KINGSTON SECTION 49
APPENDIX 2
STATEMENT OF HERITAGE IMPACT
STATEMENT OF HERITAGE IMPACT

KINGSTON SECTION 49 MASTER PLAN

Kingston Section 49, Canberra

Prepared for

Land Development Agency

August 2012
# TABLE OF CONTENTS

1.0 **Introduction** 1

1.1 Background 1

1.2 The site 1

2.0 **Heritage listings and classifications** 3

2.1 *EPBC Act, 1999* 3

2.2 *Heritage Act, 2004* 3

2.3 National Trust of Australia (ACT) 6

2.4 Register of the National Estate 6

3.0 **Statutory planning context** 7

3.1 National Capital Plan 7

3.2 Kingston Foreshore Structure Plan 8

3.3 CZ5 Mixed Use Zone 9

3.4 Development Control Plan 9

4.0 **History** 11

4.1 Sources 11

4.2 Chronological summary history 11

4.3 History 11

5.0 **Description** 23

5.1 Introduction 23

5.2 Summary of site elements 23

5.3 Local context 27

6.0 **Statement of significance for Kingston Section 49** 31

6.1 Levels of significance 33

7.0 **Description of the proposal** 35

7.1 New built form 35

7.2 Adaptive re-use 36

7.3 Demolition 37

7.4 Open space 37

8.0 **Comments on heritage impacts** 38

8.1 Assessment 38

8.2 Concluding comment 46

**APPENDIX A** ACT HERITAGE REGISTER ENTRY FOR THE KINGSTON POWER HOUSE HISTORIC PRECINCT

**APPENDIX B** ACT HERITAGE REGISTER ENTRY FOR THE FORMER TRANSPORT DEPOT

**APPENDIX C** ARCHITECTURAL DRAWINGS OF THE '1948 SWITCH ROOM' (1947)
1.0 Introduction

This Statement of Heritage Impact has been prepared for the Land Development Agency (LDA), Canberra. It addresses heritage issues and considerations associated with the proposed development of Kingston Section 49 for an arts precinct, with a combination of commercial, residential, public and arts-related uses and car parking. The proposal includes new development and limited demolition.

In the preparation of this Statement of Heritage Impact reference has been made to, Kingston Section 49 Master Plan, prepared by Cox Architecture and Purdon Associates in collaboration with Lovell Chen Architects & Heritage Consultants and GTA Consultants, November 2011. The Master Plan provides a framework for the future development of the area. It establishes land uses and built form outcomes to the extent of indicative locations (building envelopes) and heights. It does not provide details of the articulation, roof forms or materials of new built form.

Reference has also been made to architectural drawings and perspectives of the proposed parking structure for Kingston Foreshore prepared by Cox Architecture and dated April 2012. The drawings are unnumbered and include a site plan, ground floor plan, typical floor plan, elevations and sections.

1.1 Background

In November 2011, Lovell Chen prepared a Heritage Strategy for Kingston Section 49 to inform the Master Plan for the area. The Heritage Strategy includes a summary history of the former government / industrial services area at Kingston; provides an assessment of the area against the ACT Heritage Register criteria at Part 2 (10) of the Heritage Act 2004; identifies elements, areas and views of heritage significance; and provides recommendations for future development. As appropriate, this Statement of Heritage Impact draws on the content of the Heritage Strategy.

Previous reports

The Heritage Strategy was informed by the following Conservation Management Plans:

- Fitters’ Workshop, Conservation Management Plan, 2011, Duncan Marshall, Keith Baker, Nicola Hayes (Navin Officer Heritage Consultants) and Brendan O’Keefe
- Former Transport Depot, Conservation Management Plan, 2011, Philip Leeson Architects Pty Ltd

1.2 The site

Kingston Section 49 is located approximately two kilometres east of Capital Hill, and immediately south of Lake Burley Griffin in central Canberra (Figure 1). The site covers an area of approximately 5.4ha and is bounded to the north and east by Eastlake Parade, to the south by new development on Giles Street and to the west by Wentworth Avenue (Figure 2).

Kingston Section 49 includes buildings, associated elements and soft landscape features which are included in the ACT Heritage Register pursuant to the Heritage Act, 2004 (Part 3). These are: the ‘Kingston Power Historic Precinct,’ which contains the Kingston Power House, Fitters’ Workshop, sections of rail track and rail embankment and landscape elements associated with the early 1920s planting of the area; and the former Transport Depot,

---

1 See Kingston Arts Precinct Strategy (March 2011) prepared for artsACT by Susan Conroy in association with Susan Davis, Sue Kyte, Eric Martin, David Moyle and Clare Middleton.
Kingston. Section 49 also includes an operational electricity substation and areas of open space and at-grade parking that are not included in the ACT Heritage Register.

Figure 1  Map of central Canberra: Section 49 is indicated.  

Figure 2  Recent aerial view of Section 49 (indicated by the red dotted line).  
Source:  Land Development Agency.
2.0 Heritage listings and classifications

2.1 EPBC Act, 1999

The Kingston Power House Historic Precinct is not included in the National Heritage List (NHL) or the Commonwealth Heritage List (CHL).

The Kingston Power House, Fitters’ Workshop and the former Transport Depot are likewise not included in the NHL or CHL.

2.2 Heritage Act, 2004

2.2.1 Kingston Power Historic Precinct

The Kingston Power House Historic Precinct (Section 8, Blocks 8, 11, 14 and 24) is included in the ACT Heritage Register, maintained by the ACT Heritage Council, pursuant to the Heritage Act, 2004. The entry to the ACT Heritage Register is attached (Appendix A). The precinct is indicated on the Territory Plan map by the Heritage Places Register Overlay H48 (Figure 3). Features considered to be ‘intrinsic to the heritage significance of the place’ are:

- The Power House building, together with significant internal fabric identified at Schedule 1 [refer Appendix A] and Figure 4
- The Fitters’ Workshop (Bulk Supply Store)
- The original alignment of the railway and existing railway track and embankment
- Landscape elements: Monterey pine (*Pinus radiata* – A), White brittle gum (*Eucalyptus mannifera* – B)
- The base of the second chimney stack
- Fabric and operation of the siren and whistle
- The 1948 Switch Room

These elements are illustrated at Figure 4.

![Figure 3](image-url)  
*Figure 3 The Kingston Powerhouse Historic Precinct is designated H48. Source: ACT Heritage Register.*
The Statement of Significance for the Kingston Power House Historic Precinct is as follows:

The Power House and Fitters’ Workshop are of industrial and architectural significance. Other intrinsic features assist in demonstrating the industrial use of the site for power generation. The Power House is a landmark structure in its Lakeside setting.

The Power House generated the first power to the Federal Capital in 1915. The Power House and its associated Fitters’ Workshop are early examples of buildings that housed coal fired steam powered electricity generation equipment. The Power House, Fitters’ Workshop, base of the second chimney stack and remnant railway embankment and existing railway track to the north-west of the Power House demonstrate the technology and process of early electricity generation in the Federal Capital. The siren and whistle located on the main power house building was an important soundscape feature throughout Kingston. The landscape elements are remnants of Thomas Charles Weston’s 1920s windbreak plantation along Interlake (now Wentworth) Avenue and have an evident relationship with the establishment and development phases of the Federal Capital.

The Power House was the first permanent public building in the Federal Capital. Its existence was fundamental to the development and establishment of the City. It is an example of early 20th century industrial architecture and the first building in the Federal Capital designed by John Smith Murdoch, a major figure in the creation of the ‘Federal Capital’ architectural style. The Power House retains numerous internal fittings demonstrating its substantial industrial use.
The Fitters’ Workshop (Bulk Supply Store) is the second permanent structure in Canberra designed by J S Murdoch. The remnant railway embankment and existing railway track are part of the original rail system and were associated with the delivery of coal to the Power House.

The Power House ceased to provide power to the National Capital in 1929 when a cheaper source of electric power became available. It was reactivated for short periods in the years 1936-42 when repairs to the Burrunjuck Dam (which supplied water to the Burrunjuck Hydro Electric Scheme then servicing Canberra) were required, and in 1948-57 when post-war construction in NSW placed severe strain on the NSW Grid. The 1948 Switch Room provides evidence of this later period of reactivation.

The entry to the ACT Heritage Register includes a suite of Specific Requirements which are identified as ‘essential to the conservation of the heritage significance of the place’. These requirements address a range of considerations including external and internal works to significant buildings and elements; new development within the precinct; and demolition of buildings. These requirements are consistent with the Conservation & Management Policy included in the Conservation Management Plan Review for the Kingston Power House Precinct prepared by Peter Freeman Pty Ltd (2001).

2.2.2 Former Transport Depot

The former Transport Depot (forming part of Block 13, Section 49) is included in the ACT Heritage Register, maintained by the ACT Heritage Council, pursuant to the Heritage Act, 2004. The entry to the ACT Heritage Register is attached (Appendix B).

The Statement of Heritage Significance is as follows:

The former Transport Depot, Kingston is of heritage significance as the engineering and construction of the 1940-41 fully welded rigid portal frame exhibits a high degree of technical achievement and design quality, demonstrating new invention and application in Australia at the time.

The design of the fully welded rigid portal frame is of exceptional interest as the earliest notable example of a steel fully welded rigid portal frame in Australia.

