



GML
HERITAGE

Proposed Raising of London Circuit

Heritage Impact Assessment

Report prepared for Major Projects Canberra

September 2021

GML HERITAGE

Acknowledgement of Country

At GML we acknowledge that we work and live on the land of the First Australians. We know that this land was never ceded, and we respect the rights and interests of Australia's first people in land, culture, and heritage. We acknowledge their Elders past and present and support the concepts of voice, treaty, and truth in the Uluru Statement from the Heart.

Report Register

The following report register documents the development and issue of the report entitled Raising London Circuit—Heritage Impact Assessment, undertaken by GML Heritage Pty Ltd in accordance with its quality management system.

Job Number	Issue Number	Notes/Description	Issue Date
18-0678G	1	Working Draft Report	30 July 2021
18-0678G	2	Draft Report	20 August 2021
18-0678G	3	Final Report	15 September 2021
18-0678G	4	Revised Final Report	24 September 2021

Quality Assurance

GML Heritage Pty Ltd operates under a quality management system which has been certified as complying with the Australian/New Zealand Standard for quality management systems AS/NZS ISO 9001:2016.

The report has been reviewed and approved for issue in accordance with the GML quality assurance policy and procedures.

Copyright

Historical sources and reference material used in the preparation of this report are acknowledged and referenced at the end of each section and/or in figure captions. Reasonable effort has been made to identify, contact, acknowledge and obtain permission to use material from the relevant copyright owners.

Unless otherwise specified or agreed, copyright in this report vests in GML Heritage Pty Ltd ('GML') and in the owners of any pre-existing historical source or reference material.

Moral Rights

GML asserts moral rights in this work, unless otherwise acknowledged, in accordance with Part IX of the *Copyright Act 1968* (Cth). Moral rights include the attribution of authorship, the right not to have the work falsely attributed and the right to integrity of authorship.

Right to Use

GML grants to the client for this project (and the client's successors in title) an irrevocable royalty-free right to reproduce or use the material from this report, except where such use infringes the copyright and/or Moral Rights of GML or third parties.

Cover Image: c1980 Commonwealth Ave from City Hill NAA A6135, K2/6/80/21

SYDNEY OFFICE Level 6 372 Elizabeth Street SURRY HILLS NSW Australia 2010 | T +61 2 9319 4811

CANBERRA OFFICE 2A Mugga Way RED HILL ACT Australia 2603 | T +61 2 6273 7540

MELBOURNE OFFICE 17 Drummond Street CARLTON VIC Australia 3053 | T +61 3 9380 6933

www.gml.com.au | [@gmlheritage](https://twitter.com/gmlheritage) | www.contextpl.com.au | [@contextheritage](https://www.facebook.com/contextheritage)

GML Heritage Pty Ltd ABN 60 001 179 362 | GML Heritage Victoria Pty Ltd trading as Context ABN 31 620 754 761

Contents

1	Project Background	1	5.1.7	<i>Ian Potter House—ACT Heritage Place</i>	25
1.1	HIA Brief	1	5.2	Indigenous and Natural Heritage Values	26
1.1.1	<i>Project Context</i>	1	5.2.1	<i>Indigenous Heritage Values</i>	26
1.2	Study Area	1	5.2.2	<i>Natural Heritage Value</i>	26
1.3	Outline of the HIA	2	5.2.3	<i>Historical Archaeology</i>	26
1.4	Terminology	2	5.2.4	<i>Social and Community Held Values</i>	26
1.5	Limitations	3	6	Heritage Impact Assessment	28
2	Project Description	5	6.1	Canberra the Planned National Capital	28
2.1	Relevant Project Documentation	5	6.2	Parliament House Vista	30
2.2	Raising London Circuit	5	6.3	National Land Roads	32
3	Statutory Heritage Context	11	6.4	Lake Burley Griffin	34
3.1	Planning and Development Act 2007 (ACT)	11	6.5	Australian Academy of Science Building	35
3.2	Heritage Act 2004 (ACT)	11	6.7	City Hill	36
3.3	Australian Capital Territory (Planning and Land Management) Act 1988 (Cth)	11	6.8	Ian Potter House	38
3.3.1	<i>National Capital Plan (Cth)</i>	11	6.9	Applying the Risk Matrix to Heritage Places	39
3.4	EPBC Act Referral	12	6.10	Summary: Heritage Impact Assessment and Risk Assessment	39
3.5	Approvals and ‘Controlled Actions’	13	7	Recommendations	42
4	Methodology for Assessing Heritage Impacts	14	Endnotes		45
4.1	Criteria for Assessing Potential Heritage Impacts	14	Appendices		47
4.2	Definition of Proposed Works Categories	15	Appendix A—Unanticipated Finds Protocol		48
4.3	Impact Assessment Terminology	15			
5	Existing Environment—Heritage Places and Values	17			
5.1	Historic Heritage Values	17			
5.1.1	<i>Canberra the Planned National Capital</i>	19			
5.1.2	<i>Parliament House Vista</i>	20			
5.1.3	<i>National Land Roads</i>	21			
5.1.4	<i>Lake Burley Griffin</i>	22			
5.1.5	<i>Australian Academy of Science Building</i>	23			
5.1.6	<i>City Hill—ACT Heritage Place</i>	24			

Table of Figures

Figure 1.1 Aerial photograph showing the red study area boundary for the Raising London Circuit project (Source: AECOM and Transport Canberra)	2
Figure 1.2 1963 photograph from City Hill towards Capital Hill over the London Circuit intersection. The intersection of London Circuit and Commonwealth Avenue is at grade. (Source: NLA Object ID: 150591323).....	4
Figure 2.1 View looking north towards City Hill and the London Circuit, Commonwealth Avenue intersection. (Source: Department of the Environment, Draft Canberra the Planned National Capital: National Heritage place EPBC Act Referral Guidelines, 2012. Appendix 6.1 National Heritage values statement.).....	5
Figure 2.2 Existing condition and configuration of the study area. (Source: Nearmap, 2021)	10
Figure 4.1 Risk Matrix provided by MPC (Source: AECOM).....	15
Figure 4.2 1966 aerial photograph showing the London Circuit/Commonwealth Avenue intersection. (Source: ACTMAPi)	16
Figure 5.1 Aerial photograph showing the heritage places that are the focus of this report, within the vicinity of the study area. (Source: Nearmap with GML overlay, 2021)	17
Figure 5.2 Map of the nominated place 'Canberra the Planned National Capital'. (Source: < https://www.environment.gov.au/heritage/organisations/australian-heritage-council/national-heritage-assessments/canberra >).....	18
Figure 5.3 1950 historical aerial showing the intersection near City Hill, prior to the development of Parkes Way and Vernon Circle.	18
Figure 5.4 1962 photograph looking north from Commonwealth Avenue towards City Hill prior to the late 1960s Commonwealth Avenue/City Hill interchange works. (Source: NLA Object ID: 143728902	24
Figure 6.1 Current view from the study area looking north towards City Hill. (Source: Google Maps, 2021).....	37

1 Project Background

1.1 HIA Brief

Major Projects Canberra (MPC), an ACT Government agency, has engaged GML Heritage Pty Ltd (GML) to prepare a Heritage Impact Assessment (HIA) for the proposed redevelopment of the London Circuit and Commonwealth Avenue intersection system (the 'study area'; see Figure 1.1).

This HIA has been prepared to support the Environmental Assessment (EA) being prepared by AECOM Australia Pty Ltd (AECOM), and will be included in the National Capital Authority (NCA) Works Approval submission for the Raising London Circuit (RLC) project.

The HIA examines the potential impact on the known historic heritage values within or adjacent to the study area. For the purposes of due diligence, a summary of the previously identified natural and Indigenous¹ and high-level commentary on the social/community-held heritage values² have been included.

While the project does not require ACT Government Development Application (DA) approval, this report has been prepared to meet the heritage legislation of both ACT and Commonwealth jurisdictions, as the study area is in the vicinity of a place listed on the ACT Heritage Register and also within land managed by the Commonwealth.

GML understands that this proposed action would eventually facilitate the development of light rail infrastructure; however, the inclusion of light rail is not being assessed at this time, nor in this HIA.

1.1.1 Project Context

In 2019, a referral (EPBC 2019/8582) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC

Act) was submitted for the Light Rail Stage 2A project. According to the notification of Referral Decision for the City to Commonwealth Park via London Circuit and Commonwealth Avenue dated 2 February 2021, the Department of Agriculture, Water and the Environment (DAWE) determined that the project is to be a 'controlled action' and will be assessed through preliminary documentation. Heritage has not been determined as a controlling provision for Preliminary Documentation.

1.2 Study Area

The study area includes the southern portions of London Circuit, the portion of Commonwealth Avenue between City Hill and the southern side of Parkes Way. It includes the three 'cloverleaves' and the southern portion of Vernon Circle (refer to Figure 1.1).

The study area also includes three construction compounds, Compound A on London Circuit west, Compound B on Ellery Crescent and Marcus Clarke Street, and Compound C adjacent to Commonwealth Avenue and Barrine Drive near Lake Burley Griffin.

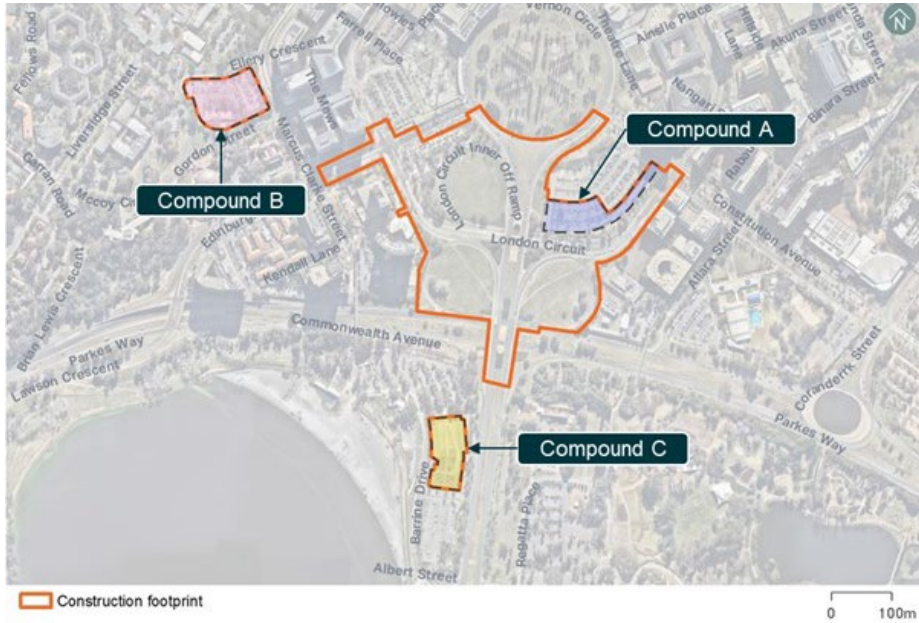


Figure 1.1 Aerial photograph showing the study area boundary (orange) for the Raising London Circuit project and the construction compounds. (Source: AECOM and Transport Canberra)

1.3 Outline of the HIA

The HIA comprises:

- Project Background (Section 1)—the brief, study area, and limitations;
- Project Description (Section 2)—the proposed action is described for RLC;
- Statutory Heritage Context (Section 3)—an overview of the statutory heritage context (ACT and Commonwealth) relevant to the project;
- Methodology for Assessing Heritage Impacts (Section 4);

- The Existing Environment, the Heritage Values (Section 5)—listed and known historic, Indigenous and natural heritage values and places within or adjacent to the study area;
- Heritage Impact Assessment (Section 6)—the impact assessment of the heritage values with reference to the EPBC Act and its guidelines; and
- Conclusion (Section 7)—recommendations, including possible mitigation measures to inform the design development and to help reduce or avoid any identified impacts.

1.4 Terminology

The terminology and abbreviations shown in Table 1.1. on the following page are used in this HIA.

The definitions are based on the EPBC Act terminology and as defined in *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance, 2013* (the Burra Charter).

Table 1.1 Definitions and abbreviations relevant to this report.

Term and definition
<p>Commonwealth Heritage Criteria — These are the criteria of r10.03A the Environment Protection and Biodiversity Regulations 2008 (made under s341D of the EPBC Act), prescribed for natural, Indigenous and historic heritage values of places owned or controlled by the Commonwealth. The Commonwealth Heritage criteria against which the heritage values of a place are tested are (a) events, processes (historic) (b) rarity, (c) research, (d) characteristic values (representative) (e) aesthetic characteristics, (f) creative or technical achievement, (g) social value (h) significant people and (i) Indigenous tradition.</p>
<p>Commonwealth Heritage List (CHL) — The CHL is a list of heritage places owned or controlled by the Australian Government. Places in the list can have natural, Indigenous or built heritage values, or a combination of these. Places included in the list have been found to be significant for one or more of the nine criteria for the CHL. Places included in the list range from local through to world heritage levels of importance.</p>

Term and definition

Commonwealth Heritage Values — Commonwealth Heritage values are the values for which a place is included in the CHL. These can comprise one or more natural and cultural aspects such as aesthetics, history, scientific importance, importance to the community and spiritual significance. The nine criteria for the CHL assist with identifying and defining these heritage values.

'Identified' Commonwealth Heritage values are those that have been assessed against the Commonwealth Heritage criteria but have not been nominated to or officially included in the CHL. Sections 26 and 28 of the EPBC Act protect identified heritage values.

Cultural significance — Aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

DA — Development Application (ACT Government)

DAWE — Department of Agriculture, Water and the Environment

EA — Environmental Assessment

Environment Protection and Biodiversity Conservation Act 1999 (Cth) — The **EPBC Act** provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places—defined as matters of national environmental significance (MNES). The EPBC Act also protects Commonwealth land, including heritage values through the CHL, and controls actions that may have a significant impact on the environment, including heritage values.

EPSDD — Environment, Planning and Sustainable Development Directorate

Fabric — All the physical material of the place including components, fixtures, contents, and objects.

Heritage Assessment — An **HA** is a report that includes the history and physical description of the property, along with analysis of environmental history and archaeological potential. Comparison with similar sites with identified heritage values is included. Assessment of this information against the criteria for the CHL is included, and a summary statement of heritage significance is provided.

Heritage Impact Assessment — An **HIA** is a report that analyses the potential impacts of a proposal on the heritage values of a place. The HIA also identifies mitigation and management measures to reduce the severity of impacts, where possible. Mitigation measures can include retention and re-use of building fabric on site. Management measures can include interpretation of heritage values, archival recording, undertaking oral history interviews and preparing a publication

Term and definition

on the history and heritage values of the site.

Key inputs to an HIA include the alternatives considered in the planning process for the proposal. An HIA can include an HA if this has not been prepared before. An HIA assists with deciding if a proposal needs to be referred under the EPBC Act. HIAs need to be prepared using the EPBC Act Significant Impact Guidelines 1.1 and 1.2.

