identifies nine Streamflow metrics relevant to urban settings as follows:

1. Annual Flow volume;
2. Mean duration of zero flow periods;
3. Total duration of zero flow periods;
4. Baseflow index (ratio of baseflow to total flow volume);
5. Frequency of freshes (flows > 3 times median flow);
6. Total duration of freshes (flow > 3 times median flow);
7. Total duration of flows above channel erosion threshold;
8. Frequency of floodplain engagement flows; and
9. Total duration of floodplain engagement flows.

- Despite the above metrics, AT&L notes that the controls to protect waterway health within the *Draft Stormwater and Water Cycle Management Study Interim Report (October, 2020)* appear to be based off only one of the above 9 metrics, *Mean Annual Flow Volume*. AT&L questions why the other streamflow metrics have not been considered for the Aerotropolis given these would likely provide a reasonable, practical, and cost-effective alternate outcome for development.
- Whilst the initial modelling undertaken to date has demonstrated the ability to achieve the mean annual flow volume reduction target using initiatives such as 'roof misting' and 'evaporative ponds', the question remains, should the mean annual run off reduction target be the sole metric used to measure consistency with the objectives initially developed by EES?
- AT&L notes that irrespective of the target set, the target must be measurable, achievable, and able to be implemented across a range of future land uses within development areas. The modelling to date has been centred around typical warehouse facilities and will ultimately need to be expanded to include other uses that are proposed including small lot subdivisions, storage facilities and open carparks which would also be compatible uses with the new airport.
- The cost effectiveness of both misting and ponds must be explored in much more detail should these initiatives be considered further. Whilst both provide some level of reduction, both measures will have significant cost implications for both infrastructure and reduction of IN1 employment lands. Misting needs to also consider the significant impact on the ability for the solar panels to work efficiently that potentially reduce the output by 70%.
- AT&L also note that increasing the pervious areas around facilities provides little overall reduction in runoff and while these areas may assist with the objectives of urban cooling, the cost to development would far outweigh the benefits. Pervious pavements and other WSUD elements have been shown to have no real potential for meeting the runoff objectives and in line with the current Penrith City Council guidelines, where no infiltration should be considered, these proposed initiatives must be abandoned.

Ultimately if the runoff target is adopted, a regional approach must be considered. Regional wetlands and/or Ponds have been a proven measure that provide for the greatest overall load reductions whilst not impacting on future development. We note that Sydney Water have previously stated:

*"Regional Wetland Facilities are the most cost-effective way to achieve stormwater volume load reductions is via open water bodies and these have a maintenance implication for developers and a wildlife risk.*

*Through master planning of the Wianamatta South Creek precinct, it will be possible to integrate regional wetlands and waterbodies and offset the need for wetlands and open water to be distributed through the Precinct on private lands.*

*This centralised management of water is preferable as it provides a more appropriate scale of WSUD assets for more cost-effective maintenance and management outcomes."*

The effectiveness of the WSUD elements outlined within the draft Precinct Plan must be reviewed as a matter of urgency. AT&L's modelling has indicated, these reductions are not only optimistic but also contradict measures outlined within other Sydney Water documentation. The objective to improve waterway health is one that is agreed. However, AT&L recommends that all stakeholders, including NSW government, work collaboratively to develop measurable methodologies and targets to achieve the objective without compromising the viability of the employment lands within the Aerotropolis.



#### Recommendations:

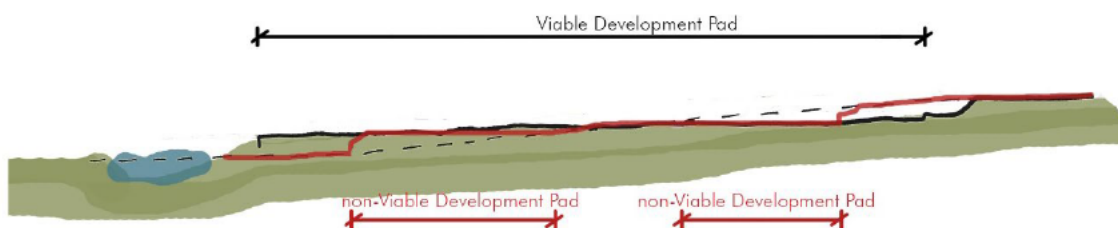
22. Sydney Water must collaborate with the development industry to ensure that the intent of the intended water quality objectives is understood. Sydney Water and DPIE must accept the significant economic impacts associated with solutions as currently identified and provide a more realistic and rational approach.
23. Sydney Water must provide clarification of the simplistic approach used to defining the mean annual runoff volumes.
24. The “Emerging Evidence” as referenced on page 26 of the Interim Report must be documented by Sydney Water so as to articulate the “clear threshold or tipping point”.
25. Salinity can exacerbate when over irrigation practices are implemented across areas where the existing the ground water table is high or known salinity issues exist. To meet the Parkland water reductions, Sydney Water have relied on significant irrigation without firstly investigating and upstanding the true impacts of such practices. These investigations must be undertaken immediately to back up the proposed solutions.
26. Any increased targets can only be reasonably achieved by a regional approach which should be funded and maintained by the State and local Governments.
27. Landowners must be allowed to work with Government to firstly understand the objectives of the integrated water cycle management and agree to workable, economical solutions that are evidence based that meets and aligns with the demands of industry.
28. Infrastructure such as drainage and open space, should be confirmed at the development application stage. Details of these types of infrastructure must be removed from the draft Precinct Plan.

