



ACT
Government

Project Business Case

Project name:	Canberra Hospital Master Plan – Pathology and Clinical Services Building and Mental Health Precinct
Tier:	1
Risk assessment (high/med/low):	High
Total estimated project capital cost (P90, \$'000, nominal):	\$14,800
Whole-of-life cashflow (P90, \$'000, nominal):	
Funding requested (\$'000):	\$14,800
Recommended delivery model:	
Sponsoring Agency:	ACT Health Directorate
Sponsoring Minister:	Stephen-Smith
Contact officer:	Catherine Loft Executive Group Manager ICE
Business Case advisors:	Ernest and Young (EY)

This Business Case template should be completed using the [Guidelines](#) on developing each section of the Business Case.

Sign-off

Sponsoring Agency:

<i>Print Name</i>
<i>Signature</i>

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Basis of authority for consideration in 2025-26 Budget: Chief Minister's authority letter.

Brief Description:

The proposal would fund the continuation of the planning and development phase to reach 50% Preliminary Sketch Plan (PSP) of the Pathology and Clinical Services (PCS) building and a feasibility study for the new mental health precinct as committed to by the Government in the 2024 election.

Wellbeing domain 1: Health

Wellbeing domain 2: Choose an item.

Wellbeing Framework priority target group(s): (Multiple categories can be ticked)

- | | | | |
|--|--|---|--|
| ☒ Older Canberrans | ☒ Women and/or gender diverse people | ☒ LGBTIQ+ | ☒ Carers |
| ☒ Culturally and linguistically diverse people | ☒ Children and young people | ☒ Aboriginal and Torres Strait Islander Peoples | ☒ People with disability |

Priority alignment: (Multiple categories can be ticked)

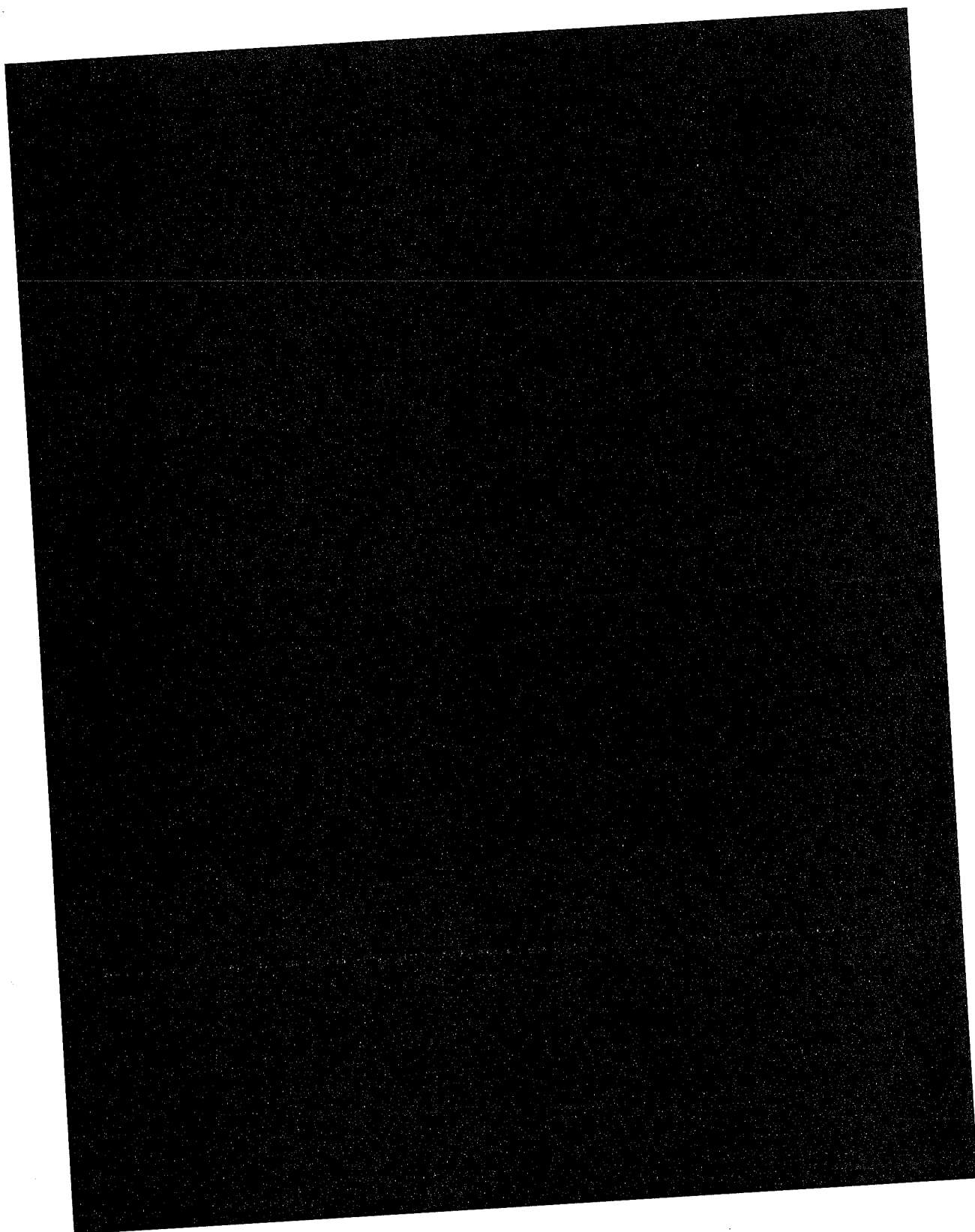
- | | | | |
|---|---|---|--|
| ☒ Election commitment | ☐ <u>National Agreement on Closing the Gap</u> | ☐ <u>ACT Aboriginal and Torres Strait Islander Agreement 2019-2028</u> | ☐ <u>ACT Women's Plan 2016-2026</u> |
| ☐ Housing | ☐ Physical and mental health | ☐ Early years | ☐ Women |
| ☐ Cost of Living | ☐ Addressing marginalisation and disadvantage | | |

Electorate: Murrumbidgee

Existing projects or program(s): 2024-25 Budget - Implementation of the Canberra Hospital Master Plan.

Year to cease funding or ongoing: Funding is to cover Phase 0 of this project. Funding to cease after 2026-27 with a Tier 1 construction business case to be submitted in the future.

Link to Budget consultation: No



¹ Please add additional lines for offsets where required; for example, where there are multiple discrete offsets for funding components.

² Please contact FABG analyst for or additional detail as to how iCBR related fees should be incorporated.

Business Case Authorisations

Lead Minister

Ministerial Endorsement	Signature and date of endorsement
Lead Minister: Stephen-Smith	
Portfolio: Health	 7/3/25

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1. Executive summary

1.1 Introduction

To address future health needs and existing critical asset conditions, the ACT Government released the Canberra Hospital Master Plan (CHMP) in 2021. The CHMP proposes phased redevelopment, improved connections between key assets, better-distributed parking, and critical infrastructure upgrades to improve health care provision and prevent health and safety risks over 20 years. Further, during the 2024 election the Government committed to undertake planning for a new mental health precinct at Canberra Hospital.

This business case proposes a total investment of \$14.8m over two years to:

- finalise planning that would enable a future Government investment decision (to be led by iCBR) for the construction of a new Pathology and Clinical Services Building.
- Deliver a feasibility plan for the Mental Health Precinct, and options for relocation of the existing Early Childhood Education centre.
- Develop an internal wayfinding signage design for the Canberra Hospital campus and deliver rectification works (See Appendix S)

This funding approach is the minimum proposed that would support continued evidence-based planning, good project governance, a small team of project staff at CHS and ACTHD, and minimise risk associated with any potential catastrophic failure of existing assets and resultant impact on the ACT Health System.

Built in the 1970s, the Canberra Hospital (CH) the campus has seen significant upgrades, including the new Critical Services Building (B5) in 2024. Despite this, critical built assets on the campus are ageing (which is impacting on the delivery of clinical care), and renewal opportunities are constrained by existing development.

Phase 2 of the Master Plan (CHMPP2) (Figure 1 below) would deliver modern fit for purpose facilities through the delivery of a Pathology and Clinical Services (PCS) Building and a new Inpatient and Outpatient Building. The first step in Phase 2 is the delivery of the PCS Building which will unlock the essential location for a new inpatient and outpatient building and allow the replacement of Building 1. Development of the PCS building is crucial for replacing Building 1, which has a high risk of failure and making the building inoperable. Failures in Building 1 would have significant impacts and adverse effects on patients, staff and lives of the community and region.

A 2024-25 Business Case was developed for Phase 2 implementation of the CHMP, with costs identified to support detailed design (and other associated works) for a PCS Building, and a new Inpatient and Outpatient Building. These buildings would be built to function together with Building 5 and integrate seamlessly with the broader campus and Territory health system. The development of the two new buildings would also replace all services in Building 1, allowing the high risk building to be decommissioned. This Business Case identified a pathway for Government to deliver infrastructure that met existing demand and growth through a single program.

ERC requested additional work to this Business Case, which was completed in 2024 to explore the scope and spread of clinical services provided across public hospitals in the ACT, exploring the optimal distribution of services and options for capital investment cashflow across the Territory's public hospitals over the coming years. This work has been valuable in supporting the delineation of roles and clinical delivery.