Heritage Management Plan — An **HMP** is prepared for a place included in the CHL or a place with identified Commonwealth Heritage values established through an HA. They are intended to help managers to conserve and protect the Commonwealth Heritage values of a place by setting out the conservation policies to be followed.

HMPs need to be prepared in accordance with the requirements of the EPBC Regulations, including the Commonwealth Heritage management principles.

Interpretation — The way in which the cultural significance of a place is presented.

MNES — Matters of National Environmental Significance

MPC — Major Projects Canberra

National Heritage List — The EPBC Act established the **NHL**. The NHL comprises those places that have been assessed as having 'outstanding' heritage values for the nation against the criteria established under the EPBC Act.

Place — Site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Setting — The area around a place, which may include the visual catchment.

NAA — National Archives of Australia

NCA — National Capital Authority

NCP — National Capital Plan

NLA — National Library of Australia

RLC — Raising London Circuit

SOR — Statement of Requirements

1.5 Limitations

This HIA relies on existing listing information and does not contain any new assessments of historic heritage values against the Commonwealth or ACT

GML HERITAGE

Heritage criteria for places on Commonwealth or Territory land located within or adjacent to the study area.

Relevant HMPs have been reviewed in the preparation of this HIA. It is noted that only those which are publicly accessible have been referenced. No heritage management documents/guideline have been prepared for City Hill, Canberra the Planned National Capital or National Land Roads.

This HIA structure generally follows the 'proposed technical report structure' as suggested by AECOM in the EA, Draft SOR Guidance document, dated 30 June 2021 provided to GML Heritage by MPC.

The scope of works and information included in Section 2 Project Description, is based on the information provided in the Raising London Circuit Environmental Assessment, dated 2 July 2021 prepared by AECOM, provided to GML on the 2 August 2021.



Figure 1.2 1963 photograph from City Hill towards Capital Hill over the London Circuit intersection. The intersection of London Circuit and Commonwealth Avenue is at grade. (Source: NLA Object ID: 150591323)

2 Project Description

This section provides an overview of the proposed action—works associated with the construction of the RLC project.

2.1 Relevant Project Documentation

In preparing this HIA, GML has reviewed the RLC documentation as follows:

- RLC Technical Specialists Project Description, Revision B, prepared by AECOM, provided to GML on 8 September 2021;
- City to Commonwealth Park Light Rail Heritage Impact Assessment, prepared for ACT Government/Major Projects Canberra, by GML Heritage, 10 September 2020 (referred to as the City to Commonwealth Park Light Rail HIA, September 2020 HIA);
- Commonwealth Avenue Bridge, Heritage Assessment, prepared by for Major Projects Canberra and the National Capital Authority (NCA), by GML Heritage, 28 September 2020;
- Draft Construction Methodology RLC Construction Chapter Rev 1, and associated drawings provided to GML on the 19 July 2021;
- Draft Landscape and Visual Impact Assessment, August 2021, prepared by AECOM, provided to GML 7 September 2021;
- Extract for MPC Review 60656949 Raising London Circuit EA Draft Rev A 20210729, prepared by AECOM, provided to GML on the 2 August 2021;
- City to Commonwealth Park Preliminary Environmental Assessment, prepared by ARUP, dated 3 July 2019;
- ARUP City to Commonwealth Park Preliminary Documentation; and

- EPBC Act Referral, Conditions of Approval for City to Commonwealth Park Light Rail Project, ACT (EPBC 2019/8582), prepared by DAWE.



Figure 2.1 View looking north towards City Hill and the London Circuit, Commonwealth Avenue intersection. (Source: Department of the Environment, Draft Canberra the Planned National Capital: National Heritage place EPBC Act Referral Guidelines, 2012. Appendix 6.1 National Heritage values statement.)

2.2 Raising London Circuit

The RLC project would involve raising London Circuit between Edinburgh Avenue and Constitution Avenue on a gradual filled embankment to meet the current height of Commonwealth Avenue, and provision of a new signalised intersection between London Circuit and Commonwealth Avenue.

The RLC project involves a range of actions, which have been outlined below. The project is programmed over 6 phases—from early preparatory works through demolition and construction of the ultimate intersection arrangement. Phases are as follows:

- Phase 1: Preparatory works;

GML HERITAGE

- Phase 2: Closure of London Circuit between Edinburgh Avenue and Constitution Avenue, including removal of ramp connections;
- Phase 3: Diversion of traffic and demolition of the Commonwealth Avenue northbound bridge over London Circuit, infilling and restatement of Commonwealth Avenue northbound;
- Phase 4: Diversion of traffic and demolition of the Commonwealth Avenue southbound bridge over London Circuit, infilling and restatement of Commonwealth Avenue southbound;
- Phase 5: opening of new Commonwealth Avenue/ London Circuit to traffic, and completion of remaining works on London Circuit; and
- Phase 6: Completion and commissioning works, including line marking and landscaping. Intersection of London Circuit and Commonwealth Avenue opened.

The phases are outlined in detailed in the Extract for MPC Review 60656949 Raising London Circuit EA Draft Rev A 20210729. Table 2.1 outlines the key elements of the project. Table 2.2 describes the key construction elements. Both tables were prepared by AECOM for MPC and supplied to GML for insertion into this HIA (RLC Technical Specialists Project Description Rev B).

Table 2.1 Key elements of the project action (Source: AECOM)

Key Element	Description
Main embankment	A main embankment with associated retaining walls and batters between Edinburgh Avenue in the west and Constitution Avenue in the east, rising in the centre to around the current height of Commonwealth Avenue. The main embankment would have a slope of up to 3.5 per cent, tapering off to around 2.0 per cent towards the new London Circuit-Commonwealth Avenue intersection
London Circuit West	A modified and reconstructed London Circuit West between Edinburgh Avenue and Commonwealth Avenue: <ul style="list-style-type: none"> • London Circuit West would be generally one travel lane in each direction, widening to two lanes between the e potential future intersection with the proposed West Road and the new Commonwealth Avenue intersection.

Key Element	Description
London Circuit East	A modified and reconstructed London Circuit East between Commonwealth Avenue and Constitution Avenue: <ul style="list-style-type: none"> • London Circuit East would be two travel lanes in each direction
New and modified intersections	<p>New and modified intersections would be delivered at Edinburgh Avenue (modified) and Commonwealth Avenue (new), as well as making provision for a future potential intersection to tie into the potential future West Road (which would run south from London Circuit West to the future New Acton Waterfront Precinct, but which does not form part of this project).</p> <p>Modified London Circuit-Edinburgh Avenue intersection</p> <p>The modified London Circuit-Edinburgh Avenue intersection would include tie-in works with London Circuit to the west of the intersection. No changes to Edinburgh Avenue outside the intersection are proposed.</p> <p>The intersection would retain three travel lanes in each direction on Edinburgh Avenue and one travel lane in each direction on London Circuit (Figure 2.2).</p> <p>New London Circuit-Commonwealth Avenue intersection</p> <p>The new London Circuit-Commonwealth Avenue intersection would be signalised and would include tie-in works on Commonwealth Avenue to the north and south of the intersection. The intersection would be designed to integrate into the local landscape and to minimise intrusion into the significant vista along the Commonwealth Avenue corridor between City Hill and Capital Hill (Figure 2.3).</p> <p>On Commonwealth Avenue, the southern approach would provide one left turn lane, two through lanes and a right turn lane into London Circuit East. On London Circuit there would be two travel lanes in each direction on both the eastern and western approaches. This intersection configuration would be integrated through tie-in works to the existing configuration of Commonwealth Avenue north and south of this intersection.</p> <p>The new intersection would allow full vehicle movements in all directions between London Circuit and Commonwealth Avenue, except for:</p>

Key Element	Description
	<ul style="list-style-type: none"> No right turn from London Circuit westbound into Commonwealth Avenue northbound. No right turn from Commonwealth Avenue southbound into London Circuit westbound. No right turn from London Circuit eastbound into Commonwealth Avenue southbound
Modification and removal of existing cloverleaf ramps	<p>Modification and removal of the existing cloverleaf ramp connections between Commonwealth Avenue, London Circuit and Parkes Way:</p> <ul style="list-style-type: none"> The cloverleaf ramp connections to the north west and to the south west of the existing London Circuit-Commonwealth Avenue interchange would be removed, with affected land stabilised and rehabilitated. The cloverleaf ramp connection to the south east of the existing London-Circuit-Commonwealth Avenue interchange would be modified. This would remove the connection from London Circuit (westbound) on to Commonwealth Avenue (southbound), but would retain the connection between Parkes Way (eastbound) and Commonwealth Avenue (southbound).
Bicycle infrastructure	<p>Provision of bicycle facilities:</p> <ul style="list-style-type: none"> Dedicated, separated off-road bicycle paths would be provided on the verge on both sides of London Circuit West and London Circuit East, which would operate as one-way pairs in each direction. Dedicated, separated off-road bicycle paths bicycle paths would be provided along both sides of the tie-in works on Commonwealth Avenue to the north and to the south of the new London Circuit- Commonwealth Avenue intersection.
Pedestrian infrastructure	<p>Provision of pedestrian facilities:</p> <ul style="list-style-type: none"> Dedicated, separated pedestrian paths would be provided on both sides of London Circuit West and London Circuit East, and along both sides of the tie-in works on Commonwealth Avenue around the new London Circuit-Commonwealth Avenue intersection.

Key Element	Description
Ancillary infrastructure	Ancillary infrastructure and works, including utility connections, lighting, street furniture, landscaping and drainage are included in the project.



Figure 2.2 Render showing the proposed London Circuit-Commonwealth Avenue intersection, looking west towards London Circuit, City Hill is to the right. (Source: MPC, September 2021)



Figure 2.3 Render showing the view from the Commonwealth Avenue median strip towards City Hill and the proposed London Circuit-Commonwealth Avenue intersection. (Source: MPC, September 2021)

Subject to securing and complying with the conditions of environmental and planning approvals, construction of RLC would commence around April 2022 and would take approximately two years to complete. The construction footprint for the Project, and the areas affected by separate early works are show in Figure 1.1.

Construction of the Project would be preceded by a series of early works required to allow construction works to commence around April 2022. These early works are subject to separate assessment and approvals, and would include:

- Relocation of utilities currently located within the RLC construction footprint
- Translocation of Golden Sun Moth (*Synemon plana*) larvae from areas affected by utility relocations
- Traffic management works at the London Circuit-Edinburgh Avenue intersection to allow closure of London Circuit during construction of the Project
- Traffic management works at the Commonwealth Avenue-Vernon Circle intersection, including signalisation, and at the London Circuit-Constitution Avenue intersection to allow closure of London Circuit and traffic management along Commonwealth Avenue during construction of the Project.

Table 2.2 Key Construction Activities (Source: AECOM)

Key Construction Activity	Description
<p>Site establishment and preparation</p>	<p>Site establishment and preparatory works would involve:</p> <ul style="list-style-type: none"> • Mobilisation and establishment of construction compound sites. Construction compounds approved for use as part of the utility relocation early works would continue to be used for construction of the Project (Figure 2.5). • Translocation of Golden Sun Moth (<i>Synemon plana</i>) larvae from within the Project construction footprint. • Implementation of temporary surface water and drainage management infrastructure, including temporary grass swales, along around areas of London Circuit to be filled and raised with bulk earthworks. • Decommissioning and removal of utilities from within the Project construction footprint. Some decommissioning and removal works may also be carried out as part of construction works along London Circuit and around the new London Circuit-Commonwealth Avenue intersection. • Implementation of traffic management measures, including reliance on early works carried out at the London Circuit-Edinburgh Avenue, Commonwealth Avenue-Vernon Circle and London Circuit-Constitution Avenue intersections, and closure of London Circuit to traffic between Edinburgh Avenue and Constitution Avenue.
<p>Closure and raising of London Circuit</p>	<p>Closure and raising of London Circuit would involve:</p> <ul style="list-style-type: none"> • Removal of existing street furniture, road pavement and vegetation along London Circuit and within the Project construction footprint. • Removal of existing street furniture and road pavement along the north west and south west cloverleaf ramp connections between Commonwealth Avenue, London Circuit and Parkes Way, and stabilisation and rehabilitation of land in those areas.

Key Construction Activity	Description
	<ul style="list-style-type: none"> • Removal of existing street furniture and road pavement for the connection between London Circuit East and the south east clover leaf ramp connection between London Circuit, Commonwealth Avenue and Parkes Way. Only the connection with London Circuit would be affected, with the remainder of the ramp connection retained with potential minor modification to accommodate the embankment batter for London Circuit East. Land affected by removal of the London Circuit connection would be stabilised and rehabilitated. • Construction of retaining walls and batters, and staged filling of the London Circuit road corridor between Edinburgh Avenue and Constitution Avenue. The infilling along London Avenue would continue concurrently and in coordination with demolition and infilling beneath the Commonwealth Avenue northbound and southbound bridges (refer below).
<p>Demolition and infilling of Commonwealth Avenue bridges</p>	<p>Demolition and infilling of the Commonwealth Avenue bridges would be carried out in stages to allow continued passage of traffic during the works. Indicative staging would be as follows:</p> <ul style="list-style-type: none"> • A temporary sidetrack would be constructed to the east of the existing Commonwealth Avenue southbound bridge and associated temporary pavement of the existing Commonwealth Avenue median to allow traffic diversion around the Commonwealth Avenue bridges during demolition works. The sidetrack would provide two traffic lanes. • Implementation of traffic management measures, including reliance on early works carried out at the Commonwealth Avenue-Vernon Circle intersection, to divert traffic on Commonwealth Avenue so that: <ul style="list-style-type: none"> - Southbound traffic travels via the temporary sidetrack. - Northbound traffic crosses onto the existing southbound carriageway.

