

Bradfield Development Authority

# Building Two Advanced Manufacturing Research Facility

Section 4.55 Modification Report

27 November 2025

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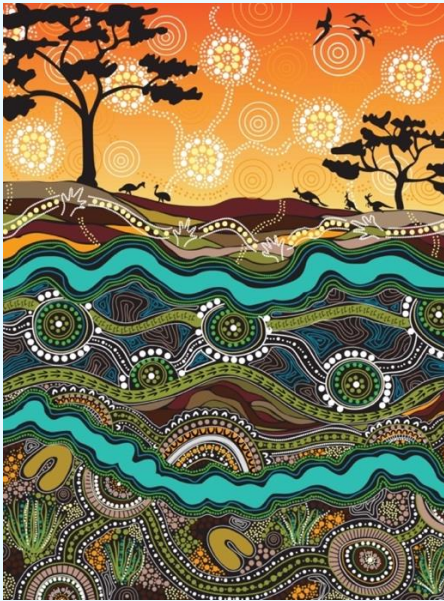
## Acknowledgement of Country

Aboriginal people have had a continuous connection with the Country encompassed by the Western Parkland City from time immemorial. They have cared for Country and lived in deep alignment with this important landscape, sharing and practicing culture while using it as a space for movement and trade.

We Acknowledge that four groups have primary custodial care obligations for the area: Dharug/Darug, Dharawal/Tharawal, Gundungurra/Gundungara and Darkinjung. We also Acknowledge others who have passed through this Country for trade and care purposes: Coastal Sydney people, Wiradjuri and Yuin.

Western Sydney is home to the highest number of Aboriginal people in any region in Australia. Diverse, strong and connected Aboriginal communities have established their families in this area over generations, even if their connection to Country exists elsewhere. This offers an important opportunity for the future of the Parkland City.

Ensuring that Aboriginal communities, their culture and obligations for Country are considered and promoted will be vital for the future of the Parkland City. A unique opportunity exists to establish a platform for two-way knowledge sharing, to elevate Country and to learn from cultural practices that will create a truly unique and vibrant place for all.



**Garungarung Murri Murri Nuru (Beautiful Grass Country)**

Artwork created by Dalmarrri artists Jason Douglas and Trevor Eastwood for the Bradfield Development Authority.

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## Appendices

| Appendix Number | Document Name   |
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| Appendix A      | Amended Architectural Plans (Architectus)                       |
| Appendix B      | Architectural Design Report (Architectus)                       |
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| Appendix E      | Traffic Impact Assessment (PTC)                                 |
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| Appendix G      | Amended Integrated Water Management Plan (Arup)                 |
| Appendix H      | Amended Air Quality and Odour Impact Assessment (Arup)          |
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| Appendix J      | Amended Waste Management Plan (Arup)                            |
| Appendix K      | Dangerous Goods Assessment (Umech)                              |
| Appendix L      | Amended Ecologically Sustainable Development Report (Arup)      |
| Appendix M      | Updated Net Zero Statement (Arup)                               |
| Appendix N      | NABERS letter (Arup)  |

*\* Estimated Development Cost Statements are provided under separate cover*

## Abbreviations

| Abbreviation | Description   |
|--------------|---|
| AMRF         | Advanced Manufacturing Research Facility  |
| AMRF1        | Building One Advanced Manufacturing Research Facility (SSD-25452459, as modified) |
| AMRF2        | Building Two Advanced Manufacturing Research Facility (SSD-58591961)              |
| BDA          | Bradfield Development Authority   |
| DCP          | Western Sydney Aerotropolis Development Control Plan – Phase 2                    |
| DP           | Deposited Plan  |
| DPHI         | Department of Planning, Housing and Infrastructure (NSW)                          |
| EIS          | Environmental Impact Assessment   |
| EPA          | Environmental Protection Agency   |
| EP&A Act     | Environmental Planning and Assessment Act 1979                                    |
| GFA          | Gross Floor Area  |
| GTP          | Green Travel Plan   |
| LGA          | Local Government Area   |
| REAP         | Registered Environmental Assessment Practitioner                                  |
| SEARs        | Secretary's Environmental Assessment Requirements                                 |
| SSDA         | State Significant Development Application   |
| TfNSW        | Transport for NSW   |
| TIA          | Traffic Impact Assessment   |
| WPCA         | Western Parkland City Authority (former)  |

# 1 Introduction

## 1.1 Applicant's details

The applicant details are summarised in **Table 1** below.

**Table 1 Applicant details**

| Item           | Description   |
|----------------|---|
| Applicant name | Bradfield Development Authority (formerly known as Western Parkland City Authority) |
| Address        | 50 Belmore Street, Penrith, NSW 2750  |
| ABN            | 84 369 219 084  |

## 1.2 Purpose of this report

This report accompanies a modification application seeking approval to deliver AMRF2 in two stages, remove the lower basement level and associated car parking, and make minor design refinements that have arisen through detailed design. It has been prepared by Architectus Australia Pty Ltd (Architectus) on behalf of the Bradfield Development Authority (BDA), formerly known as the Western Parkland City Authority (WPCA), in respect of State Significant Development Application (SSDA) (SSD-58591961).

Development consent SSD-58591961 for the Advanced Manufacturing Research Facility Building Two (AMRF2) was granted on 7 April 2025 by the Minister for Planning and Public Spaces. The approved development comprises the construction and operation of a five-storey advanced manufacturing "high technology industry" facility incorporating a café, parking, and landscaping. The site is located at Lot 3101 DP 1282964, 215 Badgerys Creek Road, Bradfield, within the Liverpool Local Government Area and the Western Sydney Aerotropolis (the Aerotropolis).

This modification seeks removal of a basement level, deletion of basement car parking, introduction of staged delivery of the development into two stages and minor design changes resulting from staging and ongoing design development.

This application provides background to SSD-58591961, outlines the strategic context of the site, describes the proposed modification, and provides an assessment of the relevant matters contained in section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This application should be read in conjunction with the appended documents.

## 1.3 Approved development (SSD-58591961)

On 7 April 2025, SSD-58591961 was approved, granting consent for the construction and operation of an advanced manufacturing "high technology industry" facility incorporating a café, parking, and landscaping applicable to part Lot 3101 DP 1282964, 215 Badgerys Creek Road, Bradfield.

The approved development comprises a five-storey hybrid timber structure around a central courtyard including a manufacturing hall, research labs, research clean rooms, workspaces, tenancy spaces and cafe. Two levels of basement car parking will accommodate 100 parking spaces, loading bay and waste collection with access via the Western Road and room for a precinct communications centre. The facility will also provide bicycle storage for 70 bicycles and end-of-trip facilities. The building will have a total gross floor area (GFA) of 10,847m<sup>2</sup> and a maximum height of 27.9 metres. The central courtyard and open connection to AMRF Park would provide 1,270m<sup>2</sup> (21% of the site) of publicly accessible open space including 643m<sup>2</sup> of deep soil zone.

The approved site plan and renders of the approved scheme are provided at **Figure 1 - Figure 3**.