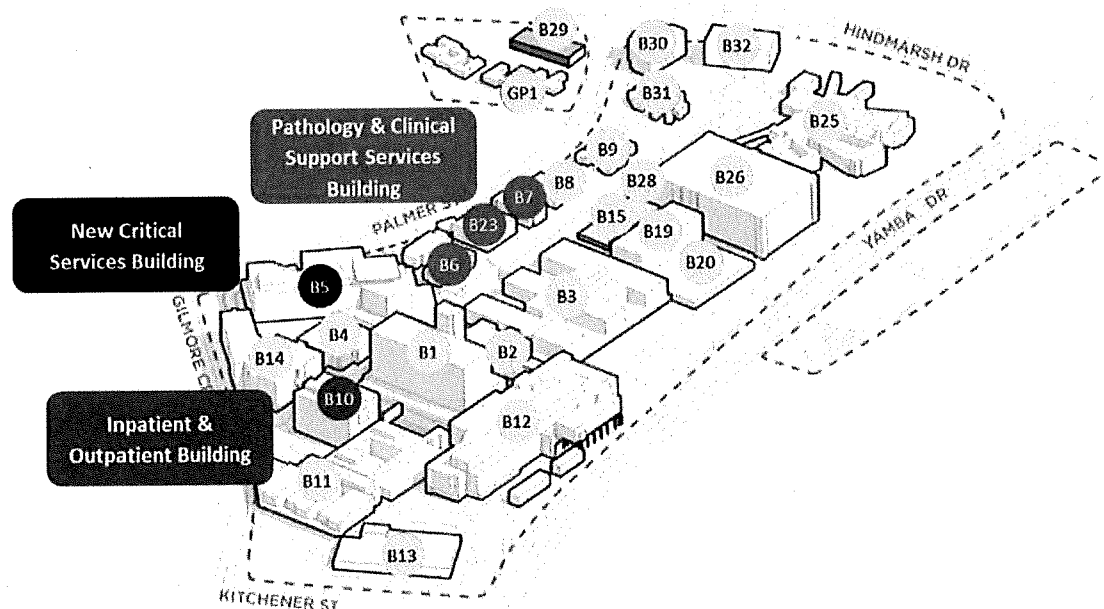
As the CHMP and the northside hospital projects continue, it will be critical that the impacts of each project on total ACT health need are regularly assessed and responded to. For example, an increase/reduction in clinical service delivery at one campus may have the corresponding impact of an increase/reduction at the other campus, resulting in changed investment/infrastructure requirements. Building on this approach, further planning and development throughout 2024 has explored an alternative staged approach to develop the PCS Building and enable the decommissioning of Building 10 and ultimately Building 1.

The 2024-25 Budget funded service investigations relating to facility extension of life of buildings at the Canberra Hospital campus. The project will engage a consultancy to undertake detailed condition inspections of Buildings 1,2,3,10 and 12. The condition assessment will include all major services i.e. electrical, mechanical, fire, hydraulic, building fabric, roof and façade, as well as ICT systems relating to security, nurse call, duress and DHR. CHS is currently working with iCBR to tender the consultancy to undertake this work, which is expected to be released to market in late February 2025. The outcomes of this work will inform timing and approaches to future construction need.

In addition to the proposed investment, the Business Case provides Government with advice on future delivery options, including a staged build option and indicative timeframes and investments to be confirmed in a future budget. It seeks confirmation from Government that a staged approach for delivery of the PCS building is preferred and that the project continue planning and development to reach 50% PSP of the PCS building based on a staged approach.

This further planning and development work will enable a Tier 1 Business Case to be submitted for consideration in the 2027-28 budget cycle and continue the CHMP program.

Figure 1 – Project Scope CHMPP2



1.2 Needs Analysis

The Canberra Hospital (CH) is a level 6 hospital and the only tertiary trauma hospital for Canberra and the surrounding region, providing trauma services and most major medical and sub-specialty services. Much of the hospital campus was built in the 1960s and 1970s, and as a result, the facilities are ageing and deteriorating with many critical clinical or clinical support buildings either at, or

beyond, end of life. This has led to the hospital becoming increasingly unfit for purpose, costly or prohibitive to maintain, and unable to meet the growing demand for modern, fit-for-purpose facilities and spaces.

The CHMP was endorsed by Cabinet in 2020-21 defining the whole of campus renewal project plan. It ensures that the critical mass of assets and services are optimised. It also enables the upgrade and modernisation of the campus facilities whilst services are maintained. The renewal pathway defined by the CHMP also ensures optimum functional adjacencies and consolidated services to reinforce and enhance the campus' precincts at the completion of the program.

The Phase 2 starting point of the CHMP is the construction of the PCS building, this is critical to the timeline to replace the failing Building 1, a replacement for which has been slated to be built on the Building 10 site. Building 10 currently contains the ACT's level 6 Pathology service, mortuary and research functions. Building 1 has a catastrophic risk rating attached to it due to the current condition of the sewer stack and HVAC system.

A HVAC failure in 2024 led to sprinkler activation on level 10 impacting patient care and staff safety with water flooding and inundating the lifts in the building and the internal access stairs. This led to the shutdown of the lifts in Building 1 and had staff responding to medical emergencies in the inpatient units through the water flowing down the internal stairs. Implementation of the CHMP is critical so that Building 10 can be decommissioned, demolished and to allow the construction of the new Inpatient and Outpatient Building. A catastrophic building failure will lead to patient evacuation, enforced treatment changes impacting care, cancelled surgeries and increase the risk of death.

The PCS building will also replace Building 10 which is at end of life and has significant functionality issues and create infrastructure that is modern and fit for purpose. It will enable full automation and digitisation of pathology services creating efficiency for the scientists, clinicians and consumers. It will enable the scientists to use their expertise for diagnosis and treatment over the menial manual tasks that are currently required due to the constraints created by their existing infrastructure. The PCS building is designed to create efficiencies and increase patient safety through:

- Automated Pharmacy
- Co-location of our essential workers administration centre to enable critical response time to medical deterioration, peer support and emergencies
- On campus access to modern fit for purpose research laboratories and animals
- Fit for purpose Mortuary and spiritual/multifaith spaces
- Dedicated learning and teaching place to ensure staff are supported and highly skilled to support the needs of the consumers

An Investment Logic Mapping (ILM) workshop was undertaken with key stakeholders to identify the problems and outline recommended responses. Three key problems were identified during the workshop:

1. The aged infrastructure has exceeded its useful life, is costly to maintain, and presents a risk of catastrophic failure.
2. The current infrastructure is poorly configured and no longer fit for purpose, resulting in inefficient and fragmented services and creating unacceptable risks for staff, visitors, and patients.

3. The outdated infrastructure cannot be configured or retrofitted with modern technology to create efficiency for services or modernisation of processes.

1.3 Strategic and Policy Alignment

The ACT has experienced the fastest growing population of any jurisdiction over the last 10 years, growing from 370,000 to 455,000 people. The Territory is expected to reach half a million residents by 2027 and by June 2060 our population is expected to increase to 784,043 people. In addition, our population structure is ageing, with the population aged 65 years and over forecast to increase by 80% over the period of June 2021-June 2060.

This presents several challenges to service delivery. An ageing population coupled with population growth places increasing demand on general and specialist medical and surgical services, with access to some services impacted by long wait times.

As part of its Territory-wide strategy to improve access to health infrastructure, the ACT Government has implemented an agenda for modern, person-centric healthcare that provides the community with the right services, at the right place, at the right time. CHMPP2 will support the government's priority for accessible healthcare through the development of fit-for-purpose infrastructure, enabling the CH campus to meet growing demand influenced by population growth and changing patient demographics.

The new PCS building will include modern, fit-for-purpose facilities to future-proof the provision of pathology and other clinical services. Failure to undertake the staged roll-out of the redevelopment of Building 6 will stall the roll-out of the CHMP. This in turn would increase the risk of catastrophic failure of older assets.

CHMPP2 will support the ACT's transition to a net-zero health sector by 2040 by shifting buildings off natural gas, improving the climate appropriateness of new buildings, and upgrading back-of-house infrastructure to enable the electrification of facilities.

The CHMPP2 aligns with several strategic objectives, policies and legislation including:

- **2024 Labor Health Policy statement:** Commits to continue to modernise the Canberra Hospital in line with the Canberra Hospital Master Plan 2021-2041. This includes continuing to plan for a new PCS Building, a new inpatient facility and planning for a new mental health precinct.
- **ACT Public Health System Framework (2020-2030):** Supports a person-centred, innovative, high-performing public health system.
- **ACT Government Wellbeing Framework 2020:** Enhances health and wellbeing by providing critical infrastructure to maintain hospital operations and high-standard healthcare services.
- **ACT Government Infrastructure Plan 2024– Health Update 2023:** identifies continued investment in the CH campus as priority in the next five years to future proof health care provision in the Territory.
- **ACT Climate Change Strategy 2019-2025:** The Strategy commits the ACT to reducing emissions to net zero by 2045 for the whole of the Territory.
- **ACT Health Services Plan 2022 – 2030:** The Plan is an eight-year roadmap, which identifies priorities for redesigning, developing and investing in the health services funded by the ACT Government.

Ongoing planning and collaboration will continue to consider the service distribution with North Canberra Hospital (NH) and ensure alignment in meeting the healthcare demands of the Territory and surrounding NSW regions. Planning works undertaken to date currently supports the ongoing requirement for the redevelopment of the PCS Building. Any expansion or reduction of the scope of the northside hospital is unlikely to change the outcome of the PCS building as the project is a critical replacement project for currently unfit infrastructure.

1.4 Options Analysis

This business case seeks funding for Phase 0, which is the same allocation for each option (1-3) presented. Phase 0 will fund the continuation of planning and development and includes the small CHMP project team for 2025-26 and 2026-27. The team will continue consultation and the design phase to reach 50% Preliminary Sketch Plans (PSP) of the Pathology and Clinical Services Building.

ACTHD will also undertake a feasibility study for a mental health precinct as committed by the Government in the 2024 ACT Election. The feasibility study for the mental health precinct will assess the territory's public mental health infrastructure requirements, consider the services committed for delivery at the Northside campus, and provide a pathway to deliver the necessary mental health services for the community including an expanded Mental Health Precinct at the Canberra Hospital. The study will examine the redevelopment of the mental health short stay unit, alcohol and other drugs service, and low dependency acute mental health, including Points of Care as demonstrated by the Health Systems Planning and Development Team in the ACTHD. Additionally, the study will include the relocation of the existing Canberra Hospital Woden Valley Early Childhood Centre in the Mental Health Precinct.

This will enable a Tier 1 Business Case to be submitted for consideration in the 2027-28 budget cycle for the indicative amounts.