Key Construction Activity	Description
	<ul style="list-style-type: none"> - The Commonwealth Avenue northbound bridge is free of traffic. • Demolition of the Commonwealth Avenue northbound bridge. • Infilling and stabilisation of the area beneath the demolished Commonwealth Avenue northbound bridge as part of the staged program to infill along London Circuit. • Construction of the western part of the new London Circuit-Commonwealth Avenue intersection, including a new northbound carriageway. • Implementation of traffic management measures following completion of the demolition and infilling of the Commonwealth Avenue northbound bridge so that: <ul style="list-style-type: none"> - Southbound traffic continues to travel via the temporary sidetrack. - Northbound traffic travels via the new northbound traffic lanes and western part of the London Circuit-Commonwealth Avenue intersection - The Commonwealth Avenue southbound bridge is free of traffic. • Demolition of the Commonwealth Avenue southbound bridge. • Infilling and stabilisation of the area beneath the demolished Commonwealth Avenue southbound bridge as part of the staged program to infill along London Circuit • Construction of the eastern part of the new London Circuit-Commonwealth Avenue intersection, including a new southbound carriageway • Implementation of traffic management measures to return southbound traffic on Commonwealth Avenue to the new southbound traffic lanes and eastern part of the London Circuit-Commonwealth Avenue intersection

Key Construction Activity	Description
	<ul style="list-style-type: none"> Demolition of the temporary sidetrack and infilling the area beneath it as part of the staged program to infill along London Circuit.
<p>Permanent road works</p>	<p>Permanent road pavement, median works and kerb and guttering would be constructed in coordination with the completion of infilling London Circuit to provide the permanent reconstructed London Circuit. Road works would include intersection works at Edinburgh Avenue and Commonwealth Avenue, and tie-in works at Constitution Avenue and around the modified and new intersections with Edinburgh and Commonwealth Avenues.</p>
<p>Ancillary infrastructure and finishing works</p>	<p>Ancillary infrastructure and finishing works would be completed prior to commissioning and opening London Circuit to traffic, including:</p> <ul style="list-style-type: none"> Construction of active transport infrastructure, permanent drainage and utilities works Installation of lighting and street furniture, and road line marking Landscaping Demobilisation, and stabilisation and rehabilitation of disturbed areas, including construction compound sites.

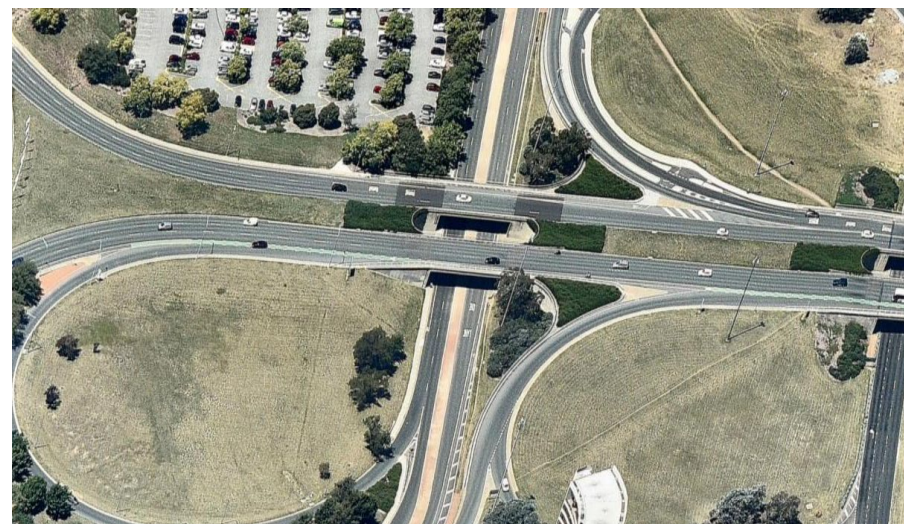


Figure 2.4 Existing condition and configuration of the study area. (Source: Nearmap, 2021)



Figure 2.5 Aerial photograph showing the proposed Elery Crescent/Marcus Clarke Street construction compound footprint. (Source: MPC, 2021)

3 Statutory Heritage Context

Heritage places and objects in the ACT are protected under Territory and/or Commonwealth legislation. This section provides an overview of the Territory and Commonwealth legislation relevant to the RLC study area.

While this project does not require an ACT Government Development Application, nor a Statement of Heritage Effect (SHE), both the territory and Commonwealth heritage legislation is included in this section and reviewed for these works for due diligence purposes.

3.1 Planning and Development Act 2007 (ACT)

The *Planning and Development Act 2007* provides a planning and land development framework for the ACT. It stipulates and regulates the functions of the Planning and Land Authority in the Environment, Planning and Sustainable Development Directorate—Planning (EPSDD).

The Planning and Land Authority is the primary authority for planning and development in the ACT, with statutory roles performed under the *Planning and Development Act 2007* and the *Territory Plan 2008* (the Territory Plan). The Planning and Land Authority advises the ACT Government on land, planning and building policy. For listed heritage places and objects in the ACT, which may be impacted by planning developments, the Planning and Land Authority seeks advice from the ACT Heritage Council under the provisions of the *ACT Heritage Act*. It also gives development approval.

3.2 Heritage Act 2004 (ACT)

Aboriginal and non-Aboriginal heritage places and objects in the ACT are protected under the *ACT Heritage Act 2004* (Heritage Act). The legislation establishes a system for recognising, registering and conserving natural and cultural heritage places and objects, including Aboriginal places and objects, in the ACT—the Heritage Council and the Heritage Register.

A Statement of Heritage Effect (SHE) is required under the Heritage Act for any proposed activity that is likely to diminish the heritage significance of a place (Section 61G *Application for approval of statement of heritage effect*).

However, the ACT Heritage Act only considers impacts to the heritage significance, and features intrinsic to the place within the place boundary, as described in the register citation. As the actions of the RLC project are outside the ACT heritage place boundaries and do not impact the features intrinsic as recognised by ACT Heritage, a SHE is not required.

3.3 Australian Capital Territory (Planning and Land Management) Act 1988 (Cth)

3.3.1 National Capital Plan (Cth)

The *Australian Capital Territory (Planning and Land Management) Act 1988* (PALM Act) establishes the requirements for the National Capital Plan (NCP) and its administration by the NCA.

The aim of the NCP is to ensure that ‘Canberra and the Territory are planned and developed in accordance with their national significance’. It is important to note that the terminology ‘national significance’ in the NCP has a different statutory meaning to ‘National Heritage value’, or significance as defined by the *Environment Protection and Biodiversity and Conservation Act 1999* (EPBC Act). The NCP defines ‘key matters of national significance’ specific to Canberra.

Designated Areas

The NCP specifies areas of land that have ‘special characteristics of the National Capital’ to be Designated Areas. These areas can be located on Commonwealth/National Land or Territory Land. The NCA has responsibility for determining detailed planning policy and the provision of Works Approval to ensure development is consistent with the NCP.³

GML HERITAGE

Designated Areas are divided into a series of precincts with detailed conditions of planning, design and development—Precinct Codes and General Codes—outlined for each precinct.⁴

The RLC study area is within or adjacent to the following Designated Areas of City Hill, West Basin, Constitution Avenue and Anzac Parade Precinct, and Main Avenues and Approach Routes. The NCP contains a series of policies and principles that are relevant to each of these areas with applicable objectives or principles to the RLC project and are reproduced below:

Section 4.6—City Hill Precinct Code

1. *Maintain and promote the City Centre as the main commercial centre of Canberra and the region – with the City Hill Precinct as the preeminent heart of City.*
2. *The design of buildings and the amenity and environmental quality of the main public spaces should result in an accessible, attractive, high quality and distinctive centre, consistent with the City's role as the major metropolitan centre and its location at one point of the National Triangle, the major organising element of the Central National Area.*
3. *That the City Hill Precinct provides a vibrant, interesting and lively centre with high levels of human activity.*
5. *The City Hill Precinct must complement and actively relate to, and integrate with, the existing and future structure of the rest of City.*

Section 4.7—West Basin Precinct Code

5. *Develop West Basin precinct with a mix of uses and create a public domain which demonstrates urban design excellence.*
8. *Enhance Commonwealth and Edinburgh Avenues as important physical, visual and symbolic links of Canberra.*
9. *Reinforce Commonwealth Avenue, a significant approach route and vista to Parliament House, as a corridor of activity, leading pedestrians from the city into the Parliamentary Zone.*

Section 4.8.3—Constitution Avenue and Anzac Parade Precinct Code

1. *Establish Constitution Avenue as a diverse and active grand boulevard lined with shops, cafés and a mix of commercial, entertainment and residential uses.*
2. *Establish Constitution Avenue as a prestigious address for National Capital Uses.*
5. *Support Constitution Avenue with an integrated transport system and mix of land uses contributing to the life of the National Triangle.*
7. *Develop a built environment which demonstrates design excellence.*
8. *Achieve leading practice environmentally sustainable development.*

Section 4.15—Main Avenues and Approach Routes Precinct Code

1. *Establish and enhance the identity of the approaches to the Central National Area as roads of national significance and, where relevant, as frontage roads for buildings which enhance the National Capital function and as corridors for a possible future inter-town public transport system.*
2. *Ensure that works within the road reservations are carried out to the highest standards, by maintaining and enhancing landscaping, and by facilitating the flow of traffic as far as possible.*
3. *Reinforce and, where possible, express the integrity of the Griffin Plan's visual structure by strengthening the geometry and form of main avenues, vistas and public spaces.*
4. *Improve the urban design and streetscape qualities of the Main Avenues as approaches to the Central National Area.*⁵

3.4 EPBC Act Referral

An EPBC referral application was submitted for the City to Commonwealth Avenue project (EPBC 2019/8582) in 2019, which included the raising of London Circuit. DAWE determined that the project is to be a 'controlled action' and will be assessed through preliminary documentation. Heritage

GML HERITAGE

has not been determined as a controlling provision for preliminary documentation. As such the following information about the EPBC Act and heritage values is provided as background information only.

The EPBC Act is the Australian Government's central piece of environmental legislation. The objects of the EPBC Act are 'to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance' (MNES).⁶ It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places. The EPBC Act provides a streamlined environmental assessment and approvals process for actions affecting protected matters. It also provides for the protection and management of important natural and cultural places.⁷ It is administered by the Department of Agriculture, Water and the Environment (DAWE).

As the RLC study area includes and is adjacent to Commonwealth/National Land and areas nominated to the National Heritage List (NHL), relevant provisions of the EPBC Act apply to the project.

National Heritage Places

The EPBC Act establishes the NHL. The NHL comprises those places that have been assessed as having 'outstanding' heritage values for the nation against the criteria established under the EPBC Act.

The RLC study area is within a nominated NHL area—'Canberra the Planned National Capital'. Nominated National Heritage places are not protected matters of national environmental significance under the EPBC Act. However, the objects of the EPBC Act include promoting the principles of ecologically sustainable development.⁸ These include the precautionary principle, where there may be a lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage. In accordance with this principle, the heritage values of nominated NHL places

may need to be taken into account when making decisions which could affect the environment of these nominated places.

Commonwealth Heritage Places

The EPBC Act regulates actions on, or impacting, the environment on Commonwealth land, or actions by Commonwealth agencies impacting the environment anywhere. This includes protecting all heritage values on Commonwealth land or affected by the actions of Commonwealth agencies.

To assist in identifying heritage on Commonwealth land, the EPBC Act establishes the Commonwealth Heritage List (CHL). The CHL comprises those places owned or controlled by the Commonwealth that have been assessed as having 'significant' heritage values against the criteria established under the EPBC Act. Section 341Y of the EPBC Act requires Commonwealth Heritage places to be managed in accordance with the Commonwealth Heritage management principles, as set out in Schedule 7B of the EPBC Regulations.

Section 2.4 of the NCP states that the NCA will consider all heritage places in Designated Areas as Commonwealth Areas for the purposes of protecting the environment in the manner currently afforded under the EPBC Act, unless they are managed by the ACT Government and included in the ACT Heritage Register.⁹

3.5 Approvals and 'Controlled Actions'

The EPBC Act requires proponents to undertake a self-assessment to determine whether an action is likely to have a significant impact on the environment. If the proponent believes the action is likely to have a significant impact, it must be referred to the Minister of the Environment via DAWE. As described elsewhere, in 2019 DAWE determined that the larger light rail project (works comprising of RLC and Light Rail 2A) is to be a 'controlled action' and will be assessed through preliminary documentation, not relating to heritage values.

4 Methodology for Assessing Heritage Impacts

This HIA has been prepared as a component of the EA for the NCA Works Approval submission. As the works are within Commonwealth land the HIA has been prepared to meet the requirements of a HIA under the EPBC Act.

This HIA is based on the impact assessment methodology and terminology outlined in the *EPBC Act Significant Impact Guidelines 1.1 and 1.2*, as outlined in Section 4.3. However, to ensure consistency across the AECOM EA report, GML has also summarised the results of the impact assessment based on the risk assessment approach and risk matrix prepared by AECOM for the EA (Figure 4.1).

4.1 Criteria for Assessing Potential Heritage Impacts

The criteria used for assessing potential heritage impacts or heritage effects of the proposed action is outlined in Table 4.1. It includes the questions applied to determine the degree of impact, a discussion of the potential impacts, a statement of heritage impact/statement of heritage effect including degree and intensity, and recommendations to reduce or avoid potential impacts. The degree of impact is determined through an assessment of the intensity, scale and duration of impacts.

Table 4.1 Methodology for Assessing Potential Heritage Impacts.

Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations
Summary of heritage values/ significance and attributes/features intrinsic.	Discussion of potential impacts on the heritage values. An analysis of the direct/indirect, cumulative, temporary/permanent, reversible/irreversible, visual, physical, social, and cultural impacts that may occur as a result of the action is discussed.	<p>Heritage Impact: Heritage impact statement.</p> <p>Degree and intensity of impacts: The relative level of severity of the potential impacts in terms of scale, intensity, timing, duration and frequency is stated.</p> <p>Post-Recommendation Impact Assessment</p> <p>A commentary on the resulting degree of heritage impact, if the above mitigation measure is implemented.</p>	Suggested measures which can be explored or introduced to avoid or mitigate impacts are provided.

As identified in Section 3.2 a SHE for the ACT Heritage Places are not required under the ACT Heritage Act for this project. However, this report has been prepared using best practice, which encourages the assessment of the whole of environment, assessing the cumulative, direct/indirect effects, not just the effects within, or near, a heritage place. Further detail is included at Sections 5.1.4 and 6.7.

4.2 Definition of Proposed Works Categories

Due to the large quantity of the works associated with the proposed action, the impact assessment has been divided into two work categories which are defined in Table 4.2 below.

Table 4.2 Definitions for Proposed Works—Categories Used in the Potential Impact Discussion in Section 6.1 to 6.9.

Category of Proposed Works	Definition
Construction Works	Physical construction activities including plant movement, traffic management, establishment of construction compounds and the installation of construction hoardings.
New Infrastructure and Modifications to Existing Infrastructure	New or modified elements such as retaining walls, embankments, road works, utility works, public domain works and pedestrian footpaths/crossing modifications.

4.3 Impact Assessment Terminology

According to the Significant Impact Guidelines, a ‘significant impact’ is an impact which is important, notable, or of consequence, having regard to its context or intensity. The factors to be considered for determining whether or not an action is likely to have a significant impact depend upon the sensitivity, value, and quality of the environment that is impacted, and upon the intensity, duration and magnitude of the impacts.¹⁰

The guidelines assist in distinguishing between different relative levels of severity of potential heritage impacts as follows. Additional definitions relating to the risk matrix and terminology (Figure 4.1), are included as sub-points:

- Severe (Significant):** Severe (or ‘significant’) impacts generally have two or more of the following characteristics: permanent/irreversible; medium–large scale; moderate–high intensity.
 - Relates to a ‘Major’ or ‘Catastrophic’ consequence in the risk matrix.
- Moderate:** Moderate impacts generally have two or more of the following characteristics: medium–long term; small–medium scale; moderate intensity.
 - Relates to a ‘Moderate’ consequence in the risk matrix.
- Minor:** Minor impacts generally have two or more of the following characteristics: short term/reversible; small-scale/localised; low intensity.
 - Relates to an ‘Insignificant’ or ‘Minor’ consequence in the risk matrix.

