

Attachment A1

Heritage Impact Statement

YARRALUMLA BRICKWORKS

HERITAGE IMPACT STATEMENT

Block 1, 7 and 20, Section 102, Yarralumla ACT 2600

May 2022

Prepared for

DOMA

Prepared by

LOVELL CHEN



Quality Assurance Register

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Cover image: View from the Brickyards looking north to Hardy Patent Kiln I and the Hardy Patent Kiln II Chimney (Source: Lovell Chen, 2021)

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Previous research and reports	1
1.2	Statutory heritage controls	1
1.2.1	Heritage Act 2004 (ACT)	1
1.2.2	Planning and Development Act 2007 (ACT)	3
1.3	Documentation	3
2.0	DETAILS OF THE PLACE	3
2.1	Description of the place	3
2.2	Significance of the place	6
2.2.1	Summary of heritage significance	6
2.2.2	Hierarchy of significant buildings and elements	7
2.2.3	Plant and equipment	7
2.2.4	Archaeology and Artefact Management	8
2.2.5	Implications of significance	10
3.0	DETAILS OF THE PROPOSAL	11
3.1	Summary of the proposal	11
3.1.1	Conservation of heritage buildings	11
3.1.2	Site access and urban design	12
3.2	Reasons for the proposal	12
3.3	Practicability of alternatives	13
3.3.1	Conservation through adaptive re-use	13
3.3.2	Consideration of potential uses	13
3.3.3	Degree of change to fabric to accommodate proposed uses	13
4.0	DESIGN PRINCIPLES	14
4.1	Holistic planning	14
4.2	Sustainable adaptation	14
4.3	Spatial planning	14
4.4	Conservation	15
4.5	New built form	15
4.6	Landscape	15
4.7	Plant and equipment	15

4.8	Archaeology	15
5.0	ANALYSIS OF HERITAGE IMPACTS	16
5.1	Summary of Register Heritage Guidelines	16
5.2	Analysis of specific elements	16
5.3	Impact on archaeological features	30
6.0	SITE-WIDE ANALYSIS	30
6.1	Comment on site-wide approach	30
6.2	Summary of mitigation and minimisation measures	30
7.0	CONCLUSION	31
	ENDNOTES	32

1.0 INTRODUCTION

This report is a specialist study of potential and likely heritage impacts relating to the proposed reactivation of the Yarralumla Brickworks by DOMA. It describes the proposed development as understood at the time of writing (May 2022) and sets out undertakings made by DOMA to minimise and mitigate effects on heritage values.

This report is intended to inform the Environmental Impact Statement (EIS) prepared by Umwelt (March 2022) and updates the study 'Statement of Heritage Effects' (GML, 2017) to reflect the masterplan and design approach as currently proposed.

1.1 Previous research and reports

The precinct has been the subject of extensive research and analysis over a long period (since at least the mid-1980s). The documents produced variously provide extensive coverage of the history and development of the brickworks complex, and its cultural heritage values. As relevant, these sources have been referenced, and their content relied upon, in the preparation of this report.

Documents of particular relevance to this report include:

- Lovell Chen, Interpretation Strategy Yarralumla Brickworks Precinct, February 2022
- GML Heritage, Canberra Brickworks Precinct, Archaeological Excavation Report and Statement of Heritage Effects, December 2021 (draft)
- GML, Canberra Brickworks Precinct, Conservation Management Plan, September 2021
- ACT Geotechnical Engineers Pty Ltd, Canberra Brickworks Redevelopment, Geological Fossil Study, March 2021
- Navin Officer Heritage Consultants, Archaeological Assessment Canberra Brickworks and Environs, September 2016
- Navin Officer, Canberra Brickworks, Aboriginal Cultural Heritage Assessment, August 2014
- Geological Society of Australia (ACT Division), 'Site 28 – Yarralumla Brickpits', 2013
- Lovell Chen, Canberra Brickworks Conservation Management Plan, April 2010 (updated April 2016)
- Susan Conroy and Munns Sly Architects, Yarralumla Brickworks and Environs Planning Review, 2005
- Connell Wagner Pty Ltd, The Old Canberra Brickworks and Environs Development Control Plan, February 2001
- National Capital Development Commission, Canberra Brickworks, South Canberra, Policy Plan, October 1988
- Lester Firth Associates, Old Canberra Brickworks, Conservation Plan, June 1986

1.2 Statutory heritage controls

1.2.1 *Heritage Act 2004 (ACT)*

The *Heritage Act, 2004* (the Act) establishes a system for recognition, registration and conservation of places and objects of natural or cultural heritage significance, and Aboriginal places and objects in the

ACT. It establishes civil protection and offence provisions to prevent conduct that diminishes the heritage significance of a registered place or object (s 74), or damages an Aboriginal place or object (s 75), with exceptions for conduct that is in accordance with (among other things) a heritage guideline, an approved conservation management plan, development approval under the Planning and Development Act 2007 or approved statement of heritage effect (s 76).

Registered heritage places

The subject site includes two places that are inscribed in the ACT Heritage Register and are subject to controls under the Act: Yarralumla Brickworks (Block 1, Section 102) and the Yarralumla Brickworks Railway Remnants (Part Block 7, Section 102).

The Register Entry for the Brickworks describes the values of the place and identifies a schedule of buildings/structures on the site that are of 'exceptional significance' (Schedule 1) and a further schedule of buildings/structures that are of 'moderate significance' (Schedule 2). It also sets out 'Specific Requirements' (Heritage Guidelines under the current Act) that provide guidance on the management of heritage values in the context of future change. Archaeological investigations conducted by GML in 2021, informed by an Archaeological Assessment (Navin Officer, 2016) and Archaeological Research Design (GML, 2020) provided further information on the archaeological significance of parts of these registered areas.

The 2014 Cultural Heritage Assessment (Stage 1), undertaken by Navin Officer identified no Aboriginal sites within the study area (a 47-hectare area including the brickworks precinct), and no areas of Aboriginal archaeological potential were identified during fieldwork.¹ As an outcome of the Cultural Heritage Assessment, no statutory implications regarding cultural heritage apply to the study area. The Cultural Heritage Assessment was approved by the ACT Heritage Council on 11 September 2014.²

Approved conservation management plan

In August 2021, a Conservation Management Plan (CMP) for the Yarralumla Brickworks (including the Railway Remnants) was approved by the ACT Heritage Council under section 61K of the *Heritage Act 2004* (GML Heritage, August 2021). The CMP also establishes a hierarchy of significant elements, which are termed core, supporting and incidental. The CMP anticipates a level of change, adaptation and demolition in the sustainable redevelopment of the brickworks site. The CMP contains an 'Inventory of Individual Historic Elements', which describes the significance of buildings or structures and sets out applicable conservation policy and adaptation guidelines.

Statement of Heritage Effects

Under the *Heritage Act 2004* s 61G 'a person or entity proposing to undertake an activity that is likely to diminish the heritage significance of a place can apply to the ACT Heritage Council for approval of a Statement of Heritage Effects (SHE). Under s 61H, the Council must approve the SHE if (in summary):

- the proposal is justifiable
- there are no reasonably practicable alternative ways to carry out the proposal, and
- the applicant has identified reasonable steps it will take to reduce the risk of diminishing the heritage significance of the heritage site.

A SHE will be lodged for approval by the ACT Heritage Council prior to submission of detailed development applications.

1.2.2 *Planning and Development Act 2007 (ACT)*

The Planning and Development Act (s 148-149) and regulations (r 26) establishes the ACT Heritage Council as a referral authority for development applications. Under the *Heritage Act 2004* s 61, the Council's advice:

- **Must include** an outline of the effect of the development on the heritage significance of the place and advice about ways of avoiding/minimising the impact of the development
- **May set out conditions**, including conditions relating to reasonable steps to minimise the extent of harm, conservation requirements under applicable heritage guidelines, or a requirement to comply with an approved conservation management plan.

It is understood that future development applications relating to Yarralumla Brickworks will be referred to the ACT Heritage Council for advice.