[REDACTED]

Noting that this project is on a brownfield site, the site has already been investigated and modified recently by the Building 6 and 23 demolition and service relocation. This means many potential issues have likely been addressed. Additionally, the recent development of Building 5 has already made significant progress in resolving planning issues like height limits and setbacks. These factors contribute to a lower risk profile for Phase 0 of the project, making a reduced contingency reasonable.

The Business Case seeks Government agreement to undertake the above work on the preferred strategic solution – Option 1 (Base Case/Do Minimum) – ‘Staged’ – identified for the CHMPP2 Project is the result of an options identification and evaluation process underpinned by the ILM described in Chapter 3 – Needs Analysis.

Three options, aligned to the needs of the CHMPP2 project, were assessed using a Multi-Criteria Analysis (MCA) structured around economic and social (wellbeing); financial and implementation evaluation criteria. Each option is detailed in Chapter 5. A summary of the options and scope is included in the table below:

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Table 1: CHMPP2 project options

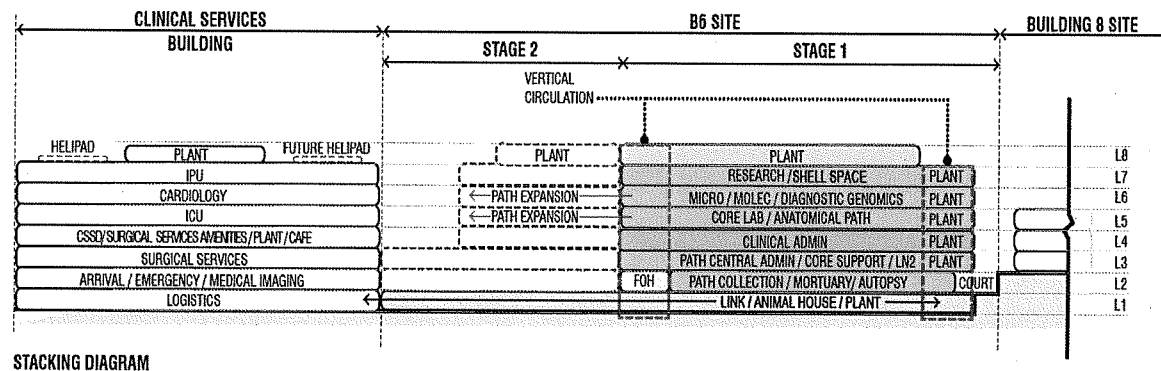
Scope Items ¹	Scope Sub-Items	Option Parameters	OPTION 1 (Base Case/Do Minimum) – Staged	OPTION 2 Full Shell + Staged Fit-Out	OPTION 3 Single Stage
			Build each PCS stage independently	Build the entire PCS building as cold shell and fit-out Stage 1 only and defer Stage 2 fit-out to a later stage	Build the entire PCS building in a single stage
N/A	N/A	Capacity		714 POC ^A	
		End State POC (Points of Care)			
		End State GBA (Gross Building Area m ²) – exc. carpark		82,358m ^{2*}	
0.0	0.1	Planning and development funding – to progress CHMPP2 from GA Plan to PSP 50% ²	✓	✓	✓
	0.2	Planning and development funding – to undertake a Territory-wide Mental Health expansion and demolition of CH Childcare Centre feasibility study and business case	✓	✓	✓
1.0	1.1	Decant, decommission and demolish B7 (including relocation of AOD ³)	✓	✓	✓
	1.2	PCS Stage 1 – construct a new 8-level building on the B6/23/7 site	18,966m ^{2*}	18,966m ^{2*}	33,336m ^{2*}
		PCS Stage 1 GBA (Gross Building Area m ²) – Shell and Fit-Out			
	1.3	PCS Stage 1 GBA (Gross Building Area m ²) – Cold Shell		14,370m ^{2*}	
		Decant pathology and other clinical services from existing B10 into the PCS Stage 1 Building	✓	✓	✓
	1.4	Decommission and demolish B10	✓	✓	✓
2.0	2.1	New Inpatient and Outpatient Services Building – construct a new 17-level building on the B10 site, inclusive of a plant level and 3 levels of basement carparking	49,022m ^{2*}	49,022m ^{2*}	49,022m ^{2*}
	2.3	Decant B1 and B12 to the newly completed B10 (inpatients / outpatients)	✓	✓	✓
3.0	3.1	PCS Stage 2 – expansion of the PCS Stage 1 Building	14,370m ^{2*}		
		PCS Stage 2 GBA (Gross Building Area m ²) – Shell and Fit-Out			
	3.2	PCS Stage 2 GBA (Gross Building Area m ²) – Fit-Out		13,820m ^{2*}	
		Decant remaining functions into the new PCS Stage 2 Building	✓	✓	
	3.3	Decant, decommission and demolish B4 and redevelop into new open space / relocate ANU Medical School into the new PCS	✓	✓	✓

Option 1 (Base Case/Do Minimum) – ‘Staged’ – Build each PCS stage independently

Option 1 delivers a like-for-like replacement and upgrade of several existing buildings in line with current standards and the characteristics of a contemporary and efficient facility. The buildings will be upgraded to comply with current standards (i.e., AS/NZS 2982-2010 and AS/NZS 2243.3-2022 and associated series) and AusHFG guidelines. The buildings include:

- A new Pathology and Clinical Services (PCS) Building replacing the existing Buildings 6, 23 and 7.
- A new Inpatient and Outpatient Services Building replacing the existing Building 10.

Figure 2: Staged delivery of the PCS Building



Option 1 seeks to deliver the PCS as two discreet buildings in a staged delivery. Phase 1 of works delivers Stage 1 of the PCS which delivers only the elements required to decommission B10. The following phase 2 and 3 of works within Option 1 would complete the PCS Building and the new Inpatient and Outpatient Building. This option also offers Government a choice of order to build Part 2 of PCS or the B10 build. Doing the B10 build prior to Stage 2 of the PCS will allow for a faster decommissioning of B1. It is key to note that the indicative capital requested here is lower as less of the PCS is delivered but when combined with Stage 2 and consideration for escalation is applied the total cost for a completed PCS is higher than the delivery cost of PCS in a single build.

Option 1 presents the lowest initial capital investment of each of the options to address the like-for-like facility needs. It allows staging of the investment, enabling government to spread the cost of the total project over an extended program of work. Staging does not reduce the overall funding requirement for the full program of works and will result in a comparably higher total project end cost due to increased escalation and delivery costs associated with remobilisation. While Government continues to operate in a capital constrained environment, Option 1 provides a pathway for staging the investment and reducing the initial funding requirement.

While Option 1 presents additional deliverability challenges – including the risk of disruption to business continuity – the staging solution serves a dual purpose of meeting short-term demand, while future proofing the campus for longer-term growth. At the time of writing, it is assumed that (1) any disruption can be minimised and mitigated, and (2) the risk of Pathology incurring a double decant or significant reconfiguration during or following the delivery of Stage 2 can be avoided.

Note: the complete assessment of their level of impact and likelihood, as well as development of appropriate mitigation measures – are subject to further work.

Option 1 has been identified as the preferred solution for CHMPP2, staging the initial funding requirement to enable Government to commence the project sooner.

1.5 Project Scope

The scope of the Preferred Option (1) comprises:

- The staged delivery of two purpose-built facilities on the CH site:
 - Phase 0: Planning and Development of the preferred Option 1 to deliver the CHMPP2.
 - Phase 1: PCS Stage 1 – delivering 18,966m² GBA. This will involve the development of a new building on the southern portion of the site of the former Buildings 6, 7 and 23 to accommodate a modern Pathology Unit (akin to a 'like-for-like replacement' of the current Pathology Unit in the existing B10), Mortuary (as scoped in CHMPP2), Research (as scoped in CHMPP2) and clinician alongside administrative areas, adjusted to comply with current

standards (i.e., AS/NZS 2982-2010 and AS/NZS 2243.3-2022 and associated series) and AusHFG guidelines.

- Phase 2: New Inpatient and Outpatient Services Building – delivering 60,122m² GBA. This will involve the development of a new building on the existing B10 site to accommodate a range of inpatient, outpatient and diagnostic services as well as some clinician alongside administrative functions. This includes an additional two floors of inpatient wards (enabling an additional five 28-bed wards) over and above the like-for-like replacement of existing capacity. This will ensure that the building is equipped to meet projected demand for acute care services to 2041 levels. The proposed building includes 11,100m² for three levels of basement carparking.
- Phase 3: PCS Stage 2 – delivering 14,370m² GBA. This will involve the horizontal expansion of the PCS Stage 1 building (towards the north) to accommodate the remainder of functions identified in the Schedule of Accommodation (SOA). This includes the expansion of Pathology Laboratory areas to meet 2041 capacity requirements.
- Currently, this approach includes the demolition and redevelopment of Building 4 (ANU). However, recent negotiations with CHS indicate that this outcome will likely not be required. Notwithstanding this does not impact on the proposed investment to undertake Phase 0 information on this approach is included for completeness. Confirmation of the removal of any Building 4 development would be validated during Phase 0.
- A range of sustainability and urban design features, including:
 - The utilisation of low water use equipment, fixtures and fittings in line with the compliance requirements of the National Construction Code 2022.
 - A building and landscape design approach which seeks to deliver an environment based on wellness and healing as integral to patient care.

1.6 Risk Analysis

The ACT Government Risk Management Policy 2021 has been adopted for the identification and assessment of critical project risks. Based on the risk assessment undertaken to date, the following risks have been identified as high risk and/or material to project delivery:

1. That planning processes and designs do not adequately consider service and infrastructure integration and connectivity with existing and new facilities, including the Building 5.
2. That Building 1 will fail prior to the building timeline and this will negatively impact medical and surgical patient capacity and therefore health outcomes.
2. That planning and approvals processes take longer than anticipated or impose unforeseen conditions on the Project.
3. That the proposed decanting strategies, are inadequate and there are insufficient contingencies provided for delays.
4. That the enabling works and extension of life buildings are not appropriately scoped, funded and implemented impacting on the ability to commence construction and the continuity of service provision at adjacent buildings.
5. Risk associated with utilities, such as unanticipated utilities/services upgrades are required or that unknown utilities/services are discovered onsite.