Note: Usually the ‘significance’ level is the threshold for triggering a referral under the EPBC Act, however an EPBC referral (EPBC 2019/8582) for the broader Light Rail project has already been submitted and no heritage provisions were determined.

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	Medium	High	Very High	Significant	Significant
Likely	Low	Medium	High	Very High	Significant
Possible	Very Low	Low	Medium	High	Very High
Unlikely	Negligible	Very Low	Low	Medium	High
Rare	Negligible	Negligible	Very Low	Low	Medium

Figure 4.1 Risk Matrix provided by MPC (Source: AECOM)

General Note about Relative Impact Levels for this HIA

The scale of an action and its impacts requires consideration when predicting the severity of impacts; generally, a larger-scale action with widespread impacts is more likely to have a significant impact on the heritage values than a smaller-scale action with localised impacts.¹¹ Considering the scale in conjunction with the intensity and duration/frequency of the impacts is important. Intensity refers to the strength and concentration of potential impacts.¹²

However, the severity of impacts alone does not necessarily indicate a significant (or adverse) impact on the overall heritage values of an individual place; or the contribution the impact could make to the 'whole environment'. The potential impacts of the action must be considered in the context of the heritage values of the whole environment, or the place in which the action will take place. In this case, the proposed activity is predominantly occurring within the Central National Area of Canberra—a place of heritage value referred to as 'Canberra the Planned National Capital'. The place is associated with the designed historic urban landscape and includes many individual heritage places, which together, contribute to the place holistically.



Figure 4.2 1966 aerial photograph showing the London Circuit/Commonwealth Avenue intersection. (Source: ACTmapi)

5 Existing Environment—Heritage Places and Values

The Significant Impact Guidelines 1.1 and 1.2 indicate that it is necessary to identify the environmental context of an action and the general features or components of the environment in the area where the action will take place.

This section identifies the existing environment of the study area including details of the historic heritage values and a summary of the previously assessed natural and Indigenous heritage values, (refer to the City to Commonwealth Park Light Rail HIA, September 2020 for more detail).

London Circuit, the section proposed to be altered, is part of a historically developed road network and contributes to the heritage values of many places listed and nominated to the ACT Heritage Register, Commonwealth Heritage List (CHL) and the National Heritage List (NHL). These places, and their heritage environments have historic, Indigenous and natural heritage values. Not all are specifically within the study area. The following sections and tables provide the overview of heritage places and their heritage values.

5.1 Historic Heritage Values

Figure 5.1, Figure 5.2 and Table 5.1 identify the historic heritage places that are registered or nominated to statutory heritage lists (NHL, CHL and ACT Heritage Register) that are located within or immediately adjacent to the study area.

Sections 5.1.1 to 5.1.7 provide summaries of the heritage values and significance of each heritage place, key attributes or features intrinsic, and excerpts from relevant heritage management documents and guidelines, if they have been prepared, and where they are relevant to the RLC proposed area and action.



Figure 5.1 Aerial photograph showing the heritage places that are the focus of this report, within the vicinity of the study area. (Source: Nearmap with GML overlay, 2021)

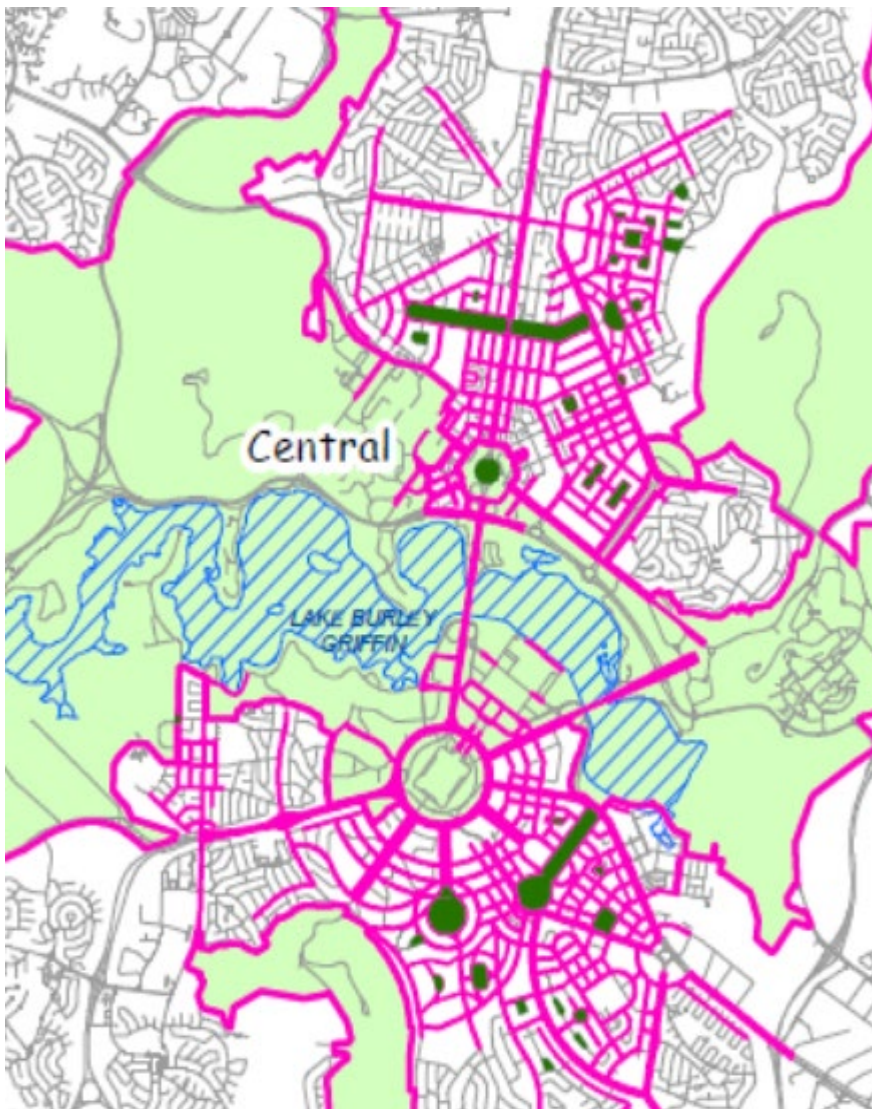


Figure 5.2 Map of the nominated place ‘Canberra the Planned National Capital’. (Source: <<https://www.environment.gov.au/heritage/organisations/australian-heritage-council/national-heritage-assessments/canberra>>)

Table 5.1 Historic Heritage Places on the NHL, CHL or ACT Heritage Register Located Within or Immediately Adjacent to the study area.

Place Name	Register	Status/ID
Canberra the Planned National Capital	Nominated: National Heritage List	Nominated
Parliament House Vista	Commonwealth Heritage List	Listed/105466
National Land Roads	Nominated: Commonwealth Heritage List	Nominated/106324
Lake Burley Griffin and Lakeshore Landscape/Lake Burley Griffin and Adjacent Lands	Nominated: National Heritage List/Commonwealth Heritage List	Nominated/106287 and 105230
Australian Academy of Science	National Heritage List	Listed/105741
City Hill	ACT Heritage Register	Registered/20002
Ian Potter House (Beauchamp House)	ACT Heritage Register	Registered/20091



Figure 5.3 1950 historical aerial showing the intersection near City Hill, prior to the development of Parkes Way and Vernon Circle.

5.1.1 Canberra the Planned National Capital

Heritage Values ¹³	Key Attributes Relevant to RLC ¹⁴
<ul style="list-style-type: none"> • <i>Canberra has outstanding heritage value to the nation because of the place’s importance in the history of Australia’s urban planning and Australia’s evolving democracy.</i> • <i>Canberra has outstanding values to the nation because of the place’s importance in exhibiting an ensemble of designed urban landscapes and settings that display and project its status, function and significance as the national capital. These features are valued highly by the Canberra and Australian communities for their aesthetic appeal.</i> • <i>Canberra demonstrates a high degree of creative and technical achievement in town planning, urban design and urban horticulture. Its ensemble of planned city features demonstrating successive twentieth century urban design and planning approaches adds up to a showcase of outstanding value to the nation.</i> • <i>Canberra the Planned National Capital has outstanding heritage values to the nation because of its special association with Australians as the nation’s capital and seat of the federal democracy. Canberra also has a special association for Indigenous Australians as the place significant progress has been made towards Indigenous rights and reconciliation.</i> • <i>Canberra has outstanding heritage values to the nation because of the place’s special association with the lives and works of Prime Ministers and Governors-General of Australia as a group, and individual town planners Walter Burley Griffin and Marion Mahony Griffin.</i> 	<p>Emphasis (bold) added by GML.</p> <ul style="list-style-type: none"> • Public parklands with their broader setting elements that form the basis for the popular presentation of the city as a garden-like city and as a city in the landscape. • Views from Mount Ainslie, Black Mountain, Red Hill and Mt Pleasant along axes and across the Central National Area. • View of the Australian Parliament House as the focal point at the end of a tree-lined boulevard, as seen travelling towards Parliament House along Commonwealth Avenue and Kings Avenue. • The Griffins’ use of topography in the arrangement of the early city and its layout in accordance with its two principal axes—the Land and Water axes. • The use of geometry in the layout and organisation of the early city. • The tree lined boulevards of King Edward and King George Terraces, and Commonwealth, Kings and Constitution Avenues with their associated visible terminal axis features. • The deliberate location of showcase buildings addressing the Land and Water axes. • City ‘ornaments’ including the Captain Cook Jet, the Carillon and night lighting display in the Parliamentary Triangle and along the water edge of Lake Burley Griffin. • Planned nature of the city—its design and plantings. • The compact layout of the early city reflecting public transport considerations. The 1925 gazetted road layout indicates the size and layout of the early city. • Central National Area, including Lake Burley Griffin and high proportion of tree planting in the public domain.

5.1.2 Parliament House Vista

Heritage Values ¹⁵	Key Attributes Relevant to RLC ¹⁶	Management Policies Relevant to RLC
<ul style="list-style-type: none"> The central national area of Canberra is strongly associated with the history of politics and government in Australia and the development of Canberra as the Australian National Capital. The Vista has high aesthetic significance due to the visual impact of the extensive open sweeping vista along the land axis that can be experienced in two directions, the designed axes set within natural features of forested hills, patterns and textures of architectural massing accentuated by planned open spaces, water planes and tree plantings that are arranged across the area. The Vista is significant for its visual drama with its ability to engage viewers in the visual perspective of the sweeping vista to the terminal features. The Vista is highly significant for its symbolic representation of the democratic interchange between the people and their elected representatives and its use of the natural landforms to generate a strong planning geometry. The Parliament House Vista is the core of the most ambitious and most successful example of twentieth century urban planning in Australia. The area has strong and special associations with the broad Australian community because of its social values as a symbol of Australia and the Federal Government. The central national area has a special association with its designers—Walter Burley Griffin and Marion Mahony Griffin; chief architect of the Commonwealth Government—John Smith Murdoch; Superintendent of Parks, Gardens and Afforestation—Thomas Charles Weston; and notable National Capital Development Commission (NCDC) planners—Sir John Overall, Peter Harrison and Paul Reid. 	<p>Emphasis (bold) added by GML.</p> <ul style="list-style-type: none"> <i>The concentration of buildings, parklands and gardens that support Commonwealth parliamentary and governmental activity as well as, to some extent, national cultural life, such as Old Parliament House and Curtilage, East Block Government Offices, the National Library of Australia, the High Court of Australia and the Aboriginal Embassy site.</i> <i>The extensive vista along the land axis, the forested hills, patterns and textures of architectural massing accentuated by planned open spaces, water features and tree plantings, artworks, the terminal features plus the interplay of scale and texture in the designed landscape.</i> <i>The whole of the vista, including all elements and features contained within it, as well as the natural wooded hills beyond.</i> <i>Memorial features including sculptures, plaques, commemorative trees, water features and gardens. Also, recreational landscape spaces and gathering spaces in which the community may demonstrate.</i> <i>The whole of the vista, its planned layout, and the view from the top of Mount Ainslie which illustrates the realisation of Marion Mahony Griffin's perspective drawing.</i> 	<p>The Parliament House Vista Area HMP 2010 provides the following conservation policies relevant to the project:</p> <p>Policy 42 Protection of Setting</p> <p><i>The NCA will protect the setting of the Parliament House Vista to the extent possible within its powers. Beyond this, the NCA will encourage such protection for those areas which fall outside its responsibilities.</i></p> <p><i>The NCA will protect the forested character of the surrounding hills, and will protect or encourage protection of views to the hills from within the Parliament House Vista.</i></p> <p>Policy 43 Protection of views to and from the Area</p> <p><i>The significant views to and from the Vista will be protected. The significant views include:</i></p> <ul style="list-style-type: none"> <i>To the surrounding hills, especially Mount Ainslie, Black Mountain and Mount Pleasant;</i> <i>To the current Parliament House;</i> <i>From Commonwealth and Kings Avenues, especially the bridges.</i>

5.1.3 National Land Roads

Heritage Values ¹⁷	Key Attributes Relevant to RLC ¹⁸	Management Policies Relevant to RLC
<ul style="list-style-type: none"> Commonwealth Avenue is significant as an integral and major part of the 1911 Griffin plan for the national capital, and its realisation is associated with the evolution of the cultural landscape of the nation’s capital. Commonwealth Avenue is one of the three major avenues defining the edges of the National Triangle and the initial design of the national capital is a highly significant part of Australia’s and Canberra’s history. Commonwealth Avenue is significant being relatively rare as an original and major part of Griffin’s design representing one side of his planned National Triangle. Commonwealth Avenue helps to demonstrate the planning of a national capital which is an uncommon aspect of Australia’s cultural history. The cultural landscape of the national capital, including Commonwealth Avenue, is significant from a research aspect in providing, through an examination of records and landscape elements, information and an understanding of the landscaping of the capital’s cultural landscape. Commonwealth Avenue is significant as a good example of an important type of landscape—wide tree-lined avenues—which are an important feature in Canberra’s planning and landscape. Commonwealth Avenue is significant as a major part of a landscape/urban design that represented a paradigm shift in urban planning in Australia. Commonwealth Avenue is an integral part of the designed national capital, acclaimed for its design excellence, which is of importance in the history of Australia and its capital city. Commonwealth Avenue has special associations with Walter Burley Griffin and Charles Weston, both persons of importance in Australia’s cultural history. 	<p>Attributes that embody the heritage values of Commonwealth and Kings Avenues have not been formally specified. The following relevant attributes have been distilled from the heritage values. Emphasis (bold) added by GML.</p> <ul style="list-style-type: none"> Commonwealth Avenue overall—wide tree-lined avenue. Formality in the design and aesthetic of Commonwealth Avenue. The siting, alignment and width of Commonwealth Avenue. Plantings—layout and mix of native and exotic species. Historical function as a major and active boulevard that facilitates public movement throughout Canberra. Views north and south along Commonwealth Avenue. The visual and spatial relationship of Commonwealth Avenue with Kings and Constitution Avenues—the other two sides of the National Triangle. Ceremonial and symbolic importance as an entrance to the Parliamentary Zone and integral link connecting the Federal and Territory functions of Canberra. 	<p>No HMP has been prepared for the National Land Roads.</p> <p>In April 2020, GML developed a series of ‘heritage principles’ to inform and guide development of Commonwealth Avenue as part of the development of a Commonwealth Avenue Masterplan by Hassell. Principles relevant to this project have been provided.</p> <ul style="list-style-type: none"> Retain and enhance the formality of Commonwealth Avenue through appropriate design, aesthetic, scale and materials. Retain Commonwealth Avenue as a wide tree-lined boulevard. Retain and enhance the landscaped character. Maintain and support Commonwealth Avenue’s function as a major and active boulevard within Canberra. Retain and enhance ready public access. Retain significant views and vistas. Any new structures along Commonwealth Avenue should be high quality, with durable materials and finishes in sympathetic and neutral colours.