There were two fully welded steel structures prior to this in Australia, though these were bridges rather than portal frames.

The design of fully welded rigid steel portal frames went on to achieve a high level of use in its ability to span wide spaces in an economical way.

The former Transport Depot is a key element in the original public works precinct with value to transport workers and their families.

The former Transport Depot is also of significance for its strong association with the cultural phase of transport history in the early and continuing development of Canberra.

The former Transport Depot is also of significance for its strong association with the foundational transport history of Canberra.

Features considered to be ‘intrinsic to the heritage significance of the place’ are:

- The fully welded rigid steel portal frames
- The presence of former Transport Depot buildings with open spaces defined by the portal frames
• The orientation of the building in relation to the former railway siding and Wentworth Avenue

The entry to the ACT Heritage Register includes the following Heritage Guidelines adopted under Section 27 of the *Heritage Act 2004*:

The guiding conservation objective is that the former Transport Depot, Kingston, shall be conserved and appropriately managed in a manner respecting its heritage significance and the features intrinsic to that heritage significance, and consistent with a sympathetic and viable use or uses. Any works that have a potential impact on significant fabric (and/or other heritage values) shall be guided by a professionally documented assessment and conservation policy relevant to that area or component (i.e. a Statement of Heritage Effects – SHE) informed by an up-to-date conservation management plan.

As noted at Section 1.1, a CMP for the former Transport Depot was prepared by Philip Leeson Architects Pty Ltd in 2011.

2.3 National Trust of Australia (ACT)

Kingston Power House was identified as a ‘classified’ place by the National Trust of Australia (ACT) on 20 July 1981. The National Trust of Australia (ACT) does not maintain files or reports for classified places. There are no statutory requirements as a consequence of this classification.

2.4 Register of the National Estate

Kingston Power House was included in the Register of the National Estate (RNE) as a ‘Registered Place’ in 1983 (Place ID 13364). The statement of significance is as follows:

A building of industrial and architectural significance which is a landmark in its Lakeside setting. It was one of the first permanent buildings of Canberra and was of social importance in the early years of the city. The architectural design is well delineated with regard to its function and form and exhibits Classical influences. It has a consistency and a high standard of detail, materials and composition for an industrial building, comparable with its landmark qualities. The former mechanical workshop of similar design contributes to the significance of the Power House.

The RNE ceased to operate as a statutory register in February 2012. It is maintained on a non-statutory basis as a publicly available archive.

The Fitters’ Workshop and the former Transport Depot are not included in the RNE.
3.0 Statutory planning context

3.1 National Capital Plan

Kingston Section 49 is not within a Designated Area, an area specified in the National Capital Plan as having the ‘special characteristics of the National Capital’. As such, it is subject to the policies and provisions of the Territory Plan. However, Special Requirements are established under the NCP for areas that are not subject to the provisions of the NCP but where it is desirable for new development to be in the interests of the National Capital. In areas where Special Requirements apply, a development proposal is administered through the Territory Plan by the ACT Planning and Land Authority in compliance with the special requirements specified in the NCP.

Section 4.5.6 of the NCP includes Special Requirements applicable to the Kingston Foreshore. The Kingston Foreshore is defined as land bounded by Bowen Park, Wentworth Avenue (including the Avenue), Cunningham Street, the Causeway through to Jerrabomberra Creek, Jerrabomberra Creek and a line approximately seven metres behind the wall of Lake Burley Griffin. The Kingston Foreshore area is described as forming, ‘a prominent urban environment when viewed from within and across East Basin, and from key tourist vantage points such as Mount Ainslie and Mount Pleasant’. The overarching objective of Section 4.5.6 is to, ‘ensure the Lake Burley Griffin Foreshore in East Basin continues to be developed as a major landscape feature helping to unify the National Capital’s central precincts’.

The following guidelines for built form and materials apply to the Kingston Foreshore:

- **Colour**
  The colour scheme of development is to be generally light in tone. Some highlighting with darker colours may be acceptable where these do not present as the dominant colour scheme when viewed from or across the Lake.

- **Roofs**
  A variety of roof forms, materials and colours should be introduced into the area.

- **Building Height**
  The overall height of buildings in the area is to be generally consistent with that of the tree canopy of mature trees in the area. This can be achieved through buildings being a maximum of 4 storeys except for some taller buildings or focal elements where these do not significantly impact on the landscape of the area or detract from the massing of the Kingston Powerhouse building.

- **Materials and Finishes**
  Materials on buildings and structures near the Lake edge are to be of a durable and low maintenance nature with a high quality in the materials used. Buildings fronting the Lake edge should generally avoid the use of highly reflective materials.

---

2 Consolidated National Capital Plan, September 2009, Section 4, p. 84.

3 The Special Requirements at Section 4.5.6 of the NCP are an outcome of Amendment 29, prepared in 1999-2000.
3.2 **Kingston Foreshore Structure Plan**

The Territory Plan (as gazetted in March 2008) includes a Structure Plan for the Kingston Foreshore, which provides for the redevelopment of the foreshore as a mixed-use area with an arts, cultural, tourism and leisure emphasis. Ten qualitative design objectives for the development of the Kingston Foreshore area include the following which have particular pertinence to the present Heritage Strategy:

(2) To ensure that the heritage significance of the site is recognised and that in particular the Power House remains a landmark building.

(6) To achieve exemplary urban design in terms of views, vistas, containment, environmental quality, design and architecture.

‘General Principles’ relating to heritage provided in the Structure Plan are as follows:

(a) Ensure that the Kingston Power House Historic Precinct is conserved and appropriately maintained consistent with its heritage significance. Strongly reflect the cultural significance of the site as the historic commercial and industrial heart of Canberra in the urban design and presentation of the development.

(b) Encourage public appreciation of the heritage values of the site through appropriate interpretation within the Kingston Power House Historic Precinct and in neighbouring precincts.

(c) Promote the conservation, reinstatement, consolidation and interpretation of the historic fabric and encourage its adaptive reuse.

---

Figure 5  Kingston Foreshore Structure Plan: precincts.  
Source: ACTPLA.
The Structure Plan adopts a precinct-based approach for areas within the Kingston Foreshore area. The Power House precinct, including the former Transport Depot, is included within precinct ‘g’ (Figure 5). Principles for precinct ‘g’ are as follows:

(a) Preserve and protect the heritage significant building and elements in a manner which encourages adaptive reuse.
(b) Provide opportunities for activities and facilities to be integrated with the historic building and setting of the Power House.
(c) Promote public access to, and experience and understanding of, the heritage significance of the place.
(d) Respect significant views to and from the Power House.

3.3 CZ5 Mixed Use Zone

Land use zones are identified in the Territory Plan (2008). Kingston Section 49 is within a CZ5 Mixed Use Zone, which provides for high-density residential development in highly accessible areas (including places in proximity to major avenues) in conjunction with commercial, retail and community uses. The CZ5 Mixed Use Zone Development Code is intended to ensure that future development is responsive and sympathetic to the character, or proposed character, of the area. The code includes general and site specific controls, which are consistent with the provisions of the NCP. General controls of particular relevance to the Masterplan for Kingston Section 49 include:

- Rule 2.1, where building heights are to be compatible with the existing, or future desired character of adjacent development; appropriate to the scale and function of the use; and minimise detrimental impacts including overshadowing and excessive scale.
- Rule 3.4, which requires that car parking structures are designed to integrate with the built form of existing development.
- Rules 6.2, which notes that, in accordance with section 148 of the Planning and Development Act 2007, applications for development on land subject to heritage registration are to be accompanied by advice from the Heritage Council stating that the development meets the requirements of the Heritage Act 2004.

Specific controls of particular relevance include:

- Rule 2.7 ‘Kingston,’ which states that the maximum height of buildings in Kingston is four storeys. Buildings in excess of four storeys may be permitted where their ground floor level is not greater than RL560m, they do not detract or compromise views and vistas to the Power House, and the overall height of any building does not exceed the lesser of RL578m or 20 metres.

Permitted uses with a CZ5 Zone include residential, community use, hotel, parkland, restaurant and shop. Permissible uses specific to Kingston Section 49 include craft workshop, tourist facility and place of assembly.

3.4 Development Control Plan

A Development Control Plan (DCP) providing lease and development control conditions for the Kingston Foreshore area, including Section 49, was prepared following amendments to the NCP (Amendment 29) and Territory Plan (Variation 113) in 2000. The DCP for the Kingston Foreshore was not completed and has not been approved by the National Capital...
Authority, and has no statutory weight. Notwithstanding, the Land Development Agency has used the completed sections of the DCP to inform development conditions for specific sites.\footnote{Susan Conroy \textit{et al}, \textit{Kingston Arts Precinct Strategy}, March 2011, Appendix 1, pp. 5-6.}

As noted in Appendix 1 of the Kingston Arts Precinct Strategy:

The Kingston Foreshore Development Control Plan was intended to be a seven part document. However only three parts were produced:

- Part 1 Development Plan
- Part 2 Public Domain Urban Design Guidelines
- Part 3 Private Domain Urban Design Guidelines

Part 1 includes guidelines for land use, built form, private domain, public art, traffic and parking, services, ESD, and landscape and public open space. This part also includes development principles and guidelines for the Power House Heritage Precinct. These provisions provide the most detailed explanation of the development intentions for this precinct and the manner in which the Power House is to be protected as a dominant visual structure within the Foreshore area.