6. That the build at the northside hospital is value managed impacting or removing services modelled for the development leading to a delivery deficit required to be accommodated at Canberra Hospital.

Mitigation strategies to address critical risks include:

1. Detailed project management and planning to understand sequencing, dependencies, and approvals processes.
2. Early and ongoing engagement with key stakeholders, including clinicians, community groups, planning agencies, operational commissioning teams and utilities providers.
3. Detailed technical surveys and site investigations.
4. Detailed design definition stage, including ensuring that Functional Design Briefs (FDB's) are incorporated into the tender for design.
5. Incorporating sufficient time for planning, design and decanting in the Master Program.

The Program Director, Project Control Groups (PCGs) and the Executive Steering Committee will be responsible for monitoring project risks throughout planning and implementation phases within existing project governance committee structures.

1.7 Delivery Model Analysis

Delivery model analysis considered traditional and non-traditional models as well as packaging options to effectively deliver a project of this scale. The recommended packaging approach for the preferred option (Option 1):

Option 1 will (1) develop the PCS Building as two discrete buildings delivered in two sequential stages, and (2) deliver the new Inpatient and Outpatient Services Building in a single stage. Option 1 is sequenced as follows:

- Phase 0: Planning and Development Funding – committing and releasing the minimum funding needed to (1) progress the CHMPP2 project to a 50% PSP level, (2) undertake a Territory-wide mental health feasibility study (including alcohol and other drugs (AOD)), and (3) undertake a feasibility study for the demolition and redevelopment of the Canberra Hospital Woden Valley Early Childhood Centre.
- Phase 1: PCS Stage 1 – delivering 18,966m² GBA. This will involve the development of a new building on the southern end of the site to accommodate a modern Pathology Unit (akin to a 'like-for-like replacement and upgrade' of the current Pathology Unit in the existing B10), Mortuary (as scoped in CHMPP2), Research (as scoped in CHMPP2) and administrative areas. The new facility will be compliant with current standards (i.e., AS/NZS 2982-2010 and AS/NZS 2243.3-2022 and associated series) and AusHFG guidelines.
- Phase 2: New Inpatient and Outpatient Services Building – delivering 60,122m² GBA. This will involve the development of a new building on the existing B10 site to accommodate a range of inpatient, outpatient and diagnostic services as well as some administrative functions. This includes an additional two floors of inpatient wards (enabling an additional five 28-bed wards) over and above the like-for-like replacement of existing capacity. This will ensure that the building is equipped to meet projected demand for acute care services to 2041 levels. The proposed building includes 11,100m² for three levels of basement carparking.

. ACT Government will develop Final Design Briefs

[REDACTED]

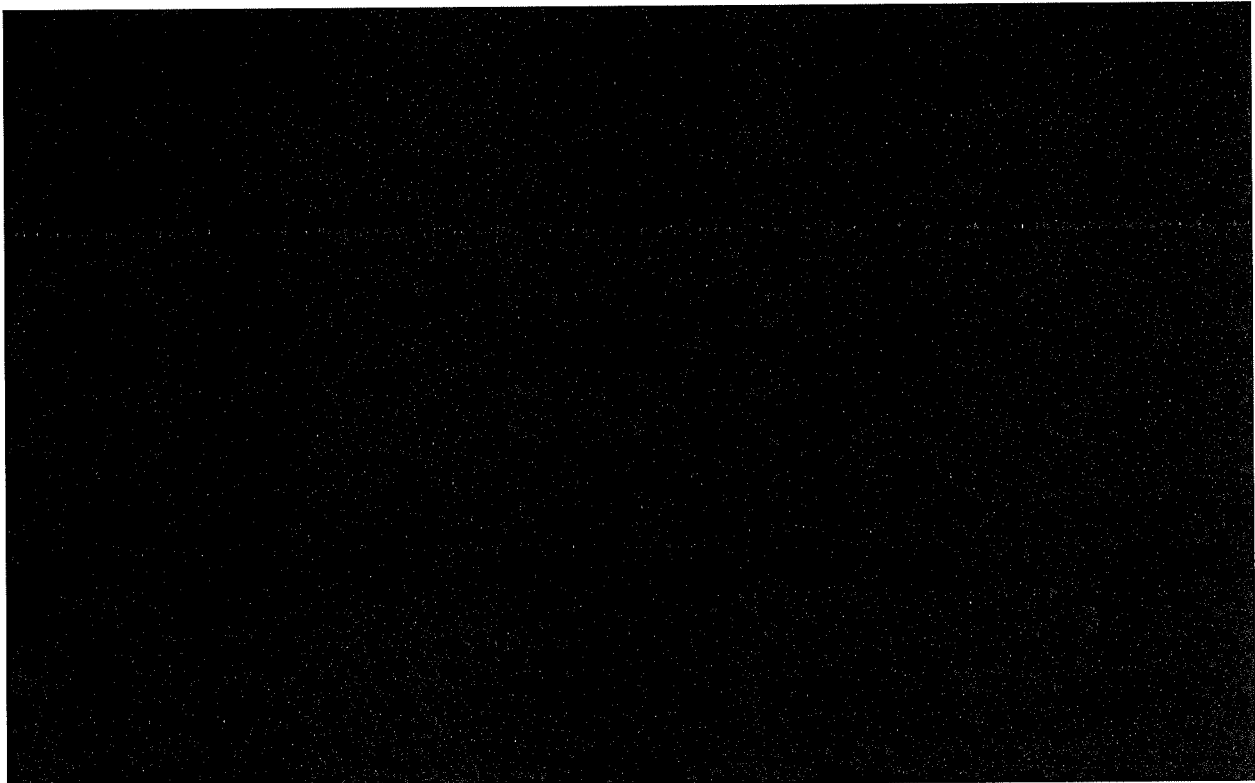
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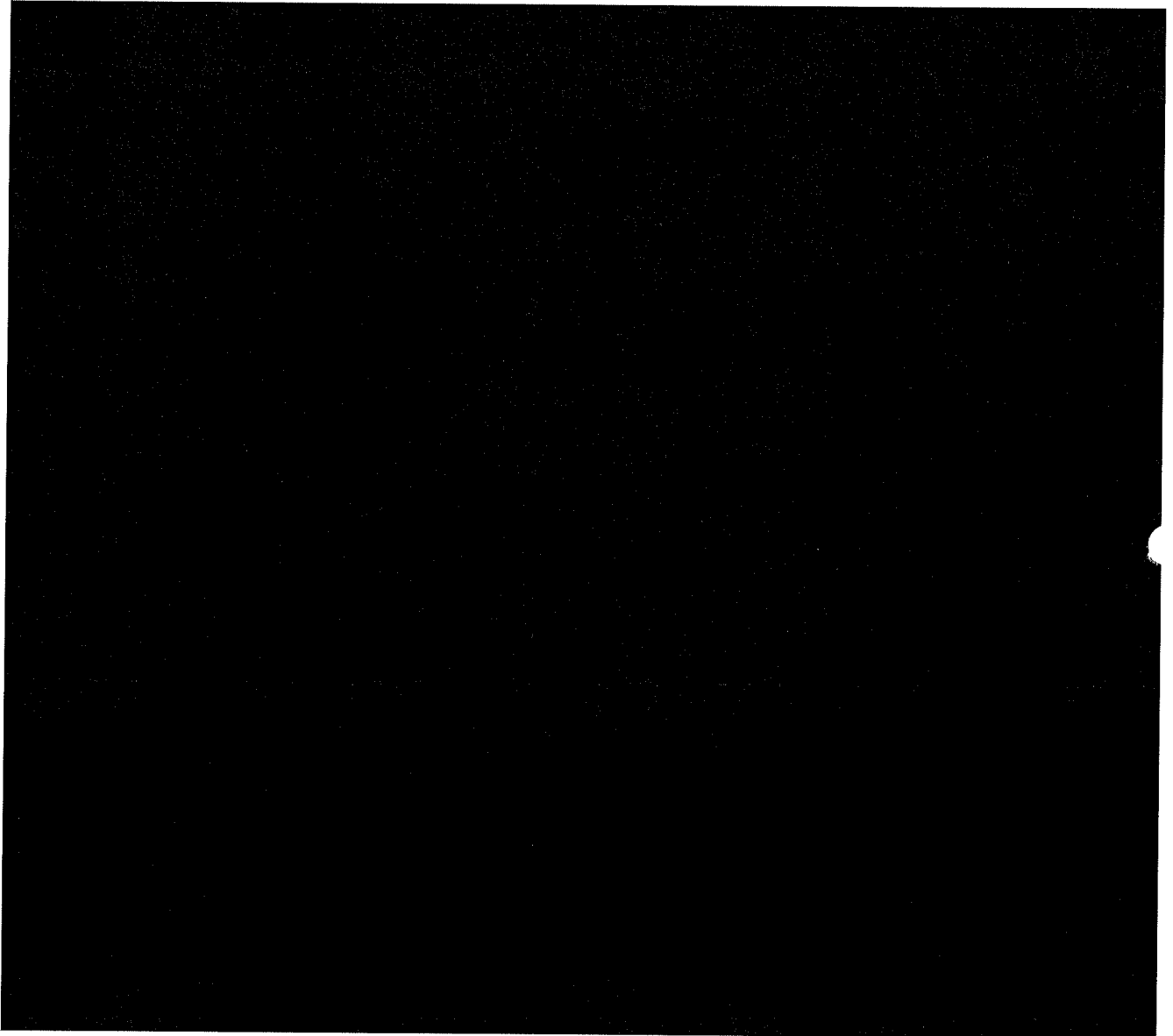
To deliver CHMPP2, the Territory will be supported by a range of groups including an Executive Steering Committee, PCGs, the Building Health Services Program (BHSP) Strategic Advisory Committee, specialist design consultants and technical advisors, and an Independent Commissioning Agent (ICA).