1.3 Documentation

This report has relied on the following documentation:

- Architectural drawings (Draft), prepared by SJB Architects, current at April 2022
- Landscape Master Plan (Draft), prepared by McGregor Coxall, 'Schematic design', dated 5 November 2021 (F46 to the EIS)
- Civil drawings, prepared by Sellick Consultants, titled 'Concept EDP – Gazetted Road Plan', dated 30 April 2020 (F09 to the EIS) and 'Draft EDP – Fill Plan', dated 16 December 2019, 27-00-H
- ACT Geotechnical Engineers, Geological Fossil Study, dated 5 March 2021, (F48 to the EIS)

2.0 DETAILS OF THE PLACE

The former Brickworks is a site of significance to Canberra and the Australian Capital Territory (ACT). It is a place that is intimately associated with the origins and evolution of the national capital. The site includes physical evidence of historical brick-making processes, including a quarry pit; brick kilns of various type and age; the remnants of a railway; and several other archaeological remnants.

2.1 Description of the place

The site is the remains of the former Yarralumla Brickworks which operated (with a period of closure during World War I) from 1913 to 1976. The subject site is located to the south-west of the suburb of Yarralumla, 5km west of the Parliamentary Triangle. It is an approximately 16ha site comprising Blocks 1, 7 and 20 Section 102 (Figure 1). As noted, within the site are two heritage places: Yarralumla Brickworks (Block 1, Section 102) and the Yarralumla Brickworks Railway Remnants (Part Block 7, Section 102).

The registered area includes a complex of former brick manufacturing infrastructure arranged in a broadly orthogonal north-south arrangement, parallel to the remains of a quarry pit. The complex, referred to as the heritage core, comprises several types of kilns dating to different periods, accompanying fan houses, stacks and underground flues and a variety of ancillary buildings including a powerhouse, former offices and machine sheds. Some buildings retain fragmentary remains of industrial plant, and there are some moveable objects remaining on the site.

The Quarry is to the east of the heritage core. It comprises an excavated former 'pit' that retains a series of rocky outcrops, with higher ground to the north and east. The area is now vegetated with grasses and self-sown shrubs, with some trees (in particular, conifers and acacias) especially on areas of higher ground. Some remnant/self-sown native grasses and flowering plants have been identified on areas of higher ground. A remnant concrete and stone walkway constructed by AR Marr Pty Ltd after the closure of the quarry is located towards the east of the quarry pit.

To the southwest of the heritage core, the Brickworks Railway Remnants comprises the remains of earth embankments which served a short-lived but early railway to the site. These embankments are substantially overgrown with shrubs and trees.

Since 1976 the site has been largely (but not entirely) dis-used. A late-1970s proposal to adapt it as a tourist destination – initiated by A R Marr Pty Ltd – foundered by the early 1980s. Subsequent ideas for site-wide reactivation, typically proposed to be funded by residential development to the periphery, also failed to gain traction. Legacies of these aborted redevelopment initiatives include the removal of much of the original brick making plant and machinery, and the introduction of some new buildings.



Figure 1 Aerial photograph of the study area (solid red line) and environs: Block 1 is the registered extent of the Yarralumla Brickworks
Source: www.nearmap.com (base photograph)

2.2 Significance of the place

2.2.1 Summary of heritage significance

The Register Entries for the site include statements of significance, but do not include an assessment against criteria (see Appendix A). The CMP 2021 for the site accepts these statements but augments it with a heritage assessment, which draws on the register entries, the CMP 2010 and Archaeological Assessment 2016. In 2021, GML Heritage Pty Ltd (GML) undertook historical archaeological test excavations across several areas of archaeological potential, which provided further information about the site's archaeological features.

The following is a summary of the values expressed in the CMP 2021 heritage assessment, augmented with findings from the Archaeological Report 2021. Where the CMP or Excavation report goes beyond the Register Entry, this is indicated in italics.

Criterion A (Historic), Criterion B (Rarity), Criterion D (Representative))

The brickworks complex is important:

- As the first industrial manufacturing facility commissioned/constructed for the ACT
- As the source of bricks for early construction, including Provisional Parliament House, Kingston Powerhouse and Hotel Canberra
- As a site that is reflective of different phases in the construction of Canberra (1920s, and post-World War II), through the presence of six extant kilns and their subsurface flues
- For the relatively rare Staffordshire and Hardy patent kilns, with the Staffordshire Kiln (with its complex system of dampers and flues) the only known remaining Australian example of its type
- As a representative and unusual example of a large-scale, twentieth century urban brickworks, including buildings, structures, site layout and archaeological remnants
- For archaeological remains of the experimental plant which is linked to early construction of Canberra, allowing early brickmakers to experiment with the brick production process and kiln construction, and providing the means to manufacture the bricks for the construction of the Staffordshire Kiln and the Kingston Powerhouse. (*This was updated by GML following the Excavation Report 2021*)
- Geological significance as the type locality for the Yarralumla Formation, a major sedimentary sequence dating from the Silurian Period, 424-423 million years ago.¹ The rock units at the site provide the reference section for comparison of other outcrops within the Yarralumla Formation, and can be used for research and teaching.

The railway remnants are important:

- As evidence of the bulk transportation of bricks, particularly during the period of expansion from 1923 to 1927
- As a relatively rare remnant of Canberra's former rail network

¹ A type locality is the location of deposits that are considered to define the characteristics/qualities of a particular geological formation or period.

Research potential of archaeological remains (Criterion C)

- Potential of archaeological remains to yield information about the operations of the Brickworks, specifically the operation of the experimental kilns and the subsurface flue components
- Potential to yield information about the construction, nature and configuration of the railway (*noting that this is not indicated in the Register Entry; and that nil-low archaeological potential was identified following the GML Archaeological investigation 2021*)

Aesthetic importance of the Brickworks (Criterion E)

The Brickworks is important:

- As a distinctive industrial landscape, through the combination of robust and dramatic building forms, structures, larger elements of equipment, dominance of brick and corrugated iron and the visual qualities of the quarry (open space and exposed rock outcrops)
- For the low setting of the site within the landscape
- For the landmark quality of the 1953 brick stack

Association with the ACT community (Criterion G)

- The Brickworks holds strong associations with the local Yarralumla community
- Canberra Reds (brick type) are sought after as a building material (*indicated in the CMP, but not included in the Register Entry*)

It is noted that the CMP 2021 found that the brickwork production process and railway remnants did not meet the threshold for Criterion F as, while the kilns demonstrate technical processes, they do not display innovation or technical achievement. Similarly, the Excavation Report 2021 concluded that, although the experimental plant demonstrated that technical processes were being trialled, the archaeological resource of the area does not demonstrate a high degree of technical achievement.

2.2.2 Hierarchy of significant buildings and elements

The CMP establishes a three-tier hierarchy of significance for buildings, elements, areas and attributes at the site: core, supporting and incidental. This differs from the Register Entry, which lists the elements in two schedules of 'intrinsic features of the place', termed exceptional and moderate significance. In general, the CMP accepts the Register Entry, but goes beyond it to suggest that some elements that are not identified in the Register Entry are significant, or that conservation policies apply.

The Register Entry for the Railway Remnants recognises the intrinsic features of the place as 'remnants of the original earthen railway embankment, cutting and terraces'.

Both the CMP and the Register Entry specific requirements respond to this hierarchy of significance through differing adaptation guidance, which indicates a greater tolerance for change in elements of lesser significance.

2.2.3 Plant and equipment

The ACT Heritage Register entry for the Yarralumla Brickworks includes 'specific requirements' for Industrial Equipment, as follows:

- a. Major equipment and machinery associated with the historical industrial use of the place shall be retained and conserved in situ. Minor equipment should be retained and conserved but may be relocated to a new location within the site for interpretive purposes and/or its own protection.
- b. The Primary Crusher House (20), including the integral equipment and machinery, and the Elevator Conveyor (22) shall be conserved for their ability to demonstrate and interpret industrial processes and secondary aesthetic values.