5.1.4 Lake Burley Griffin

Heritage Values ¹⁹	Key Attributes Relevant to RLC ²⁰	Management Policies Relevant to RLC ²¹
<p>The following is a summary of Lake Burley Griffin’s National and Commonwealth Heritage values.</p> <ul style="list-style-type: none"> Historically, Lake Burley Griffin has importance for its association with the creation of the national capital and it reflects two key periods of urban design: the City Beautiful/Garden City discourse and the later discourses of International Modernism. Lake Burley Griffin is an important component of the Griffin plan for Canberra and its subsequent realisation in central Canberra’s designed landscapes, in particular the Land and Water Axes. Lake Burley Griffin is considered to have outstanding heritage value to the nation in its own right as a designed landscape of creative genius and high technical achievement. Lake Burley Griffin and surrounds possess research potential and is Australia’s largest artificial, ornamental lake. The presence of water in the landscape is an overriding and essential component of the lake’s valued aesthetic qualities. Lake Burley Griffin is valued highly by communities for its landmark value, as a symbol of Canberra and as an iconic cultural landscape which for many is a symbol of local identity. Lake Burley Griffin is highly valued as an important element in the Canberra landscape, frequently visible and ever-present in daily life, acting as a reference point, backdrop and important gathering place within the heart of the city. Lake Burley Griffin and surrounds possesses highly significant associations with people of importance in Australia’s history. 	<p>Emphasis (bold) added by GML.</p> <ul style="list-style-type: none"> The lake landscape including its edge treatments, bridges, dam, Captain Cook Water Jet and islands and its relationship to the geometry of Griffin’s Plan. The size and diverse shape of the lake, and its location within Canberra. Public access to and use of the lake and its foreshores. Quiet and peaceful qualities, particularly of secluded areas in the lower reaches The presence of the lake in views of and within central Canberra, and the availability of views from publicly accessible locations. The qualities of naturalness, including the places with natural habitat values. The integrity of the Griffin land/water axis and associated lands (Mount Ainslie, Black Mountain, Parliament House Vista etc.). Formal design elements especially Central basin and its foreshores in relation to the Parliamentary Triangle and other elements of the Griffin Land Axis. The submerged Molonglo River may possess significance for Aboriginal communities. 	<p>The Lake Burley Griffin and Adjacent Lands HMP 2008 provides the following conservation policies relevant to the project:</p> <p>Policy 1.6 <i>Conserve and manage the integrity of the formal design elements of the Study Area deriving from the Griffin plan and the later design and construction of the lake and its foreshores.</i></p> <p>Action 1.6.1 <i>Conserve the integrity of the axes, vistas and visual links with the surrounding landscape (including Black Mountain, Mount Ainslie and Red Hill) and conserve the visibility of the lake from public open spaces and public institutions. This will support the continued appreciation of the lake as a unifying and linking element for the close and distant topography in the landscape and as the setting of the surrounding buildings and open space areas.</i></p> <p>Action 1.6.2 <i>Conserve the visibility of the waters of the lake in views from within Canberra, including the retention of open views to the water from roads and other public use areas (Commonwealth Avenue, Parkes Way, the cycle paths) as well as local secluded vistas from near the lake shore.</i></p>

5.1.5 Australian Academy of Science Building

Heritage Values ²²	Key Attributes Relevant to RLC	Management Policies Relevant to RLC
<p>Statement of Significance:</p> <p><i>The formation of the Australian Academy of Science marked with the post-war development of the Australian scientific community at an international level, providing Australian science with national presence and an international face. The creation of the Academy and the Shine Dome is directly related to scientists such as Sir M L Oliphant, Dr. I Clunies Ross, Dr J C Eccles, Sir D Mawson and A C D Rivett who were instrumental in the establishment of the Academy.</i></p> <p><i>The construction of the Australian Academy of Science Building was a significant technical achievement and a milestone in the Australian construction industry. The load bearing capacity of the large radius copper clad dome is formed by the moat surrounding the building, making the dome extremely stable, preventing movement and the need for expansion joints. The internal walls do not structurally support the dome.</i></p> <p><i>The Academy building is an excellent example of the Geometric Structuralism, demonstrating clarity of design philosophy in the uncompromising, integrated and consistent architectural style and detailing of the buildings exterior and interior. The dome is an innovative structure, reflecting the bold modernism of the era, but sensitively complementing the surrounding landscape. The form, structural integrity, materials selection, geometry, functionalism symmetrical planting and sensitivity to the setting make the building rare for 1959.</i></p> <p><i>The Australian Academy of Science Building represents the work of one of the most prominent Australian architects for the era. The building was the culmination of Roy Grounds’ architectural development. The multiple award winning design is seen as the purist [sic] example of Grounds’ structuralist work in Australia.</i></p> <p><i>The interior design and furnishings are an integral part of the building and significance.</i></p>	<p>Attributes that embody the heritage values of the Australian Academy of Science Building have not been formally specified. The following relevant attributes have been distilled from the statement of significance and the Shine Dome HMP 2018. Emphasis (bold) added by GML.</p> <ul style="list-style-type: none"> • Freestanding copper clad dome form and structure. • Perimeter wall and cloister. • Encircling water filled moat and main entry bridge. • Interior design and furnishings. • Original uses of building. • Surrounding garden setting that allows clear view to building. 	<p>The Shine Dome HMP 2018 provides the following conservation objectives relevant to the project:</p> <ul style="list-style-type: none"> • <i>Conservation Objective 1: to ensure that any decisions or actions which will impact on the significance of the place are based upon professional conservation principles.</i> • <i>Conservation Objective 2: ensure ongoing use conserves the heritage values of the place and the associate [sic] values and meanings.</i> • <i>Conservation Objective 3: to retain the existing and historical forms, details and character of the place and significant elements while allowing ongoing effective use as conference/meeting venue. Changes to the buildings and site can be permitted if essential for the ongoing conservation of the place provided the impact on heritage significance is nil or minimal.</i>

5.1.6 City Hill—ACT Heritage Place

Heritage Significance ²³	Features Intrinsic ²⁴	Management Policies Relevant to RLC
<p>Emphasis (bold) added by GML.</p> <p>Statement of Significance:</p> <ul style="list-style-type: none"> City Hill represents an important element of urban design and is an integral component of the Griffin plan. It is a generating point for the major avenues of Civic and its plantings provide visual corridors for those avenues. Aesthetically, City Hill provides an important landscaped open space within the Central Business District and enables views of the key topographical elements of the city to be seen from the hill. The verticality created by the trees and flagpole forms a landmark for the city. Plantings have historical significance due to their association with Thomas Charles Weston, Superintendent of Parks and Gardens. City Hill is also of local historical significance because of its association with the first visit of a reigning British monarch to Canberra. 	<ul style="list-style-type: none"> All grassed areas. Six axial plantings of <i>Cupressus sempervirens</i> 'Stricta'. Eleven oval shaped groups of <i>Cupressus sempervirens</i> 'Stricta'. All groups of <i>Pinus radiata</i> between the axial plantings. Plantings of <i>Robinia pseudoacacia</i>. The metal flagpole in its existing location. 	<p>A CMP has not been prepared for City Hill.</p> <p>The following heritage guidelines are from the ACT Heritage Register citation:²⁵</p> <ul style="list-style-type: none"> The landscape qualities of City Hill are to be retained as an important element of Canberra's planning. The integrity of the plantings is to be retained by replacing all dead and damaged trees with the same species after thorough research of the original design. Access to City Hill by pedestrians is encouraged. Any proposals to alter any aspect of City Hill shall be referred to the Heritage Council of the ACT for comment prior to detailed planning and commencement works.



Figure 5.4 1962 photograph looking north from Commonwealth Avenue towards City Hill prior to the late 1960s Commonwealth Avenue/City Hill interchange works. (Source: NLA Object ID: 143728902)

5.1.7 Ian Potter House—ACT Heritage Place

Heritage Significance ²⁶	Features Intrinsic ²⁷	Management Policies Relevant to RLC ²⁸
<p>Statement of Significance:</p> <p><i>Ian Potter House (known until 1985 as Beauchamp House) is historically significant for its associations with the Federal Capital Commission’s building program for the transfer of public servants from Melbourne to Canberra in 1927. Together with other hostels built around the same time, it represents an early phase in Canberra’s developing social and cultural history. It was originally used to accommodate female public servants, only later being used by both female and male public servants until the early 1970s, when it was also a guesthouse for visitors to Canberra.</i></p> <p><i>The exterior of the building is a significant example of the Inter-War Georgian Revival style of architecture. It was the winning design by Melbourne architects, Anketell and Kingsley Henderson, in a competition held by the Federal Capital Commission to produce ideas for four hostels needed for the growing population of the new Federal Capital. It was the first of four guest houses designed by architects outside the Commission, to provide some variety in the design of the government hostels, most of which had been designed by Commonwealth architect, John Smith Murdoch. It was also the first building of a reinforced concrete structure in Canberra.</i></p> <p><i>The building has associations with Sir Ian Potter, a highly respected entrepreneur and philanthropist.</i></p>	<p>Emphasis (bold) added by GML.</p> <ul style="list-style-type: none"> • <i>the building, including Fellows Court and Boden Court;</i> • <i>its setting; and</i> • <i>the wisteria (<i>Wisteria sinensis</i>) in Fellows Court.</i> 	<p>The ACT Heritage Register provides the following relevant heritage guidelines for conservation of the heritage place: ²⁹</p> <p>Requirements relating to setting</p> <ul style="list-style-type: none"> • <i>The courtyards of the building shall be maintained and conserved, including the wisteria in Fellows Court.</i> • <i>The garden setting of the building as shown on the attached site plan shall be maintained in a manner consistent with the building’s heritage significance.</i>

5.2 Indigenous and Natural Heritage Values

The following is based on the Indigenous heritage, natural heritage and historical archaeological analysis undertaken as part of the City to Commonwealth Park Light Rail HIA, September 2020. The findings have been summarised below.

5.2.1 Indigenous Heritage Values

The study area (including the City to Commonwealth Park study area) was found to have low potential for the likely existence of Aboriginal archaeological sites, and was confirmed as being within a landscape of cultural significance to the Aboriginal community but it was found that the proposed project would not affect those values any more than the development of Canberra has already impacted those values.

No further assessment is required for the Indigenous heritage values.

An unexpected finds protocol must be implemented for the project to ensure any unanticipated heritage artefacts or remains are appropriately managed. (refer to Appendix A).

5.2.2 Natural Heritage Value

Previous studies (including for the City to Commonwealth Park Light Rail HIA, September 2020) concluded that there are no vegetation communities or individual flora species with natural heritage value within the study area.

Despite the lack of natural grassland community, the Golden Sun Moth has been recorded in the grassed areas adjacent to the RLC study area, the clover leaf open areas and Parkes Way median strip in a number of surveys.

These impacts on the natural heritage values of the Golden Sun Moth have already been considered under the EPBC Act and management is documented as part of the Preliminary Documentation and associated

Golden Sun Moth Plan. This information should be referred to for further information. No further discussion is provided within this HIA.

5.2.3 Historical Archaeology

The study area is considered to have low archaeological potential and the proposed action is not anticipated to have an impact on historical archaeological values. As a result, there are no further assessment requirements for historical archaeological sites in relation to the proposed RLC project. If historical archaeological remains were to be unexpectedly encountered, an unanticipated finds protocol should be implemented for the construction works.

5.2.4 Social and Community Held Values

Social values are those that are held by today's community relating to their social, spiritual, or cultural associations with a place. These values may not be formally recognised in formal heritage listings or registers for a variety of reasons.

The social, or community held values of the study area have not been formally tested, nor are they reflected in the existing formal listings of the heritage places. However, based on the information sought in the social and aesthetic heritage values assessment of the Commonwealth Avenue Bridge in 2020 (prepared by GML) and on a high-level understanding of the possible social values, the community may hold social values associated with the:

- prominent location of Commonwealth Avenue as a key part of the planned city;
- London Circuit as surviving remnant of the early Canberra road layout and as part of the planned city;
- the NCDC era cloverleaves; and

GML HERITAGE

- the importance of the view from City Hill towards Commonwealth Avenue Bridge, amongst others.

GML Heritage is currently engaged by MPC to assess community-held aesthetic and social values of Commonwealth Avenue. This work, along with the preparation of a forthcoming heritage Interpretation Strategy, will assist the proponent in understanding, engaging with, and mitigating any impacts to, the social heritage values of the study area.

6 Heritage Impact Assessment

This section outlines the assessment of potential heritage impacts from the proposed action on the historic heritage values of the places located within or immediately adjacent to the study area. A relative level of heritage impact is provided along with potential impact analysis.

Summary recommendations to reduce/avoid impacts are included, along with a summary ‘post-recommendation assessment’ or the statement of the residual impact. The fully described and expanded recommendations are included in Section 7 and should be read in conjunction with the summary recommendations.

Refer to Section 5 for a more detailed description of the place’s heritage values and key attributes.