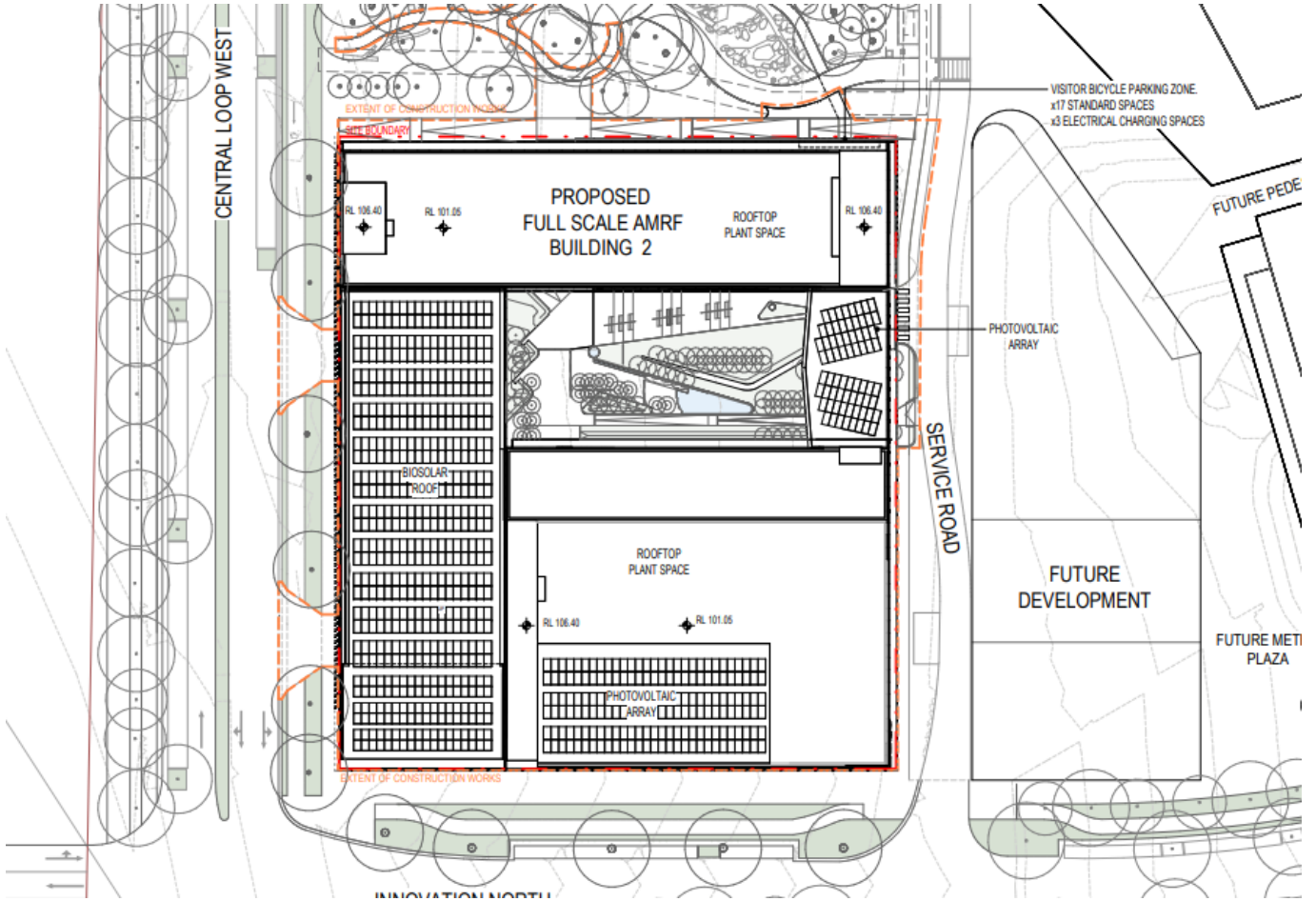


Figure 1 AMRF2 site plan as approved  
Source: Architectus (2024)

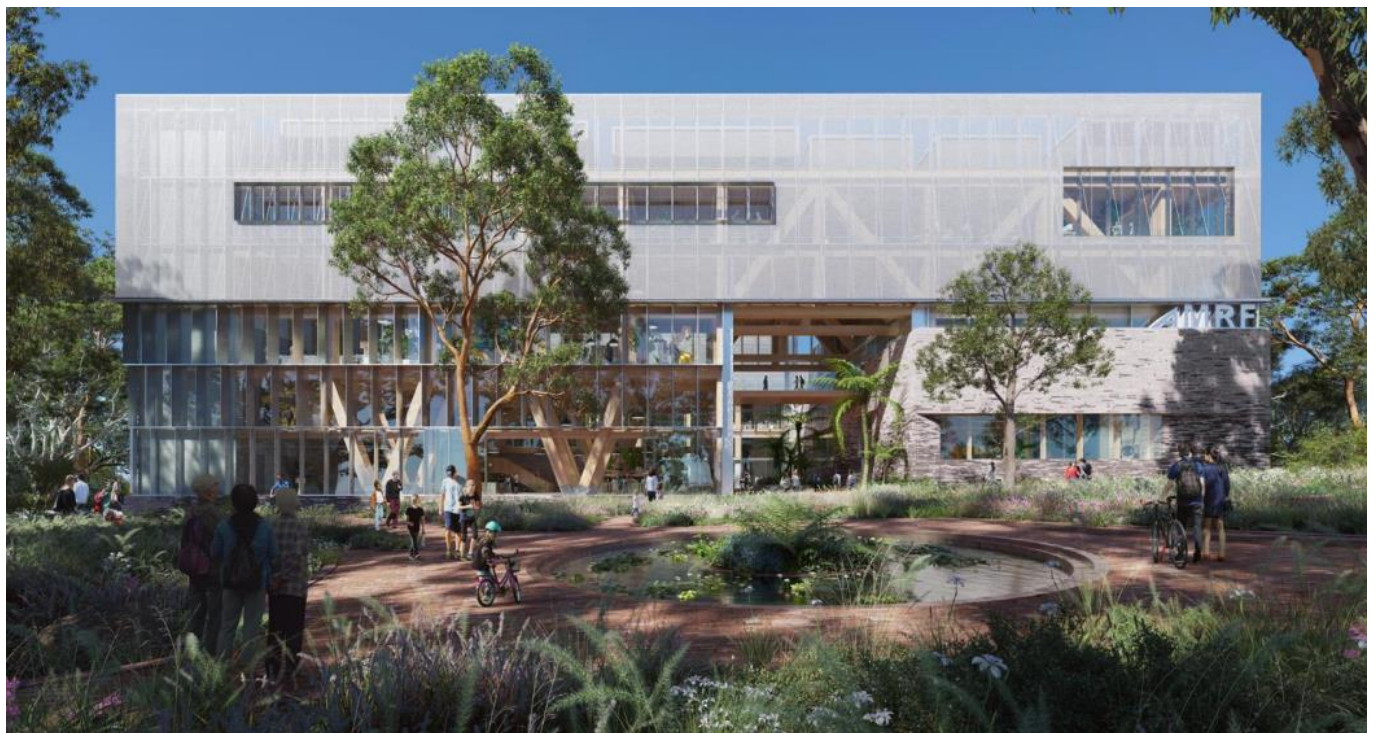


Figure 2 AMRF2 northern elevation as approved  
Source: Architectus (2023)



**Figure 3 AMRF2 central courtyard as approved**

Source: Architectus (2023)

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## 1.4 Background

The proposed development is located within the Aerotropolis, an area focused on attracting investment and driving economic opportunities to benefit both the Aerotropolis and the wider Western Parkland City. The AMRF will play a key role in supporting local manufacturers and fostering emerging industries of the future.