The recommendations included at Parts 1 and 3 of the DCP are generally consistent with the 2001 CMP Review for the Kingston Power House Precinct. The Power House and Bulk Store (Fitters’ Workshop) are identified as the ‘heritage-building group,’ and emphasis is placed on the enduring prominence of the ‘distinctive gabled tile roof of the Power House’ in any future development of the area. Building zones for new development within the Power House precinct are identified, and recommendations for their relationships with the heritage buildings, which are proposed for adaptive re-use. A parking structure is proposed to be located within the ‘market building envelopes’ (the former Transport Depot). With regard to materiality, new development is to be differentiated from historic forms through a ‘robust industrial aesthetic’.
4.0 History

4.1 Sources

The following summary history is drawn primarily from the following documents:

- *Kingston Foreshore Site Cultural Mapping Study*, Freeman Collett & Partners, 1996
- *Fitters’ Workshop, Conservation Management Plan*, 2011, Duncan Marshall, Keith Baker, Nicola Hayes (Navin Officer Heritage Consultants) and Brendan O'Keefe
- Assessment of the Kingston Transport Depot for inclusion in the ACT Heritage Register, 2010, included as Appendix (iii) in the *Former Transport Depot, Conservation Management Plan*, 2011, Philip Leeson Architects Pty Ltd

4.2 Chronological summary history

4.3 History

1908 On 8 October 1908, the Limestone Plains at Yass-Canberra was selected as the site of the National Capital by parliamentary ballot. The 1909 *Seat of Government Surrender Act* (NSW) and the 1909 *Seat of Government Acceptance Act* (Commonwealth) officially named Yass-Canberra as the site of the federal capital. The area subsequently surveyed by District Surveyor Charles Scrivener included the present Kingston Section 49 (Kingston was then known as ‘Eastlake”).

1911, February Approval to construct a gauging weir across the Molonglo River, close to the intersection with the Jerrabomberra Creek, was granted on 3 February 1911. The weir was required to measure the river flow.

1911, April The competition for the design of the Federal Capital was announced in April 1911. The deadline for receipt of entries was 31 January 1912 (extended to 28 February 1912), in Melbourne. In the interim, the government was concerned to progress the establishment of the city’s foundations, including the provision of a power supply. However, senior government officials decided that no permanent structure could be erected before the competition was decided.

1911, July In July 1911 a site of 8ha (20 acres) for a temporary power station was selected on the south bank of the Molonglo River, near the Jerrabombera Creek. The site was close to the gauging weir which, it was hoped, would create a pool immediately down river to provide a constant water supply for the power station’s steam-powered boilers. It was also close to the future rail line from Queanbeyan.

1911, August The decision to construct a rail line from Queanbeyan to Canberra was taken in August 1911. Sidings from the rail line were to extend

---

to the Power House, to enable delivery of coal. Grading works were required to be carried out at the Power House site to compensate for the slope down to the river. The rail sidings at had a significant bearing on the development of Kingston as an industrial area.

1912

On 23 May 1912, Walter Burley Griffin was announced as the winner of the competition for the design of the Federal Capital. The scheme envisaged residential development at the present Kingston foreshore. Griffin’s scheme, as well as other highly-placed entries, was revised and adapted by the Departmental Board charged with implementing the city structure. In November 1912 the Departmental Board presented its plan with a power station at the site selected in 1911 – i.e. by November 1912, the ‘temporary’ site had effectively become ‘permanent’. The Federal Cabinet formally ratified the Departmental Board’s plan for the city in February 1913.

1912

Chief architect of the Department of Works and Railways John Smith Murdoch began design work for the Power House in 1912. Rather than guessing how long the facility (then ‘temporary’) would be operational, Murdoch took the view that the coal-fired Power House should be large enough to accommodate the majority of the equipment specified by F W Clements, Chief Engineer and General Manager of the Melbourne Electric Supply Company in his report to Colonel Percy Owen, Commonwealth Director-General of Works, in July 1911.8

1913-14

By 1913 construction of the steel frame of the Power House was underway, and the ‘Brickworks’ light railway had reached the site (Figure 6). The Power House was originally to be clad in corrugated sheet steel. The decision to use bricks may have related to confirmation of the permanent nature of the site. However, the bricks from the Yarralumla brickworks site were of poor quality, resulting in the decision to enclose the steel frame with unreinforced concrete panels. The Power House was oriented at an angle to true north, and located between the two rail sidings that extended from the new Queanbeyan to Canberra rail line. Walter and Marion Burley Griffin arrived in Australia in August 1913, and disapproved of the location of the Power House.9

1914, May

The rail line from Queanbeyan was operational from May 1914. The first goods train pulled into the Power House sidings on 25 May 1914.

1914

Ancillary structures under construction by 1914 included a large engineer’s workshop to the south-east of the Power House, to the rear of which were three other galvanised iron sheds, a blacksmith’s shop, electrical store and joiner’s shop, stables, stores and accommodation for workers, there being little available in Canberra. A temporary saw mill, St Paul’s Church and single men’s camp had been constructed by 1915.


Figure 6  The Power House under construction, c. 1913-14: viewed from the south-west. Note rail line at right.

Figure 7  The Power House and Fitters’ Workshop viewed from the north-west. Note rail lines in the foreground.
Source: ACT Heritage Library.
1915-16 Construction of the Power House and Fitters’ Workshop was complete by 1915, and the machinery was acceptance tested on 2 July 1915 (Figure 7). By early 1916 the Power House was supplying a number of sites included the Royal Military College at Duntroon, the hospital, Commonwealth Bank and Post Office. At the time the Kingston Power House was considered to be among the most advanced in Australia. However, as noted by H A Jones, former chairman of the ACT Electricity Authority, ‘progress soon made it old fashioned’.  

1919 From 1919 a wind break was planted along Interlake (Wentworth) Avenue and Dawes Street at the direction of Charles Thomas Weston, officer in charge of afforestation at the National Capital between 1913 and 1926 (Figure 8). The windbreak consisted of outer rows of acacias, an inner row of eucalypts and four rows of Radiata pines. The depth of the plantings would suggest that the windbreak was also intended to provide a visual barrier between the Power House and the emerging residential development to the south-west. However, it remained a landmark in longer views (Figure 9). As noted by Freeman and Collett, ‘… the entire area enclosed by the power house windbreak was unrelated to Griffin’s street alignment’. Rather, the rail sidings running either side of the Power House were the key determinants in the planning of the area.

1920s Development within and around the Power House precinct during the 1920s included Government stores, a temporary Government saw mill, the Government Printing Office, a fire station, a concrete mixing works near the Molonglo River and residential development, including cottages to the north-east of the Power House and camps to the south-west (Figure 8).

In 1926, the Federal Capital Commission (FCC) announced the construction of the Eastlake Garage, ‘a large brick garage to accommodate 13 cars and 23 lorries,’ to the south of the Power House. The building was constructed around an open-air courtyard (vehicle turning courtyard) with brick external walls to all sides. There was an opening in the north-east elevation, providing access to the south rail siding. There were stepped brick parapets to the north-west and south-east elevations (Figure 10). Shelter for the fleet of four buses, 13 cars and 18 trucks was provided by skillion-roofed enclosures sloping towards the turning area. Mess rooms, toilets and stores were provided in the corners of the building, and two offices were located to the north-west (front) wall. There were two fuel pumps within the turning area. Canberra railway station, at the site of the present station (south of Kingston Section 49), was also completed in 1927.

---


13 ACT Heritage Register citation for the Former Transport Depot, pp. 6-7.
Figure 8  Oblique aerial from the south-east, 1925.

Figure 9  View looking north from the Capitol Theatre, Manuka, 1928, with the Power House indicated.
Source: National Archives of Australia.
Figure 10  View of the former Transport Depot from the Power House, 1929. Source: National Archives of Australia.

Figure 11  Electricity Transmission Switch Yard at the Kingston Power Station, constructed 1929 for receiving power from the Burrinjuck hydro-electric scheme. Source: National Library of Australia.
1920s Despite increasing demand, and the introduction (in 1927) of a British Thomson Houston (BTH) type turbo-alternator, significantly increasing the generating capacity of the Power House, the cost of power generated at Kingston was high. In 1929, when the Burrinjuck hydro-electric scheme in New South Wales came online, the Federal Capital Authority elected to source electricity from this cheaper source. The Kingston Power House was kept on stand-by in the event of problems at Burrinjuck. However, from 1929, after only 13 years in operation, the Kingston Power House was closed down. The site retained its connection with the distribution of power to Canberra and beyond through the introduction of a power line from the Burrinjuck dam to a new bulk substation north-west of the Kingston Power House. This bulk substation (or Electricity Transmission Switch Yard) received, controlled and stepped down the 66,000 volt supply for distribution to the domestic market (Figure 11).

1930s-'40s Doubts about the strength of the Burrinjuck Dam wall in 1935 led to the Kingston Power House being brought back into service between 1938 and 1942. Also in 1938, a 66,000 volt line was connected to the Canberra Switchyard from Goulburn. It is possible that a new switch house building located between the Power House and the bulk substation was constructed to manage the increased load. This small face brick structure had a gabled roof, two windows to its south-east elevation and doors at each end. It included a seven-panel 11kV Westinghouse truck switchboard. The 1938 Switch Room was demolished in the 2000s.