### 3.6.4. Undisturbed Soil

AT&L have reviewed the requirements for undisturbed soil and make the following comments:

- Maintaining an undisturbed soil network of 17.6m wide along road edges produces reduced building pad widths which are below industry standard, unfeasible and inefficient for employment land uses (shown in red in **Figure 19**).
- Conversely, maintaining this network along existing riparian corridors provides not only an interconnected soil network and biodiversity/blue green infrastructure corridors it allows for a more uniform and viable production of development pads that provides efficiency (shown in black above).

Figure 19 - Undisturbed Soil Cross Section



Source: *Nettleton Tribe*

#### Recommendations:

29. Undisturbed soil networks must be confined to defined riparian areas and must not impede the development of the efficient building pads required for employment land uses.

### 3.7. ACCESS AND MOVEMENT FRAMEWORK

The objectives relating to access and movement within the draft Precinct Plan are supported in principle. However, there are some concerns around access and movement framework which including significant impact of the identified transport corridors will have on effective master planning of the site.

Transport consultants Stantec (GTA) have reviewed the access and movement framework and make the following comments:

- Whilst the public transport target mode share appears high, it is difficult to envisage how the public transport target mode share would be met without significant bus improvements to access the precinct.
- There is general alignment between the draft Precinct Plan and the proposed Master Plan with slight differences due to the different road networks.
- The proposed Master Plan identifies a sub-arterial road connection through the site, which benefits local and regional connectivity and effective bus route catchments. Such a defined road hierarchy is preferable to a series of parallel collector roads.
- Whilst the active transport mode share target of 6% may be high to begin with as walking and cycling are also a function of surrounding land uses and connectivity to them, which will take time to develop and evolve.
- To support the future employment growth of the Northern Gateway is essential that a large site such as the site are adequately serviced by local and regional public transport. BHL would support any initiatives to maximise access and connections from the site to nearby rail hubs and WSA.
- BHL supports the revised design of the M12 which includes the potential for access from Elizabeth Drive adjacent to WSA. This access is essential to support the enterprise function of the Northern Gateway, as well as efficient road network operation for the Northern Gateway/ WSA interface and must be reflected in future precinct planning.

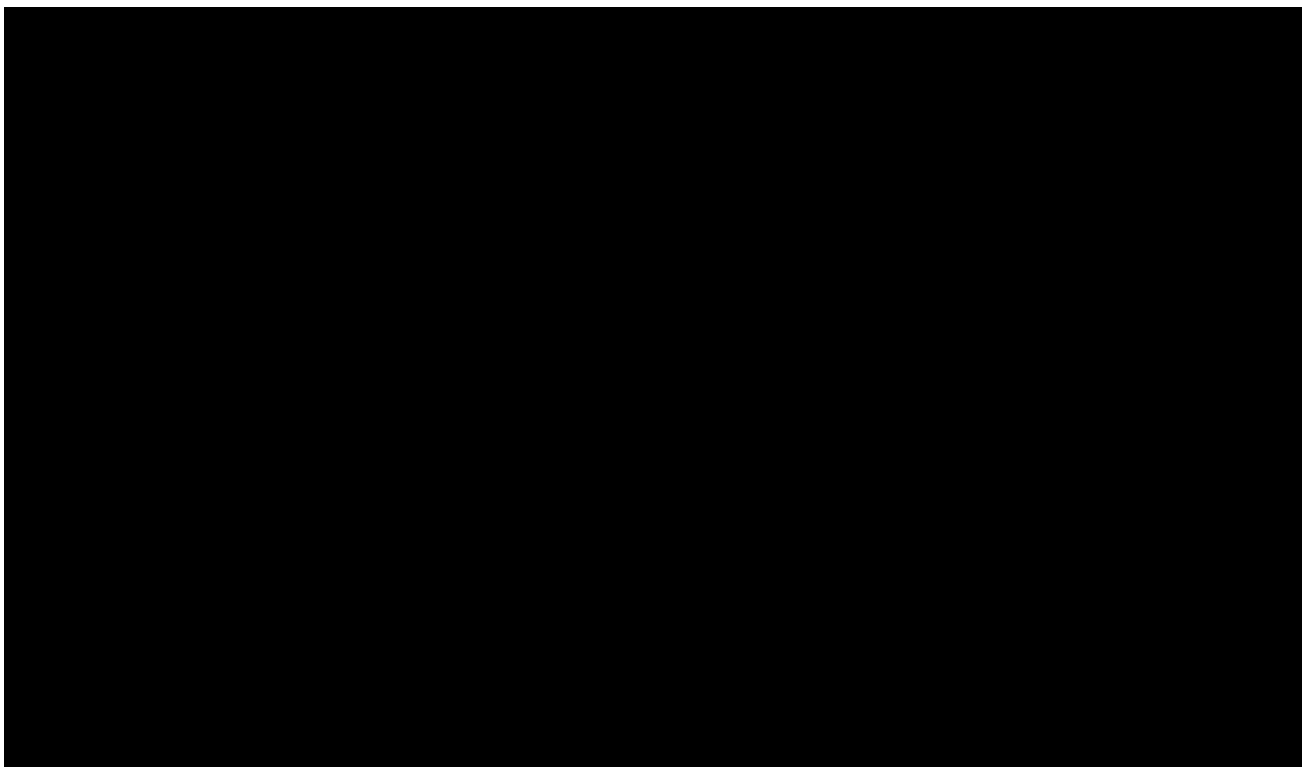
Stantec's comments in relation to the proposed road network, corridor protection and street hierarchy are outlined in the following sections.