The NSW Government's funding commitment for AMRF2 includes completion of construction to align with the planned opening of the Western Sydney International (Nancy-Bird Walton) Airport and Sydney Metro's Aerotropolis Station, scheduled to commence operations in December 2026 and April 2027 respectively. The modification enables delivery of the first operational components of AMRF2 to align with these timeframes while allowing the remaining elements to proceed following finalisation of detailed design and precinct infrastructure.

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## 1.5 Authorship

This report has been prepared by Jasmine Bautista, Senior Planner and Piers Hemphill, Associate Planner of Architectus. Piers is a Registered Environmental Assessment Practitioner (REAP).

## 2 Strategic context

### 2.1 Key features of the site

The site is located within a property known as 215 Badgerys Creek Road, Bradfield within the Liverpool Council Local Government Area (LGA).

The site is located within the north-western corner of Bradfield City Centre and has an approximate area of 5,996m<sup>2</sup>. The site is within a land parcel formally described as Lot 3101 DP1282964 with a total area of 114 hectares, of which the AMRF2 site comprises 5996 m<sup>2</sup> (see **Figure 4** and **Figure 5**). The site is located within the Aerotropolis Core of the Western Sydney Aerotropolis.

The proposed site is adjacent to AMRF1 which opened on 5 March 2025, and features a unique urban pavilion with three connected buildings under one roof (an advanced manufacturing hall, office spaces, and areas for exhibitions, talks and events), a rooftop viewing platform and green roof, a large roof structure that generates solar energy and collects water for reuse, and uses low-carbon materials including timber and rammed earth.



**Figure 4 Aerial view of property**

AMRF2 site outlined in blue and Lot 3101 DP 1282964 outlined in red

Source: Nearmap with Architectus edits (2025)



**Figure 5 Aerial view of the site**

The site is outlined in blue

Source: Nearmap with Architectus edits (2025)

## 2.2 Assessment against relevant strategic context

The proposed modification remains consistent with the relevant strategic framework including any Government plans, policies and guidelines that apply to the site as detailed in SSD-58591961. The modification retains the approved advanced manufacturing land use and built form response while reducing excavation and car parking and maintaining high-quality landscaping. In doing so, it continues to support the delivery of Bradfield City Centre as a transit-oriented, jobs-rich innovation hub and does not materially alter the strategic planning outcomes previously endorsed.

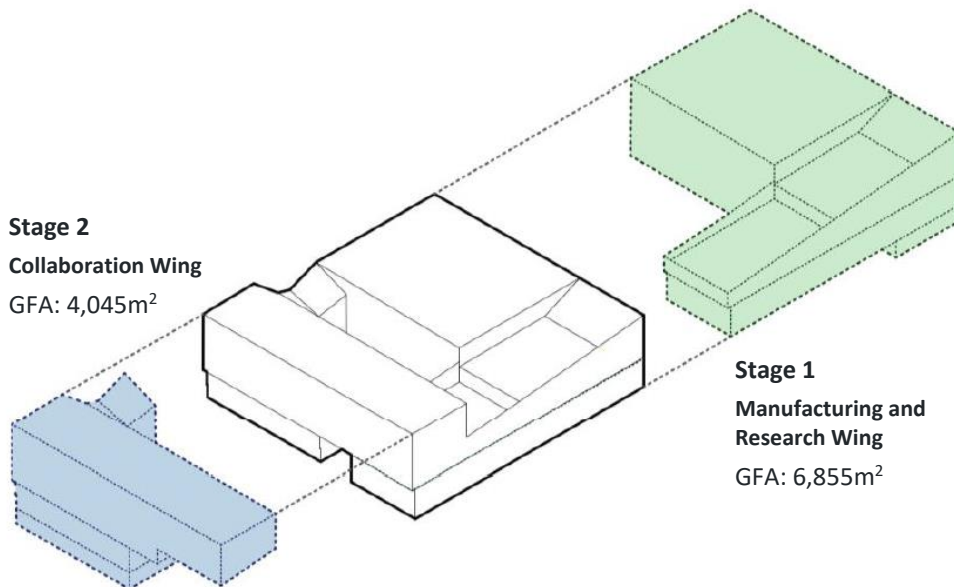
## 3 Description of the modifications

### 3.1 Overview of the proposed modification

The proposed modification seeks:

- Removal of Basement Level 2.
- Partial removal of Basement Level 1.
- Deletion of basement car parking and relocation of vehicle loading bay from the basement to the Ground Level accessed from Central Loop West.
- Insertion of additional tenancy space within an interstitial ceiling space on Level 3.
- Partial removal of Level 3.
- Internal reconfiguration including relocation of conference facilities from the Ground Level to upper levels, shifting of advanced manufacturing hall northward and reduction of tenancy space on Level 4.
- Minor building façade changes.
- Rationalisation of landscaping.
- Staged delivery of the development across two stages (refer **Figure 6** and **Table 2**).

The total building GFA has been marginally increased from 10,847m<sup>2</sup> as approved to 10,900m<sup>2</sup>.