The 1930s-'40s saw the consolidation of Kingston as a government services and infrastructure hub: the printing office was expanded, a hardwood saw mill was established (1947) to augment the existing softwood mill and a trades complex was set up south of the printing works, including facilities for joiners, plasterers etc.

Figure 12  The Power House viewed from Wentworth Avenue, 1951. Note the new chimney stack (right foreground).
Source: ACT Heritage Library.

Figure 13  Elevations and plans for the New Switch House at the Electricity Supply Power Station, Kingston, 11 August 1947 (see also Appendix C).
Source: National Archives of Australia.
The Transport Depot was extended to the north in 1936. Four years later a roof carried on a fully welded rigid steel portal frame was constructed over the original section of the depot, and an administration wing designed in the Inter-War Functionalist style was added to the building’s Wentworth Avenue elevation. In 1945, Interlake Avenue was realigned, renamed (Wentworth Avenue) and widened to its present dimensions, including a broad median strip which was used for parking associated with expansion of the Transport Depot. The widening resulted in the removal of 'Weston’s windbreak,’ with the exception of plantings at the north end in proximity to the Power House (Figure 12).

1950s-'70s

The final operational phase of the Kingston Power House (1948-1957) was brought about by increasing demand for electricity in New South Wales in the post World War II period. A new stack was constructed as part of this final phase of operations, located to the south-west of the economiser annex (Figure 12). A diesel generating power station and a new Switch Room were also constructed at this time (Figure 13). It is possible that the new Switch Room was constructed in anticipation of an increased requirement for the distribution and control of power associated with post-war demand. However, it did not come online until 1960, when the 11kV switchgear was installed, three years after the closure of the Power House for the final time. It is assumed that the 1938 switch house remained operational prior to 1960.

As built, the gabled roof of the single-storey face brick '1948 Switch Room' building was clad with Marseilles pattern terracotta tiles to match the Power House and Fitters’ Workshop (see original drawings at Appendix C).

The former switch house has been extended and/or modified in at least three phases: it was extended to accommodate additional switchgear prior to 1983; it was adapted to an office in the mid-1980s, resulting in the adaption of the doors to its north-east elevation to windows, and the construction of a porch at its north-west end; and in 2006-07 it was adapted to residential accommodation, including a new fit-out.

The base of the late-1940s stack survives, surmounted by an interpretive glass-panel chimney. The diesel generating power station has been demolished.

---

19 H A Jones, 'Electricity,' Chapter 6 of *Canberra’s Engineering Heritage*, Institution of Engineers, Canberra Division, 1990, p. 133.

20 H A Jones, 'Electricity,' Chapter 6 of *Canberra’s Engineering Heritage*, Institution of Engineers, Canberra Division, 1990, p. 133.

A Senate Select Committee report (1955) into the development of Canberra expressed concern about the unplanned nature of development at Kingston, and recommended that no new industrial facilities should be constructed in Kingston and that existing industrial facilities/enterprises should be relocated to the new industrial suburb at Fyshwick. A further recommendation was that Kingston should be developed in accordance with Walter Burley Griffin’s vision for Kingston as a residential suburb.\textsuperscript{22}

In 1964 the NCDC prepared plans for the ‘Kingston Government Services Area’ which provided for the management of the Power House complex by the recently-formed ACT Electricity Authority (ACTEA). ACTEA and its successor body ACT Electricity and Water (ACTEW) remained \textit{in situ} until the early 1990s. ACTEA oversaw the demolition of a number of ancillary structures at the complex, and the construction of new facilities, including workshops and offices to the west of the site.

During the 1960s, significant development around Section 49 included the construction of a major new Government Printing Office (1963) at the intersection of Wentworth Avenue and Dawes Street. The orientation of this large one and two-storey complex referred to the Griffin street plan for the area rather than the alignment of the rail sidings (Figure 14). The other significant change during the 1960s was the creation of Lake Burley Griffin (the lake reached its planned level in April 1964). Contemporary with Lake Burley Griffin was the construction of the Kingston Foreshore Boat Harbour and a new access road (Mundaring Drive) from Wentworth Avenue. The new road (now Eastlake Parade) effectively separated the new lakeside setting and the Power House complex. Subsequent development around the Boat Harbour included the Commonwealth Fish Management Fish Building (1970), the Lake Ecology Building (1971), the Forensic Medicine Building (1972) and a store for ACTEA (1972).

1980s-'90s

In 1981 the Power House was classified by the National Trust of Australia (ACT). Two years later it was included in the Register of the National Estate. The Kingston Power House Precinct was included in the ACT Interim Heritage Places Register in 1998.

In the early 1980s, following discussions with the NCDC, ACTEA agreed to relocate from the Power House, and established new facilities in north and south Canberra. ACTEA also constructed a new substation north of the Power House. The Telopea Park Substation opened in 1984. Also at this time, a transformer and switching building was constructed, accessed from Mundaring Drive, and 132kV cables were placed underground leading from the substation along the alignment of the north rail siding. The agreement between the
NCDC and ACTEA resulted in the release of the lakeside land for development. However, ACTEA retained tenure of the Power House, and was responsible for finding a buyer for the heritage place.

In 1989, with the granting of self-government to the ACT, the Kingston area became subject to the provisions of the Territory Plan. Six years later, in 1995, the ACT Government acquired the Kingston foreshore area and set in train a process of transforming the industrial suburb into a residential area, as anticipated by Walter Burley Griffin. From 1995 this process was guided by the Kingston Foreshore Development Authority (established in September 1995) and more recently by the Land Development Agency (LDA).

In 2006-07, the Power House was adapted to the Canberra Glassworks by Tanner Architects (Sydney).
5.0 Description

5.1 Introduction

Kingston Section 49 is a 5.4ha irregularly-shaped site bounded to the north and east by Eastlake Parade, to the south by new development on Giles Street and to the west by Wentworth Avenue. The land, which forms part of the Molonglo River valley, slopes gently from south to north. The site includes extensive areas of asphalt (much of which is used for car parking). Plantings include remnants of ‘Weston’s windbreak’ (1920s) at the north-west of the site and opposite the entrance to Canberra Glassworks. These trees include Monterrey Pine (*Pinus radiata*) and White Brittle Gum (*Eucalyptus mannifera*).

5.2 Summary of site elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Pictures</th>
</tr>
</thead>
</table>
| Former Kingston Power House (Canberra Glassworks) | The Power House was designed in 1911-12 by chief architect of the Department of Works and Railways John Smith Murdoch. The body of the building comprises two gabled halls (the former boiler and engine bays), each approximately four storeys high (the gable ridges are RL 579; the eaves line is RL 573.5). The Power House is steel-framed with walls of unreinforced concrete panels. The steeply pitched gables are clad with unglazed terracotta tiles. There is lower parapeted section to the north-west (RL 571.6) and a single storey economiser annex to the south-east. The base of the 1948 chimney is to the south-east of the economiser annex. The stack has been demolished. A glazed interpretive feature carried on a metal frame, replicating the height and form of the stack, has been installed on top of the chimney base. In 2006-07, the Power House was adapted to Canberra Glassworks to designs by Tanner Architects. The works included the adaptation of the former boiler bay to a workshop for glass artists, and the construction of a skillion-roofed single-storey stores clad with dark-coloured corrugated sheeting to the north-east of the Power House (bottom right). | ![Picture 1]![Picture 2]![Picture 3]![Picture 4]![Picture 5]![Picture 6]![Picture 7]![Picture 8]
<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Fitters’ Workshop</td>
<td>The Fitters’ Workshop (built 1916) is a substantial structure constructed of unpainted concrete panels with a gabled roof clad with red/orange tiles. The entrance is at the south end of the north-west elevation. Historically, the area to the south-east of the Workshop accommodated a number of associated buildings. It is presently open space. Internally, the space is a single volume. The Fitters’ Workshop is vacant. It is proposed to be adapted as premises for the Megalo print workshop, including the introduction of a mezzanine level, and an annex projecting to the south-east.</td>
<td>![Picture 1] ![Picture 2] ![Picture 3]</td>
</tr>
<tr>
<td>Former 1948 Switch Room (now accommodation for visiting glass artists)</td>
<td>The former Switch Room is a single-storey brick building with a gabled tiled roof. It was constructed in 1948. (The original drawings of the building are included at Appendix C.) In the post-World War II period there was a shortage of generating plant in New South Wales, and a significantly increased demand. This resulted in the Power House being brought back into service (from 1948-57). The new stack was built as part of the final operating phase of the Power House. The former Switch Room was constructed at the same time, presumably in anticipation of an increased requirement for the distribution and control of power. However, the 11kV switchgear was not designed and installed until 1960, three years after the closure of the Power House for the final time. The building was later extended to the north-west to accommodate additional switchgear. It is assumed that the 1938 Switch Room</td>
<td>![Picture 4] ![Picture 5] ![Picture 6]</td>
</tr>
</tbody>
</table>