#### 3.7.1. Road Network

The draft Precinct Plan indicates four intersections with Elizabeth Drive to the south and four connections over Cosgroves Creek to Luddenham Road to the west adjacent to the site. In comparison, the current proposed Master Plan includes two connections to Elizabeth Drive and one connection to Luddenham Road.

The road network within the draft Precinct Plan (**Figure 20**) has been reviewed in detail by BHL's Traffic and Transport Consultants, Stantec who have made the following comments:

- While it is recognised that the increased number of access points to the site will allow for a greater distribution of traffic through the Northern Gateway Precinct, there is substantial cost involved with providing three additional bridge crossings to Luddenham Road over Cosgroves Creek.
- Considering the desired land uses and the likely traffic generation, an additional three connections with Luddenham Road and two additional left-in left-out accesses at Elizabeth Drive are not considered warranted from a traffic capacity perspective.
- The number of road connections to Elizabeth Drive is inconsistent with a limited access arterial road and consultation with TfNSW to-date. The ability to provide auxiliary lanes and positive road safety outcomes is compromised by this number of connections.
- The number of internal public roads within the site indicated in the draft Precinct Plan is considered excessive and will undermine the network efficiency, as well as undermine the extent of developable area available for industrial and warehouse development and opportunity for private internal/ estate roads to access individual tenancies, providing flexibility on several levels.
- Based on a review of overall traffic capacity, the additional collector roads within the draft Precinct Plan are unlikely to be required. Further any additional roads are likely to be local or private roads within each block (if required).
- The Precinct Plan provides a road layout which includes intersections at acute angles. Such a layout will impact road safety, available intersection sight lines, and vehicle manoeuvrability particularly when considering the proposed land uses will likely generate demand for B-Doubles.



### 3.7.2. Protected Transport Corridors

The proposed transport corridors impact approx. 165ha of the site. Of this land 46ha is attributed to the operational footprint for the M12 and 3.4ha is attributed to the metro rail corridor. Despite the operational footprints of both committed projects, approx. 104.5ha has been left out of the Precinct Plan despite this land being zoned Enterprise under the Aerotropolis SEPP. Much of this land relates to the M9 Outer Sydney Orbital (OSO) / Western Sydney Freight Line which currently remains uncommitted and unfunded.

As outlined in previous submissions, it is our view that the wider M12/M9/OSO Corridor reflected in the draft Precinct Plan as gazetted in the Aerotropolis SEPP would have a significant detrimental effect on the efficient and productive use of the BHL land and its connectivity and integration with the broader precinct. The proposed corridors would create isolated pockets of land both north and south of the operational footprint of the M12, reducing the development potential of the site and the orderly and economic use and development of land.

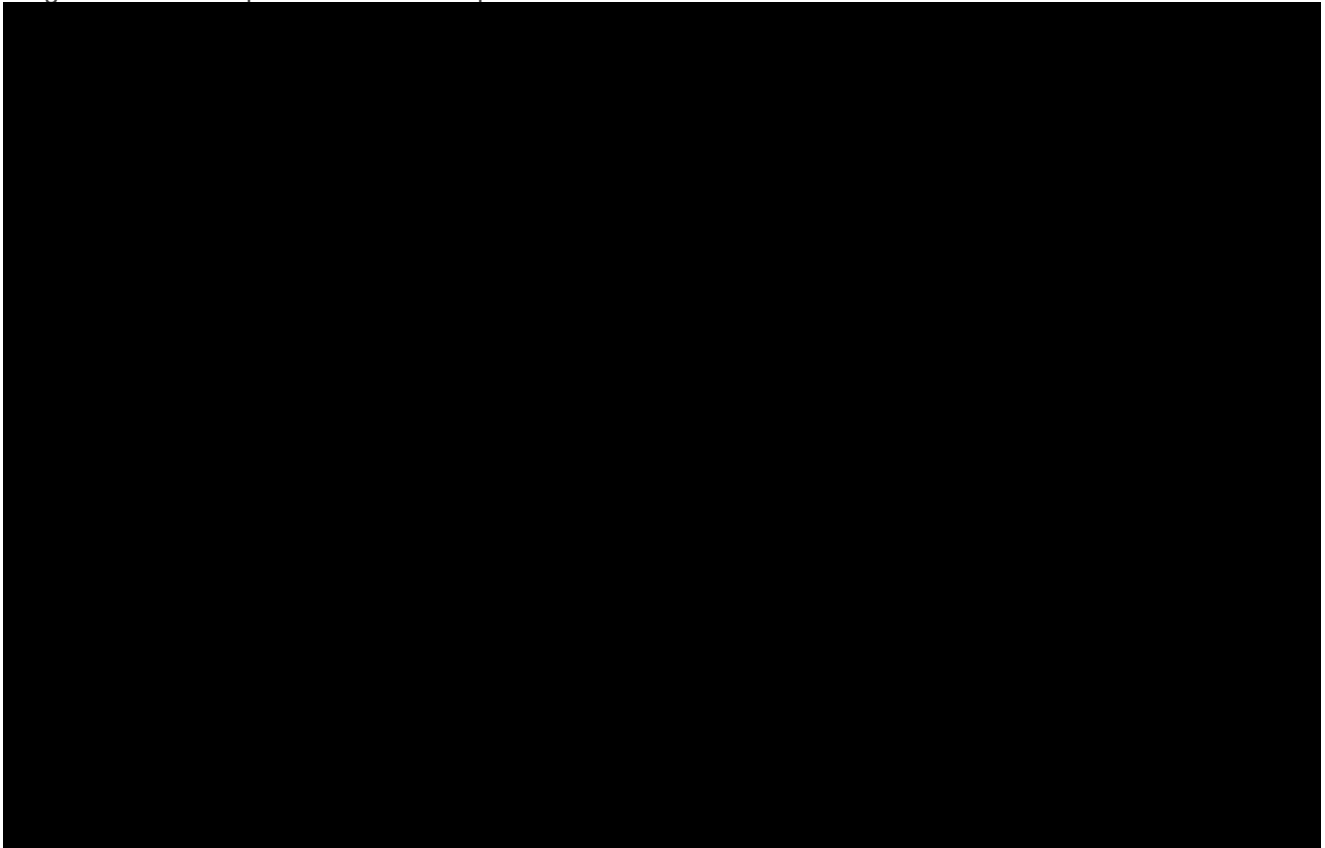
The Aerotropolis SEPP maps clearly identify the OSO is a project only under consideration at this time (**refer Figure 21**). It is therefore inappropriate that such vast areas be excluded from consideration in the draft Precinct Plan. For ultimate precinct cohesion, this area must be appropriately planned for, given there is no certainty that the future infrastructure projects will proceed.