**Figure 6 Proposed staging**  
 Source: Architectus (2025)

Table 2 Proposed staging

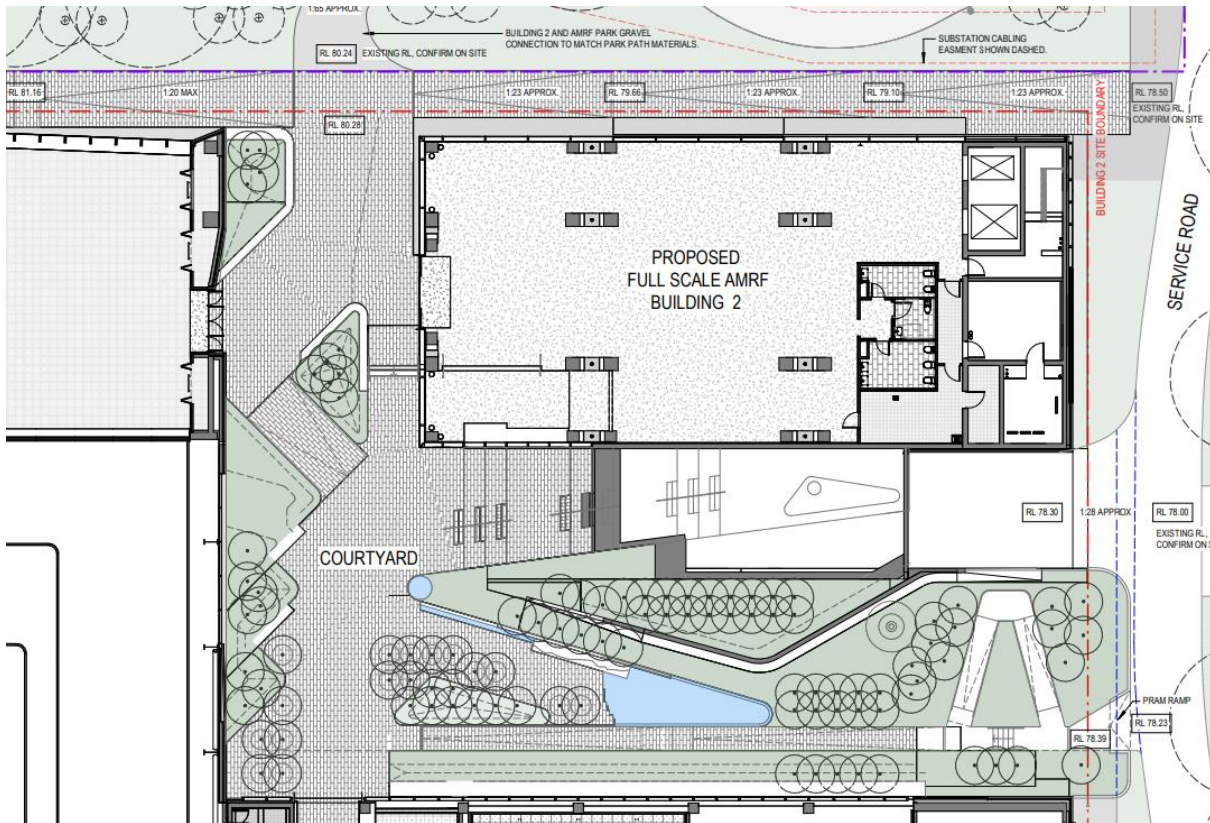
| Stage   | Description  |
|---|--|
| <b>Stage 1 – Construction of the Manufacturing and Research Wing with interim landscaping</b> | <ul style="list-style-type: none"> <li>• Construction of the Manufacturing and Research Wing.</li> <li>• Provision of interim end-of-trip facilities at Basement Level 1 of the Manufacturing and Research Wing.</li> <li>• Landscaping works including courtyard, interim landscaping over the Stage 2 building footprint and temporary café cart/kiosk in the northeast portion of the site.</li> <li>• Stage 1 anticipated to be operational in Q4 2027.</li> </ul>   |
| <b>Stage 2 – Construction of the Collaboration Wing and removal of interim landscaping</b>    | <ul style="list-style-type: none"> <li>• Removal of the interim end-of-trip facilities and reconfiguration of the internal layout at Basement Level 1 of the Manufacturing and Research Wing.</li> <li>• Removal of the interim landscaped courtyard and café to make way for the Collaboration Wing.</li> <li>• Construction of the Collaboration Wing and connection to the Manufacturing and Research Wing.</li> <li>• Alterations to landscaping.</li> <li>• Stage 2 operational date is not yet known.</li> </ul> |

Refer to the Amended Architectural Plans at **Appendix A** and the Architectural Design Report at **Appendix B** for full details of the proposed modification to built form.

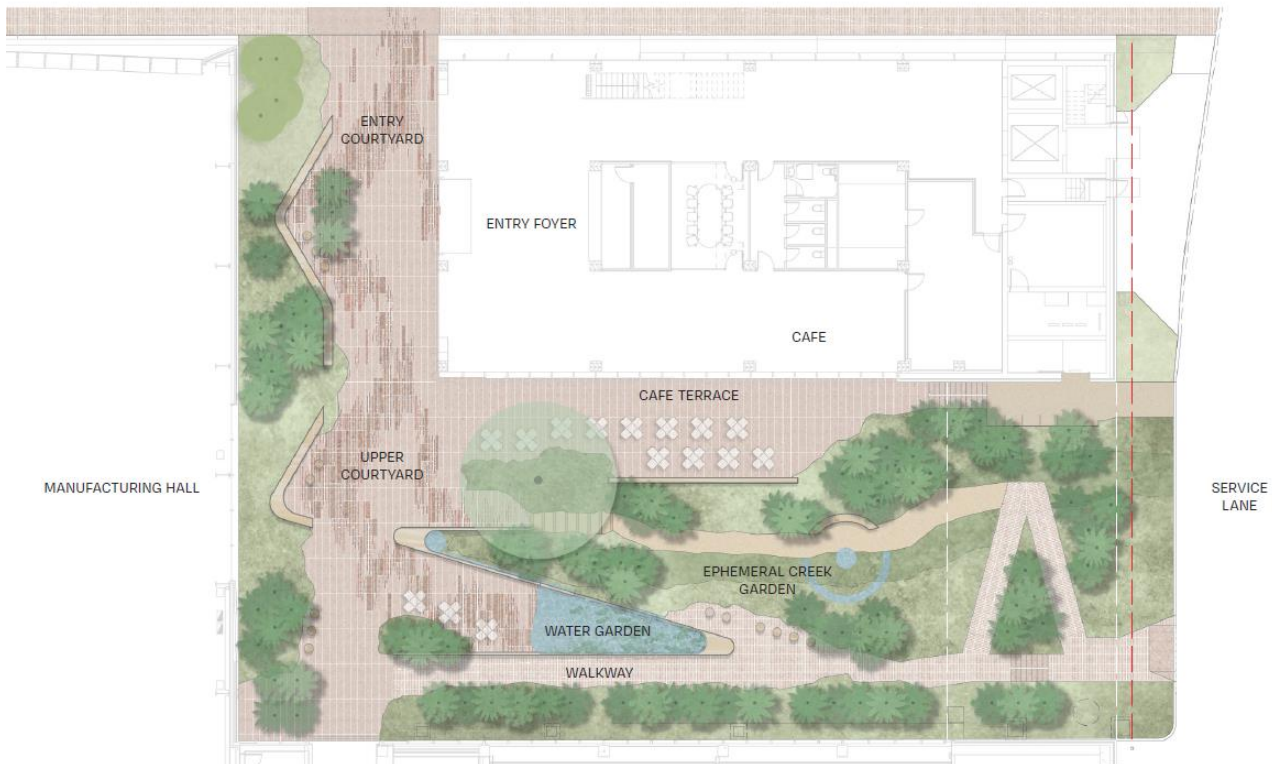
The ultimate (Stage 2) landscape outcome remains largely unchanged from the approved scheme but for the following amendments:

- Stepped terrace at eastern side of courtyard is no longer proposed and is replaced with expanded planting area.
- Conversion of seated terrace into café terrace to provide more formal seating and a stronger physical connection with the foyer space to its north.
- Rationalisation of entry courtyard with larger and contiguous planting area reflecting the removal of a door to the former Conference Hall space.
- Reconfiguration of levels reflective of change to the basement design beneath.