The concurrent development of the NH project is likely to impact the delivery approach for CHMPP2. There may be opportunities to coordinate procurement activities or test innovative approaches with the market across both campuses. Following the finalisation of scoping and concept design for both sites, a targeted market sounding process is recommended to support this outcome.

1.8 Financial Analysis

Each option outlined in this business case includes the total estimated investment (TEI) required to deliver all stages in full. However, the TEI includes both indicative and non-indicative sums based on the staging strategy to deliver each option. For the preferred option identified in this Business Case, (1) the non-indicative amount would be committed and released by government to progress the planning and development of the preferred option, and (2) the indicative amounts would be committed and released at a later date – subject to satisfying any additional planning and development requirements in line with ACT Treasury requirements. In summary, the breakdown of scope and costs is outlined in table 2a and 2b below:





1.9 Economic Appraisal

The economic merits of this Project have been assessed through a socio-economic and wider economic benefit analysis. The benefits have been informed by the ILM.

The social economic analysis identified the following benefits of this Project:

1. Improved asset efficiency and sustainability will be supported through the replacement of ageing facilities with modern, more efficient, and sustainable facilities. Modern hospital facilities are built with the latest sustainable technologies, including more durable materials which are easier to maintain and more resistant to wear and tear.
2. An improved workforce environment, including investment in digitally enabled health infrastructure, will streamline workflows and operations, increasing the efficiency and effectiveness of care delivered.
3. Improved safety and amenity of site will be achieved through the redevelopment of existing facilities in line with contemporary safety and building standards that prioritise the safety, comfort and experience of staff and patients alike. Extension of life investments will ensure

that ageing assets are kept operational and safe before services can be decanted into the new buildings.

4. Improved patient health outcome, site access and flow, and satisfaction through a range of project features, including:
 1. Enabling the CH to incorporate more service innovations, including automation of workflows to provide quicker and more effective care; and
 2. Supporting research and teaching activities to promote the development of new clinical policies and practices.



1.10 Project Governance

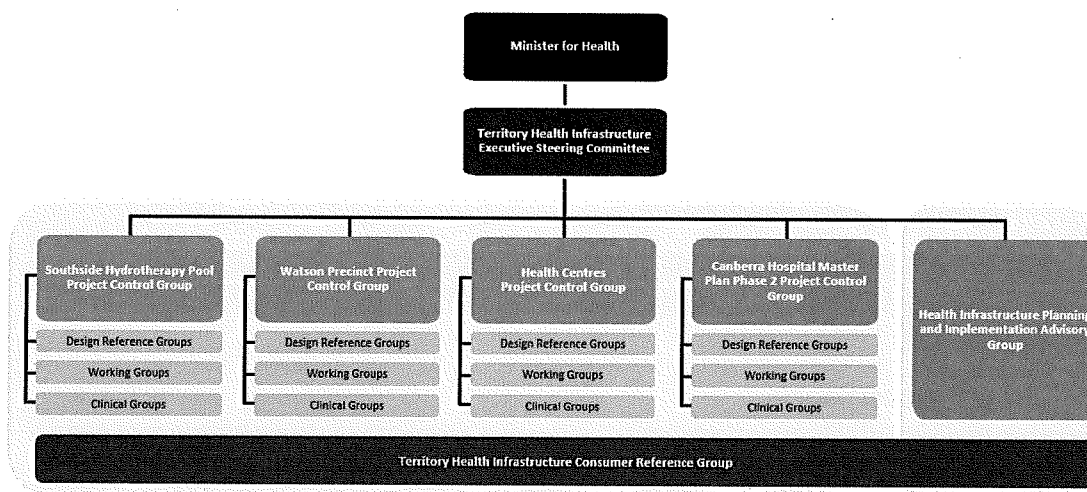
The successful delivery of this project necessitated the establishment of strong governance and program management processes. During the development of the Business Case, ACTHD led delivery of the project with support from iCBR and CHS. These stakeholders were engaged through the following mechanisms:

- ACTHD participated in weekly **project status meetings**. These meetings provided an update on each workstream, including key meetings held, issues or challenges which may be hindering progress, and next steps for the workstreams;
- ACTHD, iCBR, CHS attended monthly **Project Control Group (PGC) meetings** which provided strategic oversight and direction. Attendees approved all project findings and recommendations made by the Executive Planning Team (EPT); and
- ACT Treasury, ACTHD, iCBR and CHS attended monthly **Steering Committee meetings** to provide guidance and resolution on any project conflicts or matters that required escalation.

The broader Territory Health Infrastructure Governance Framework is outlined in the figure below. The framework ensures accountability and transparency throughout project planning and development of the preferred option and delivery (including planning, designer and contract procurement, construction, commissioning, and operations). It provides a whole-of-territory framework that enables collaborative decision making between CH, NH and Community Health infrastructure. A new governance structure will be implemented during the post-Business Case planning and development stage of the preferred option.

Figure 3: ACTHD Territory Health Infrastructure Governance Framework

Territory Health Infrastructure Governance Framework



Notes:

1. The shaded area indicates information sharing and collaboration between infrastructure projects and with the Consumer Reference Group.
2. Design reference groups, working groups and/or clinical groups will be established as required at each stage of the project.

1.11 Stakeholder Engagement and Advisor Plan

During the development of the Business Case, stakeholders were extensively consulted to articulate a clear case for change, test viable delivery models and undertake a robust assessment of project options to enable informed government decision-making ahead of detailed delivery planning post this Business Case. This included significant consultation with a wide range of clinicians, to ensure the new buildings will be fit-for-purpose. Design and technical advisors were engaged to co-develop key project inputs, such as Service Models, FDB's, SOA's, and Concept Design.

After the Business Case phase, ACTHD remains committed to working closely with the community, stakeholders, consumers, and our workforce to ensure health facilities are designed to meet the needs of Canberrans now and into the future. Feedback will be considered and used during this phase to contribute to the development of facilities and services for the people of Canberra and the surrounding regions.

Community and stakeholder involvement in the delivery of the CHMP will enable improved healthcare infrastructure outcomes, including optimal performance for healthcare workers, alignment with First Nations cultural values, better patient treatment and recovery, and more supportive spaces for families.

The Stakeholder and Engagement Strategy is included at Appendix Q.

1.12 Timeline

The CHMPP2 Delivery Program is set out for the preferred option for the project scope for the business case which is *Option 1 (Base Case/Do Minimum) – Staged*. The indicative Delivery Program has been developed to identify the following key milestones:

- Phase 0: Planning and Development Works (FY25-27)
- Phase 1: PCS Stage 1 (FY28-31)
- Phase 2: New Inpatient and Outpatient Services Building (FY29-36)
- Phase 3: PCS Stage 2 (FY34-39)

All dates listed are indicative to provide Government with advice on the expected construction duration and yearly cashflow investment. They are subject to several factors, including future budget business case, submission of documentation to government and confirmation of funding release regarding the CHMPP2 project and delivery.

2. Introduction

Key messages

- There is critical need for ongoing investment into the development of the CH campus to mitigate the risk of catastrophic failure of the old infrastructure and ensure critical services to the community can be maintained.
- Phase 2 of the CHMP (CHMPP2) will deliver a new Pathology and Clinical Services (PCS) Building and new Inpatient and Outpatient Building, to function together with Building 5. CHMPP2 supports the staged relocation of services to minimise disruptions and maintain service continuity on a capacity constrained campus and unlock the site required to address the inherent risk of critical failure of infrastructure in Building 1.
- The Business Case seeks funding to undertake detailed planning and development of the preferred project option identified alongside a territory wide mental health and AOD feasibility and Canberra Hospital Woden Valley Early Childhood Centre relocation.

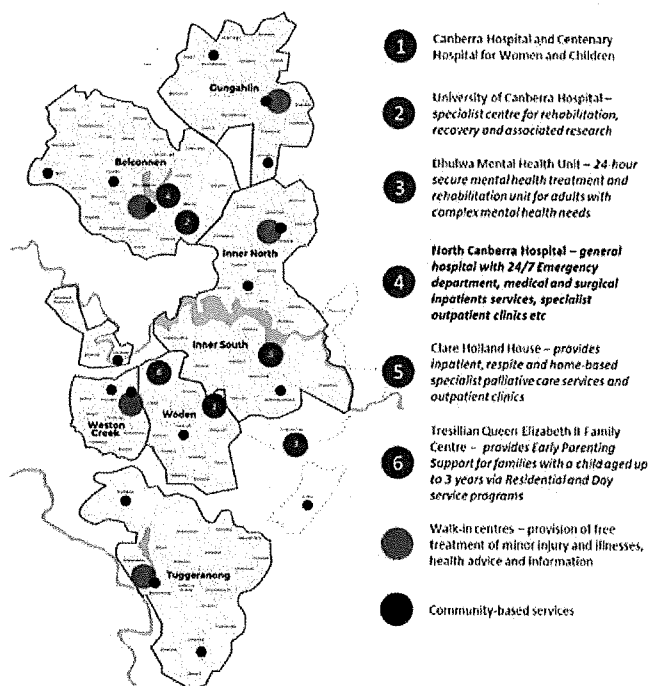
2.1 Overview

ACT Health Context

The Australian Capital Territory (ACT) Government's vision is for a public health system that is accessible, accountable, and sustainable.¹ In line with this vision, the ACT Health Services Plan establishes the system-wide priorities for service development and redesign of ACT-Government funded health services over the next 10 years.

Figure 4 illustrates the system of key Canberra Health Services, including medical precincts, Walk-in Centres, and community-based services.² As the largest public hospital and tertiary referral centre, CH (numbered 1 in **Figure 4**) plays a leading role in serving ACT's health care priorities.