Proceeding with the protection of these corridors as currently gazetted represents a significant lost opportunity for Government in its efforts to deliver on the Objectives and Vision for the Aerotropolis. This includes a missed opportunity to deliver the economic opportunities of the Western Sydney Airport and to attract additional investment, businesses and job creation to the Western Parkland City through a larger quantum of developable land adjacent to the WSA.

It is critical that TfNSW establish up-front the legal status of these corridors and in doing so provide greater certainty around the land take required for these future transport corridors such that these areas do not end up sterilising developable land in perpetuity without any clear requirement for TfNSW or any other State Government agency to acquire the land.



Figure 21 - Aerotropolis SEPP – Transport Corridors



Street typologies in the draft Precinct Plan were understood to be based on the draft Western Sydney Street Design Guidelines. We have reviewed the proposed street hierarchy and typologies and make the following comments:

- While the Guideline is well-considered and communicated. The document however does not address alignment with the Government Architects (GANSW) Movement and Place framework. The document uses a functional hierarchy approach focused on movement with minimal consideration of the place value of streets.
- The proposed road reservations within the Precincts Plans are excessive, and it is assumed the extra width is to accommodate the landscaping of mature street trees. In some instances, there is potential conflict with the height and coverage of tree canopies and narrow carriageways creating obstructions for taller vehicles (e.g. trucks) within the industrial areas.
- Tree canopy cover is unrealistic compared with industry practice. Many photographic examples provided in the guideline do not reflect the canopy targets provided. The street typologies also do not cater for bushfire requirements.
- Considering the location of the site and distance between key destinations, separated cycleways should be replaced in favour of a 3.5m wide shared path on one side of the road. Cycleways can also be problematic in industrial precincts near driveways and roundabouts.
- The cross section on p71 of the Northern Gateway Precinct Urban Design Report is incorrect as it shows the kerb side lanes as 3m wide and the inside lanes 3.5m wide.
- The draft Precinct Plan also indicates Collector Roads and Industrial Streets are to have 2.3 metre parking lanes (and/ or 6 metres if providing perpendicular parking). A 2.3 metre parking lane is considered too narrow for a precinct which will accommodate industrial activity where there's a significant chance that trucks will park in the parking lane.
- The street typologies included in the draft Precinct Plan generally indicates verges with high planting/ tree canopies. This is also not considered suitable for industrial precincts as it may conflict with kerbside truck and bus activity.

#### Recommendations:

30. The draft Precinct Plan must adopt a transport strategy that responds to existing conditions within the site, to enable an immediate delivery of the precinct and aligns with the vision of the Western Parkland City.
31. The proposed road reservations within the Precincts Plans are excessive and will undermine the extent of developable area required for industrial and warehouse development.
32. The WSPP and TfNSW must determine the legal status of transport corridors and infrastructure left out of precinct planning despite being zoned Enterprise under the Aerotropolis SEPP.
33. TfNSW must identify the actual land take required for future infrastructure including the M9 Outer Sydney Orbital and Western Sydney Freight Line such that effective Precinct Planning can occur for the residual land.
34. Should TfNSW choose not to identify the actual land take required for all transport corridors then the Aerotropolis SEPP and draft Precinct Plan must identify a clear legal process and requirement for TfNSW to acquire the land identified.
35. It is recommended that the parking lane for collector roads and industrial streets be increased to 3 metres wide. This approach would be consistent with the requirements outlined in Penrith DCP for industrial streets. Such a specific provision should be included in the Stage 2 DCP rather than a Precinct Plan.

## 3.8. LAND USE AND BUILT FORM FRAMEWORK

The draft Precinct Plan contains built form parameters to guide development. These controls include land use, maximum building heights, yield and density frameworks, urban typologies, subdivision and block structure and open space.

The proposed controls do not align with current industry standards and are overly prescriptive. The proposed restrictions on varying these specific requirements will significantly impact upon development and early activation and investment within the Aerotropolis.