A side-by-side comparison of the two schemes is provided in **Figure 7** and **Figure 8** below.



**Figure 7 AMRF2 courtyard design as approved**  
 Source: Tyrrell Studio (2024)



**Figure 8 AMRF2 courtyard design as proposed (Stage 2)**  
 Source: Tyrrell Studio (2025)

The interim (Stage 1) landscape arrangement provides an appropriate and valuable temporary use of the future Collaboration Wing footprint prior to its construction. The space is proposed to function as a grassland garden with rows of ‘nursery’ trees planted in large tubs set into the ground, enabling them to mature in place and be relocated once Stage 2 commences (see **Figure 9**).

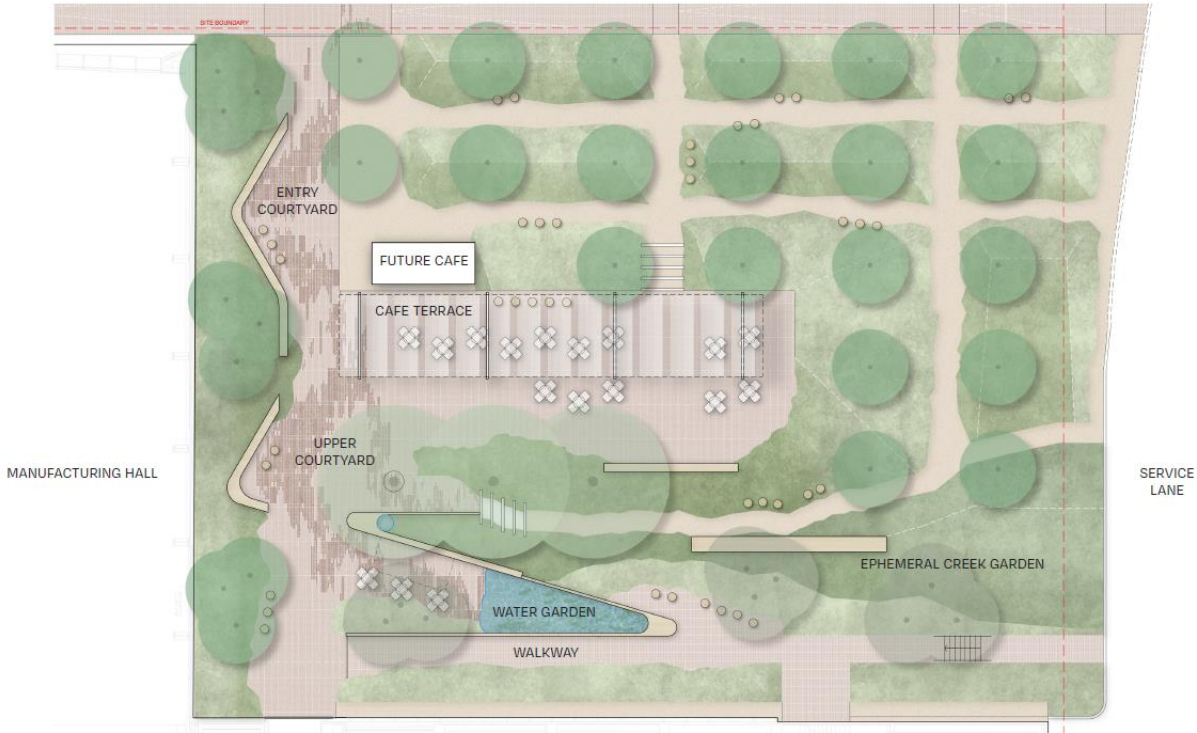


Figure 9 AMRF2 landscape design as proposed (Stage 1)  
 Source: Tyrrell Studio (2025)

A Landscape Report and amended Landscape Plans prepared by Tyrrell Studio are provided at **Appendix C** and **Appendix D**.

### 3.2 Proposed amendments to the conditions

This section outlines the proposed modification to the description of the approved development and conditions of consent included in SSD-58591961. The proposed modifications are listed in **Table 3** below. Proposed modifications to these considerations are shown with Bold Italic for inserted text and Strikethrough for deleted text.

**Table 3 Proposed amendments to conditions of consent**

| Condition of consent  |
|---|
| <p>Definitions:</p> <p>Development - The development described in Schedule 1, the EIS, Submissions Report and Additional Information, including the works and activities comprising construction, fit-out and operation of a five-story advanced manufacturing research facility, including café, parking and landscaping, as modified by <b>the Section 4.55(1A) Modification Report and</b> the conditions of this consent.</p>   |
| <p>A2. The development may only be carried out:</p> <ul style="list-style-type: none"> <li>(a) in compliance with the conditions of this consent;</li> <li>(b) in accordance with all written directions of the Planning Secretary;</li> <li>(c) in accordance with the EIS, Submissions Report and Additional Information;</li> <li>(d) in accordance with the Development Layout in Appendix 1; <del>and</del></li> <li>(e) in accordance with the management and mitigation measures in Appendix 2-; <b>and</b></li> <li><b>(f) in accordance with the Section 4.55 Modification Report including appendices.</b></li> </ul> |
| <p><b>A25</b> The Applicant must pay a levy under section 7.12 of the EP&amp;A Act of <del>\$9,547,198.48</del> <b>[\$to be confirmed] at Stage 1 and [\$to be confirmed] at Stage 2</b>, being 4.6% of the cost of carrying out the Development <b>of each Stage</b> as determined in accordance with section 208 of the EP&amp;A Regulation, subject to conditions A26 and A27.</p>   |
| <p>A26. The levy of <del>\$9,547,198.48</del> <b>[\$to be confirmed] at Stage 1 and [\$to be confirmed] at Stage 2</b> must be adjusted at the time of payment by multiplying it by the following:</p> <p><i>[remainder of condition to remain unchanged]</i></p>   |

A27. After construction of **each Stage** of the Development has been completed, and before the occupation or use of any part of a building **of each Stage** authorised by this consent commences, the Applicant must submit a statement prepared by a quantity surveyor or chartered professional accountant of the actual cost of carrying out the Development that includes or excludes the same costs that are to be included or excluded, as the case may require, in determining the estimated cost in accordance with section 208 of the EP&A Regulation. If 4.6 % of the actual cost of carrying out the Development is greater than the amount of ~~9,547,198.48~~ **\$(to be confirmed) for Stage 1 and \$(to be confirmed) for Stage 2**, as adjusted in accordance with condition A26, 4.6% of the difference between the two amounts must also be paid to the Council (additional levy).

A28. The Applicant must ensure the levy, as determined in accordance with conditions A25 and A26, and any additional levy payable under condition A27, is paid to the Council before the commencement of the occupation or use of ~~the whole or any part of any building~~ **each Stage** authorised by this consent.

A29. A special infrastructure contribution must be made in accordance with the Environmental Planning and Assessment (Special Infrastructure Contribution – Western Sydney Aerotropolis) Determination 2022 (as in force when this development consent takes effect).