---


<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element</td>
<td>remained operational prior to 1960. The 1948 Switch Room was adapted to an office in the mid-1980s, at which time the switchgear was removed, an extension was added to the south-west and the original doors to the centre of the north-east elevation were adapted to windows. More recently, the building has been adapted to accommodation for visiting glass artists, including a new fit-out.</td>
<td></td>
</tr>
<tr>
<td>Telopea Park Substation</td>
<td>The substation is located at the north of Kingston Section 49. The brick structure was built in 1984. The complex has not been identified as having heritage significance. However, its presence perpetuates the century-old connection between the site and the production/distribution of electricity.</td>
<td></td>
</tr>
<tr>
<td>Former Transport Depot</td>
<td>The former Transport Depot is a large one and two-storey brick building constructed in multiple increments between 1926 and the 1980s. The original building (the Upper Hall) was constructed around an open-air vehicle turning courtyard. Parking was provided under skillion roofed enclosures to the sides. There were stepped parapets to the north-west and south-east elevations. Modifications in 1940 included the enclosure of the depot with a pitched roof carried on a fully welded rigid steel portal frame, and the construction of an administration wing to the south-west designed in the Inter War Functionalist style (bottom right). Subsequent additions saw the extension of the building to the north (Lower Hall), and included a two-storey workshop area at the south-east of the building (right).</td>
<td></td>
</tr>
</tbody>
</table>

### Element | Description | Pictures
--- | --- | ---
Trees | Remnants of ‘Weston’s windbreak’ (1920s) are located at the north-west of the site (top right) and opposite the entrance to Canberra Glassworks (bottom right). Respectively, these trees are Monterey Pine (*Pinus radiata*) and White Brittle Gum (*Eucalyptus mannifera*). | ![Tree Image](image1.png) ![Tree Image](image2.png) ![Tree Image](image3.png)
North rail siding and embankment | An archaeological excavation was carried out at the embankment to the north of the Power House and Fitters’ Workshop prior to the adaptation of the Power House to the Glassworks in 2006-07. It is understood that the embankment was subsequently regraded. Sections of steel rail line and timber sleepers were installed for interpretive purposes at that time. | ![Rail Siding Image](image4.png) ![Rail Siding Image](image5.png)
South rail siding | The alignment of the former south rail siding is generally open space. The northern annex to the former Transport Depot (1980s) is constructed on this alignment. | ![Rail Siding Image](image6.png) ![Rail Siding Image](image7.png)
Rail platform | A section of the railway platform associated with the former south rail siding is located between the Fitters’ Workshop and Lower Hall 3 (1951) of the former Transport Depot. | ![Rail Platform Image](image8.png) ![Rail Platform Image](image9.png)

---

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscaping</td>
<td>A modern pedestrian pathway connects Wentworth Avenue to Eastlake Parade at the east of the site. South-west of the Glassworks this connection incorporates a landscaped area including the remnant White Brittle Gum (right top). North-east of the Glassworks two ramps manage the level change created by the rail embankment. The path itself is finishes in red bricks arranged in a herringbone pattern, and crushes brick (right bottom).</td>
<td></td>
</tr>
<tr>
<td>At grade car parking</td>
<td>At grade car parks are located to the north-east of Section 49, and to the north-west of the Power House.</td>
<td></td>
</tr>
<tr>
<td>Underground services</td>
<td>132kV electrical cabling extends from the south-east corner of the Telopea Park substation and along the alignment of the north rail siding embankment and Printers Way. See thick green line (indicated) in plan at right.</td>
<td></td>
</tr>
</tbody>
</table>

### 5.3 Local context

Until the 1990s the Kingston foreshore retained an industrial character, with generally open views to Lake Burley Griffin. Redevelopment since then has seen its transformation to a primarily residential area, based on a masterplan prepared for the Kingston Foreshore Development Authority by Colin Stewart Architects in the late-1990s (Figure 15). Recent development includes medium-rise (three to five levels) apartment buildings in the blocks bounded by Eyre and Giles streets, Wentworth Avenue and Eastlake Parade (Figure 16), and the Waterfront apartments to the north-east of Kingston Section 49.

The Waterfront development has blocked views to Lake Burley Griffin from Kingston Section 49 (Figure 17). From the north of the lake visibility of historic buildings at Kingston Section 49 is limited to the economiser annex, the interpretive glazed stack and the Fitters’ Workshop (Figure 18). The parapets of the penthouse suites to the Waterfront development are RL 578, consistent with the Development Code for the CZ5 Mixed Use Zone. The Aurora,
Lakefront and Bridge Point developments are under construction to the east of Kingston Section 49, to the north of the boat harbour (Figure 15).

Development to the west of Wentworth Avenue ranges from one to three storeys and generally dates from the 1970s, interspersed with some older properties (Figure 19).

Figure 15  Kingston Foreshore Masterplan.  Section 49 is highlighted.
Figure 16  View of contemporary residential development from Kingston Section 49.

Figure 17  View looking east from the space between the Power House and Fitters’ Workshop (October 2011): note the Waterfront Apartments to the left, and new construction to the centre of the picture.
Figure 18  View of Kingston Section 49 from Grevillea Park, on the north bank of Lake Burley Griffin (October 2011). The Fitters’ Workshop and economiser annex to the Power House are indicated.

Figure 19  View of the west side of Wentworth Avenue from the median strip.
6.0 Statement of significance for Kingston Section 49

The Heritage Strategy for Kingston Section 49 (Lovell Chen, November 2011) includes the following Statement of Significance for the place. It also identifies buildings, areas and elements (including landscape features) considered to be of primary and secondary significance to the former industrial and government services area at Kingston (Section 6.1).

Statement of significance

What is significant?

The former industrial and government services area at Kingston Section 49 is located approximately 2km east of Capital Hill in central Canberra. It is a remnant of a once much larger industrial complex that extended south-east towards the present Canberra railway station. The primary surviving industrial/government services buildings at the area are the Power House (Canberra Glassworks), Fitters’ Workshop and the former Transport Depot. These buildings are oriented north-west to south-east, their planning being subordinate to the two rail sidings that ran either side of the Power House and Fitters’ Workshop from 1914. The alignment of the rail sidings remains visible. The north rail siding and embankment has been partially reconstructed. To the west of Kingston Section 49, two groups of trees (Monterey Pine, Pinus radiata and White Brittle Gum, Eucalyptus mannifera) are remnants of a deep windbreak planted from 1919 under the direction of Thomas Weston, officer in charge of afforestation at the National Capital between 1913 and 1926.

How is it significant?

The former industrial and government services area at Kingston Section 49 is of historical significance. The Power House (Canberra Glassworks), Fitters’ Workshop and the remnants of Weston's windbreak are of historical and aesthetic significance. The former rail siding alignments are of historical significance. The upper bay of the former Transport Depot is of historical and technical significance.

Why is it significant?

The former industrial and government services area at Kingston Section 49 is historically significant for its associations with the establishment phase of the Federal Capital. Following the decision in 1908 to construct the Federal Capital at the Limestone Plains, consideration was given to the provision of water, power and construction materials in the isolated setting. The construction of a power station south of the Molonglo River (the pool created by the 1913 gauging weir provided a constant source of water for the Power House boilers) and in proximity to the anticipated rail line from Queanbeyan was an outcome of this process, and was a critical factor in the emergence of Kingston as an industrial area. The decision also pre-dated the competition for the design of the Federal Capital. By the time Walter Burley Griffin was announced as the winner of the competition the ‘temporary’ site had become permanent. Griffin had anticipated the area for residential development.

The Power House and Fitters’ Workshop were among the first permanent buildings constructed in the Federal Capital (completed in 1915 and 1916 respectively). The space between them is believed to have been the first man-made environment in the nascent city.
Coal for the Power House was delivered to the site by rail sidings (1914) located to either side of the Power House and Fitters’ Workshop. An embankment was created to the north of the buildings, to compensate for the slope down to the Molonglo River. The alignment of the rail sidings remains visible, and contributes to an understanding of the process of coal fired electrical power production. The north rail siding and embankment has been partially reconstructed as part of the interpretation of the place.

During its relatively brief period of operation (from 1916 to 1929), a large number of buildings and ancillary structures were constructed in proximity to the Power House. The planning of these structures was generally subordinate to the alignment of the rail sidings. This pattern continued to the south of the Power House during the 1920s and ’30s, with development extending on a strong axial alignment from north-west to south-east. Later Government facilities included saw mills, the Government printing office and a trades school, reflecting the centralised provision of industrial and engineering services as part of the planned approach to the development of Canberra. The orientation of the Transport Depot (1926-27), located to the south of the Power House, was also subordinate to the rail siding, and reflected the consolidation of government services in the area.

The former Transport Depot (upper hall) is historically significant for its ability to recall the evolution of Canberra’s public transport network in the development phase of the national capital.

Since the 1960s, the planning emphasis for the area has seen its gradual transformation from an industrial to a residential area. During this period the extent of the former industrial/government services area has been considerably reduced. The Power House, Fitters’ Workshop, the former Transport Depot and the rail siding alignments and embankment survive as remnants of the area’s industrial character. Subsurface artefacts at Kingston Section 49 have the potential to contribute to an understanding of the uses and operation of the industrial area in the early development of the national capital.

Historically, the government services/industrial area was a self-contained compound, screened from view by a deep windbreak planted from 1919 under the direction of Thomas Weston, officer in charge of afforestation at the National Capital between 1913 and 1926. However, the body of the Power House building (approximately four storeys high) and its distinctive steep gabled roof forms were visibly prominent in the generally flat landscape. Notwithstanding new development in the area, the gabled roof forms remain visible today, particularly in views from the west, through the remnants of Weston’s windbreak planted in the 1920s.