Figure 4: ACT Health Services Map



Canberra Hospital

For 50 years, CH has been serving its local community at the Woden Valley site and the broader hospital catchment area. CH is the largest public hospital and tertiary referral centre in the region. It provides trauma services and most major medical and sub speciality services to more than 500,000 people.¹

Each year, CH's staff manage approximately 90,000 patient admissions. Staff members work across 28 buildings at the hospital's 21.7-hectare site located in Garran (in Canberra's Woden Valley) to provide a range of services including medical, surgical, specialist outpatient clinics and other clinical support services including pathology services.³

CH has two primary roles:

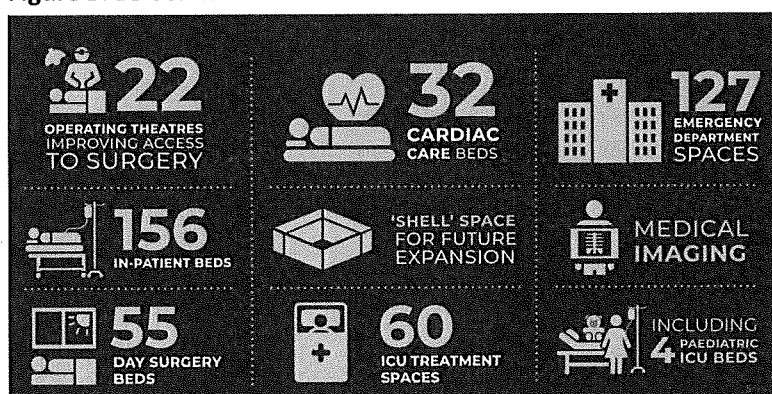
- To service the 500,000 plus people living in its primary catchment including the ACT and the South-eastern Region of New South Wales.
- To be the principal teaching hospital in partnership with Australian National University (ANU), Australian Catholic University, Canberra Institute of Technology and University of Canberra.

Critical Services Building – Building 5

With much of the CH campus built in the 1970s, significant investments have been made over the last two decades in new and upgraded infrastructure including the Critical Services Building (Building 5) which opened in August 2024. Building 5 delivers increased capacity across CH's intensive care, surgical, coronary care, and emergency services. The building is designed to seamlessly integrate with existing services and buildings on campus, ensuring a smooth connection.

As the capacity of B5 expands over time, other buildings and services will also need to adjust their capacity to accommodate the growing population, ageing demographics, and increased healthcare demand. This may entail refurbishment, expansion, or redevelopment of these facilities.

Figure 5: B5 Services

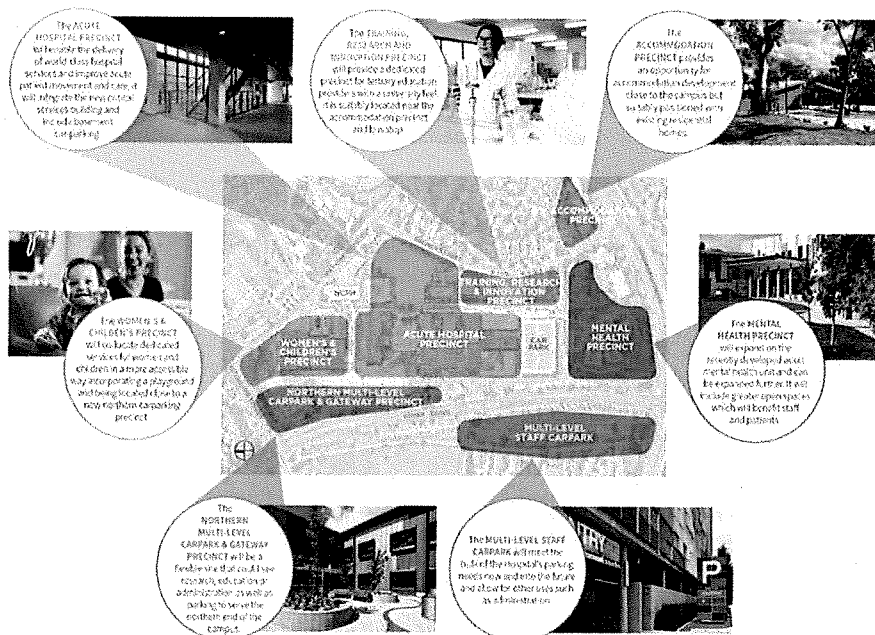


Canberra Hospital Master Plan

The CHMP is the next step in transforming the CH campus and providing world class healthcare that achieves the ambitions expressed by community and stakeholders. Released in 2021, the CHMP will guide the redevelopment of the campus into a functional and efficient environment over the next 20 years.⁴

As pictured in **Figure 6**, the CHMP identifies the redevelopment and renewal of the campus including.

Figure 6: Canberra Hospital Master Plan



Phase 2 has undertaken broader service planning and considers the constrained capital enabling the identification of minimum spend options that continue to support the required infrastructure replacement to mitigate the known risk.

This business case proposes a new option to allow full consideration of the CHMP project and has focused on a staged approach. The first stage delivers the minimum scope required to address the replacement of services provided in Building 10. This is critical to modernise and bring pathology up to national standards and ultimately relocate the services allowing the rebuild of Building 1.

2.2 Project objectives

This Project – Canberra Hospital Master Plan Phase 2 – would support the future delivery of a new staged PCS Building (shown in **Figure 7**) to support growing demand for acute services and seamlessly integrate with B5 and broader campus. This phase of the CHMP is essential to create efficiencies in the support services, such as pathology and pharmacy but also to decommission Building 10 to make way for a new inpatient and outpatient building which is critical for replacement prior to any catastrophic infrastructure failure of the sewer system and HVAC.

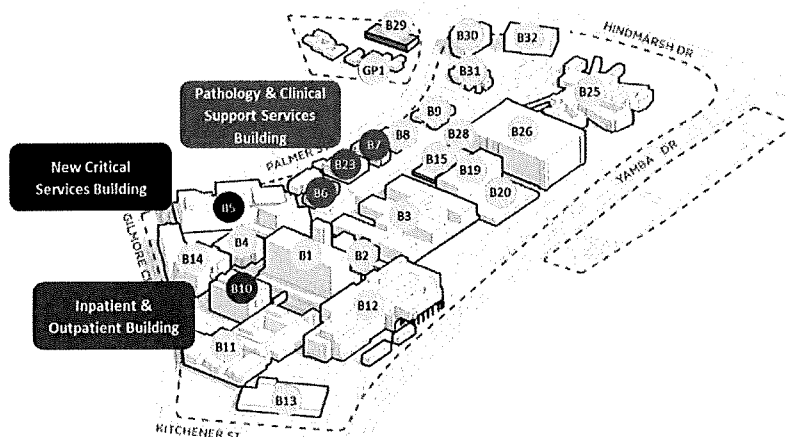
CHMPP2 is critical for supporting the staged relocation of supportive services into a fit for purpose building. CHMPP2 supports the staging of upgrades across the CH campus to minimise disruptions to the delivery of acute services from brownfield construction on a significantly capacity constrained campus.

The purpose of this Business Case is to provide a robust basis for the ACT Government to make an informed decision about investing in CHMPP2. The Business Case seeks funding to:

- finalise planning that would enable a future Government investment decision (to be led by iCBR) for the construction of a new Pathology and Clinical Services Building.
- Deliver a feasibility plan for the Mental Health Precinct, and options for relocation of the existing Early Childhood Education centre.
- Develop an internal wayfinding signage design for the Canberra Hospital campus and deliver rectification works (See Appendix S)

This Business Case has been prepared in accordance with the Capital Framework guidance and in consultation workshops with key stakeholders.⁵

Figure 7: Project Scope



Project Scope

The project scope aligns to the vision set out in the CHMP and includes the redevelopment of the campus to include:

- A new Pathology and Clinical Services Building; and future decant and the demolition of building 10 to support B5 and the modernisation of the campus and CHMP program.
- The project includes related enabling works, including demolition and decanting of services.

Pathology and Clinical Services Building

Designed to modernise clinical services on the CH campus and enable the B5 to meet growth in acute service demand across the Territory and broader region, a new PCS Building is proposed adjacent to B5 on the site of existing Buildings 6, 23 and 7, as indicated by Figure 7.

Pathology services currently occupy most of the Building 10, however, share the space with other clinical support services including research, mortuary, industrial waste treatment, and various administrative areas. Increasingly capacity constrained, pathology services do not have the space to meet growing demand or implement new technologies in line with contemporary service delivery models directly impacting on service efficiency. The building is also at the end of its useful life and cannot be maintained or upgraded to meet all occupation health and safety requirements.

The new PCS building will have direct public access onto Hospital Road and internal access from B5 via levels 1, 2 and a higher level to be determined in a later stage of design. The building will also enable pneumatic and physical connections to allow for the efficient and safe transfer of samples between the buildings.

The building will also incorporate cutting-edge technology and include modern fit-for-purpose infrastructure. These advancements will enhance operational efficiency and facilitate the delivery of contemporary models of service, ensuring the provision of effective high-quality services for both the Territory and the surrounding region.

Mental health precinct

CHMP team will also undertake a feasibility study to understand the territory wide needs for Mental Health and Alcohol and Other Drugs which will enable planning for service delivery both in the

community and on the hospital campus. This aligns with the CHMP to relocate and demolish the Canberra Hospital Woden Valley Early Childhood Centre (an ageing asset) and create a Mental Health Precinct.

Limitations

To acknowledge the Territory's increasing demand for healthcare services due to the growing and ageing population, the ACT Government has funded a new northside hospital (NH) at Bruce.

Scope of the new NH Clinical Service Plan is currently being ascertained during their detailed design process. Work on the NH scoping is unlikely to affect the new PCS building as these services are being moved from elsewhere on the CH campus and need to remain on the tertiary hospital site. The expanded fit for purpose redesigned Pathology space is essential for the ongoing support of services across the territory including NH.

2.3 Project background

The CHMP delivered a spatial plan to guide development of the Canberra Hospital over the next 20 years; including the high-level phasing and implementation that supports the realisation of the Canberra Hospital Master Plan. This was agreed to by government and released in 2021.

Phase 2 of the Master Plan (CHMPP2), Implementation, will deliver modern and state of the art facilities through the delivery of a Pathology and Clinical Services (PCS) Building and a new inpatient and outpatient building. The first step in Phase 2 is the delivery of the PCS Building which will unlock the location for a new inpatient and outpatient building.