A person may not apply for a Crown Certificate (as the case may require, having regard to the Determination) in relation to **the relevant stage of** the development unless the person provides, with the application, written evidence from the Department of Planning, Housing and Infrastructure that the special infrastructure contribution for the development (or that part of the development for which the certificate is sought) has been made or that arrangements are in force with respect to the making of the contribution.

B10. Prior to the commencement of operation, the Applicant must install the stormwater management system as described in the ~~Submissions Report~~ **Section 4.55(1A) Modification Report** and ensure the system is operational.

B33. All signage and fencing must be erected in accordance with the development plans included in the Submissions Report and Additional Information **except where modified in the development plans included in the Section 4.55 Modification Report**.

B39. The quantities of dangerous goods stored and handled at the site must be **in accordance with the Dangerous Goods Assessment prepared by Umech, dated 21 November 2025** below the placard quantities listed in Work Health and Safety Regulation 2017, Schedule 11, at all times with the exception of those listed in Table 3.

*Table 3 Dangerous Goods Maximum Storage Quantities Above Placard*

| <b>Glass</b> | <b>Description</b>             | <b>Maximum Quantity (kg or L)</b> |
|--------------|--------------------------------|-----------------------------------|
| 2.2          | Non-flammable, non-toxic gases | 300*                              |
| 3            | Flammable liquids              | 300                               |
| 6.1          | Toxic substances               | 300                               |
| 8            | Corrosive substances           | 300                               |
| 9            | Miscellaneous substances       | 300                               |

*Note: \* means 'Based on storage of up to 6 x G size cylinders each with 50 L water capacity'*

Appendix 2:

TTA5: Car Parking: A minimum 18 car parking spaces will be provided on site to service the neighbouring AMRF Building 1. **Prior to operation, a minimum of 50 car parking spaces will be provided for the exclusive use of AMRF1 (18 spaces) and AMRF2 (32 spaces) on a site within 250m walking distance within a safe and accessible path of travel.**

Appendix 2:

DG4: Dangerous Goods Handling: The proposal will be in accordance with the design, storage and practices contained in the ~~Dangerous Goods Compliance Report prepared by Riskcon, dated 24 July 2024~~ **Dangerous Goods Assessment prepared by Umech, dated 21 November 2025.**

Appendix 2:

ESD1: Green Star Rating: The proposal will implement the sustainability strategy outlined by ARUP in the Ecologically Sustainable Development (ESD) Report (November ~~2023~~**2025**) to target a 5-star Green Star rating.

## 4 Statutory context

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### 4.1 General

Section 4.55 of the EP&A Act contains the provisions that must be considered by a consent authority in determining an application to modify a Notice of Determination. In this regard, the relevant provision is section 4.55(1A) of the EP&A Act. This application is lodged under section 4.55(1A) as the amendments proposed are considered to be minor in nature and have only minimal environmental impact.

In addition to the EP&A Act, Sections 99 and 100 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) set out the manner in which an application to modify a consent must be made and the information that must be submitted with the application. The requirements under the EP&A Act and EP&A Regulation are addressed in the following subsections.

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### 4.2 Substantially the same development

Section 4.55(1A) of the EP&A Act provides that:

*A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—*

*(a) it is satisfied that the proposed modification is of minimal environmental impact, and*

*(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and*

*(c) it has notified the application in accordance with—*

*(i) the regulations, if the regulations so require, or*

*(ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*

*(d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.*

For the consent authority to approve a 4.55(1A) modification, it must be satisfied that the modification will be 'substantially the same development' and the modification will have 'minimal environmental impacts'.

In this case the proposed modification clearly satisfies these tests because:

- the approved land use, overall purpose and building typology remain unchanged.
- the building footprint remains unchanged with a minor change to the roofline.
- the extent of basement excavation is reduced, with the removal of Basement Level 2 and partial removal of Basement Level 1.
- car parking provision is reduced from 100 to 50 spaces in a highly accessible, Metro-served location, consistent with the applicable DCP parking framework.
- overshadowing and visual impacts are equal to or improved compared to the approved scheme, as demonstrated in the updated architectural and technical documentation.
- there are no new or altered off-site amenity, traffic, noise or environmental impacts identified in the updated specialist reports.

It is therefore concluded, based on the above assessment and the accompanying technical reports, that the proposed development as modified remains substantially the same as the development originally approved and would result in only minimal environmental impacts, consistent with Section 4.55(1A) of the EP&A Act.

## 5 Assessment of impacts

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### 5.1 Section 4.15 (1)(a) Matters for Consideration – General

There are no substantive provisions under the applicable planning framework or proposed instrument that relate to the proposed modification. Refer to **Section 5.2** below which provides a consideration of the likely impacts.

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### 5.2 Section 4.15 (1)(b) The Likely Impacts

#### Building Design

The building envelope of the full scheme (Stage 2) as modified presents almost the same as the approved development, with a part deletion of Level 4 and a minor change to the roofline. The visual impacts of the full scheme remain consistent with the approved design and fits well within the future character of the site.

Shadow impacts have been reduced as compared to the approved design as demonstrated by the shadow diagrams in **Appendix A**.

The interim (Stage 1) built form is reduced in bulk and scale, while remaining consistent with the robust civic character of the precinct and set within a high-quality landscaped setting. The presentation of Stage 1 to AMRF Park is softened by an increased setback, temporarily landscaped with rows of trees as described below.

Public access to AMRF2 will be provided via a temporary 'front door' on the northern elevation facing the courtyard, until the formal lobby is delivered as part of Stage 2.

A BCA Design Compliance Report prepared by MBC Group (**Appendix I**) has assessed the modified proposal as capable of compliance or adequate performance solution with relevant National Construction Code - Building Code of Australia standards in both Stage 1 and Stage 2.

#### Landscaping

Landscaping is a defining element of the approved AMRF2 development, designed to complement and extend the emerging Aerotropolis green grid. The approved works include a 1,270m<sup>2</sup> publicly accessible central courtyard featuring seating and breakout areas set within lush planting and water features that create a comfortable microclimate. In addition, an 850m<sup>2</sup> bio-solar roof will incorporate photovoltaic cells within a native grass meadow, further enhancing the site's ecological and environmental performance.

The ultimate (Stage 2) landscape outcome remains largely unchanged from the approved scheme but for minor design rationalisation as described in **Section 3.1**.

The Stage 1 interim landscaping will create a soft landscaped setting with substantial canopy cover, extending AMRF Park and offering a pleasant space for meeting and relaxation. The tree canopies will help reduce local temperatures through shading and evapotranspiration, creating a comfortable microclimate and helping to mitigate urban heat island effects.

A seating area with a shade structure will be provided in the centre of the space collocated with a temporary coffee cart/kiosk to operate until the on-site café is delivered in Stage 2.

A summary of key landscape statistics is provided in **Table 4** below.