Consistent with Policy 9 in the CMP, moveable relics on the site have been investigated and recorded through an Inventory of Moveable Relics (GML 2020, Appendix H to the Approved CMP). A formal assessment of significance or historic research (including into provenance, origin, manufacture date or purpose) was not undertaken as part of the Inventory, and there was no distinction made between 'major' and 'minor' equipment. However, preliminary recommendations on investigation, salvage, storage or re-use were made as part of the Inventory, and the Report recommended (in summary):

- research to establish provenance and function of items, and connection to history and significance of the Brickworks
- retention of fixed industrial equipment for re-use and/or interpretive purposes
- recording, conservation and salvage works prior to construction commencing

Items were included in the inventory if they were thought to have had 'an integral association with the industrial function of the Brickworks (ie Brickmaking)'.³

2.2.4 Archaeology and Artefact Management

The Yarralumla Brickworks Precinct has long been identified as a place of (non-Aboriginal) archaeological potential (see for instance Policy 15 of the Canberra Brickworks CMP by Lovell Chen, dated April 2010). The Archaeological Assessment prepared by Navin Officer in 2016 identified 12 areas of archaeological sensitivity and recommended that areas of moderate and high archaeological potential be subjected to an archaeological testing programme prior to any works or development in these areas (see Figure 2).

Archaeological investigations undertaken in 2021 were informed by an Archaeological Research Design, (GML, September 2020). The objective was to determine the nature and extent of archaeological deposits at the site and develop recommendations for management requirements for archaeological deposits. Based on a review of the Archaeological Assessment (2016) and an inspection of the site it was determined that eight of the 12 areas of archaeological sensitivity identified in the Archaeological Assessment should be subjected to further archaeological testing (BRW1, BRW2, BRW3, BRW7, BRW8, BRW10, BRW11 and BRW12). The outcomes of the investigations are summarised in the Canberra Brickworks Precinct, Draft Archaeological Excavation Report (GML, December 2021).

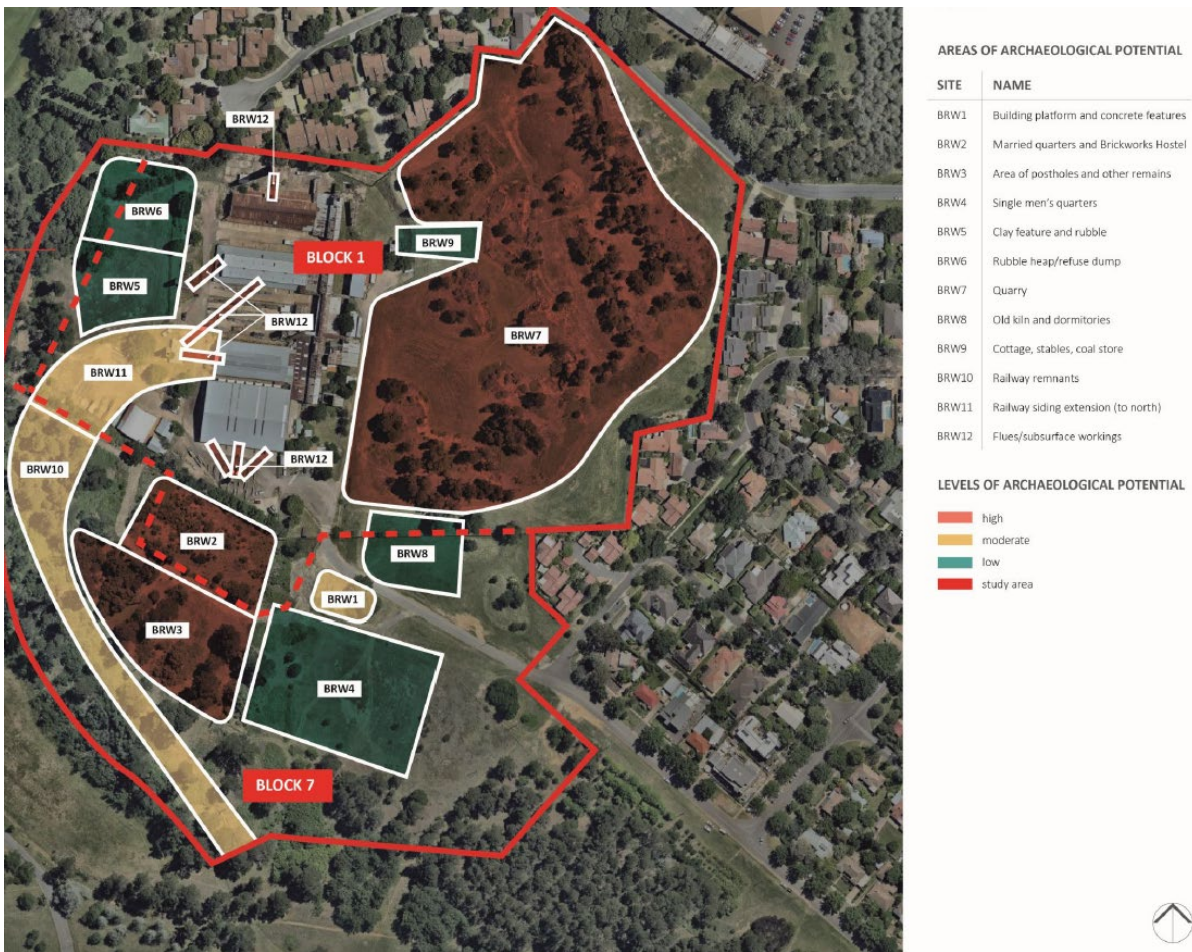


Figure 2 Areas of archaeological potential identified in 2016: BRW8, BRW10 and BRW 12 were assessed as significant following investigations carried out in 2021
 Source: Navin Officer, Archaeological Assessment, September 2016

The Statement of Significance from the Archaeological Excavation Report states that:

The Canberra Brickworks Precinct is significant as the first industrial manufacturing facility commissioned for and constructed in the ACT, developed specifically to facilitate the construction of the new capital city. On the surface, the Precinct is an unusually complete example of a complex demonstrating aspects of the operation of a twentieth century large scale urban brickworks. It has a diverse range of heritage values, such as the role it has played in the course of the ACT's history, its aesthetic qualities, and the connection it holds with both the local Yarralumla community and the wider Canberra population. These values are manifested in the intact industrial landscape and the key role it played in the course of the ACT's history.

The archaeological remnants identified in this investigation are only partially reflective of these values. The site has undergone several distinct phases of operation, the later ones often obscuring the earlier activities. However, where archaeological remains that demonstrate the early and complex nature of the site are present, these have the ability to contribute to understanding both of the site and brick making processes more widely.

The Precinct underwent several distinct phases of operations, each reflective of the broader political contexts that have determined the fluctuation of construction in the capital city...

It assesses each of the phases, and provides the following summary of significant archaeological remains:

- The archaeological remains of the experimental plant (BRW8) have been assessed as meeting criteria a), b), c), and d). They are highly significant.
- The archaeological remains of the railway remnants (BRW10) have been assessed as meeting criteria a) and b). They are moderately significant.
- The subsurface flues (BRW12) have been assessed as meeting criteria a), b), c), d), e), and f). They are highly significant.

Following the GML investigations, the predicted archaeological potential of sites was updated, as summarised in the following table:

Table 1 Summary of updated archaeological potential (GML 2021)⁴

Area	2016 Assessment (Navin Officer)	2021 Update (GML)
BRW1 Building platform and concrete features	Moderate	Nil
BRW2 Married Quarters and Brick Hostel	High	Moderate
BRW3 Area of postholes and other remains	High	Low
BRW 4 Single men's quarters BRW 5 Clay feature and rubble BRW 6 Rubble heap/refuse dump	Low	Not investigated
BRW7 Quarry	High	High
BRW8 Old kiln and dormitories	Low	High
BRW9 Cottage, stables, coal store	Low	Not investigated
BRW 10 Railway remnants	Moderate	Low
BRW 11 Railway siding extension	Moderate	Nil
BRW 12 Flues and subsurface workings	High	High

2.2.5 Implications of significance

The register entry expresses the following overall objective for conservation of the site:

The identified heritage values and intrinsic features of the place shall be conserved whilst allowing for the integrated and sympathetic redevelopment of the place as a single entity, consistent with contemporary practices for the adaptive reuse of industrial and commercial heritage places. In conserving and developing the place, its significant historical use as an industrial site for the production of bricks and clay products shall continue to be evident and accessible to the public.