6.1 Canberra the Planned National Capital

Summary Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations
Relevant key attributes include: <ul style="list-style-type: none"> public parklands with their broader setting elements; views from Mount Ainslie, Black Mountain, Red Hill and Mt Pleasant along axes and across the Central National Area; view of the Australian Parliament House as the focal point at the end of a tree-lined boulevard; layout in accordance with its two principal axes—the Land and Water axes; the use of geometry in the layout and organisation of the early city; 	<p>Temporary Construction Works:</p> <p>Temporary construction works have the potential to directly obstruct significant views north and south along Commonwealth Avenue, views toward Lake Burley Griffin and the views across the Central National Area.</p> <p>The construction of the temporary ‘sidetrack’ roads would degrade the predominantly geometric character of the Avenue by adding curved roads to the side of the avenue.</p> <p>The visual and physical impacts would be temporary, with works limited to the duration of the construction period with hoardings, construction compounds and temporary ‘sidetrack’ roads to be removed and made good on completion of construction.</p>	<p>Construction works are likely to have a minor impact on significant views and the ability to read the key elements of the Griffins’ formally adopted plan for Canberra.</p> <p>The proposed construction works are for a relatively short duration and of low intensity.</p>	<p>The following three recommendations apply to both Temporary Construction Works and New Infrastructure and Modifications to Existing Infrastructure.</p> <ul style="list-style-type: none"> Develop and implement an Interpretation Plan to identify and interpret the history and heritage values of Canberra and to engage with the community. Complete an Archival Recording prior to any site disturbance and site establishment. Follow an Unexpected Finds Protocol. MPC should adopt an Unexpected Finds Protocol prior to the commencement of project works.
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>The construction of a raised London Circuit and formation of an intersection at Commonwealth Avenue would see the introduction of a significant new piece of permanent infrastructure within the roadway, requiring modifications to intersections, demolition of existing features,</p>	<p>Post-Recommendation Impact Assessment:</p> <p>If the above recommendation is implemented, post action, the impact would remain at a minor level.</p>	
	<p>New infrastructure and modifications to existing infrastructure is likely to cause a moderate impact the heritage values of ‘Canberra the Planned National Area’.</p>	<p>Further resolve the Design Development:</p> <ul style="list-style-type: none"> Reduce the number of light poles/signage/traffic signals to as few as possible. 	

Summary Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations
<ul style="list-style-type: none"> the tree-lined boulevards of Commonwealth, Kings and Constitution Avenues with their associated visible terminal axis features; planned nature of the city—its design and plantings; the 1925 gazetted road layout indicates the size and layout of the early city; and Central National Area and high proportion of tree planting in the public domain. 	<p>construction of embankments, verges and associated infrastructure (ie traffic signals, street lights).</p> <p>The existing median strip of Commonwealth Avenue is a large, grassed area that is devoid of trees or large infrastructure, it has an opening to London Circuit below, low barriers and fences at the London Circuit overpass. The geometry of the Avenue is shown through the treatment of the continuous median strip, the verges and dual roadway.</p> <p>The new intersection would physically and visually disrupt the median as a continuous feature from City Hill to Lake Burley Griffin and would interrupt the clear view of green median and uninterrupted roadway from City Hill. There is also a chance the verges will be impacted by the addition of new turning lanes or a wider road.</p> <p>The proposed modification to the London Circuit and Commonwealth Avenue intersection would reinstate the road system to an earlier configuration (similar to the 1925 Griffin Plan Road layout) (Figure 1.2, Figure 5.3, Figure 5.4) and would enhance the legibility of the hexagonal nature of London Circuit. However, the proposed works would change the original and intact topography of the London Circuit by raising it up on both sides of Commonwealth Avenue to meet at the height of the current overpass (Figure 4.2).</p> <p>The proposed raising of London Circuit on both sides of Commonwealth Avenue will reduce the physical presence of City Hill as a topographical feature in the landscape—part of the Griffin’s arrangement of the early city responding to the topography. Currently, the view from London Circuit towards City Hill clearly demonstrates the physical presence of the Hill. The works have the potential to diminish the presence of City Hill and reduce the ability to read it in its context as a prominent feature and focal point (Figure 6.1) as seen from the southern side of the hill.</p> <p>The works include the demolition of two NCDC era bridges over London Circuit. Combined with the removal of two of the three existing ‘cloverleaves’, the proposed works would diminish the understanding of the NCDC road alignment program. The cloverleaves were a part of the NCDC’s interpretation and implementation of the Griffin Plan, and would be removed by the proposed work.</p> <p>The RLC project provides an opportunity to implement the landscape structure of Commonwealth Avenue, including new planting and landscaping along Commonwealth Avenue, where this is consistent with the heritage values of the place.</p>	<p>The works are permanent; medium–large scale and of moderate intensity.</p> <hr/> <p>Post-Recommendation Impact Assessment:</p> <p>The above mitigation measures would partially mitigate the impact, however, post action, the impact would remain at a moderate level.</p>	<ul style="list-style-type: none"> Ensure light poles/signage/ traffic signals are finished in a recessive colour. Ensure the verges and median of Commonwealth Avenue are retained. Ensure that earthworks and construction works are limited to those that are necessary. Reduce the quantity of paving/bitumen to that which is required. <p>Retain the Landscape Character:</p> <ul style="list-style-type: none"> Ensure the heritage values of the place/s (noted in this report) are conserved and appropriately managed. Implement the landscape structure of Commonwealth Avenue, where consistent with the heritage values of the place/s. Retain historic trees where possible, and explore and document alternatives to the removal of trees. Replace any removed trees with advanced tree stock of suitable varieties. Ensure new plantings are in keeping with the Commonwealth Avenue heritage values and NCA Tree Management Policy. Ensure any median strip planting is complementary and does not obscure the vista. Include proposed tree removal/planting works in the Communication Strategy.

6.2 Parliament House Vista

Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations
<p>Relevant key attributes, summarised from citation, includes:</p> <ul style="list-style-type: none"> concentration of buildings, parklands and gardens that support Commonwealth parliamentary and governmental activity and national cultural life; extensive vista along the land axis accentuated by planned open spaces, water features, tree plantings, terminal features etc; whole of the vista; and planned layout of vista. 	<p>Temporary Construction Works:</p> <p>Construction work at the junction of London Circuit and Commonwealth Avenue has the potential to introduce new temporary elements or alter existing elements of the vista’s immediate setting.</p> <p>The construction of a temporary sidetrack road would introduce new a physical element into the roadway however it would not distract from the setting of the Vista.</p> <p>These impacts would be temporary, with works limited to the duration of the construction period and hoardings and sidetrack road to be removed on completion of construction.</p> <p>Views to the surrounding forested hills and significant views to and from Parliament House Vista would not be impacted.</p>	<p>Construction works are unlikely to have an adverse heritage impact on the Commonwealth Heritage values of the Parliament House Vista.</p>	<p>The following three recommendations apply to both Temporary Construction Works and New Infrastructure and Modifications to Existing Infrastructure.</p> <ul style="list-style-type: none"> Develop and implement an Interpretation Plan to identify and interpret the history and heritage values of the Parliament House Vista and to engage with the community. Complete an Archival Recording prior to any site disturbance and site establishment. Follow an Unexpected Finds Protocol. MPC should adopt an Unexpected Finds Protocol prior to the commencement of project works.
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>The proposed permanent works would introduce new elements or alter existing elements of the Parliament House Vista’s immediate setting. The construction of a raised London Circuit and formation of an intersection at Commonwealth Avenue would see the introduction of a significant, new piece of permanent infrastructure within the roadway, requiring modifications to intersections, embankments, verges and installation of associated infrastructure (ie traffic signals, street lights).</p> <p>The study area is within the setting of the Parliament House Vista. Changes to the setting would comprise a minor impact and are not likely to interfere with the significant views to and from the Vista from Commonwealth Avenue, nor the ‘underlying geometry of the area nor obstruct significant views to and from the Vista’, which is in accordance with the HMP policies.</p>	<p>Post-Recommendation Impact Assessment:</p>	
		<p>Implementing the recommendations would assist in reducing impacts (post action), potentially achieving little to no adverse impact.</p>	
		<p>New infrastructure and modifications to existing infrastructure are unlikely to adversely impact the Commonwealth Heritage values of the Parliament House Vista.</p>	
		<p>Post-Recommendation Impact Assessment:</p>	<ul style="list-style-type: none"> Ensure the verges and median of Commonwealth Avenue are retained.
		<p>Implementing the recommendations would assist in reducing impacts (post action), achieving little to no adverse impact.</p>	<ul style="list-style-type: none"> Ensure that earthworks and construction works are limited to those that are necessary. Reduce the quantity of paving/bitumen to that which is required. <p>Retain the Landscape Character:</p>

Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations
			<ul style="list-style-type: none"> • Ensure the heritage values of the place/s (noted in this report) are conserved and appropriately managed. • Implement the landscape structure of Commonwealth Avenue, where consistent with the heritage values of the place/s. • Explore and document alternatives to the removal of trees. • Replace any removed trees with advanced tree stock of suitable varieties. • Ensure new plantings are in keeping with the Commonwealth Avenue heritage values and NCA Tree Management Policy. • Ensure any median planting is complementary and does not obscure the vista. • Include proposed tree removal/planting works in the Communication Strategy.

6.3 National Land Roads

Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations	
<p>Relevant key heritage values and attributes include:</p> <ul style="list-style-type: none"> • wide, tree-lined avenue; • plantings; • formality of the road due to siting, alignment and width; • historical function as a major and active boulevard that facilitates public movement throughout Canberra; • views north and south along the road alignment of Commonwealth Avenue; • the visual and spatial relationship of Commonwealth Avenue with Kings and Constitution Avenues—the other two sides of the National Triangle; and • ceremonial and symbolic importance to Canberra, the national capital. 	<p>Construction Works:</p> <p>The introduction of temporary sidetrack roads for re-routing traffic and other temporary construction work will temporarily impact the view north and south along Commonwealth Avenue.</p> <p>The construction of the temporary sidetrack roads would directly degrade the formality of the road alignment as a ‘boulevard’ by adding curved diversion roads to the side of the avenue.</p> <p>This potential visual impact would be temporary, with works limited to the duration of the construction period. Hoardings, temporary roadways and construction compounds are to be removed and made good on completion of construction.</p>	<p>Construction works are likely to have a minor visual impact on the heritage values of the National Land Roads.</p> <p>The proposed works would be temporary, reversible and low intensity.</p>	<p>The following three recommendations apply to both Temporary Construction Works and New Infrastructure and Modifications to Existing Infrastructure.</p> <ul style="list-style-type: none"> • Develop and implement an Interpretation Plan to identify and interpret the history and heritage values of Commonwealth Avenue and to engage with the community. • Complete an Archival Recording prior to any site disturbance and site establishment. • Follow an Unexpected Finds Protocol. MPC should adopt an Unexpected Finds Protocol prior to the commencement of project works. 	
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>The construction of a raised London Circuit and formation of an intersection at Commonwealth Avenue would see the introduction of a significant new piece of permanent traffic infrastructure.</p> <p>At present, the Commonwealth Avenue median is a large, grassed area that is devoid of trees, with existing infrastructure confined to traffic signals, barriers, fencing and flag poles. The existing Avenue is a wide boulevard with parallel alignment and no intersections interrupting the vista.</p> <p>The new intersection and raised London Circuit would physically and visually alter Commonwealth Avenue, potentially detracting from its landscaped character and visual prominence of the elevated Avenue as a formally aligned road.</p> <p>The creation of a multi-lane signalised intersection between London Circuit and Commonwealth Avenue would permanently alter aspects of the roadway, although the works are considered a reinstatement of the road system to an earlier configuration (Figure 5.3).</p> <p>The works also include the demolition of two NCDC era bridges over London Circuit. Combined with the removal of two of the three</p>	<p>Post-Recommendation Impact Assessment:</p>		<p>Implementing the recommendations, the post action impact would remain at a minor level.</p>
		<p>The proposed new infrastructure and modifications to existing infrastructure, namely the intersection works and raised London Circuit, are likely to have a moderate impact on the heritage values of the National Land Roads.</p> <p>The proposed works are long-term, medium scale and moderate intensity.</p>		<p>Further resolve the Design Development:</p> <ul style="list-style-type: none"> • Reduce the number of light poles/signage/traffic signals. • Ensure light poles/signage/ traffic signals are finished in a recessive colour. • Ensure the verges and median strip of Commonwealth Avenue are retained. • Ensure that earthworks and construction works are limited to those that are necessary. • Reduce the quantity of paving/bitumen to that which is required. <p>Retain the Landscape Character:</p>
		<p>Post-Recommendation Impact Assessment:</p>		

Heritage Values	Discussion: Potential Impact Analysis of Proposed Works	Heritage Impact Statement	Summary Recommendations
	<p>existing ‘cloverleaves’, the proposed works would diminish the understanding of the NCDC road alignment program. The cloverleaves were a part of the NCDC’s interpretation and implementation of the Griffin Plan, which would be substantially modified/ obstructed by the proposed work.</p>		<ul style="list-style-type: none"> • Ensure the heritage values of the place/s (noted in this report) are conserved and appropriately managed. • Implement the landscape structure of Commonwealth Avenue, where consistent with the heritage values of the place/s. • Explore and document alternatives to the removal of trees. • Replace any removed trees with advanced tree stock of suitable varieties. • Align new plantings with the Commonwealth Avenue heritage values and NCA Tree Management Policy. • Ensure any median strip planting is complementary and does not obscure the vista. • Include proposed tree removal/planting works in the Communication Strategy

6.4 Lake Burley Griffin

Heritage Significance	Discussion: Potential Impact of Proposed Works	Heritage Impact Statement	Summary Recommendations
<p>Relevant key heritage values and attributes include:</p> <ul style="list-style-type: none"> presence of the lake in views of and within central Canberra; the lake landscape including its edge treatments, bridges, dam, Captain Cook Water Jet and islands and its relationship to the geometry of Griffin’s Plan; quiet and peaceful qualities; qualities of naturalness; availability of views from publicly accessible locations to the lake; and public access to and use of the lake and foreshores. 	<p>Construction Works:</p> <p>Construction works, including the proposed compound to be established along the western side of Commonwealth Avenue, may obstruct the ‘presence of the lake in views of and within central Canberra’ and the ‘availability of views from publicly accessible locations to the lake’. This potential visual impact would be temporary, with works limited to the duration of the construction period and hoardings and construction compounds to be removed and made good on completion of construction.</p> <p>Construction works are unlikely to impact the ‘quiet, peaceful and reflective qualities’ of the lake. The noise generated would be comparable to the noise generated by existing traffic and construction that already occurs within the lake’s vicinity.</p>	<p>Construction works, namely construction compounds and hoardings, are likely to have a minor visual impact on the heritage values of Lake Burley Griffin, with the proposed works being temporary, reversible and low intensity.</p> <p>Post-Recommendation Impact Assessment:</p> <p>Implementing the recommendations, the post action impact would remain at a minor level.</p>	<p>The following three recommendations apply to both temporary Construction Works and New Infrastructure and Modifications to Existing Infrastructure.</p> <ul style="list-style-type: none"> Develop and implement an Interpretation Plan to identify and interpret the history and heritage values of Lake Burley Griffin and to engage with the community. Complete an Archival Recording prior to any site disturbance and site establishment. Follow an Unexpected Finds Protocol. MPC should adopt an Unexpected Finds Protocol prior to the commencement of project works.
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>Elements of vertical infrastructure (ie traffic signals) are proposed to be installed within the RLC boundary of Commonwealth Avenue. The proposed infrastructure, is unlikely to obstruct the ‘open views to the water from roads and other public use areas’ as specified by the 2008 HMP Action 1.6.2.</p>	<p>The proposed RLC project is unlikely to cause impact on the heritage values of Lake Burley Griffin.</p> <p>Post-Recommendation Impact Assessment:</p> <p>No mitigation measures are recommended.</p>	