Table 4 Landscaping statistics

| Item           | Approved                    | Proposed (Stage 1)          | Proposed (Stage 2)          |
|----------------|-----------------------------|-----------------------------|-----------------------------|
| Site area      | 5,996m <sup>2</sup>         | 5,996m <sup>2</sup>         | 5,996m <sup>2</sup>         |
| Canopy cover   | 270m <sup>2</sup> (4.5%)    | 694m <sup>2</sup> (11.6%)   | 399m <sup>2</sup> (6.7%)    |
| Deep soil      | 643m <sup>2</sup> (10.7%)   | 1,389m <sup>2</sup> (23.2%) | 697m <sup>2</sup> (11.6%)   |
| Permeable area | 1,100m <sup>2</sup> (10.7%) | 2,016m <sup>2</sup> (33.6%) | 1,423m <sup>2</sup> (23.7%) |

As demonstrated above, the proposed modification provides an improved canopy cover, deep soil and permeable area outcome compared to the approved scheme.

## Stormwater Management

An amended Integrated Water Management Plan has been prepared by Arup (**Appendix J**) to reflect the proposed modification to AMRF2. The key updates are summarised below.

A concept-level stormwater drainage design has been prepared for the interim Stage 1 works, with final design to be completed by the D&C contractor. The key drainage elements include:

- A permanent trunk drain along the southern edge of the internal courtyard, connecting to the precinct network in the East Laneway.
- Linear surface drainage, including a permanent drain in the north-west courtyard that will operate under higher flows during Stage 1 and may require resizing.
- Interim linear drainage within the temporary mounded landscape area to intercept run-off before it leaves the site, connecting to a 375 mm pipe stub in the East Laneway.
- Landscape subsoil drainage (as required).
- A rainwater tank in the courtyard.
- Subsoil drainage beneath both permanent and temporary pavements.

Stage 2 drainage works will complete the courtyard drainage system with additional linear drains for new landscape areas, incorporate a passive irrigation system beneath the link bridge, and adjust drainage pit lids to suit final surface levels.

The proposed construction stages will impact the expected water balance due to the changes to the building fixture layouts and reduced building area and subsequent population and mechanical demands in the interim period. The hydraulic and mechanical contractors shall allow to provide an updated water balance based on the final Stage 1 construction design with provision for the additional Stage 2 demands.

## Traffic and Transport

### Construction impacts

The proposed deletion of the lower basement and the staging of the development will reduce the daily volume and overall impacts of construction traffic.

As the timing of Stage 2 construction is not yet known, the cumulative impacts of Stage 2 in combination with other concurrent construction activities cannot be reliably assessed at this time. Notwithstanding this, the scale of Stage 2 works, in the context of the broader transformation of Bradfield and the Aerotropolis, is incidental and can be appropriately managed.

The contractor for Stage 2 will be responsible for managing and mitigating any potential impacts on the operations of AMRF2 Stage 1 during Stage 2 construction.

The conclusions and conditions of consent established under the original SSDA assessment and approval remain current.

Operational traffic and access

Site access will be modified as follows:

- Main vehicle movements to travel further up East Laneway into the existing at-grade car park.
- Main pedestrian entry relocated to northern elevation of south wing during Stage 1.
- End-of-trip facilities relocated to the western side of Basement 1 and cycling entry point via the northern entry of the Manufacturing and Research Wing (both stages).
- Loading dock relocated from the basement to the southern end of the Ground Level with access from Central Loop West (both stages). This loading dock is serviced by an internal turntable and will provide for deliveries and waste collection.

A Traffic Impact Assessment (TIA) has been prepared by PTC in support of this modification application and is provided at **Appendix E**. It has assessed the modified site access arrangements and concludes that the arrangements are safe and efficient through both stages of the development.

Relocating the loading dock to the western side of the building provides improved servicing for the manufacturing space. A turntable within the dock will enable vehicles up to Medium Rigid classification to enter and exit in a forward direction, with a management system in place to schedule arrivals and prevent queuing on Central Loop Road.

Occasional larger vehicles will be required to reverse into the loading dock similar to the current approved arrangements.

The modification removes vehicle movements from Service Lane which is a shared zone.

The TIA contains swept path diagrams demonstrating vehicle movements comply with all relevant standards.

Car parking

The approved AMRF2 includes a 100-space basement carpark to be utilised by both AMRF1 and AMRF2.

AMRF1 was approved with a requirement to provide car parking spaces on land east of the site. Condition B4 of the AMRF1 approval requires the preparation of an Operational Traffic Management Plan which must include a car parking strategy to detail the number and location of car parking spaces to be provided prior to and following the opening of the Sydney Metro Project.

The AMRF1 Operational Traffic Management Plan, prepared by Stantec (31 July 2024) and endorsed by DPHI, proposed the delivery of 50 parking spaces, 18 permanent and 32 temporary until the Western Sydney Airport Metro is operational in an arrangement as shown in **Figure 10**. These 50 spaces are inclusive of two accessible spaces and two electric vehicle charging spaces.



**Figure 10 AMRF1 approved car parking layout**

Source: Stantec (2024)

This car park is currently operating with a reduced capacity of 44 parking spaces to accommodate construction vehicle movements entering from the north and swinging internally as shown in **Figure 11**. Once the local road network is completed, construction vehicle movements will be redirected and the six additional spaces will be instated in accordance with the approved layout as shown in **Figure 10**.



**Figure 11** Aerial view of the site

The site is outlined in blue

Source: Nearmap with Architectus edits (2025)

AMRF2 was approved with 100 basement parking spaces inclusive of 18 spaces for use by AMRF1 to allow the adjacent at-grade car park to be decommissioned.

It is now proposed to reduce the parking provision for AMRF2 from 82 spaces (plus 18 for AMRF1) to 32 spaces (plus 18 for AMRF1) with the at-grade car park to be retained indefinitely.

AMRF2 will not be operational until after Sydney Metro's Aerotropolis Station has commenced operations in April 2027. Accordingly, the provision of temporary spaces will no longer be required for use by AMRF1.

The TIA prepared by PTC (**Appendix E**) has assessed the anticipated parking demand for AMRF2 Stage 1 and Stage 2 as summarised below.

Being located within 800m walking distance of the Aerotropolis Metro Station, the *Western Sydney Aerotropolis Development Control Plan – Phase 2* (the DCP) sets maximum parking rates but no minimum parking rates for the site. Accordingly, the only parking required to be provided is the 18 spaces to service AMRF1 imposed under the current SSD-25452459 consent, which is satisfied by this proposal.

To reduce parking demand and encourage active transport utilisation, the modification proposes to reduce the quantity of parking spaces to a total of 50 spaces.

All 50 parking spaces will be available from day one of operation of Stage 1. Once Stage 2 is developed, Bradfield City Centre will have matured, and it is anticipated that a greater mode share of active transport options will have been adopted. The project's Green Travel Plan (GTP) is required to be routinely updated to reflect the increasing public and active transport of the precinct as it develops.

### Bicycle parking

The approved AMRF2 includes 70 bicycle parking spaces including nine electric charging spaces. End-of-trip facilities are also included to provide adequate lockers, showers and change cubicles. At full completion (Stage 2), the development as modified will remain consistent with the full 70 bicycle parking spaces including nine electric charging spaces and will provide 64 lockers (four accessible) and seven showers (three male, three female and one accessible) in full compliance with the DCP.