In endorsing the CMP, the ACT Heritage Council has indicated that the *Heritage Act 2004* would 'require the conservation and responsible management of all significant features of the place, as set out in Section 5 of the CMP.'⁵ Consequently, a key ambition of this project has been to stabilise, conserve and retain all significant buildings, repurposing where possible with a viable and sustainable new use.

It is recognised that in accordance with the Burra Charter, conservation means all the processes of looking after a place so as to retain its cultural significance:

Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these. Conservation may also include retention of the contribution that related places and related objects make to the cultural significance of a place.

Given the complexity of the site, it is to be expected that a spectrum of approaches will be used. The selection of the approach will be calibrated to the degree and nature of significance, and be balanced across the site and within key buildings. The framework to achieve this balance is established by the approved CMP, in particular Appendix A, which provides specific guidance on the adaptation and conservation of significant elements. The CMP 2021 also emphasises the need to conserve the heritage significance of the site as a whole. This has been approached through a coordinated approach to development, guided by design principles that respond to the CMP and Register Entry.

3.0 DETAILS OF THE PROPOSAL

3.1 Summary of the proposal

The proposed redevelopment would include a mix of re-purposed heritage buildings and spaces (the 'Heritage Core'), with a maximum of 380 residential dwellings, and recreational parkland in the former Quarry. The intent of the proposal is to reactivate the Brickworks complex with a mix of residential, commercial, retail and food and beverage facilities. A health and wellness centre is proposed, incorporating the Staffordshire kiln and two of the three downdraft kilns. The Hardy Patent Kilns and process buildings will be repurposed for a mix of commercial, retail and hospitality uses.

3.1.1 Conservation of heritage buildings

The primary strategy for conservation of heritage buildings is through a mix of in-situ retention and adaptive re-use.

With the objective of managing the site holistically, the proposal includes:

- *Adaptive reuse:* Buildings to be adapted to new uses include the powerhouse and office, downdraft kilns, Staffordshire Kiln, Hardy Patent kilns (I and II) machine bays (I, II and III), Staffordshire Kiln fan house and the workshop and White Pan Room (Large Crusher House II);

- *New works to support adaptive reuse:* Limited new built form is proposed to support the re-use of retained buildings. Interventions include elevated ‘walkways’ to provide access to the upper levels of the major kiln structures; and additions to the kiln structures, to facilitate repurposing.
- *Conservation works:* Stabilisation and retention of original fabric during adaptation, and of buildings/elements as ‘features’ within the landscape, including crusher houses and brick stacks; and
- *Landscaping:* The introduction of a landscaping treatment across the site to assist with ‘softening’ the industrial environment and providing an appropriate level of amenity and sustainability.

Given the varying condition, intactness and levels of significance of the extant elements a building-specific approach will be adopted for the conservation works. Over-arching objectives are for the retention of original fabric, plant/infrastructure and the powerful forms of the primary built elements comprising kilns, stacks and process buildings/machine bays.

3.1.2 *Site access and urban design*

The principal vehicular point of arrival to the brickworks will be ‘Quarry Drive’, a new roadway at the south of the site. Quarry Drive leads to a roadway extending east-west across the south of the heritage core. At the west end of this roadway is a parking structure, located opposite a linear north-south spine to the west of the kilns.

New accessible open spaces will include the brickyards (the open area to the north of the Staffordshire kiln and south of Hardy Patent kiln no. 1) and the quarry park, with access through the site via a linear open space between the kilns and fan houses (sometimes referred to as the ‘village green’).

The area between the two Hardy-patent kilns (sometimes referred to as Brickyard 2) will be a controlled access – accessible only by the people attending associated restaurants and offices. The pool area to the north of the heritage core (north of Hardy Patent kiln no. 2) will not be publicly accessible.

A landscape and urban design masterplan has been prepared for the brickworks precinct by McGregor Coxall. The design approach seeks to respond to the landscape setting of the site, maintain the strong definition of the heritage core and celebrate the existing materiality of the site, while creating new, sustainable and comfortable places for recreation. As conceived a ‘key design principle for [the] public domain is to celebrate the site’s industrial past and improve access and legibility to its history’.² Interpretation will be integrated into landscape treatments, as described in the Interpretation Strategy (Lovell Chen, 2022).

3.2 **Reasons for the proposal**

The Brickworks site has long been disused and inaccessible. Since the closure of the Brickworks in 1976, there have been a series of proposals for mixed commercial, residential and public space developments—all have failed to progress. Meanwhile, the site and its fabric have deteriorated, with some buildings in an advanced state of decay.

As anticipated by the Register Entry and the CMP 2021, the proposal takes an integrated approach to adaptive reuse and development. By introducing new uses which are economically and socially

² MacGregor Coxall, Landscape and Urban Design Package, 2017.

sustainable, the proposal offers an opportunity to establish a framework for ongoing care of the heritage significance of the place. At the same time, it establishes a new identity for the place, as a destination where the history of the site, and the connection to the broader history of Canberra, is evident and accessible to the public.

3.3 Practicability of alternatives

3.3.1 *Conservation through adaptive re-use*

It is widely accepted that the best way to conserve a heritage building, structure or site is to use it.⁶ Adapting buildings to a viable new use provides a framework for retaining and sustaining those structures into the future.

In the context of the Brickworks, the largest and most prominent buildings on the site are also the most significant. The arrangement of kilns and process buildings within the heritage core provides a natural centre to the site, where the significance of the site is most readily understood. For the values of the site to remain 'evident and accessible', there is a need to locate most public experiences within key heritage locations: the heritage core, the quarry and the railway remnants.

The quarry and railway remnants are to be retained as public open space—an approach that naturally minimises the impact of change. However, to anchor public experiences around the heritage core, it is necessary to find viable and sustainable uses for component structures, particularly kilns and process buildings. From a heritage perspective, it is desirable that these uses will bring people to and through the site, will allow the fabric and form of these buildings to be appreciated and understood, and will connect to the significant open space areas planned for the site. From a social and economic perspective, it is essential that these proposed uses respond to an analysis of likely commercial, demographic and property market conditions and forecasting. This includes the need for the development to create sufficient value to support the costs of conservation of valued fabric.

3.3.2 *Consideration of potential uses*

In developing proposals for potential adaptive re-use of significant structures, DOMA has considered the need to:

- Provide for the needs of future residents, while also attracting visitors
- Provide alternative housing options that are currently in limited supply (for example, townhouses, terraces and apartments)
- Integrate the development as a significant new precinct within a broader Canberra setting
- Strategically locate access points and relationships between new public areas and surrounding residences
- Calibrate potential uses to minimise impacts on the most significant elements and original fabric (where present), with more intervention
- Ensure commercial viability by responding to minimum space requirements and expectations of potential tenants

3.3.3 *Degree of change to fabric to accommodate proposed uses*

It is accepted that a significant degree of physical change will be required to adapt some structures as habitable, comfortable and compliant with contemporary codes/standards. For example, re-building of the roofs and walls of process buildings and the upper levels and roofs of kiln structures to comply with

building standards is considered the only reasonably practicable alternative to secure a viable new use for these structures.

In some cases, retention of existing fabric is not a practicable alternative because of structural instability or the presence of hazardous materials.

Consistent with the CMP, the approach to adaptation is one that anticipates a greater degree of change to elements of more moderate significance, such as process buildings. Within more significant buildings, the approach to change is also balanced, with areas of greater intervention balanced with areas where original fabric and form is carefully retained. This ‘balanced’ approach is considered essential to facilitating new uses and the commercial viability of the development.

4.0 DESIGN PRINCIPLES

The Register Entry expresses an objective that ‘significant historical use as an industrial site for the production of bricks and clay products shall continue to be evident and accessible to the public.’ This objective is reflected in the 2021 CMP.