Further analysis of the proposed land use and built form framework is provided in the following sections.

### 3.8.1. Land uses

The adoption of urban development zones within the Aerotropolis SEPP was specifically created to provide flexibility and encourage investment. The approach was created to minimise spot re-zonings and enable innovative development assessment approaches that facilitate economic activity and job growth in the Western Parkland City.

We make the following comments in respect of the land uses identified within the draft Precinct Plan:

- The additional detail diminishes the effectiveness of the urban development zones and does not reflect the 'flexibility' of permitted land uses within the 'Enterprise Zone' under the Aerotropolis SEPP.
- There appears to be a lack of evidence and clarity underpinning land use allocations and built form requirements.
- The subject site is described as 'Business and Enterprise' land use bringing with it a suite of associated land use parameters. Assigning a higher order land use to the landholding and the associated employment density targets (between 75-250 jobs/ha), without the necessary planned public transport connections goes against the 30min city aspiration set by the Regional and District Plans. These requirements will render the land undevelopable in the short to medium term until these transport connections can be effectively planned.
- As discussed in section 3.7.2, the current land use framework and associated road grid does not allow sufficient flexibility to provide for initial land uses which are likely to be for warehouse and logistics.
- Specific land uses should be dictated by present and future market needs, and only required to demonstrate alignment with the vision and principles contained in the draft Precinct Plan.

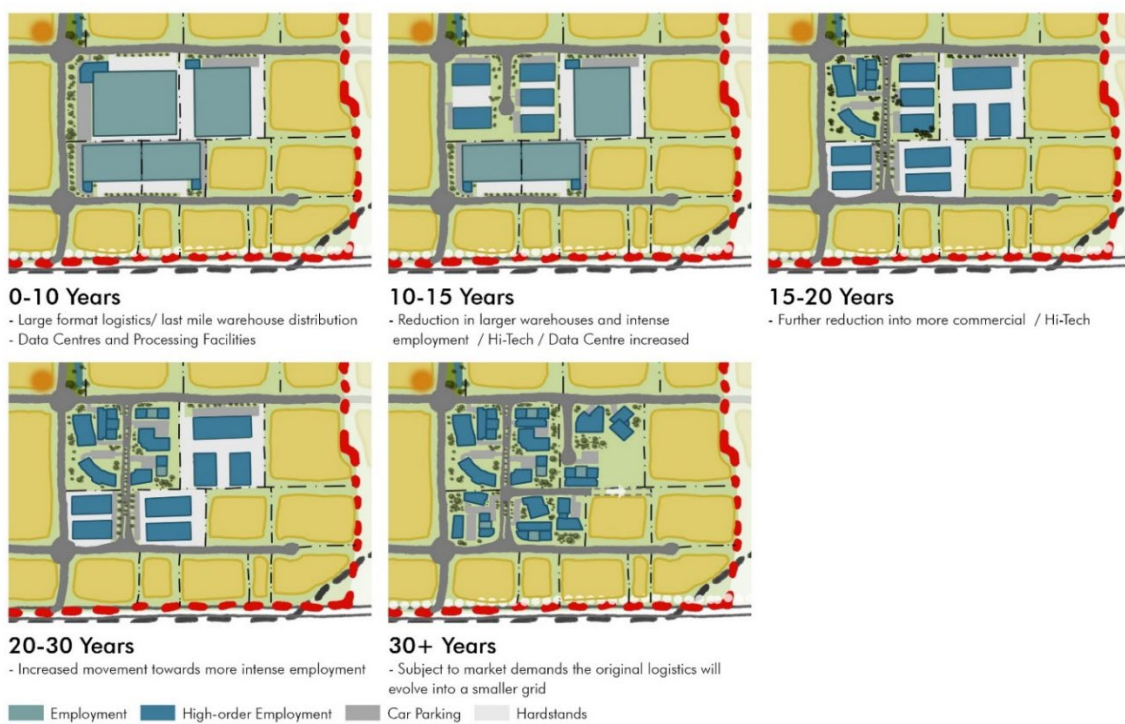
To ensure flexibility for future development, specific land use allocations and associated built form parameters identified in the draft Precinct Plan must be removed and included in the Stage 2 DCP.

### 3.8.2. Built Form Parameters and Targets

We make the following comments in respect of the built form parameters and targets within the draft Precinct Plan which are prescribed metrics intended to guide built form outcomes, development yields and precinct densities:

- The proposed statutory weight of the draft Precinct Plan means that the application of these built form controls will significantly restrict the flexibility sought by the market and significantly risks discouraging early investment within the Aerotropolis.
- The controls appear to be based on the 2056 vision of the and do not reflect the uses being considered for the site by early movers such as warehouse and distribution centres, data centres, and manufacturing uses.
- The built form parameters and in particular the urban grid of 150m x 150m identified for the site within the draft Precinct Plan does not enable a market driven response and is not appropriate for the early intended take-up of large industrial warehouses. These uses require the flexibility of the more sizeable 350 x 350 street grid identified for the Enterprise Zone (outside centres including local).
- The draft Precinct Plan should reflect how development controls can facilitate investment in the short term, while enabling block patterns to be subdivided over time with the evolution of the precinct to eventually create the desired fine grained urban grid as land uses intensify over time. This approach is illustrated in **Figure 22** below.
- Restrictions over site cover, yield and density are not aligned with current industry standards and place risk on the overall competitiveness and investment attraction of the Aerotropolis.
- The proposed site coverage / permeable area requirements conflict with the industry accepted approach within the adjacent Western Sydney Employment Area. In the WSEA it is acknowledged that a certain proportion of the site not included in the site coverage is taken up by hardstand aprons required for the safe and efficient loading and unloading of heavy vehicles. It is not appropriate designate all areas not included in site as permeable area.