During the operation of Stage 1, a total 25 bicycle parking spaces including five electric charging spaces will be provided in addition to 29 lockers (one accessible) and seven showers (three male, three female and one accessible).

## Hazardous Materials

A Dangerous Goods Report prepared by Umech (**Appendix K**) has assessed the storage and handling of the modified proposal across the two proposed operational stages. The key findings are summarised below.

The majority of dangerous goods usage occurs in the cleanrooms and the advanced manufacturing hall within Stage 1. Associated dangerous goods storage areas are located on the ground floor with direct access off East Laneway. The hazardous waste store is located on the ground floor adjacent to the loading dock accessed via Central Loop West. An acid waste neutralisation plant and diesel store are proposed within the basement.

The AMRF2 facility will be classified as a Manifest Quantity Workplace based on the quantity and classification of chemicals on site.

Any areas where Class 2.1 Flammable Gases or Class 3 flammable liquids are stored or reticulated will be subject to a hazardous area assessment as per AS 60079.10.1 Classification of Areas – Explosive Gas Atmospheres. This includes the flammable liquids store in the main chemical store and the main gas store.

In areas that are classified as hazardous according to AS 60079.10.1, all electrical equipment will comply with AS/NZS 60079.14.

The development continues to sit below any relevant threshold defined in the Hazardous and Offensive Development Application Guideline “Applying SEPP 33” published by the (then) NSW Department of Planning and Environment. Therefore, the development as modified is not considered potentially hazardous and will not require a Preliminary Hazard Analysis report.

Condition B39 of the approval which relates to the quantities of dangerous goods stored and handled at the site requires updating as proposed in **Section 3.2** of this report.

Condition B40 of the approval which relates to the storage and handling of dangerous goods remains current.

## Ecologically Sustainable Development

An updated Ecologically Sustainable Development (ESD) report has been prepared by Arup (**Appendix L**) to reflect the proposed modification to AMRF2. The key findings are summarised below.

AMRF2 will continue to be registered with a minimum 5-Star target. The ESD report provides a clear framework on how to satisfy these requirements, and which best practice sustainable building principles can be applied to the detailed design, construction and ongoing operations of the development.

Verification of the strategy via Green Star rating will be obtained for the interim state at Stage 1 completion, and separately for a future end state after Stage 2 completion, rather than be deferred by the staged approach.

Mitigation Measure ESD1 within Appendix B of the conditions of consent should be modified to reference the updated ESD report.

A Net Zero Statement (**Appendix M**) and NABERS letter (**Appendix N**) prepared by Arup accompany this modification application and confirm that the modified proposal continues to comply with relevant statutory requirements and adopted sustainability targets.

## Other

Several technical reports have been updated to reflect the proposed modification to AMRF2 including the proposed staging as identified below.

An updated Waste Management Plan has been prepared by Arup (**Appendix J**) to reflect the proposed modification to AMRF2 including the proposed staging.

An updated Air Quality and Odour Impact Assessment has been prepared by Arup (**Appendix H**) to reflect the proposed modification to AMRF2. The key updates are summarised below.

An Environmental Noise Assessment has been undertaken by Resonate (**Appendix F**). The report concludes that sensitive receivers are not expected to be affected by the modified proposal as noise levels are predicted to be below the Project criteria as required by the NSW Environmental Protection Agency's (EPA) *Noise Policy for Industry 2017*. The noise management and mitigation measures previously outlined remain unchanged and are still applicable.

### 5.3 Section 4.15 (1)(c) Suitability of the Site

The proposed modification does not alter the building footprint and results in a reduction of the proposed depth of excavation. Accordingly, there are no additional impacts from site conditions including geotechnical, contamination, flood risk or groundwater.

As reflected by the existing approval, there are no known site conditions which would prevent the development including geotechnical conditions, contamination, flood risk or groundwater. Matters relevant to this modification have been addressed in this report.

### 5.4 Section 4.15 (1)(d) Submissions Made

Any submissions made on this the proposed modification application will be duly considered and addressed.

### 5.5 Section 4.15 (1)(e) The Public Interest

The proposed design revisions do not significantly alter the design or function of the approved development. Despite the proposed modifications, the development remains substantially the same as the building for which consent was originally granted under SSD-58591961.

Public interest outcomes are either maintained or improved as the modification:

- Reduces basement excavation and construction intensity, thereby lowering potential construction-related impacts.
- Reduces on-site car parking in a highly accessible, Metro-served location, reinforcing the mode-shift and sustainability objectives of the Western Sydney Aerotropolis planning framework.
- Maintains and, in some respects, enhances landscaping, canopy cover and permeable areas relative to the approved scheme.
- Enables staged delivery of key advanced manufacturing infrastructure to meet Government timing commitments for Bradfield City Centre.

On this basis, the proposal as modified remains in the public interest and continues to give effect to the NSW Government's vision for Bradfield City Centre as a hub for globally competitive advanced industries.

## 6 Project justification

The BDA has a key role in shaping Bradfield City Centre as the social, economic and environmental powerhouse of Australia. The BDA seeks to deliver new industries and jobs to improve the lives of people in Western Sydney and realise the once-in-a-generation opportunities of the new 24/7 Western Sydney International (Nancy-Bird Walton) Airport and the surrounding Western Sydney Aerotropolis precinct.

Critical to the realisation of this vision is a thriving advanced manufacturing ecosystem, anchored by the AMRF in Bradfield City Centre. The BDA is working with State and Commonwealth Government agencies and local councils to co-ordinate infrastructure, attract new investment and build the skills base needed for future industries. This work is guided by local and international best practice, research and close engagement with communities, partners, industry and advisory bodies. Bradfield City Centre will foster the innovation, industry and technology needed to drive the broader Aerotropolis and support long-term economic prosperity across the Western Parkland City.

AMRF2 will contribute to the creation of around 17,600 highly skilled jobs within the city centre and help deliver 200,000 jobs across the broader Western Parkland City. Progression of this project is essential to meeting Government commitments deliver AMRF2 in alignment with the opening of the Metro Station in early-mid 2027. The project is also central to realising the NSW Government's ambition for Bradfield City Centre as a hub for globally competitive advanced industries.

AMRF2 will strengthen the NSW manufacturing sector by building on established capabilities, introducing new technologies and processes, and supporting the growth of high-value jobs. The staged delivery approach will ensure AMRF1 continues to operate effectively while enabling timely delivery of AMRF 2 and fostering the clustering of advanced manufacturing activity within the precinct.

The proposal as modified demonstrates that the development remains suitably serviced by transport and utility infrastructure, with interim measures in place while the design and construction of permanent regional infrastructure is completed. The reduced basement excavation reduced car parking and enhanced landscaping outcomes support broader sustainability objectives for the Aerotropolis.

As the first buildings in the Bradfield City Centre, the AMRF hub sets an important benchmark for the design quality, sustainability and innovation. The proposed modification maintains these commitments while enabling the project to be delivered in a manner consistent with Government timeframes and strategic objectives for the precinct.