It is considered that this objective can be achieved by managing heritage impacts through the design process. Consequently, the design team has established the following principles to ensure that this history is legible and central to the human experience of the new development. These principles are intended to embed the relevant sections of the CMP and Register Entry in the overall design approach.

4.1 Holistic planning

Heritage is integrated within the overall vision for the site and the development outcome is coordinated across the complex. New uses of the site and its components are sustainable economically and socially, supporting long-term conservation of heritage values. All significant elements are retained and conserved and the heritage significance of the site as a whole is respected and celebrated.

Key references are CMP Policy 7 (whole of site approach to conservation), 17 (explore adaptation opportunities) and 18 (respect heritage significance when planning new development).

4.2 Sustainable adaptation

All significant buildings and elements on the site will be retained, stabilised and conserved. Significant buildings will be repurposed, considering the site as a whole and balancing fabric conservation with the changes required to deliver a sustainable and viable new use.

Key references are CMP policies 6 and 8 (conservation in accordance with assessed significance), 12 (encourage public access), 15 (planning for sustainable future), 16 (compatibles uses) and 17 (explore adaptation opportunities).

4.3 Spatial planning

The design and arrangement of the new development responds to the spatial qualities of the site. The design approach avoids fragmentation of the site by maintaining key views, relationships, circulation patterns and spaces. In particular, the historical approach from the south, the connections between kiln structures and their chimneys/fan houses, and the north-south connection to the Brickyard will be maintained, and the heritage structures will remain the dominant visual elements in these areas.

Key references are CMP Policy 7 (whole of site approach to conservation), 12 (encourage public access), 13 (respect historic circulation and road layout) 15 (planning for sustainable future), 22 (respect for views) and 23 (respect for spatial qualities and relationships).

4.4 Conservation

A full program of conservation and remediation works will be integrated into the development, informed by expert advice and investigations.

The key reference is policy 10 (conditions maintenance program to conserve core and supporting heritage elements on site).

4.5 New built form

New built form will be introduced that supports sustainable and viable new uses of the site and its elements. New buildings and elements (such as elevated walkways) will be located and designed to maintain key visual and spatial relationships and points of appreciation of significant structures. New structures will be recessive in height and scale, and adopt a complementary form, character, detailing and material palette.

Key references are CMP policy 19 planning infill development, 20 (retain industrial character) and 23 (respect spatial qualities and relationships)

4.6 Landscape

The landscape treatment will enhance and interpret the distinctive qualities of the heritage core, the quarry and geological features and railway remnants. As set out in the *Yarralumla Brickworks Precinct Interpretation Strategy* (Lovell Chen, February 2022) interpretive elements will be integrated with landscaping and wayfinding.

Key references are policy 21 (retain historic industrial character) and 23 (respect spatial qualities and relationships).

4.7 Plant and equipment

Plant and equipment will be maintained consistent with the CMP where it contributes to the significance of the site/or an understanding of the operation of the place as a Brickworks. Some fragmentary industrial equipment may be retained where possible for its contribution to an industrial aesthetic.

The key reference is policy 9 record, investigate and conserve plant and equipment where it relates to the former operation of the site.

4.8 Archaeology

The design has been informed by archaeological assessments conducted by Navin Officer (2016) and investigations and assessments conducted by GML (2020). Consistent with the recommendations in the GML report, archaeological findings will be interpreted through interpretation/landscape treatment, subsurface flues will be stabilised, works will be monitored in selected un-investigated areas, and works in other areas will follow an unanticipated finds protocol.

The key reference is policy 28 (assess for impacts from development on areas of archaeological potential).

5.0 ANALYSIS OF HERITAGE IMPACTS

The following analysis considers the proposed development as understood at the time of writing (April 2022) to identify the likely impacts on buildings and structures of identified heritage significance. Some aspects of the design are yet to be resolved, but the core aspiration is for retention of the values of significant elements, consistent with the CMP 2021 and Register Entry.

5.1 Summary of Register Heritage Guidelines

The Register Entry contains heritage guidelines addressing demolition, adaptation, landscaping and new buildings.

In summary, where a building is identified as of ‘exceptional significance’:

- The external form, including the arrangement of openings and detailing that reflects the industrial use of the building or element should be retained
- Minor external alterations and additions and major internal alterations to the building or element may be permitted to suit a new use where the proposed works will not adversely affect the heritage significance of the elements or the place as a whole
- Alterations and additions to the original built fabric, including alterations to external finishes, should complement the historical industrial use and architectural style of the place
- Demolition of the original internal fabric should only occur in the context of sympathetic alteration and additions, as identified within the CMP

Where a building is of ‘moderate’ significance:

- Subject to the recommendations of the CMP, the building or element ‘may be conserved to interpret the historical use of the place or adapted to suit a new use for the place’.
- Elements that no longer include substantial evidence to describe industrial processes (specifically buildings 15 to 18 (Machine Bays I to III), Building 18 (the Workshop), 19 (Large Crusher House/White Pan Room) and 21 (Small Crusher House)) ‘may be replaced with new development that is generally consistent with the scale, form, external materials and industrial character of the place’
- The Primary Crusher House (20), including the integral equipment and machinery, and the Elevator Conveyor (22) shall be conserved for their ability to demonstrate and interpret industrial processes and secondary aesthetic values.

5.2 Analysis of specific elements

Figure 3 provides a numbered site plan indicating the location of significant elements. Table 2 below lists all buildings or structures on the site, summarises relevant policies from the CMP (and register entry, where these go beyond the general guidelines at section 5.1) and comments on the compliance of the proposal with this guidance.