Figure 22 - 0-30+ Years, Development & Land Use Evolution



Source: Nettleton Tribe

Definitive built form controls place potential risk over the viability of the Aerotropolis by limiting market opportunities. To ensure a flexible and merit driven approach, built form controls must be removed from the Precinct Plan and included within the *Stage 2 Development Control Plan* (DCP). This approach will provide the consent authority guidance on built form controls but does not restrict development to innovate to meet market demands.

### 3.8.3. Building Height

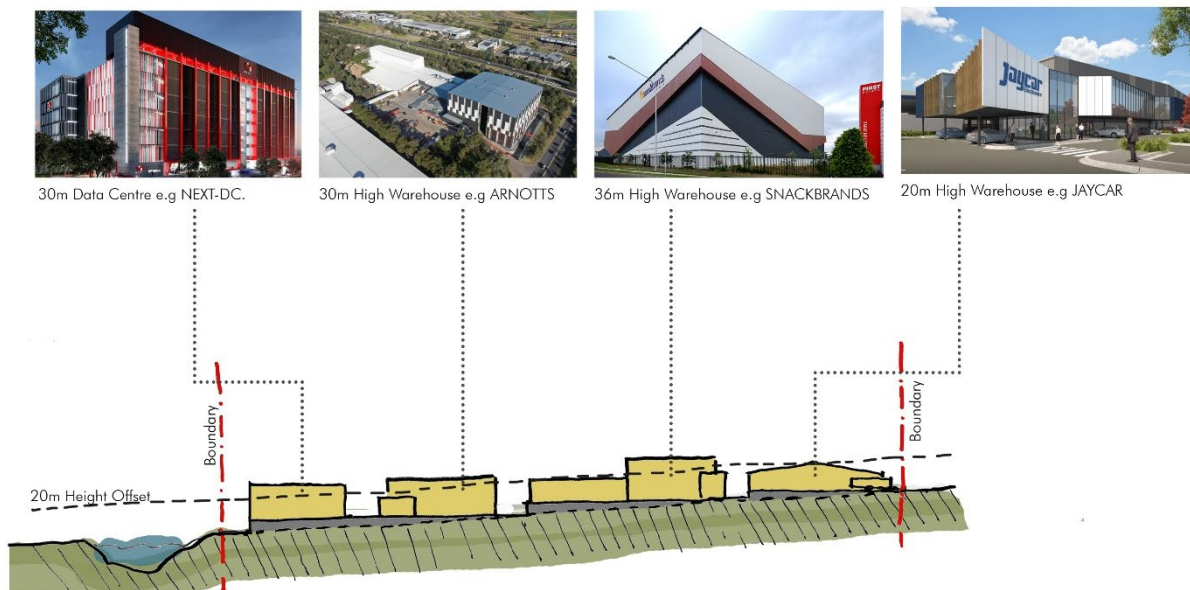
The maximum building height across the site (other than the local centre) is limited to 20m. This is despite the OLS overlay allowing greater heights in areas not within the approach paths for the WSA. The draft Precinct Plan must reconsider the fundamental implications of current building controls and height limits and remove unjustified detail.

We make the following specific comments in relation to the building height designated for the landholding:

- The 20m height limit is overly restrictive and demonstrates a significant lack of understanding of current market trends and demand for high bay sheds and other innovative building typologies as illustrated in **Figure 23**.
- Relatively low building height limits prescribed over large and expansive precincts presents the risk of a generic and flat skyline that provides a lack of visual interest and poor legibility and wayfinding.
- The 20m building height does not consider topography and the market requirement for large level building pads for large format warehouses.
- The draft Precinct Plan should provide flexibility for a market response which supports the creation of place and best-practice urban design outcomes.
- A more appropriate mechanism to control building heights can be provided by the OLS for WSA which will effectively control building heights closer to WSA and allow more flexibility for end users (refer **Figure 24**). An example of this approach can be seen around Sydney Kingsford Smith Airport and more specifically, the IKEA development in Tempe.