The remnants of the windbreak are significant as early plantings associated with Thomas Weston. They demonstrate his approach to landscaping and plantings that has exerted a major influence on the development of the national capital. They are also significant for their ability to demonstrate the intent to screen the industrial complex from view in the early period of the national capital.

The Power House and Fitters’ Workshop are aesthetically significant. Both buildings were designed by chief architect of the Department of Works and
Railways John Smith Murdoch, and were completed in 1915 and 1916 respectively. The buildings are related stylistically, being early examples of the Stripped Classical (or 'Federal Capital') architectural style. The Power House is steel-framed with walls of unreinforced concrete panels. The Fitters’ Workshop is a reinforced concrete structure with roughcast render walls. Both have steeply-pitched gabled roofs areas finished in unglazed terracotta tiles. Each building expresses its function. The two gabled halls of the Power House accommodated the boiler and engine bays. The Fitters’ Workshop is a single volume, reflecting the requirement for a flexible space for maintenance of government plant and equipment.

As built (1926-27), the former Transport Depot was a symmetrically composed brick structure with stepped parapets at each end and an open-air turning circle in the middle. Modifications and later additions have reduced an ability to appreciate the building in its original form. The fully welded rigid portal frame constructed in 1940 to enclose the Bus Depot is technically significant as an early example of its type in Australia.

6.1 Levels of significance

6.1.1 Curtilage

Primary heritage curtilage

Two levels of heritage curtilage have been identified at the study area: primary and secondary (Figure 20). The primary curtilage is the area surrounding the Power House and Fitters’ Workshop. To the north-east and south-west this area is flanked by the former rail siding alignments; to the south-east and north-west it extends approximately 15m from the historic built form. It is considered that the retention of this area as open space is critical to an appreciation of the architectural and planning relationship between the two buildings.

The location of the Transport Depot to the south of the Power House and south-west of the Fitters’ Workshop is of interest, particularly its alignment in relation to the rail sidings. However, the evolved building does not have an architectural or functional relationship with the Power House or Fitters’ Workshop, and is not considered to constitute a component of the primary heritage setting.

Secondary heritage curtilage

The secondary heritage curtilage captures all the identified heritage elements (buildings and trees) within the study area. It is defined to the north-east by the former rail siding alignment and to the north and south-west by Wentworth Avenue. The southern extent is defined by the south-east elevation of the former Transport Depot.

The secondary curtilage is intended to represent a zone of heritage sensitivity as opposed to an area that should necessarily remain free of new development. Where new development is proposed within the secondary heritage curtilage, the siting, massing and height of new built form should demonstrate a sensitive approach to buildings and elements of primary significance.

6.1.2 Buildings and elements

Primary significance

Building and landscape elements of primary heritage significance at Kingston Section 49 are associated with the early development of Kingston as an industrial and government services area (i.e. from 1913, when construction of the Power House commenced). These are:

- The former Kingston Power House (Canberra Glassworks)
• The former Fitters’ Workshop
• The former rail siding alignments to the north and south of the Power House, and remnant section of railway platform to the south-west of the Fitters’ Workshop
• Trees to Wentworth Avenue, remnants of the 1920s windbreak: Monterey pines (*Pinus radiata*) and White brittle gum (*Eucalyptus mannifera*)
• The 1926-27 component of the Transport Depot, including the fully welded rigid portal frame (1940)

**Secondary significance**

Building and landscape elements of secondary heritage significance are later (mid-twentieth century) additions to the industrial and government services area and include:

• The 1948 Switch Room
• Later additions to the former Transport Depot (1936, 1945, 1951, 1954, 1960 and the 1980s)

![Figure 20 Levels of significance. Source: Lovell Chen Heritage Strategy.](image)
7.0 Description of the proposal

The proposal is for the development of Kingston Section 49 as a mixed-use residential, commercial and manufacturing precinct with an arts emphasis. It includes new built form, the adaptive re-use and extension of the Fitters’ Workshop and limited demolition. Approximately 30 per cent of the area is proposed for public open space (equivalent to c. 1.6ha).

7.1 New built form

A large building envelope is proposed to the north-west of the Power House, within the secondary heritage curtilage. This site is proposed for development as a multi-level parking structure with retail tenancies in an undercroft to the south-east at ground level. The parking structure is rectilinear in form, and has a footprint of approximately 45m x 36m at ground level (the dimensions of the upper levels are approximately 50m x 36m). To the south-west and north-east it aligns with the main building line of the Power House. To both of these elevations, stair/lift cores extend into the rail siding alignments, and assist in breaking down the mass of the building. The north-west elevation is approximately 10m from the Telopea Park Substation – as noted below (Section 7.3), the existing ’1948 Switch Room’ is proposed for demolition. At ground level, the south-east elevation of the parking structure is 16.4m from the north-west elevation of the Power House, requiring the demolition of the modern skillion-roofed single-storey stores associated with the Glassworks. The upper levels of the parking structure are separated from the Power House by 10.9m. The height of the parking structure is approximately 12m above ground level, being aligned to the parapet of the lower projecting wing to the north-west elevation of the Power House (RL 571.6) (Figure 21, Figure 22 and Figure 23). No details have been provided regarding the materials of the facades. However, it is understood that the intention is to provide a neutral cladding system, to minimise the visual impact of the parking structure as a foreground element in views of the Power House from the north.

Figure 21 Ground floor plan of the proposed parking structure.
Source: Cox Architecture (April 2012).
Further building envelopes are proposed to the north-east of the north rail alignment (predominantly outside the secondary heritage curtilage) and to the south-east corner of Kingston Section 49, in proximity to the modern residential development addressing Giles Street. These include two commercial / retail buildings located either side of a public open area oriented to the view line extending from the Power House to the lake. These buildings will be a maximum of four storeys, and it is anticipated that their parapets will be no higher than the eaves line of the Power House (RL 573.5). As such they will be screened in ground-level views from the north (across the lake) by the Waterfront apartments (RL 578). The commercial buildings will be no less than 30m from the Power House and Fitters’ Workshop, with the north rail alignment and embankment providing a spatial buffer, and enabling an appreciation of oblique views of the Power House and Fitters’ Workshop from the north-east and south-east.

A new arts facility is proposed to the south-east of the Fitters’ Workshop, with a new residential development in proximity to the modern medium-rise residential development to the south of the area. The arts facility is proposed as three individual buildings. A laneway between two of these elements will enable a continuation of the north rail alignment. The Master Plan does not identify heights for the arts facility. At its closest point, the arts facility is approximately 50m from the south-east elevation of the Fitters’ Workshop, separated by a new public plaza.

7.2 Adaptive re-use

Note: Plans for the future use of the Fitters’ Workshop are not included in the Kingston Section 49 Master Plan. However, the footprint of the extension is indicated in the Master Plan, and its proposed use by Megalo does form part of the proposed development of Kingston Section 49 as an arts precinct.

It is anticipated that the Fitters’ Workshop will be adapted for use by the Megalo Print Studio. Works to accommodate Megalo include the introduction of a mezzanine level within the
existing building, and the construction of a new annex extending to the south-east. This is understood to be a single-storey pavilion, connected to the workshop by a glazed enclosure.

7.3 Demolition

The former ‘1948 Switch Room’ is proposed for demolition, to provide space for the construction of the parking structure. Also proposed for demolition are the modern skillion-roofed single-storey stores associated with the Glassworks and the 1980s additions to the north-east of the former Transport Depot (Figure 24). These 1980s additions to the former Transport Depot are built over the alignment of the south rail siding.

7.4 Open space

Kingston Section 49’s Wentworth Avenue interface is to be retained as open space. A landscape treatment is not identified in the Master Plan document. A new plaza is proposed in the area to the north-east of the former Transport Depot and south-east of the Fitters’ Workshop.

Figure 24 Sequential development plan of the former Transport Depot, Kingston. The ‘Northern Annex’ is indicated.
8.0 Comments on heritage impacts

The following assessment of heritage impacts has regard for the relevant provisions and policies of the:

- *Heritage Act 2004*: the ACT Heritage Register entries for the Kingston Power House Precinct and the former Transport Depot
- National Capital Plan: Section 4.5.6, Kingston Foreshore Special Requirements
- Territory Plan: Kingston Foreshore Structure Plan and the CZ5 Mixed Use Zone Development Code

This assessment also has regard for policies and recommendations included in:

- *Fitters’ Workshop, Conservation Management Plan*, 2011, Duncan Marshall, Keith Baker, Nicola Hayes (Navin Officer Heritage Consultants) and Brendan O’Keefe

The conservation policies and guidelines included in these CMPs were reviewed during the preparation of the Heritage Strategy (Lovell Chen, November 2011). As appropriate, these policies / guidelines were incorporated into the Heritage Strategy for Kingston Section 49, prepared by Lovell Chen (November 2011). The Heritage Strategy, including the Statement of Significance and identification of elements and areas of significance (Sections 6.0 and 6.1), is also referred to in the following assessment.

Comment

From a heritage perspective, the principal issues with regard to the proposed development of Kingston Section 49 for a mixed-use residential, commercial and manufacturing precinct with an arts emphasis are considered to be:

- ensuring that new built form does not detract from the Power House as the dominant built element in the area, particularly the distinctive gabled tiled roof form;
- maintaining an appreciation of the architectural and planning relationship between the Power House and the Fitters’ Workshop; and
- conserving elements and areas critical to an appreciation of the operation and planning of the former government services / industrial precinct.