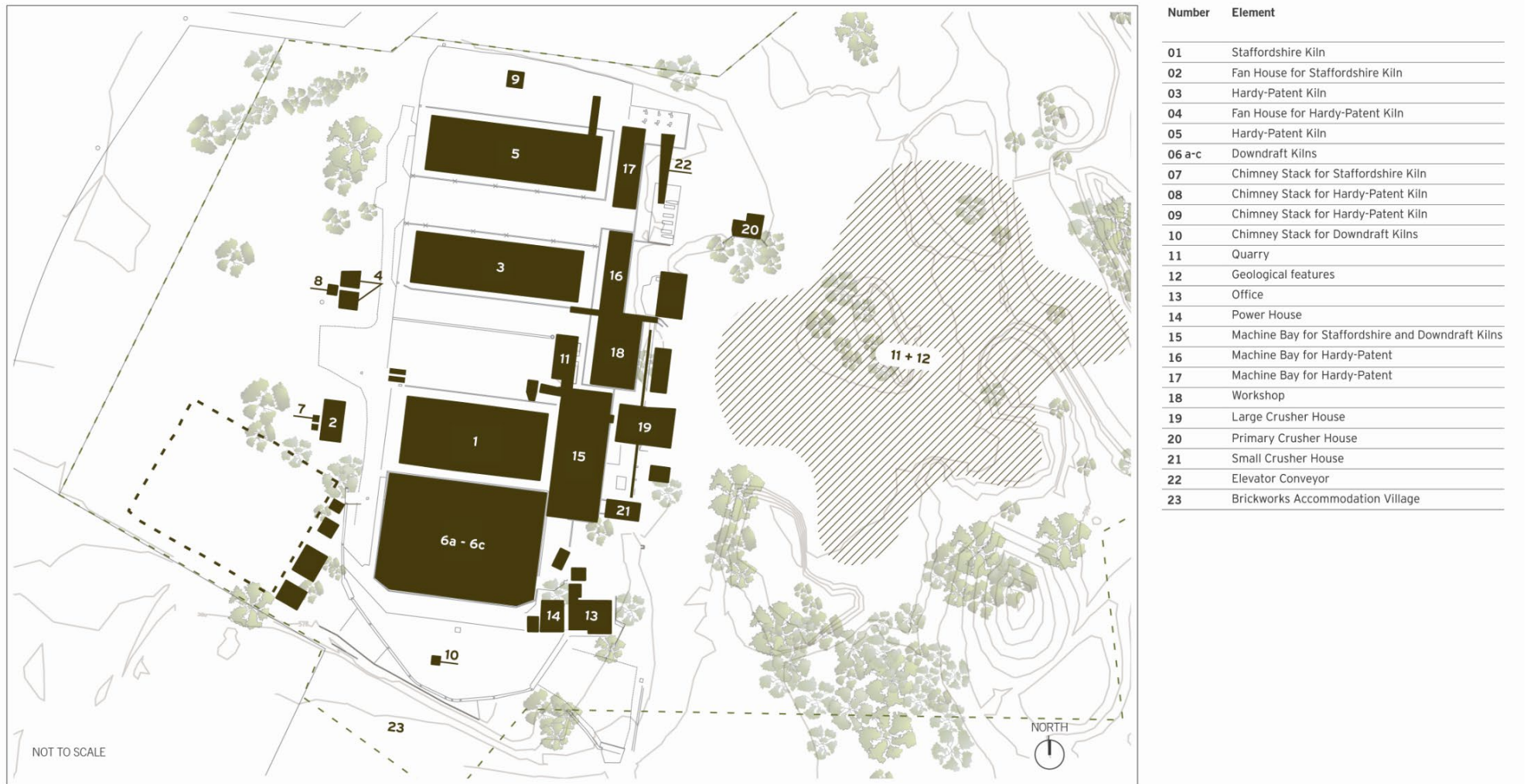


Figure 3 Yarralumla Brickworks site plan: built form and site infrastructure: numbers correspond with the ACT Heritage Register entry for the brickworks

Table 2 Comment on consistency with CMP Policies for specific elements

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
1: Staffordshire kiln (1914-15)	Exceptional	Core	<ul style="list-style-type: none"> • Retain original external fabric and restore brickwork • Internal adaptation is acceptable, provided that a representative example of a kiln chamber and a section of the firing floor are retained • Retain the form of kiln entries (allowing for introduction of recessed doors) • Ensure new structures reference the industrial character of the place • Minor exterior changes are acceptable including new roof lights, solar panels or other ESD measures 	<p>The proposal is to retain and adapt the Staffordshire Kiln for use as a wellness centre, with associated hospitality and retail spaces. Most of the original brickwork and kiln forms (16 of 20) at ground level will be retained. Level 1 walls and roof will be rebuilt to contemporary standards, retaining the original roof form and detail, with new corrugated metal cladding and new window openings. New built form will be inserted to the north (a glazed ground level café) and south (a two-storey glazed structure linking to two of the draught kilns), to create new spaces and access points.</p> <p>The works will involve impacts on both original and non-original fabric, extensive internal change, and changes to the setting and external presentation of the kiln. However, these impacts are necessary to support the proposed new uses and will be minimised by:</p> <ul style="list-style-type: none"> • Retaining the form and materiality of the building • Retaining and conserving original brickwork at ground level and where present at level 1 • Careful and respectful design of new structures, with attention to materials, form, bulk and the connection between old and new fabric • Retention of distinctive interior and exterior qualities where possible, including representative examples of kiln firing holes and firing marks, extensive retention of roof trusses and overhead equipment, minimisation of the visual and material impact of services, and retention of original brick details and kiln numbers • Use of lighting, ground plane treatments and signage to interpret and celebrate the history and operation of the kiln

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
				Overall, the proposal is a balanced outcome that is consistent with the CMP policies and Register Entry, and will provide for the ongoing conservation of the kiln structure.
1A: Railway remnants (1923)	Significant	Core	<ul style="list-style-type: none"> Retention as an open landscaped space that reflects its origins through the form of embankments and earth terraces Adaptation of this area should ensure legibility as a former railway Note contents of ACAT Orders (2013) that the zone shall be treated as landscaped open space, celebrating the history of the railway remnants 	<p>The proposal is for retention of the area as landscaped open space, with a strong interpretive dimension. It is noted that there is very little remnant fabric or archaeological potential associated with the railway remnants. The landscape treatment will retain and reinforce the cutting alignment. Interpretive signage, furniture and play structures will respond to the history of the railway remnants, and their significance as a point of departure and connection to major built landmarks in Canberra (such as the Provisional Parliament House).</p> <p>This proposal is consistent with the CMP policies and represents a positive heritage outcome.</p>
2: Fan house for Staffordshire kiln (1914-15)	Exceptional	Core	<ul style="list-style-type: none"> Retain original form, openings, fabric, internal configuration and concrete platforms New removable flooring could be introduced to facilitate use of the space Replace deteriorated fabric to match or be complementary to existing materials 	<p>The proposal is for retention and conservation of the Fan House. Decayed fabric will be replaced in a like-for-like manner, water ingress will be addressed, the roof will be re-built to meet current standards and doors will be installed to ensure the building is secure and weather-tight. The potential for the introduction of a new floor will be explored to facilitate future use.</p> <p>This proposal will have some heritage impacts including demolition of early fabric and impact on the ability to perceive the connection with underground flues. However, these changes are necessary given the extent of decay and the need to secure a sustainable new use. Measures to minimise impact including retaining the original form, openings and fabric where possible, replacing decayed fabric to match or complement existing and exploring options for retention of some extant,</p>

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
			<ul style="list-style-type: none"> • Investigate and address water ingress • Investigate possibility of retention of fan function or elements 	fragmentary equipment. Overall, the proposal is consistent with CMP policies and represents a positive heritage outcome.
3: Hardy-Patent kiln 1 (1927)	Exceptional	Core	<ul style="list-style-type: none"> • Retain, conserve and stabilise external original form and fabric (brick), replacing (or re-fixing) wall and roof sheeting • External modifications (including new first floor openings, windows, recessed doors) are anticipated • The verandah should be retained or re-interpreted to reference the original • Internal modifications including carefully designed subdivisions in the kiln chambers and installation of concrete slab are anticipated; if possible, roof trusses should be retained/exposed 	<p>The proposal is for the adaptation of Hardy Patent Kiln I for new hospitality and commercial uses. The building's external form and original brickwork at ground level will generally be retained and conserved. The verandah will be replaced with a new awning structure and the recessed glass doors will be introduced. The upper-level metal clad walls and roof will be replaced, with the addition of windows, roof lights and vents to support the new use. A new elevated catwalk will be inserted to the south (eastern end), east and north of the building. Internally a limited number of carefully designed new openings will be inserted in the wall dividing the two kiln chambers and finished in a way that is visually differentiated. Floors at ground and level one will be excavated with new concrete slab floors installed.</p> <p>The proposal will result in heritage impacts including changes to original fabric, the external appearance and the setting of the kiln. However, the changes are necessary to support a sustainable new use for the kiln, and are limited in line with CMP guidance, so that the history of the use of the kiln will be legible in the new development. Minimisation and mitigation measures include retention and conservation of most of the original brickwork and roof trusses, design of modifications and additions to be respectful and complementary to original fabric and form, and interpretation to support continued understanding of the history and operation of the kilns. Overall, the proposal is a balanced outcome that is consistent with the CMP policies and Register Entry, and will provide for the ongoing conservation of the kiln structure.</p>