Figure 23 - Building Height Case Studies

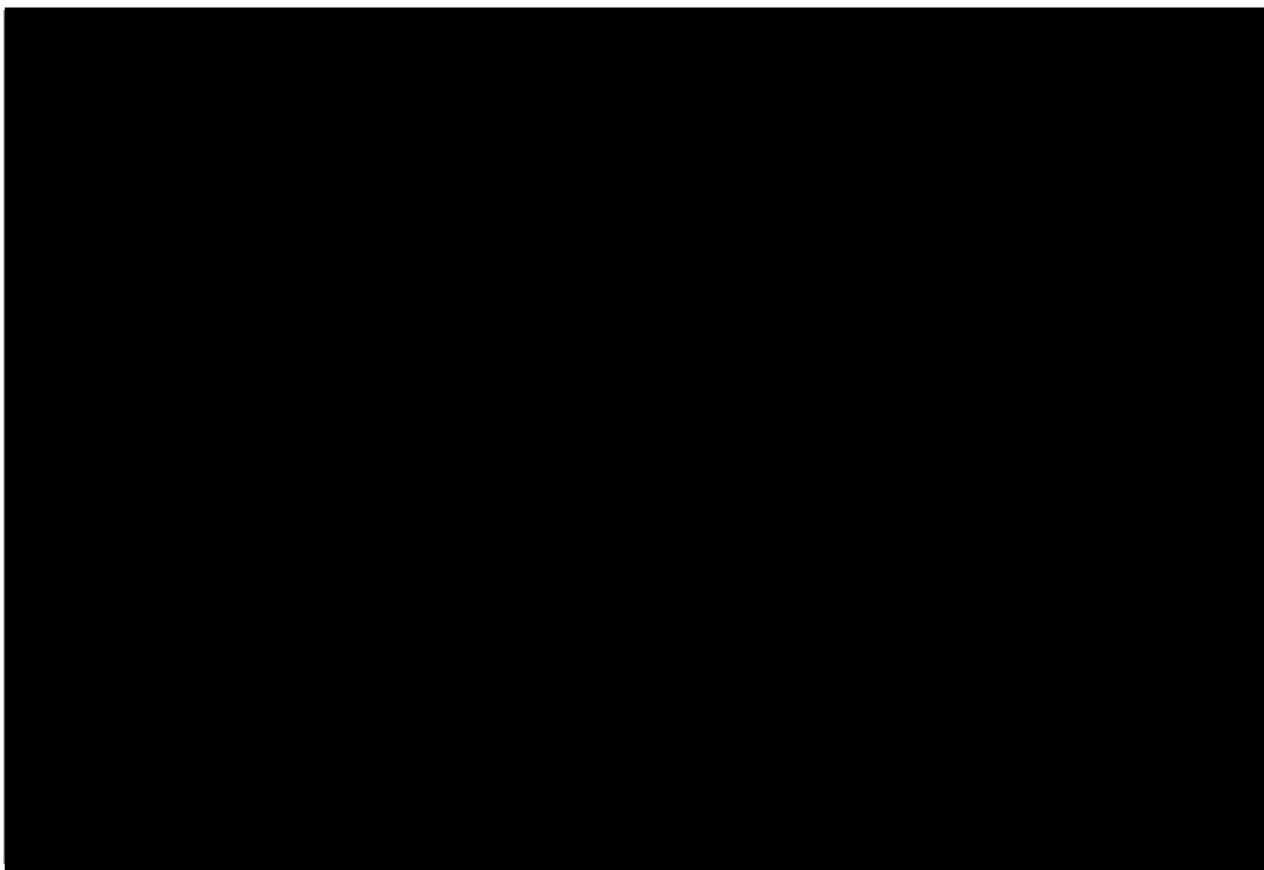
To achieve a great variety of warehouse heights providing opportunities for several types and uses



Source: Nettleton Tribe



Figure 24 - Obstacle Limitation Surface Map



Source: Nettleton Tribe

### 3.8.4. Open Space

To realise the vision of the Western Parkland City, it is accepted that specific objectives and high-level targets particularly around open space, are required to promote intended outcomes. However, the detail of open space typologies, locations and quantum outlined in the draft Precinct Plan are greatly limiting and lack evidence. Employment areas should not be required to provide similar open space requirements to mixed-use areas.

Commercial and industrial developments are capable of identifying the quantum of open space required to support future employees, through detailed design processes. In addition, the draft Precinct Plan must recognise the role of Wianamatta-South Creek Precinct will play in providing a major regional asset, which focuses on recreation and environmental amenity for the Western Sydney Aerotropolis.

The identification of infrastructure such as drainage and open space is premature. This infrastructure is best identified at the development application stage, when for example water cycle management modelling will confirm basin types, sizes and their locations.

#### Recommendations:

36. The draft Precinct Plan must remove detail of land use assumptions and their location from the draft Precinct Plan. Including more detailed land uses within an additional statutory document undermines the flexible land use zones within the Aerotropolis SEPP. Land uses should be dictated by the market, as long as they align with the vision and principles contained in the Precinct Plan.
37. The land use and built form framework must not preclude initial development of the site for warehouse and logistics uses.
38. However, if higher order land uses are envisaged for the subject land early in the Precinct Planning process then the WSPP must advocate for the provision an additional metro station between the Airport Business Park and Luddenham Road.
39. Built form controls relating to site coverage, yield and employment densities are specified as guidelines and as such must be removed from the draft Precinct Plan. Built form controls should be

implemented through the Stage 2 Development Control Plan (DCP) which will provide the consent authority with guidance on built form controls but also does not overly restrict development to innovate to meet market demands.

40. Building Heights must be dictated by the OLS such that the ultimate height of development is dictated by market/end user requirements.
41. Employment areas must not be required to devote such a significant quantum of land area to open space beyond zones already identified for Environment and Recreation.
42. The location of infrastructure such as drainage and open space must be removed from the draft Precinct Plan and determined by detailed site investigation and ground truthing as to future development requirements.