### Assessment

<table>
<thead>
<tr>
<th>Issue</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition of the ‘1948 Switch Room’</td>
<td>The ACT Heritage Register Statement of Significance for the Power House Precinct states that the 1948 Switch Room is significant for its ability to provide evidence of the last phase of the reactivation of the Power House (1948-57). The building was graded C (on a grading system of A-D) in the <em>Kingston Power House Precinct, Conservation Management Plan Review</em>, 2001.²⁷ It is important to acknowledge the distinction between Kingston Section 49 as a site for the generation of...</td>
</tr>
</tbody>
</table>

electricity (1916-29, 1936-42 and 1948-57) and a site for
the receipt, control and distribution of power generated
elsewhere (1929 to the present day). The reactivation of
the Power House in 1948 required the construction of a
new stack in order to support operations (the base of the
stack survives). However, the construction of the 1948
Switch Room was not in itself related to the reactivation of
the Power House. Rather, the function of the building was
to receive, control and distribute power.

At the time of its construction the Switch Room was
surplus to requirements. It did not come online until 1960,
when the 11kv switchgear was installed. Since then it has
been extended and/or modified on at least three occasions.
The most recent works (the fit-out to residential use) post-
date the ACT Heritage Register entry for the Kingston
Powerhouse Historic Precinct (2000). The context of the
1948 Switch Room has also changed since 2000, through
the demolition of the two-storey engineering services
workshop and the 1938 switch house (respectively graded
D and C in the 2001 CMP Review). This has resulted in the
1948 Switch Room being physically isolated from the
Power House and Fitters’ Workshop. Today, in a planning
sense, the building relates most directly to the modern
Telopea Park substation (1984). This connection is
reinforced through the design parallels between the 1948
Switch Room and the main entry to the substation,
including the general scale of the buildings, their simple
gabled roof forms, the use of face brick and dark concrete
roof tiles.

The requirements in the entry to the ACT Heritage Register
for the Kingston Power House Precinct state that demolition
will be not supported unless it is recommended for public
health and safety reasons, and unless it can be
demonstrated that there is no prudent or feasible
alternative.

The 1948 Switch Room is a modified building. It was
graded C in 2000, and further works have been carried out
to it since then. In revisiting the building, our conclusion is
that works over time, and the changed context, have
diminished the significance of the former Switch Room to
the point that the demolition of the building would not
materially affect the cultural heritage values of the former
government services / industrial area.

Demolition of the north annex
to the former Transport Depot

The north annex to the former Transport Depot was the
last addition to the evolved structure, being constructed in
the 1980s.

The significance of the former Transport Depot, as noted in
the entry to the ACT Heritage Register for the former
Transport Depot includes the fully welded rigid steel portal
frames to the upper hall and the orientation of the building
in relation to the former railway siding and Wentworth Avenue. The north annex has not been identified as contributing to the significance of the former Transport Depot.

The CMP for the former Transport Depot prepared by Philip Leeson Architects (2011) identifies the north annex as an element that, ‘May be demolished to facilitate the opening up of the lower halls to an outdoor plaza area’.

In addition, it is considered that the location of the north annex on the alignment of the former south rail siding inhibits an understanding of the rail sidings as historically open spaces that provided the core planning determinant in the development of the area.

In summary, the demolition of the north annex is supported from a heritage perspective, as an action that will enhance an appreciation of the rail sidings and enable the activation of the former Transport Depot with the open area to the north-east. The demolition of the north annex will also re-establish the historic connection between the original bus depot (1926-27) and the area to the south-east of the Fitters’ Workshop.

<table>
<thead>
<tr>
<th>Demolition of modern stores to the north-west of the Power House</th>
<th>The modern skillion-roofed single-storey stores associated with the Glassworks make no contribution to the cultural heritage significance of the area, and their demolition raises no heritage issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impacts of the parking structure</td>
<td>Over time, built form in the area to the north-west of the Power House has included an Electricity Transmission Switch Yard (Figure 11) and two associated Switch Rooms (both single storey), of which one is extant albeit modified. These developments have been of limited scale and located within the alignment of the north and south rail sidings. The area is presently at grade car parking. A car parking structure with ground level retail tenancies is proposed to the north-west of the Power House. This location has been identified as an outcome of the masterplanning process for the development of Kingston Section 49 as an arts precinct. Specific requirements in the ACT Heritage Register entry for the Kingston Power House Precinct stipulate that the Power House is to remain the dominant feature of the precinct in any future development, and that new development will only be permitted where it can be demonstrated that it will not adversely affect the heritage significance of the place or the landmark qualities of the Power House. The Heritage Strategy (Lovell Chen, 2011) notes that new development can be contemplated to the north-west of the Power House and the south-east of the Fitters’ Workshop.</td>
</tr>
</tbody>
</table>
on the condition that new built form is contained within the rail sidings. The Heritage Strategy also notes that new development should be a minimum of 15m from the north-west elevation of the Power House. Key historic views identified in the Heritage Strategy are to the east of Power House and Fitters’ Workshop, particularly oblique views that enable an appreciation of the architectural and planning relationship between the two buildings (Figure 20). It is also noted that the provisions of the Development Code for the CZ5 Mixed Use Zone require that car parking structures are designed to integrate with the built form of existing development.

The location of the parking structure has a high level of heritage sensitivity. In terms of its footprint, height and bulk it is considered that the parking structure in its proposed form can be accommodated. It generally satisfies the specific requirements in the ACT Heritage Register entry for the Power House, and the recommendations of the Heritage Strategy (Lovell Chen 2011), although greater separation of the proposed parking structure from the north-west elevation of the Power House would be desirable. The stair/lift cores do extend into the rail sidings, but these elements are of limited dimensions. As such their impact will be marginal, and can be balanced against the potential for the cores to break down the mass of the structure.

A critical issue to resolve is the articulation of the parking structure, in order for it to sit comfortably in its setting, and to avoid detracting from an appreciation of the Power House. This is also a requirement of the Development Code for the CZ5 Mixed Use Zone. The selection of the materials should be considered carefully, and the colours should be both responsive and deferential to the heritage context.

Historically the area between the Molonglo River (Lake Burley Griffin) and the north rail siding has been developed for a range of uses associated with industrial / services operations. Built form in this area has generally been of limited scale. Today, much of this area is used as at grade car parking. There is limited visibility to this area from outside Kingston Section 49, with views constrained by the Waterfront apartments (RL 578) and the Power House itself.

The Kingston Section 49 Master Plan identifies the area to the east of the north rail siding for a number of new buildings (commercial, residential and arts-use). A height of RL 573.5 (approximately 14.5m above ground), equivalent to the eaves line of the Power House, is identified for the two northern-most buildings. The new buildings will be no less than 30m from the Power House.
and Fitters’ Workshop.

The Special Requirements to the National Capital Plan (Section 4.5.6) require that the height of new buildings in the area is to be generally consistent with that of the tree canopy of mature trees in the area, or four storeys except, for some taller buildings where these do not significantly impact on the landscape of the area or detract from the massing of the Power House. The Development Code for the CZ5 Mixed Use Zone notes that new buildings should be no higher than four storeys. It is also noted that the area to the east of the north rail siding is outside the secondary heritage curtilage, as identified in the Heritage Strategy (Lovell Chen, 2011).

The key heritage consideration relating to the proposed development to the east of and south-east of Kingston Section 49 is the potential for the works to impact visually on the Power House and the Fitters’ Workshop, including the architectural and planning relationship between the buildings. It this regard, it is considered that the separation of building envelopes from the historic built form by no less than 30m – an area that includes the north rail alignment and its embankment – is an appropriate response to the site, enabling an appreciation of oblique views of the Power House and Fitters’ Workshop from the north-east and south-east. The proposed height of the commercial buildings to the north of this area are responsive to the guidelines at Section 4.5.6 of the NCP and the CZ5 Development Code, and will have no visual impact on the Power House in views from the north, being screened by the Waterfront development. Development of comparable scale to the south-east of Kingston Section 49 would likewise have limited visibility from across the lake, being screened by the new buildings under construction to the north of the Boat Harbour.

The Master Plan does not include details of façade articulation or materials. However, the recommendations at Section 4.5.6 of the NCP (Special Requirements) are generally supported, including roof forms that do not compete with the distinctive steep gabled roof form of the Power House and a materials palette that is generally light in tone and with limited diversity.

| Impacts of the extension of the Fitters’ Workshop | Detailed plans for works to the Fitters’ Workshop do not form part of the Master Plan for Kingston Section 49. The following comments relate to the footprint and location of the proposed Megalo extension, which is proposed to the west of the south-west elevation of the Fitters’ Workshop.

Historically, buildings and additions associated with the Fitters’ Workshop have extended to the south-west of the building, addressing the rail sidings. This has created a ‘U’ shaped building form, with the Fitters’ Workshop as the... |
base of the ‘U’. As existing, the area to the south-west of the Fitters’ Workshop is vacant.