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
4: Fan house for Hardy-Patent kiln I (c 1926, 1953)	Exceptional	Core	<ul style="list-style-type: none"> Retain and stabilise in-situ, retaining the internal configuration as evidence of the original function of the building. No new openings should be introduced Substantially dismantled plant could be retained or removed and recorded 	<p>The proposal is for retention and stabilisation of the Fan House. Cladding that cannot be refixed will be removed, and timber framing, windows and openings will be repaired. Ductwork and remnant machinery will be retained.</p> <p>The proposal is consistent with the CMP and Register Entry and represents a positive heritage outcome.</p>
5 Hardy Patent Kiln II (1953)	Exceptional	Core	<ul style="list-style-type: none"> Policies are comparable with the policies for Hardy Patent Kiln I (see above). 	<p>The proposal is broadly similar to the proposal for Hardy Patent Kiln I, including retention of original brickwork, rebuilding of upper walls and roof with new openings, replacement of verandah structure and internal demolition (limited openings between kiln structures, and excavation of the firing floor). These interventions will support the introduction of new specialty retail and commercial uses.</p> <p>As for the analysis of the Hardy Patent Hardy Patent Kiln I proposal, while the proposal involves loss of fabric and change to presentation and of understanding of the operation of the kiln, this is a balanced outcome that includes minimisation/mitigation measures, including retention of the building's overall form, conservation of original fabric where possible and design of complementary alterations and additions, supported by interpretation.</p> <p>The proposal is consistent with the policies of the CMP and Register Entry and is necessary to introduce a new viable use to the place.</p>
6 Downdraught Kilns (1963)	Exceptional	Core	<ul style="list-style-type: none"> The enclosing shed roof structure could be retained or demolished as required. 	<p>One of the downdraught kilns will be retained and adapted for a hospitality (bakery/café) use, with the remaining two connected to the Staffordshire Kiln to the north will be adapted for use a wellness centre. Interventions include</p>

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
			<ul style="list-style-type: none"> Adaptive reuse should be explored, including internal subdivision. 	demolition of the shed, installation of new metal roofs to a complementary design, introduction of lightweight internal partitions and new glazed north and south openings and fresh air louvres (with existing metal doors fixed open and retained). Existing vertical steel beams and tensioned cables are to be retained where possible. Opportunities will be explored to remove the infill from feedholes, stabilise the brick and install a new steel lintel and window, to allow natural light into the kilns, or to retain the rhythm and form of feedholes where full retention is not structurally possible. Care will be taken to minimise the visibility and impact of services, including through floor reticulation.
7 Chimney Stack for Staffordshire Kiln (1915)	Exceptional	Core	Element should be retained and conserved.	The proposal is for retention, stabilisation and conservation. This is consistent with the CMP and represents a positive heritage outcome.
8 Chimney stack for Hardy-Patent kiln I (1927)	Exceptional	Core	Element should be retained and conserved.	The proposal is for retention, stabilisation and conservation. This is consistent with the CMP and represents a positive heritage outcome.
9 Hardy-Patent kiln 2 chimney stack (1953)	Exceptional	Core	Element should be retained and conserved.	The proposal is for retention, stabilisation and conservation. This is consistent with the CMP and represents a positive heritage outcome.
10 Chimney Stack for Downdraft Kiln (1963)	Exceptional	Core	Element should be retained and conserved.	The proposal is for retention, stabilisation and conservation. This is consistent with the CMP and represents a positive heritage outcome.
11 and 12 Quarry and geological features A, B, C and D	Exceptional	Core	<ul style="list-style-type: none"> Retain as a landscape element that reflects in its form and presentation its origins as an excavated brick pit. 	The proposal is to develop the Quarry as a landscaped public park, including an interpretive water feature linking to the Brickyard. Housing will be located on the elevated areas to the south and east. Limited excavation and fill works are proposed in two areas to the east of the quarry—one area well removed from geological features to the east of the lake, and another area to the east and south of geological feature C.

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
			<ul style="list-style-type: none"> • Landscaping and low-medium height building may be permitted • Minor modification to the shape of the quarry is acceptable, utilising existing access points • Retain and protect identified geological features (rock outcrops) • Retain the western section of the Quarry closest to the Brickworks buildings as open space • Integrate geological features into site landscaping and avoid disturbance of immediate surface, retain immediate environs as landscape open space 	<p>The proposal retains the quarry largely intact, with large areas of the excavated brick pit to be exposed. Excavation and fill works are limited and will avoid significant geological features. Archaeological Investigations of the area to be disturbed (GML 2021) found that while there are archaeological deposits, they are of no heritage significance (and consequently, do not represent a heritage impact). Investigation by ACT Geotechnical Engineers (2021) (assessing a more extensive proposal) concluded that there is no geological reason to prevent cut and fill works in proposed areas, and that geological feature C could be protected with a fenced exclusion zone. Since then, the potential impact has been further minimised with a reduced fill area proposed to the south, and removed from, geological feature C.</p> <p>The proposed landscape design for the park will enable public access to the area and interpretation of historical and geological significance of the quarry. The immediate environs of the geological features and the area to the west linking to the Brickyards will remain as landscaped open space. The proposed cut and fill works should be regarded as minor modifications to the shape of the Quarry.</p> <p>The proposal complies with the CMP and register entry policies and will result in a positive heritage outcome.</p>
13 Office (1916) 14 Power House (1915)	Moderate	Supporting, but c 1953 and 1970s extensions are incidental	<ul style="list-style-type: none"> • Buildings could be adapted internally, with remnant equipment in the Power House retained or removed as required 	<p>The proposal is for the removal of later additions and adaptation of these buildings for the provision of concierge (and possibly retail) uses.</p> <p>While the final design is not resolved, the proposal will include demolition of non-significant (incidental) extensions, replacement of doors and windows in existing openings and internal demolition including removal of equipment. The proposal may include the introduction of lower scale and sympathetically designed</p>

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
			<ul style="list-style-type: none"> • 1953 and 1970s extensions are not significant and could be removed • Remove intrusive ad hoc additions, and consider repairing and reinstating infilled openings (doors and windows) if required 	<p>additions (such as glass walkway connection or low scale addition to the north of the Office).</p> <p>While there may be some minor impacts associated with demolition, the result will, on balance, be positive and is consistent with the CMP. It will result in retention of the buildings, removal of intrusive additions and the introduction of a sympathetic new use.</p>
<p>15 Machine Bay I (c 1955)</p> <p>16 Machine Bay II (c 1955)</p> <p>17 Machine Bay III (c 1955)</p> <p>18 Workshop (1955)</p> <p>19 Large crusher house/ White Pan Room (c 1955)</p> <p>21 Small crusher house (mid-late 1950s)</p>	Moderate	Supporting	<ul style="list-style-type: none"> • These buildings are all of moderate/supporting significance and have broadly similar adaptation policies: • There is scope for external modification (including windows and other openings to allow for adaptive reuse) and internal adaptation • Remnant conveyors, platforms, hoppers and walkways could be retained or replaced with new development that is generally consistent with the industrial character of the place 	<p>The proposed approach for the adaptation of these buildings will result in a significant degree of internal change and smaller scale glazed extensions, while retaining the overall effect of the external cladding and roof forms of the buildings.</p> <p>The approach to adaptation of these buildings follows a similar set of principles:</p> <ul style="list-style-type: none"> • the walls will be rebuilt to meet code requirements, including insulation and internal sheeting, but retaining/repairing/refixing external corrugated iron (original or salvaged material); and • new rainwater goods will be installed to match existing, and opportunities to replicate external details (such as roof vents) will be explored • existing openings will be glazed and new external openings (doors and windows) in new metal frames will be inserted to support the adaptation of the space and need for access, ventilation and light • new 'glass box' steel and glazed extensions will be added to the east of the Machine Bays at level 1 • the gantry crane/conveyor that links the Machine Bays will be retained, and opportunities to retain existing upper level hoppers and other equipment, will be explored • lightweight internal walls will be inserted to support new uses

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
				<ul style="list-style-type: none"> some areas of existing concrete slab and platforms will be retained and repaired, with new concrete slab inserted at new levels and extensions. <p>This proposal represents a balanced approach, which is consistent with the CMP and register entry policies. Overall the works will make a significant contribution to the retention of significance of the place, and the understanding of the Brickworks as a cohesive site.</p>
20 Primary crusher house (1955)	Moderate	Supporting	<ul style="list-style-type: none"> Not included in CMP Appendix A. Register Entry guidelines to retain external form and detailing, and to conserve for ability to demonstrate/interpret industrial processes and secondary aesthetic values. 	The proposal is for retention, stabilisation and conservation. This is consistent with the Register Entry and represents a positive heritage outcome.
22 Elevator conveyor (c 1955)	Moderate	Supporting	<ul style="list-style-type: none"> Preferably retain and conserve, although could be relocated Requires structural assessment and securing of loose sheeting 	The proposal is for retention, stabilisation and conservation. This is consistent with the CMP and represents a positive heritage outcome.
23 Remains of the Brickworks Accommodation Village	Moderate	Area identified as BRW2 and BRW3 identified as of high	Not included in CMP Appendix A.	<p>The proposal is to develop this area to include residences (townhouses and apartments) and landscaping for amenity and services installation.</p> <p>BRW2 and BRW3 were included in archaeological investigations that took place in 2021 (GML, 2021). These investigations concluded that the proposed works would result in negligible impact to archaeological features. This was because, although archaeological features were identified in the area, they were assessed as having</p>