## 3.9. OTHER MATTERS

### 3.9.1. Social, Community and Cultural Infrastructure

Whilst the overall requirements for social and community infrastructure needs across the Aerotropolis are not questioned, it is inappropriate for the draft Precinct Plan to identify locations for this infrastructure for these reasons:

- The locations provided within the draft Precinct Plan do not reflect the future land use of the site and the likely demand for that infrastructure in the short, medium and longer term.
- There is a risk that some infrastructure will never be provided in the location identified due to varying development timeframes. This could result in a shortfall of social infrastructure provision across the Aerotropolis,
- The infrastructure locations within the draft Precinct Plan are inconsistent with the locations and types identified within the *Draft Social Infrastructure Needs Assessment* to inform the Precinct Plan.
- The provision of this social, community and cultural infrastructure should be identified in the relevant contribution plan with developers encouraged to provide this infrastructure within their development as Works in Kind.
- The desired location of such social infrastructure must be removed from the statutory document and included within the Stage 2 DCP such that it does not prevent a landowner from providing for this infrastructure on another site if it is considered an equally appropriate location.
- The draft Precinct Plan provides no details as to who will be responsible for the acquisition, dedication and ongoing management of this infrastructure.

### 3.9.2. Infrastructure Delivery and Sequencing

The general staging and release of precincts within the Aerotropolis is supported. However, the WSPP must drive a significant level of engagement and coordination with agencies and landowners to ensure that critical infrastructure is delivered concurrently to early movers within the Aerotropolis. More specifically Sydney Water requirements must be understood and reflected within the draft Precinct Plan. This includes confirmation of critical road connections so that Sydney Water can finalise servicing and take off arrangements into surrounding land.

### 3.9.3. Contributions Framework

BHL understands the requirements of infrastructure across Western Sydney and the demand it places on State and local government agencies to facilitate the timely delivery to unlock land for urban development.

The use of a contribution plan to levy funds for infrastructure delivery is understood, however, both State and local governments need to holistically look at the cumulative effects of multiple contributions and how they affect feasible development outcomes.

At the time of this draft Precinct Plan exhibition, both State and local governments proposed to overhaul the infrastructure contribution by proposing the following:

- Section 7.12 Plan for the Western Sydney Aerotropolis: 6.5% levy on capital investment value
- Western Sydney Aerotropolis SIC: \$200/ ha of net developable area

The WSPP must work with the DPIE, Liverpool and Penrith Council to ensure there is a balance between infrastructure contributions and delivery of development. An analysis of the proposed infrastructure contributions to the current industrial market indicates a significant impact on Sydney's ability to attract industrial tenants compared to Melbourne and Brisbane.

The proposed increase in infrastructure contributions is likely to result in Sydney's industrial land becoming even less attractive to both investors and tenants, which will further reduce Sydney's competitiveness against Melbourne and Brisbane. This will have flow-on implications as Sydney loses jobs in the industrial and supply chain sectors to Melbourne and Brisbane.

Higher infrastructure contributions will further push up industrial rents in Sydney as developers seek to maintain their development margins and project feasibilities. Higher rents will affect the affordability of industrial land in Sydney and impact its ability to compete for investment against the Melbourne and Brisbane industrial markets. As a result, prospective and even existing tenants will likely look to locate in more affordable markets such as Brisbane and Melbourne. This would impact the NSW Government's vision for the Aerotropolis and in turn, negatively impact Sydney's ability to create jobs and economic opportunities.

#### Recommendations:

43. Locations and types of social infrastructure to be provided on a site must be removed from the draft Precinct Plan.
44. Details must be provided as to who will be responsible for maintaining social infrastructure being provided including any land dedication and acquisition requirements.
45. The Precinct Plan must consider site ownership as a significant consideration for delivery and phasing of roads, infrastructure and land uses.
46. The WSPP must drive a significant level of engagement and coordination with agencies and landowners to ensure that critical infrastructure is delivered concurrently to early movers within the Aerotropolis.
47. Sydney Water requirements must be understood and reflected within the draft Precinct Plan. This includes confirmation of critical road connections so that Sydney Water can finalise servicing and take off arrangements into surrounding land.
48. The WSPP must work with the Department of Planning, Industry and Environment and Penrith City Council to understand the cumulative impacts of infrastructure contributions. If implemented as it currently stands, investment will choose to locate to more attractive cities, such as Melbourne and Brisbane. This is a significant risk to achieving the Western Parkland City vision and ensuring success of the Aerotropolis.



## **4. CONCLUSION**

The previous exhibitions and post-exhibition review have resulted in limited amendments to the Western Sydney Aerotropolis Plan and the Aerotropolis SEPP.

As outlined within the submission, there are significant concerns relating to the complexity and detail of the draft Precinct Plan. There are in our opinion significant technical flaws that left unresolved will create significant uncertainty on not only planning expectations but also development delivery. This will be further complicated if as suggested by DPIE that the draft Design and Place SEPP / Urban Design Guidelines are also intended to be layered in to the Aerotropolis SEPP. And this is in addition to the yet to be released Stage 2 DCP and Master Plan Guidelines.

The planning framework and approvals pathway as it is currently headed has the potential to set a new benchmark for all the wrong reasons when fundamentally, government and industry are otherwise aligned as far as broad outcomes and objectives are concerned.

BHL requests the WSPP to meet with key landowners and developers immediately to resolve the matters raised in this submission and seek an agreement to provide industry the confidence on the timing delivery of development and the WSPP assurance the planning framework can successfully respond to market demand in the short term.

BHL is willing and motivated to engage directly with the WSPP to work collaboratively on critical decisions relating to the Master Planning for this key site. In working through the critical matters, BHL is confident that an appropriate balance can be struck between meeting the vision and objectives of the draft Precinct Plan and a clear development pathway can be achieved for the development of the Aerotropolis.