6.5 Australian Academy of Science Building

Heritage Significance	Discussion: Potential Impact of Proposed Works	Heritage Impact Statement	Summary Recommendations
<p>Relevant key heritage values and attributes include:</p> <ul style="list-style-type: none"> freestanding copper clad dome form and structure; and clear view to building. 	<p>Construction Works:</p> <p>A construction compound is proposed to be established to the north of the Australian Academy of Science Building across Gordon Street. The proposed compound would be physically separated from the heritage place by the width of Gordon Street and is unlikely to obstruct visibility of the heritage place from the public domain.</p> <p>Construction works along Edinburgh Avenue may be visible from the heritage place but are unlikely to impact its heritage values as they would be physically and visually separated from the heritage place by intervening development, plantings and distance.</p>	<p>Construction works are unlikely to have an adverse impact on the Australian Academy of Science Building.</p>	<ul style="list-style-type: none"> No mitigation measures are recommended.
		<p>Post-Recommendation Impact Assessment:</p>	
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>Proposed permanent works are unlikely to impact on the Australian Academy of Science Building as they would be physically and visually separated from the heritage place by intervening development, plantings and distance.</p>	<p>No mitigation measures are recommended.</p>	<ul style="list-style-type: none"> No mitigation measures are recommended.
		<p>New infrastructure and modifications to existing infrastructure are unlikely to have an adverse impact on the heritage values of the Australian Academy of Science.</p>	
	<p>Post-Recommendation Impact Assessment:</p> <p>No mitigation measures are recommended.</p>		

6.7 City Hill

City Hill’s significant attributes and features, within the ACT Heritage place boundary and as an element of the broader landscape setting are recognised in the statement of significance, though not itemised in the list of features intrinsic to the place. This heritage impact assessment table identifies that the proposed works will not have an impact on the legislated ‘features intrinsic’ to City Hill’s heritage listing. However, City Hill is an integral element of the heritage places described in Sections 6.1, 6.2 and 6.3, and the proposed action is likely to have a visual impact on City Hill, as viewed from the broader landscape setting to City Hill, rather than an impact on the intrinsic features included in the ACT Heritage Register place boundary of City Hill.

Heritage Significance	Discussion: Potential Impact of Proposed Works	Heritage Impact Statement	Summary Recommendations
<p>Relevant key aspects of heritage significance and features intrinsic include:</p> <ul style="list-style-type: none"> • City Hill’s role as a generating point for the major avenues of Civic, with its plantings providing visual corridors for those avenues, and as a historically significant and enduring component of the Griffin Plan; • the important historical and aesthetic landscaped open space City Hill provides within the Central Business District, enabling views of the key topographical elements of the city to be seen from the hill; • the verticality created by the trees and flagpole forms a landmark for the city; • all grassed areas; • cultural plantings (<i>Cupressus sempervirens</i>, <i>Pinus radiata</i> and <i>Robinia pseudoacacia</i>); and • central flagpole and in its existing location. 	<p>Construction Works:</p> <p>Construction works have the potential to obstruct and alter views to and from City Hill, impacting its significance as ‘a generating point for the major avenues’ and its aesthetic significance as ‘an important open space’ and providing ‘views of the key topographical elements of the city.’</p> <p>This potential visual impact would be temporary, with works limited to the duration of the construction period, and hoardings, construction compounds and temporary sidetracks being removed and made good on completion of construction.</p>	<p>Construction works are likely to have a minor impact on the significance of City Hill.</p> <p>The impact is visual, as viewed to City Hill, and as part of the broader landscape setting, rather than an impact on the intrinsic features, within the ACT Heritage place boundary of City Hill.</p> <p>The impact on the heritage values would be of a temporary nature, be reversible and of a low intensity.</p> <p>Post-Recommendation Impact Assessment:</p> <p>Implementing the recommendations, the post action impact would remain at a minor level.</p>	<p>The following three recommendations apply to both Temporary Construction Works and New Infrastructure and Modifications to Existing Infrastructure.</p> <ul style="list-style-type: none"> • Develop and implement an Interpretation Plan to identify and interpret the history and heritage values of City Hill and its place as part of Commonwealth Avenue, and to engage with the community. • Complete an Archival Recording prior to any site disturbance and site establishment. • Follow an Unexpected Finds Protocol. MPC should adopt an Unexpected Finds Protocol prior to the commencement of project works.
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>The action of RLC and introducing an intersection at Commonwealth Avenue would see the establishment of new infrastructure within the vicinity of City Hill. Modifications to grade London Circuit to meet Commonwealth Avenue would require earthworks, the introduction of</p>	<p>The proposed works are likely to have a minor impact on views to City Hill along Commonwealth Avenue and have the potential to cause an impact to the legibility of City Hill as a topographical element</p>	<p>Further resolve the Design Development:</p> <ul style="list-style-type: none"> • Reduce the number of light poles/signage/traffic signals to as few as possible.

Heritage Significance	Discussion: Potential Impact of Proposed Works	Heritage Impact Statement	Summary Recommendations
	<p>retaining walls, berms, traffic signals and associated infrastructure (Figure 2.4).</p> <p>This section of Commonwealth Avenue is a grassed area that is largely devoid of trees or infrastructure. This remains from the NCDC’s decision not to plant in the median of the northern side of the Commonwealth Avenue Bridge, in order to maintain an open, simple and effective vista towards and from City Hill. The increased visual clutter in the median strip from the associated traffic signals, pedestrian crossings, turning lanes, curbing, etc would have a potential to disturb the open vista intended from City Hill to Capital Hill.</p> <p>The proposed raising of London Circuit on both sides of Commonwealth Avenue may have the potential to reduce the prominence of the City Hill in the landscape context. City Hill is a topographical feature in the landscape (Figure 5.4 and Figure 6.1) which was identified and featured as part of the Griffins’ arrangement of the early city. The proposed works may reduce the ability to read it as a special feature, as identified by the Griffins. The RLC project has the potential to reduce the understanding of City Hill as a natural hill in the landscape as viewed from the southern side of London Circuit as it intersects with Commonwealth Avenue.</p> <p>The proposed works do not include the removal of trees, nor other actions within the place boundary of City Hill, as such the works will not impact the features intrinsic as identified by ACT Heritage.</p>	<p>in the city.</p> <p>The impact is visual, as viewed to City Hill, and as part of the broader landscape setting, rather than an impact on the intrinsic features, within the ACT Heritage place boundary of City Hill.</p> <p>The impacts would be long-term, small-medium scale and of a low intensity.</p> <p>Post-Recommendation Impact Assessment:</p> <p>Implementing the recommendations would assist in reducing the impact, however the post impact level would remain at a minor.</p>	<ul style="list-style-type: none"> • Ensure light poles/signage/ traffic signals are finished in a recessive colour. • Ensure that earthworks and construction works are limited to those that are necessary. <p>Retain the Landscape Character:</p> <ul style="list-style-type: none"> • Ensure the heritage values of the place/s (noted in this report) are conserved and appropriately managed. • Implement the landscape structure of Commonwealth Avenue, where consistent with the heritage values of the place/s. • Ensure new planting are consistent with the heritage values of Commonwealth Avenue and NCA Tree Management Policy. • Ensure any median strip planting is complementary to the heritage values and does not obscure the vista.



Figure 6.1 Current view from the London Circuit looking north towards City Hill. (Source: Google Maps, 2021)

6.8 Ian Potter House

Heritage Significance	Discussion: Potential Impact of Proposed Works	Heritage Impact Statement	Summary Recommendations
Relevant features intrinsic include: <ul style="list-style-type: none"> the building; and setting. 	<p>Construction Works:</p> <p>A construction compound is proposed to be established north of Ian Potter House, across Gordon Street. The proposed compound is unlikely to have an impact on the identified features intrinsic of the heritage place or its visibility from the public domain.</p> <p>Construction works along Edinburgh Avenue, namely hoardings, are unlikely to obstruct the visibility of Ian Potter House and its setting from the public domain.</p>	Construction works are unlikely to have an adverse impact on the significance of Ian Potter House, with the proposed works being temporary, reversible and low intensity.	<ul style="list-style-type: none"> No mitigation measures are recommended.
		<p>Post-Recommendation Impact Assessment:</p>	
		No mitigation measures are recommended.	
	<p>New Infrastructure and Modifications to Existing Infrastructure:</p> <p>The RLC Project is unlikely to obstruct the visibility of Ian Potter House and its setting from the public domain.</p>	New infrastructure and modifications to existing infrastructure are unlikely to have an adverse impact on the significance of Ian Potter House.	
	<p>Post-Recommendation Impact Assessment:</p>		
	No mitigation measures are recommended.		

6.9 Applying the Risk Matrix to Heritage Places

Undertaking a risk assessment based on ‘likelihood’ and ‘consequence’ of the possible impact to heritage values is unlike other types of environmental risk assessments. The potential impact that is being assessed, is the actual proposed works, rather than an unexpected, or unplanned occurrence. As such, much of the impact has been deemed to have a likelihood ranking of ‘almost certain’.

Table 6.1 Risk Assessment

Action	Likelihood	Consequence	Risk
Canberra the Planned National Capital			
Construction works	Likely	Minor	Medium
Infrastructure works	Likely	Moderate	High
Parliament House Vista			
Construction works	Possible	Insignificant	Very low
Infrastructure works	Possible	Insignificant	Very low
National Land Roads			
Construction works	Likely	Minor	Medium
Infrastructure works	Likely	Moderate	High
Lake Burley Griffin			
Construction works	Possible	Minor	Low
Infrastructure works	Unlikely	Minor	Very Low

Action	Likelihood	Consequence	Risk
Australian Academy of Science			
Construction works	Unlikely	Minor	Very Low
Infrastructure works	Unlikely	Minor	Very Low
City Hill			
Construction works	Likely	Minor	Medium
Infrastructure works	Likely	Minor	Medium
Ian Potter House			
Construction works	Unlikely	Minor	Very Low
Infrastructure works	Unlikely	Minor	Very Low

6.10 Summary: Heritage Impact Assessment and Risk Assessment

To ensure consistency with the EA report, the heritage impact assessment tables (above) and the risk assessment in Table 6.1 are summarised together in Table 6.2.

Table 6.2 Summary of Heritage Impact and Risk Assessment

Heritage Impact	Risk Assessment
Canberra the Planned National Capital	
<ul style="list-style-type: none"> Construction works are likely to have a minor adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are likely to cause a moderate adverse impact on the heritage values of Canberra the Planned National Capital. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'likely' with a 'minor' consequence. As such, the risk ranking is Medium. The proposed infrastructure works causing an adverse impact on the heritage values is 'likely' with a 'moderate' consequence. As such the risk ranking is High.
Parliament House Vista	
<ul style="list-style-type: none"> Construction works are unlikely to have an adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are unlikely to cause an adverse impact on the heritage values of the Parliament House Vista. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'possible' with an 'insignificant' consequence. As such the risk ranking is Very Low. The proposed infrastructure works causing an adverse impact on the heritage values is 'possible' with an 'insignificant' consequence. As such the risk ranking is Very Low.
National Land Roads	
<ul style="list-style-type: none"> Construction works are likely to have a minor adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are likely to have a moderate adverse impact on the heritage values of National Land Roads. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'likely' with a 'minor' consequence. As such, the risk ranking is Medium. The proposed infrastructure works causing an adverse impact on the heritage values is 'likely' with a 'moderate' consequence. As such the risk ranking is High.

Heritage Impact	Risk Assessment
Lake Burley Griffin	
<ul style="list-style-type: none"> Construction works are likely to have a minor adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are unlikely to cause an adverse impact on the heritage values of Lake Burley Griffin. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'possible' with a 'minor' consequence. As such, the risk ranking is Low. The proposed infrastructure works causing an adverse impact on the heritage values is 'unlikely' with a 'minor' consequence. As such the risk ranking is Very Low.
Australian Academy of Science	
<ul style="list-style-type: none"> Construction works are unlikely to have an adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are unlikely to cause an adverse impact on the heritage values of the Australian Academy of Science building. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'unlikely' with a 'minor' consequence. As such, the risk ranking is Very Low. The proposed infrastructure works causing an adverse impact on the heritage values is 'unlikely' with a 'minor' consequence. As such the risk ranking is Very Low.
City Hill	
<ul style="list-style-type: none"> Construction works are likely to have a minor adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are likely to have a minor adverse impact on the heritage values of City Hill as part of the broader landscape setting. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'likely' with a 'minor' consequence. As such, the risk ranking is Medium. The proposed infrastructure works causing an adverse impact on the heritage values is 'likely' with a 'minor' consequence. As such the risk ranking is Medium.

GML HERITAGE

Heritage Impact	Risk Assessment
Ian Potter House	
<ul style="list-style-type: none"> Construction works are unlikely to have an adverse impact on the heritage values. The proposed new infrastructure and modifications to existing infrastructure are unlikely to cause an adverse impact on the heritage values of Ian Potter House. 	<ul style="list-style-type: none"> The proposed construction works causing an adverse impact on the heritage values is 'unlikely' with a 'minor' consequence. As such, the risk ranking is Very Low. The proposed infrastructure works causing an adverse impact on the heritage values is 'unlikely' with a 'minor' consequence. As such the risk ranking is Very Low.

7 Recommendations

The heritage impact assessment in Section 6 found that the RLC project would have a potential impact on the historic heritage values of the places located within or immediately adjacent to the study area. The following recommendations are intended to inform the decisions associated with individual heritage places, to achieve an appropriate management approach for the next stage of design and project implementation, and to assist in avoiding and mitigating heritage impacts.

Develop an Interpretation Plan: During the design phase and prior to the commencement of the project works, MPC should prepare an Interpretation Plan to identify and interpret the history and heritage values of Canberra, the Parliament House Vista, Commonwealth Avenue, Lake Burley Griffin, City Hill.