The Fitters’ Workshop CMP prepared by Duncan Marshall et al. (2011) anticipates new development to the south-east of the Workshop. The CMP recommends that new development should ‘echo the footprint of one of the earlier buildings in this area,’ should be sympathetic to the earlier industrial character of the area and be of muted colours. New development should have minimal impact on the south-east elevation of the Workshop.

The proposed Megalo extension (to the extent of its footprint and location), satisfies the recommendations of the Fitters’ Workshop CMP. Further, the location of the extension, allied to the demolition of the northern annex to the former Transport Depot, will reinforce the historic alignment of the south rail siding.

<table>
<thead>
<tr>
<th>Landscaping and open space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historically, open space at the former Kingston industrial / government services area at Kingston was unplanned and utilitarian, with open areas flanking the rail sidings (storage areas) and other open spaces towards the river (Lake Burley Griffin from 1964). Formal landscaping was limited to the Wentworth Avenue frontage (‘Weston’s windbreak’). Other open areas of significance were the rail siding alignments themselves. The open spaces included areas of hard-paving, and included few if any decorative plantings.</td>
</tr>
<tr>
<td>The Master Plan proposes new open spaces between the commercial buildings to the east of Kingston Section 49 and a plaza to the south-east of the Fitters’ Workshop. Existing landscaped open spaces to the Wentworth Avenue frontage are to be retained.</td>
</tr>
<tr>
<td>Specific requirements relating to landscaping included in the ACT Heritage Register entry for the Kingston Power House Precinct are for the conservation of the Monterey Pines (Pinus radiata) and White Brittle Gums (Eucalyptus mannifera) along Wentworth Avenue, and their replacement with the same species when required; the retention of the north rail siding as a linear open space; the retention and ‘appropriate’ landscaping of the spaces surrounding the Power House, Fitters’ Workshop and railway alignment; and the retention of visual links between the Power House and East Basin and Bowen Park. These recommendations are reiterated in the Kingston Power House Precinct, Conservation Management Plan Review, prepared by Peter Freeman (2001).</td>
</tr>
<tr>
<td>Policies relating to landscape considerations included in the Fitters’ Workshop CMP (2011) are that the areas to the north-west, north-east and south-west of the Fitters’ Workshop should remain open to allow views of the</td>
</tr>
</tbody>
</table>
Workshop, with no plantings or structures and a hard landscape finish evocative of the former industrial/engineering character of the area. The Former Transport Depot, Conservation Management Plan, prepared by Philip Leeson Architects Pty Ltd (2011) notes that retention of Cypress Trees to the south and west of the Upper Halls is ‘desirable,’ consistent with their location in this area since the 1950s.

From a heritage perspective the principal landscaping considerations relate to the Wentworth Avenue frontage, and the remnants of ‘Weston’s windbreak’. This area is proposed to be retained as open space and, as such, satisfies the requirements of the ACT Heritage Register entry and the CMP Review. It will maintain the existing views of the former Kingston government services/industrial area from the north. These are relatively recent views. However, this approach is consistent with the present use of the Power House as a visitor attraction.

The Master Plan does not include details of a proposed landscaping treatment. However, it would be appropriate for the remnants of the windbreak to be reinforced, with the planting of additional trees and replacement of existing with the same species as required. There is also potential for future landscaping works to be integrated with the interpretation of the area, including the retention of the rail alignments as linear open spaces. A formal treatment for the south rail alignment, incorporating the extant section of platform, would be supported from a heritage perspective.

As a general comment, future landscaping should be of a contemporary character and appearance that responds to the historic context with a balance of soft and hard landscaping. Extensive grassed areas should, in preference, be avoided.

Views and vistas

The Power House was a large industrial facility built to provide an essential service. It was not a building designed to be ‘viewed’. However, given its scale – it was built to accommodate five 600kW generators – and the generally flat terrain it has long been recognised as having ‘landmark’ qualities in its local context. This remains the case today, particularly in views from the west.

From the 1920s until the 2000s the Power House complex was screened in views from the west, both by plantings and built form. Between 1919 and 1923, a deep windbreak was planted to the west of the Power House, running parallel with Interlake (Wentworth) Avenue. This formed a visual barrier from the emerging residential district to the west. In the mid-1940s the present alignment of Wentworth Avenue was established, with a wide median strip for parking, and Plane trees to either
However, in the immediate vicinity of the Power House the 1920s plantings – by then mature – survived. In the 1960s, two workshop and office buildings were constructed for ACTEA in the triangular area to the west of the Power House. These were demolished in the 2000s. The present generally open views of the complex from the south-west and north-west date to this period, and provide the principal viewing point for the complex from the public domain.

Historically, views of the Power House complex from the north and east, across the Molonglo River (Lake Burley Griffin from 1964), were comparatively open. A 1941 conference attended by senior officers responsible for the various industrial functions in the Kingston met to consider the future development of the area, which was considered unsightly and uncoordinated. The conference resolved that a strip of at least 135m (150 yards) should be reserved along the riverbank for a belt of trees to screen the area. However, this was not established.

The 2001 CMP Review for the Power House Precinct identified views of the Power House from Kings Avenue Bridge as a key ‘vantage point’. However, the recent Waterfront development has largely blocked views from the north, with only the Fitters’ Workshop and the former economiser annexe being visible.

The 1997 master plan for the Kingston foreshore prepared by Colin Stewart Architects incorporated a view line looking north-east from the Power House through the new lakeside development towards the Jerrabomberra Wetlands. This view line is a modern introduction, and is not based on historic precedent. It is also noted that there is limited visibility of the Power House from the wetlands – i.e. this is a view ‘out’, rather than ‘in’.

From a heritage perspective, longer views of the Power House are fortuitous and of limited significance. The key consideration in terms of views and vistas are local views of the Power House and Fitters’ Workshop as structures with a demonstrable visual, planning and functional relationship. The primary vantage points for these views are from the north-east, particularly viewed obliquely. These views are retained in the proposed Master Plan.

| Interpretation | Within the Kingston Section 49, existing interpretation devices are limited, and include story boards fixed to temporary hoardings along the Wentworth Avenue frontage. The Kingston Foreshore Structure Plan promotes increased |

---

public access to, and experience and understanding of, the heritage significance of the Kingston Foreshore.

The Master Plan does not include an interpretation strategy. However, it does recommend the preparation of an interpretation plan prior to the finalisation of the Estate Development Plan (EDP) to enable any proposals requiring development approval to be included in the EDP. This recommendation is supported.

The interpretation plan should augment the physical evidence of the Kingston government services/industrial area, and enhance an appreciation of the processes and activities that occurred there, as well as emphasising the status of the Power House as the first permanent building in the national capital. A critical element of the plan should be to reinforce the alignment of the former rail sidings, being the elements that determined the planning of the area from 1913/14 to the 1960s.

8.2 Concluding comment

Kingston Section 49 is a large and under-utilised site located in an area that has seen significant development over the past 15-20 years, and where future development is anticipated. The acceptance that development can occur at Kingston Section 49 is well established, as reflected in the provisions and policies of the National Capital Plan and the Territory Plan.

From a heritage perspective, a key issue is how to appropriately reflect the heritage significance of the place and its constituent elements in the new development.

The primary reasons for the significance of the former government services / industrial area at Kingston Section 49 relate to its associations with the establishment phase of the Federal Capital. This is demonstrated in the Power House and Fitters’ Workshop, which were among the first permanent buildings constructed in the Federal Capital and today are the dominant heritage features at Kingston Section 49 with a clear architectural and planning relationship. The siting and orientation of the three major buildings at the site is also significant, reflecting the role played by the rail sidings to the north and south of the Power House and Fitters’ Workshop in determining development on an axial alignment from north-west to south-east.

Built fabric proposed for demolition as an outcome of the Master Plan for Kingston Section 49 is of contributory or little or no significance to the former industrial / government services area. The 1948 Switch Room was not used during the operational period of the Power Station complex, only coming on-line in 1960, and has been modified to the extent that it has very little ability to demonstrate its original use. The demolition of the 1980s additions to the north of the former Transport Depot will reveal the original south rail alignment, and re-establish the historic connection between the original bus depot (as built in 1926-27) and the area to the south-east of the Fitters’ Workshop.

The framework for the future development of the area outlined in the Master Plan establishes land uses and built form outcomes to the extent of indicative locations and heights. The Master Plan generally satisfies the policies, principles and guidelines provided in the National Capital Plan, the Territory Plan and the ACT Heritage Register entries for the Power House precinct and the former Transport Depot. The siting of the proposed building envelopes, and the indicative heights, are appropriately responsive to the heritage context, and the balance of built form to landscaped open spaces provides an appropriate setting for an appreciation
of the relationship between the remnant industrial buildings and the historic activities and operations at the area. As noted, an important issue to resolve is the articulation of the parking structure, in order for it to sit comfortably in its setting, and to avoid detracting from an appreciation of the Power House. Further, there is potential for an understanding of the historic significance of the area to be enhanced though integrated interpretation devices.

The delivery of the Master Plan will result in alterations to the heritage place, notably in the introduction of the parking structure to the north-west of the Power House, and the demolition of the 1948 Switch Room. However, as considered against the identified heritage values of the place, it our assessment is that these impacts can be accommodated without diminishing the cultural heritage significance of the heritage place. The Power House will be maintained as the dominant built form in the vicinity, and the conservation of key heritage areas and elements will enable an on-going understanding of the historic operation and planning of the former Kingston government services / industrial precinct.