The development of the PCS building is critical on the path for the replacement of Building 1 on the campus, which holds the high inherent risk of failure. Failure in Building 1 will impact the lives of the community in the Territory and southern regions which it serves.

The PCS Building is slated for the Building 6/23/7 site which is located adjacent to B5 and ideally placed to support the services undertaken in B5. These services are currently being undertaken in Building 10 which is no longer fit for purpose and cannot be refurbished for modern and efficient technological advances and workplace standards.

Building 6 and 23 have been demolished and the Government has committed to the Mental health feasibility study which will also align with the replacement of Building 7 which services the clients of Alcohol and other Drugs into a combined precinct.

3. Needs Analysis

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3.1 Problem (or opportunity) and strategic responses

As Canberra and the region's main tertiary trauma hospital, CH has a crucial role in delivering health care services to the residents of Canberra and surrounding regions of New South Wales (NSW). Since many of the buildings across the campus were built in the 1970's, many of its facilities are now showing age, deteriorating, directly impacting on patient care via time delays caused by building failure or convoluted access routes, and at risk of building failure, making it increasingly difficult to:

- Guarantee the availability of health care.
- Respond to changing clinical, functional and operational requirements; and
- Accommodate demand based on the projected population growth across CH's catchment.

Increasing maintenance works – due to the frequency and severity of identified building faults – are presenting both a financial and operational challenge to CHS. In a capacity constrained hospital, the need for significant unplanned maintenance and repairs could lead to the shutdown of entire floors or even buildings, leading to significant service disruptions and catastrophic consequences putting the lives and health of people at risk.

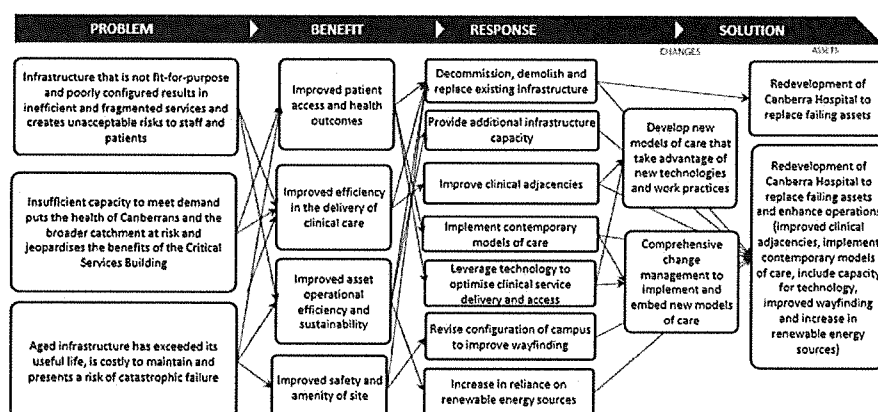
The 24/25 Budget funded service investigations relating to facility extension of life of buildings at the Canberra Hospital Campus. The project will engage a consultancy to undertake detailed condition inspections of Buildings 1,2,3,10 and 12. The condition assessment will include all major services i.e. electrical, mechanical, fire, hydraulic, building fabric, roof and façade, as well as ICT systems relating to security, nurse call, duress and DHR. CHS is currently working with iCBR to tender the consultancy to undertake this work which is expected to be released to market in late February 2025.

Project scope

The project scope considers Phase 2 of the CHMP. This proposes planning and development of a new PCS Building. The delivery of this building needs to minimise the disruption of existing service delivery through a fit-for-purpose enabling works program to create a safe and operationally functional construction site including the installation of hoarding, designation of appropriate set-down areas for vehicle ingress and egress, and the installation of temporary linkways to maintain critical building connections during construction. The Project would also need to consider and adhere to the critical path of the implementation of the CHMP.

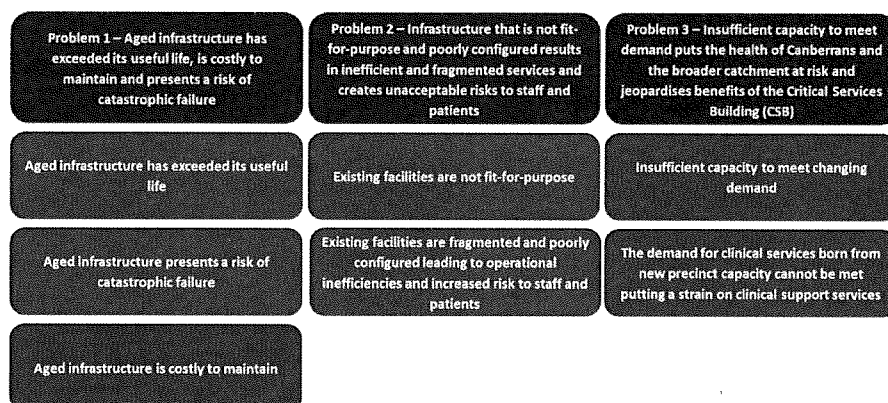
An ILM workshop was held with key stakeholders to identify the problems, benefits, responses and recommended strategic solutions, as outlined in Figure 8.

Figure 8: Investment Logic Map



The three problem statements included in the ILM have been supported by evidence statements. This is set out in Figure 9 and then expanded on in the sections thereafter.

Figure 9: Problem statements



ILM supporting documentation can be found in Appendix A. The detailed ILM is included in Appendix B Investment Logic Map.

Problem 1 – Aged infrastructure has exceeded its useful life, is costly to maintain and presents a risk of catastrophic failure

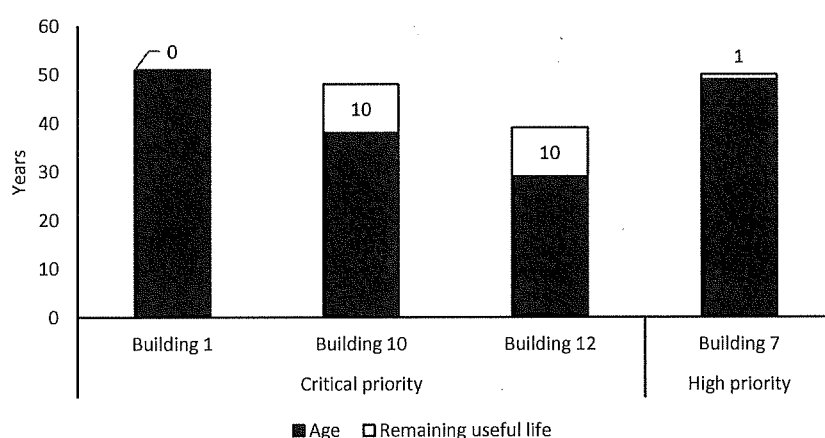
Since most of the CH was constructed in the 1970's, many of its buildings are nearing, or at, the end of their useful life. It is generally accepted that building performance, including functionality and efficiency, declines with age.³ This can introduce a risk to the quality and consistency of patient care, where the physical environment is no longer equipped to support the delivery of contemporary care. These buildings are also prone to non-compliance with the latest hospital and building standards which in turn can introduce a risk to staff and public safety. For many buildings that have reached the end of their useful life, it is appropriate, both financially and operationally, to consider the full replacement of the asset rather than attempting complex and costly remediations for a likely limited extension of its life, which may remain restricted in its capacity to deliver the standard and level of care expected across the Territory.⁴

As identified in section 0, all critical and high priority assets in-scope for this project are falling below their target condition and functionality standards.

Evidence 1.1 – Aged infrastructure has exceeded its useful life

Almost all buildings in-scope will reach the end of their useful life in the next 10 years, with Buildings 1 and 7 already at, or close to, the end of their useful life. The age of the buildings are shown in Figure 10.

Figure 10: Age of buildings and remaining useful life as at 2024⁵



** The services originally housed in Building 6 and Building 23 (hospital administration) have been decanted. As a result, the priority of these buildings has shifted to greater importance. Note that the assessment of the remaining useful life has been performed in August 2017 with the development of the Strategic Asset Management Plan. All values have been amended to reflect the current remaining useful life as of early 2024.*

In addition, the existing fittings, fixtures and equipment in these buildings have exceeded their design life with some examples identified as more than double their expected design life. This is particularly problematic for Building 1, which includes some heating, ventilation and air conditioning (HVAC) equipment that has not been replaced since it was built in 1972, as shown in Table 3.

3 Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

4 Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

5 Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023. Calculated to 2023 figures.

Table 3: HVAC equipment expected design life and age in Building 16

Equipment	Expected design life	Age in CH Building 1 (2023)
Ductwork and fittings	20-30 years	51 years
Fans	15-20 years	51 years
Kitchen equipment	15-20 years	51 years
Pipework and valves	20-25 years	51 years
Pumps	20-25 years	51 years
AHU – custom built	20 years	51 years
Automatic controls and instrumentation	20-25 years	51 years

While extension of life works can offer a short-term solution to “keeping the lights on”, it would almost always realise a sub-optimal result – both clinically and operationally. The cost of these works can also be substantial and do not negate the need for a replacement of the asset in the medium to long-term. The feasibility of extension of life works are also limited to the extent that they comply with modern building standards (for example, the building structure of ageing assets would likely be subject to durability testing and may not meet IL4 seismic requirements). Therefore, extension of life works present an opportunity cost to the ACT Government. While appropriate in certain circumstances, the ACT Government needs to balance the sunk cost of remediation against the upfront affordability of replacement. Delivering a replacement in the short term would realise savings for the ACT Government over the long-term.

Evidence 1.2 – Aged infrastructure presents a risk of catastrophic failure

Several buildings have deteriorated such that further remediation and upgrades to make safe and bring them in line with modern building and compliance standards are no longer feasible. The risk of failure – for example, loose and damaged façade – presents an unacceptable risk to public safety. The impact of such a risk event being realised would be catastrophic. This presents Canberra Health Services with the reality of forced closures where buildings are no longer safe to occupy, which would in turn place a significant risk on the hospital’s ability to maintain service continuity. Interruption to Hospital services directly impact patients' health and lives through cancelled surgeries, lack of beds for admissions creating bed block further impacting the emergency department's ability to treat patients and ambulances offloading.