- The Interpretation Plan should inform how the detailed design of the project is to recognise the heritage values of the place.
- It should include a commitment to display and present information about the evolution of the heritage fabric and values of London Circuit, Commonwealth Avenue, Lake Burley Griffin, City Hill and Canberra, including through the RLC program, in publicly accessible areas.
- The Plan should identify and commit to suitable interpretation devices throughout the life of the project—from the early site establishment, construction phase and in the final completed landscape design—and provide a timeline for the implementation of the interpretation works.
- A Communication Strategy could also be prepared by MPC in conjunction with the Interpretation Plan. This Consultation Plan should identify actions to undertake that will ensure the heritage significance of the place is well understood by the project team and community, and to engage community in the possible heritage impacts and

mitigation measures that are being undertaken (refer to Landscape Considerations). It should provide a timeline for the implementation of these actions.

Further Resolve Design Development: Prior to commencing the relevant element of the project works, MPC should resolve the following design issues, to ensure the heritage values of the place/s are conserved, appropriately managed, and maintained.

- Implement the landscape structure of Commonwealth Avenue, where it is consistent with the heritage values of the place/s.
- Reducing the number of light poles/signage/traffic signals to as few as possible to conserve the urban/cultural landscape setting.
- Ensure light poles/signage/traffic signals are be finished in a recessive colour, eg in Dulux Eternity in Bronze Pearl Satin, as per Northbourne Avenue Light Rail infrastructure.
- Ensuring the verges and median strip of Commonwealth Avenue are retained and are consistent with the landscape structure of Commonwealth Avenue.
- Refining the design documentation to ensure that earthworks and construction works are limited to those that are necessary, with the aim of limiting any change to the current topography including at the 'cloverleaves' and along the new London Circuit up ramps.
- Reducing the quantity of paving/bitumen to that which is required. Selecting grassed areas over paving/bitumen where possible.
- Any other issues identified during the design process with impact on the heritage values.

The identification and resolution of these design features should be undertaken in consultation with heritage advisors, and possibly an

GML HERITAGE

independent design review panel, with specific consideration for the conservation of heritage values.

Once resolved and prior to the commencement of the specific project elements, MPC should notify the relevant planning authority of the final design decisions and make this information publicly available.

Retain the Landscape Character: Prior to commencing the project works, MPC should identify measures it will undertake to conserve and reflect the heritage significance of the place through landscape planning and planting, and commit to a timeline and approach for implementing these measures during and after the project. These measures should include:

- Implementing the key findings from the landscape structure of Commonwealth Avenue, where it is consistent with the heritage values of the place/s.
- Exploring and documenting (in drawings and written text) all possible alternatives to the removal of historic trees.
- Where removal and replacement of trees is necessary, ensuring advanced tree stock of suitable varieties are planted.
- Ensuring the alignment of trees and species selection provides a consistent, defined character along the avenue in keeping with Commonwealth Avenue's heritage values, guided by the NCA Tree Management Policy and the landscape structure.
- Ensuring any plantings in the median complement the visual links between City Hill and Parliament House, without obscuring the central vista.
- Including proposed tree removal/planting works in the Communication Strategy to ensure the community are aware of the impacts and mitigation measures (refer to Interpretation Opportunity).

- Ensure the construction compounds are reinstated to a appropriate condition after construction is complete.
- Any other measures to conserve and reflect the heritage significance and character of the landscape identified during the design process.

Once resolved and prior to the commencement of the specific project elements, MPC should notify the relevant planning authority of the final design decisions and make this information publicly available.

Complete an Archival Recording: Prior to any site disturbance and site establishment, MPC should complete a general photographic archival recording of Commonwealth Avenue from City Hill to Commonwealth Avenue Park, and of London Circuit from Edinburgh Avenue to the Commonwealth Avenue on-ramp in the east, as well as within the areas to be occupied by construction compounds.

- MPC should make provision for information to be permanently accessible through the ACT Government website or another suitable platform as an archival record of the works and RLC program.
- MPC should ensure recording is undertaken in accordance with published best-practice guidelines for heritage archival recording, eg: *Photographic Recording of Heritage Items Using Film or Digital Capture* (2006) guidelines issued by the New South Wales Heritage Office, and the *How to Prepare Archival Records* (1998) by the Heritage Council of NSW.

Follow an Unexpected Finds Protocol: MPC should adopt an Unexpected Finds Protocol prior to the commencement of project works. Refer to an example attached as Appendix A.

- The protocol should be implemented and followed in the event of historical or Aboriginal archaeological remains are found during ground disturbing works.

Endnotes

- ¹ GML Heritage, September 2020 City to Commonwealth Park Light Rail Heritage Impact Assessment, prepared for ACT Government/Major Projects Canberra.
- ² GML Heritage, September 2020 Commonwealth Avenue Bridge, Heritage Assessment, prepared by for Major Projects Canberra and the National Capital Authority; and GML Heritage, May 2020 Commonwealth Avenue Bridge—Community Engagement and Heritage Assessment, Aesthetic and Social Values, prepared for Major Projects Canberra and the National Capital Authority.
- ³ Australian Government/National Capital Authority, 'Designated Areas', viewed 22 July 2020, <<https://www.nca.gov.au/planning-heritage/about-planning-act/designated-areas>>.
- ⁴ National Capital Authority 2019, *National Capital Plan*, Australian Government p 39.
- ⁵ National Capital Authority 2019, *National Capital Plan*, Australian Government pp 88–192.
- ⁶ Environment Protection and Biodiversity Conservation Act 1999 (Cth), Section 3.
- ⁷ Department of Agriculture, Water and the Environment, 'About the EPBC Act', viewed 12 July 2021, <<https://www.environment.gov.au/epbc/about>>.
- ⁸ Environment Protection and Biodiversity Conservation Act 1999 (Cth), Section 3.
- ⁹ Australian Government/National Capital Authority, The National Capital Plan, revised December 2019.
- ¹⁰ Department of the Environment and Heritage, 2013, Significance Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999.
- ¹¹ According to the Significant Impact Guidelines 1.1, the scale of the action and its impacts is a fundamental consideration when predicting the severity of impacts. Generally, a larger-scale action with widespread impacts is more likely to have a significant impact on the environment than a smaller-scale action with localised impacts. However, it is important to consider scale in conjunction with the intensity and duration/frequency of the impacts.
- ¹² According to the Significant Impact Guidelines 1.1, Intensity refers to the strength and concentration of the impacts. It gives non-heritage example of open-cut mining, which involves comprehensive modification of the environment, is an example of an action with high intensity impacts. A secondary example is that low density grazing of livestock on native pastures is an example of an action with low intensity impacts in most circumstances.
- ¹³ Department of the Environment, Draft Canberra the Planned National Capital: National Heritage place EPBC Act Referral Guidelines, 2012. Appendix 6.1 National Heritage values statement.
- ¹⁴ Department of the Environment, Draft Canberra the Planned National Capital: National Heritage place EPBC Act Referral Guidelines, 2012. Appendix 6.1 National Heritage values statement.
- ¹⁵ Department of Agriculture, Water and the Environment, Australian Heritage Database, 'Parliament House Vista, Anzac Pde, Parkes, ACT, Australia', viewed 23 June 2020 <<http://www.environment.gov.au/cgi-bin/ahdb/search.pl>>.
- ¹⁶ Department of Agriculture, Water and the Environment, Australian Heritage Database, 'Parliament House Vista, Anzac Pde, Parkes, ACT, Australia', viewed 23 June 2020 <<http://www.environment.gov.au/cgi-bin/ahdb/search.pl>>.
- ¹⁷ Department of Agriculture, Water and the Environment, Australian Heritage Database, 'National Land Roads, Commonwealth Ave, Parkes, ACT, Australia', viewed 23 June 2020 <http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=106324>.
- ¹⁸ Department of Agriculture, Water and the Environment, Australian Heritage Database, 'National Land Roads, Commonwealth Ave, Parkes, ACT, Australia', viewed 26 July 2021 <http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=106324>

- ¹⁹ Godden Mackay Logan, Lake Burley Griffin—Heritage Assessment, report prepared for the National Capital Authority, May 2010.
- ²⁰ Godden Mackay Logan, Lake Burley Griffin—Heritage Assessment, report prepared for the National Capital Authority, May 2010.
- ²¹ Godden Mackay Logan, Lake Burley Griffin and Adjacent Lands—Heritage Management Plan, report prepared for the National Capital Authority, January 2008.
- ²² Department of Agriculture, Water and the Environment, Australian Heritage Database, 'Australian Academy of Science Building, Gordon Street, Canberra City, ACT, Australia', viewed 22 September <<http://www.environment.gov.au/cgi-bin/ahdb/search.pl>>.
- ²³ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'City Hill', viewed 12 December 2019 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.
- ²⁴ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'City Hill', viewed 12 December 2019 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.
- ²⁵ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'City Hill', viewed 12 December 2019 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.
- ²⁶ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'Ian Potter House', viewed 23 June 2020 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.
- ²⁷ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'Ian Potter House', viewed 23 June 2020 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.
- ²⁸ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'Ian Potter House', viewed 23 June 2020 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.
- ²⁹ Environment, Planning and Sustainable Development Directorate—Environment, ACT Heritage Register, 'Ian Potter House', viewed 23 June 2020 <https://www.environment.act.gov.au/heritage/heritage_register/register-by-place>.

Appendices

Appendix A—Unanticipated Finds Protocol

Protocol to be followed in the event that previously unrecorded or unanticipated archaeological material (objects, artefacts, deposits or relics) are encountered.

1. All ground surface disturbance in the area of the finds should cease immediately when unanticipated archaeological material is uncovered. The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be halted.
2. All work in the vicinity of the discovery will cease.
3. Contact the project archaeologist to assess the nature of the finds.
4. The project archaeologist will record the finds. This will include a significance assessment and the lodgement of site information for all new recordings with ACT Heritage.
5. If the finds are historical artefacts not in-situ, the finds will be recorded and collected and stored with the project proponent or project archaeologist and incorporated into the assemblage of other historical artefactual material at the conclusion of subsequent archaeological investigation phases.
6. If the finds are in-situ structural features or in-situ archaeological deposits of assessed significance a determination will be made between the project archaeologist and the onsite operators regarding the following:
 - a) If sufficient information has been gained by the test location, then the sampling process will not re-commence and the find will be reburied using the excavated soil;
 - b) If the test location can be moved to a location not directly impacting surface features, then the sampling process will re-commence at that new location and the finds will be reburied using the excavated soil;
 - c) If there are no suitable location alternatives and further sampling is required, the following will be undertaken:
 - i. All work in the location will remain on hold as the following steps are completed:
 - ii. ACT Heritage will be informed of the findings and a further course of action will be discussed.
 - iii. Based on discussions with ACT Heritage further assessment processes and formal permission under the ACT Heritage ACT may be required to facilitate the removal of the features.
 - iv. At the completion of the additional assessment phases the agreed mitigation measures will be carried out prior to the removal of the features based on the conditions of approval.
7. If the finds are Aboriginal artefacts, the project archaeologist will contact ACT Heritage and the four ACT Representative Aboriginal Organisations (RAOs) to discuss ongoing management measures.
8. Work will not commence at the find location until ACT Heritage, the RAOs and the Project archaeologist have agreed an approach to managing the artefacts, and the finds location.

Protocol to be followed in the event that suspected human remains are encountered.

1. All ground surface disturbance in the area of the finds, should cease immediately the finds are uncovered.
 - a. The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be temporarily halted; and
 - b. The site supervisor and the development proponent will be informed of the find(s). If there is substantial doubt regarding a human origin for the remains, then consider if it is possible to gain a qualified opinion within a short period of time. If feasible, gain a qualified opinion (this can circumvent proceeding further along the protocol for remains which turn out to be non-human). If conducted, this opinion must be gained without further disturbance to any remaining skeletal material and its context as possible (Be aware that the site may be considered a crime scene containing forensic). If a quick opinion cannot be gained, or the identification is positive, then proceed to the next step.
2. Immediately notify the following people of the discovery:
 - a. The local Police (this is required by law);
 - b. ACT Heritage;
 - c. Representatives from the RAOs (where appropriate); and
 - d. The project archaeologist (if not already present).
3. Facilitate the evaluation of the find(s) by the statutory authorities and comply with any stated requirements. Depending on the evaluation of the find(s), the management of the find(s) and their location may become a matter for the Police and/or Coroner.
4. Construction related works in the area of the find(s) may not resume until the development proponent receives written approval from the relevant statutory authority: from the Police or Coroner in the event of an investigation; and from the ACT Heritage Council in the case of human remains outside of the jurisdiction of the Police or Coroner.
5. In the event that the proponent continues an active role in the evaluation and/or management of the find(s), via a direction or advice from the Police, Coroner and/or Heritage Council, then all or some of the following steps may be conducted:
6. Facilitate, in co-operation with the appropriate authorities, the definitive identification of the skeletal material by a specialist (if not already completed). This must be done with as little further disturbance to any remaining skeletal material and its context as possible.
7. If the specialist identifies the bone as non-human then, where appropriate, the protocol for the discovery of historical or Aboriginal artefacts (above) should be followed.
8. If the specialist determines that the bone material is human, then the proceeding course of action may be of three types:
 - a. The bone(s) are of an Aboriginal and non-Aboriginal person who died less than 100 years ago and where traumatic death is suspected. Such remains come under the jurisdiction of the *ACT Coroner's Act 1997*. All further decisions and responsibilities regarding the remains and find location rest with the ACT Police, and/or the ACT Coroner.

- b. The bone(s) are of a non-Aboriginal person who died more than 100 years ago. In this case, and where the Police have indicated that they have no interest in the find(s), the following steps may be followed:
 - i. Ascertain the requirements of the ACT Heritage Council, the development proponent, the project archaeologist, and the views of any relevant community stakeholders;
 - ii. Based on the above, determine and conduct an appropriate course of action. Possible strategies could include one or more of the following:
 - 1. Avoiding further disturbance to the find and conserving the remains *in situ* (this option may require relocating the development and this may not be possible in some contexts);
 - 2. Conducting (or continuing) archaeological salvage of the finds following receipt of any required statutory approvals;
 - 3. Scientific description (including excavation where necessary), and possibly also analysis of the remains prior to reburial;
 - 4. Recovering samples for dating and other analyses; and/or
 - 5. Subsequent reburial at another place and in an appropriate manner determined by the Heritage Council and in consultation with other relevant stakeholders.
- c. The bone(s) are of an Aboriginal person who died more than 100 years ago. In this case the following steps may be followed:
 - i. Ascertain the requirements of the local RAOs, the ACT Heritage Council, the development proponent, and the project archaeologist;
 - ii. Based on the above, determine and conduct an appropriate course of action. Possible strategies could include one or more of the following:
 - 1. Avoiding further disturbance to the find and conserving the remains *in situ*, (this option may require relocating the development and this may not be possible in some contexts);
 - 2. Conducting (or continuing) archaeological salvage of the finds following receipt of any required statutory approvals;
 - 3. Scientific description (including excavation where necessary), and possibly also analysis of the remains prior to reburial;
 - 4. Recovering samples for dating and other analyses; and/or
 - 5. Subsequent reburial at another place and in an appropriate manner determined by the RAOs and the Heritage Council.