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
		archaeological potential (2016 Navin Officer); updated following investigations in 2021		no significance (see also Chapter 7 'Impact Assessment' in Canberra Brickworks Precinct Archaeological Report and Statement of Heritage Effects, GML Heritage, December 2021)
24 Concrete Retaining Wall	Not identified	Core significance at p 79, but not of heritage significance at Appendix A; but conservation policies apply	<ul style="list-style-type: none"> • Not required to be retained—but where retained it should be stabilised. • Model railway workshop and non-original wall could be demolished as required. 	The proposal is largely for in situ retention with limited proposed demolition at the site of the former Model Railway Workshop, consistent with the CMP.
25 Amenities Block (c 1950, c 1977)	Not identified	Incidental	Retain or demolish as required	Demolition of incidental elements is consistent with the CMP and does not present an impact on heritage significance.
26 Downdraught kiln control room (c 1961)	Not identified	Moderate significance at p 80, but not of significance at Appendix A; retain or demolish as required	Retain or demolish as required	The proposal for demolition is consistent with the policy guidance contained in Appendix A of the approved CMP, that the control room could be retained or demolished as required. It is also noted that the control room is not a significant element in the Register Entry.

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
27 Toilet Block (c 1971) 28 Ancillary Storage Building (c 1971) 29 Substation/Control Room (c 1971) 30 Boiler House (c 1971) 31 Amenities Block 2 (c 1960s) 32 Brick Extrusion Plant (remnants) (c 1971) 33 Ancillary Storage Building 2 (c 1960s) 34 Storage shed (c 1960s) 35 Model railway workshop (c 1979) 36 Model railway workshop (c 1979)	Not identified	Incidental	Retain or demolish as required	Demolition of incidental elements is consistent with the CMP and does not constitute an impact on heritage significance.
37 and 38 Brickyards	Not identified	Core significance at page 79; Appendix A,	<ul style="list-style-type: none"> Retain and conserve as a landscape element Manage new development is managed in a way that 	The Brickyards will be largely retained as open space, with addition of lower-scale built form to enable circulation and provide a new café space to the north of the Staffordshire Kiln. There will also be extensive landscaping, which is of a low scale, including the introduction of hard and soft elements and a new interpretive water feature. New development will frame this space as central to the experience of

Element	Register entry	CMP 2021	Summary of applicable CMP policies/guidelines	Comment on consistency of proposal
		conservation policies apply	<p>retains an understanding of historic function</p> <ul style="list-style-type: none"> • Respect industrial character, massing, scale, form and orthogonal layout of existing buildings • Repair or replace surfaces, avoiding impact on underground flues 	<p>the revitalised Brickyards, and will be a key location for interpretation and enjoyment of historic structures.</p> <p>There will be some impacts relating to the transformation of the setting of kiln structures from a starkly industrial, to a softened environment. This approach can, however, be justified to adapt these new spaces to the needs of people and the realities of Canberra climate. Impacts will be minimised through a recessive and respectful design approach that showcases heritage buildings, employs complementary materials and incorporates interpretive elements.</p> <p>The approach is consistent with the CMP and represents a positive heritage outcome.</p>

5.3 Impact on archaeological features

It is noted that GML undertook an assessment of impacts on archaeological features following its excavation activities. In summary, GML concluded that the proposed development would have nil to negligible impact on all investigated areas except for BRW8, where there would be severe impacts on significant remnants of experimental plant. Methods for managing these impacts included a recommendation that the findings of the excavation be interpreted and presented to the public, and that works in this area be monitored for the potential presence of additional kilns.

GML did not come to a conclusion on impacts to areas that were not investigated. It recommended that potential impacts be managed by monitoring during construction in BRW 2, 4, 5, 6, and 9 and by following the unanticipated finds protocol in other areas.

6.0 SITE-WIDE ANALYSIS

6.1 Comment on site-wide approach

As indicated in both the Register Entry and the CMP, the effect of any activity on the cultural heritage significance of the Brickworks needs to be assessed both for impact on individual significant elements and on the site as an integrated whole.

Currently, the site is understood an industrial place, which has high degree of intactness in terms of the layout of key buildings, remnant (if decaying) fabric and evidence of former uses. Key relationships—between the Kilns and their fan-houses/chimney stacks, with the process buildings and with the Quarry—are evident within this environment.

The proposed activity will change understandings and uses of the site, which will offer new spaces for living and for social and commercial activity. The ambition is to create a vibrant and sustainable environment. To achieve this, as outlined above, a degree of change to the fabric and setting of the place is necessary. This will include, as described, alterations, additions, new built form and a new approach to landscaping, lighting and wayfinding at the site. The broader site will also be transformed with new development. This transformation will alter the ability of the site to be understood as a former brickworks. However, these impacts have been mitigated and minimised through a variety of design strategies.

6.2 Summary of mitigation and minimisation measures

In summary, the proposal includes the following measures:

- Minimisation of impact through an integrated and whole-of site proposal
- Retention of the broad orthogonal layout of the site and the historical approach from the south, locating new buildings towards the east of the heritage core to preserve key relationships and appreciation of the most significant elements of the site
- Adoption of a consistent architectural and landscape language, which clearly delineates new fabric and positions it as a complementary backdrop to retained heritage fabric
- Integration of fabric conservation into the proposal for adaptive reuse
- A balanced approach to retention of heritage fabric, allowing appreciation of significance at various scales from the monumental (for example, the form of kiln structures and the open

space of the Quarry) to the detailed (for example, retention of remnant machinery, kiln numbers, patina of heritage fabric)

- An integrated approach to interpretation, with the overarching objective of ensuring that identity and cultural heritage values of the precinct remain central to its character once works for the reactivation of the precinct are complete

7.0 CONCLUSION

As reflected in the Register Entry for the Brickworks, the overall objective for minimising heritage impacts is that the 'significant historical use as an industrial site for the production of bricks and clay products shall continue to be evident and accessible to the public.' The adaptation proposal has been designed with reference to this overall objective and to respond to specific guidance in the CMP.

It is considered that the proposal achieves a high degree of compliance with the policy contained in the CMP and Register Entry, and includes a significant commitment to minimisation and mitigation of impacts on heritage significance across the site. It will result in an outcome where the site is accessible and attractive to Canberra residents and visitors, allowing the significance of the site to be seen and appreciated. The proposal will include a program of conservation works, and will establish a framework for conservation of the site through adaptive re-use.

It is concluded that while the proposal will impact some aspects of the heritage significance of the site, these impacts are justifiable, and efforts have been made to minimise impacts and conserve and interpret significance into the future.

ENDNOTES

- ¹ Navin Officer, Canberra Brickworks, Aboriginal Cultural Heritage Assessment, August 2014, Section 6.1.
- ² ACT Heritage Council, Heritage Advice to Navin Officer Heritage Consultants, 10 September 2014.
- ³ 'Appendix H, Inventory of Moveable Relics, GML Heritage 2021 ' in Canberra Brickworks CMP Vol 2, GML Heritage, 2021, p 345.
- ⁴ GML Heritage, Canberra Brickworks Precinct, Archaeological Excavation Report and Statement of Heritage Effects, December 2021 (draft) (Archaeological Report 2021), Table 5.1, p 139-143.
- ⁵ Conservation Management Plan Approval, ACT Heritage Council to Doma Group, August 2021.
- ⁶ For example, Heritage Council of NSW and RAI, New uses for heritage places: Guidelines for the adaptation of historic buildings and sites, NSW Department of Planning, 2008, p 4.