Various assets and systems located within these buildings are also at the end of their useful life, including the sewer stack network, fire safety compliance systems, air supply, building façade and electrical infrastructure. This contributes to a higher likelihood of building faults leading to risk events. The current condition of these assets and systems are outlined in 4.

Table 4: Aged infrastructure and risks of failure

Issue	Space / locations in scope	Description	Consequences
Sewer stack network	Building 1	The sewer stack pipe network which is used for the discharge of fluid and solid waste and to trap and vent sewer gases is at the end of its useful life. The sewer stack is in poor condition, and recent investigations found pitting and corrosion. The sewer stack is	The sewer stack pipes are in such poor condition that they cannot be cleaned to remove corrosion. The works cannot be conducted iteratively, as entire wards need to be closed, even for small works. Replacement is

6 Source: ARUP. 2017. HVAC Services Audit. Accessed on 30 November 2023.

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Issue	Space / locations in scope	Description	Consequences
		brittle and cannot be maintained effectively.⁷ The current condition of the sewer stack pipework in Building 1 is considered an extreme risk per the draft 2023 CHS Infrastructure Plan⁸. Failing sewer stack pipe network has resulted in property damage, constant backs-ups and unpleasant sewer odours impacting clinical areas and service delivery.	needed urgently however rectifying these issues would require closures to the building, causing significant disruption to services and impact on patient outcomes. There is nowhere on the campus nor at NH to accommodate patients while work is underway, leading to a severe deficit in the availability of inpatient beds and the need to reduce services such as elective surgeries. This would directly impact the health of the community, delaying treatments and increasing the risk of death.
Fire safety compliance	Buildings 1, 7, 10 and 12	Upgrades are required for fire compliance systems including fire detection systems, fire indicator panels, fire suppression systems, fire dampers and deluge systems. This is considered a high risk per the draft 2023 CHS Infrastructure Plan.⁹ Mechanical pressurisation systems require upgrade, balancing and commissioning across Building due to age, refurbishment of areas and penetrations in fire and smoke rated walls. In a fire event, smoke exhaust systems may be ineffectual. Fire dampers, central fire stairs, and hydrant and hose reel locations are non-compliant with Australian standards.	A lack of compliance with fire safety standards poses a significant risk for the uncontrolled spread of fire and smoke in critical patient buildings. In the event of a fire or smoke event, these systems may be ineffectual, representing a significant safety risk to building occupants. The external façade of Building 12 cannot be remediated to meet current standards and requires replacement of the entire façade.
Air supply	Buildings 1, 10 and 12	Current air supply assets are over 50 years old, including HVAC systems which are past the end of their useful life and at increasing risk of failure. An audit was undertaken of the HVAC systems in Building 1 in 2022 which were rated a 3 for their likelihood and consequence of failure ('highest risk' and 'most critical' respectively).¹⁰ This includes the air handling system, fan coil units, cooling towers, ductwork, mining boxes and Variable Refrigerant Flow (VRF) systems. This is considered a high risk per the draft 2023 CHS Infrastructure Plan.¹¹	General patient care areas such as medical and surgical wards can operate in an environment without air conditioning for a longer period of time, but the potential spread of infections between patients post-surgery – particularly those with wounds or who are immunocompromised – increases significantly as temperature, humidity and ventilation are affected. This can lead to a rise in infections, increased use of antibiotics, longer lengths of stay and potentially patient death; as well as reduced patient and staff satisfaction.
Building façade	Building 1	Building façade is in poor condition, with several extreme risks requiring immediate mitigation. The façade is showing signs of bowing, cracking and general displacement.	Without remediation, façade failure or collapse will occur resulting in property damage and safety risks to people in and around Building 1.

7 Source: ACT Health, building condition workshop materials, Accessed 21 November 2023

8 Source: ACT Government Health, Draft CHS Infrastructure Plan 2023, accessed 27 November 2023

9 Source: ACT Government Health, Draft CHS Infrastructure Plan 2023, accessed 27 November 2023

10 Source: ACT Health. Canberra Hospital Studies HVAC Services Unit. 11 September 2017. Accessed 1 December 2023.

11 Source: ACT Government Health, Draft CHS Infrastructure Plan 2023, accessed 27 November 2023

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Issue	Space / locations in scope	Description	Consequences
		The windows are fitted with non-compliant glass, with evidence of corrosion to frames and damaged or missing seals. ¹²	
Electrical infrastructure	Building 1, 7, 10, 12	Assets are approaching the end of their useful life within the next five years. Replacement is required for electrical services including distribution boards, mechanical services switchboards (MSSBs), emergency and general lighting, Uninterruptible Power Supply (UPS) and generator replacement (not applicable to Buildings 1, 10 or 12). This is considered a high risk per the draft 2023 CHS Infrastructure Plan¹³. There is currently no funding for the upgrade of MSSBs which are needed for HVAC services and mitigation of a fire risk. Lighting throughout Building 1 is beyond end of life and requires replacing. Aged lighting represents an increase to maintenance activities and spend, with low light levels presenting a patient safety risk.	This presents a higher risk of failure, including increased risks of power outages and equipment malfunction and downtime which would result in significant impacts to clinical service delivery.

Evidence 1.3 – Aged infrastructure is costly to maintain

Aged infrastructure is more costly to maintain and operate in comparison to modern infrastructure. With much of the infrastructure at the end of its useful operating life, and as evidenced Table 4, the maintenance and capital renewal costs for buildings within the scope of this project are prohibitively high.



The 2017 Strategic Asset Management Plan (SAMP) notes that to maintain financial sustainability, maintenance expenditure in relation to the management of asset portfolios should range between 1% to 2% of asset replacement value (ARV), and a range of 4% to 6% of ARV for asset refurbishment or replacement. Investment below these benchmarks would lead to the deterioration of the asset portfolio and accruals of long-term backlog maintenance requirements.

Over the 10-year period to 2017, the average annual maintenance spend as a percentage of ARV was 0.48% and 0.37% for capital renewal spends over a 4-year average period, which was well below the benchmarked thresholds.¹⁵ The 2017 SAMP also found that the financial sustainability of the required maintenance spend was considered high-risk¹⁶ and that funding required for proposed maintenance and capital renewal would not be affordable. The impact of this includes the continued

¹² Source: ARUP, Façade Inspection Report – Building 1, 19 September 2022, accessed 30 November 2023

¹³ Source: ACT Government Health, Draft CHS Infrastructure Plan 2023, accessed 27 November 2023

¹⁴ GFA obtained from 2022-23 Canberra Health Services Annual Report.

(https://www.canberrahealthservices.act.gov.au/data/assets/pdf_file/0017/2301209/CHS_Annual-Report-2022_23_AAA-DIGITAL-FAMA.pdf). Accessed on 1 December 2023.

¹⁵ Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

¹⁶ Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

deterioration of the hospital's assets, increasing the likelihood of failures and closures which would risk disruption to service continuity. Based on the early evidence from the 2023 SAMP, the condition of the gross floor area has deteriorated from 75% of gross floor area being good or better condition in 2017 to 37% – in 2023.

If CH were to undertake extensive extension of life works, (1) they would need to be staged to maintain operational continuity which would create further delays increasing an already unacceptable risk to safety across the precinct, and (2) it would not provide any additional capacity for CH to meet growing demand.

Problem 2 – Infrastructure that is not fit-for-purpose and poorly configured results in inefficient and fragmented services and creates unacceptable risks to staff and patients

Some of the buildings within the scope of CHMPP2 have been in operation since the 1970's and as a result are increasingly difficult and costly to refurbish to support the delivery of contemporary models of care. As a result, evolving technology and health care delivery practices are retrofitted into unsuitable environments, which impacts the efficacy of the service delivered. This is due to the poor configuration and inflexibility of existing infrastructure, which cannot adequately adapt to the latest service requirements. These factors hinder the overall benefit realised from implementing new technologies and the more advanced treatments they promise to deliver. Further, risks may emerge around the expected versus actual efficacy of treatments delivered which could impact the health outcomes for patients.

Evidence 2.1 – Existing facilities are not fit-for-purpose

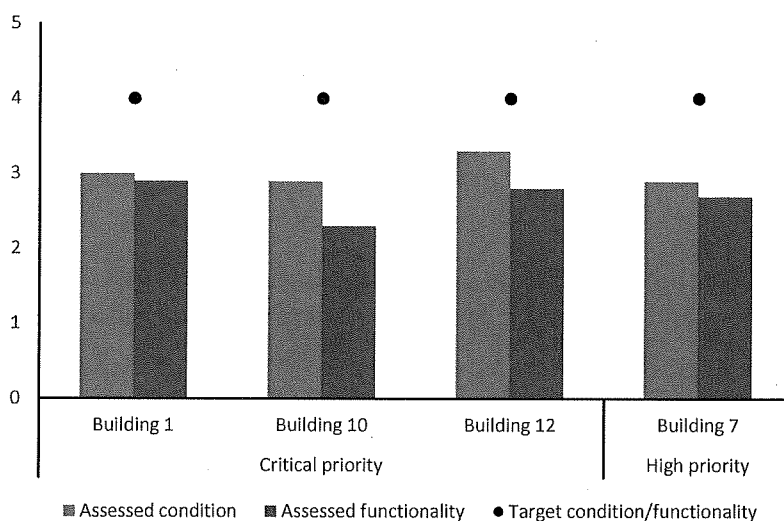
The 2017 SAMP sets the framework for the management of CH's asset portfolio. A functionality assessment was undertaken by the SAMP to determine a buildings fitness to deliver the required services. This found that the functionality of 9 out of the 28 Canberra Hospital Campus buildings are rated as 'poor'.¹⁷ Buildings 1, 7, 10 and 12 are considered high-priority or critical assets¹⁸ wherein the assets are deemed vital to the continuity of CH's service delivery and must be kept in an acceptable condition where only minimal/minor deterioration is tolerated.¹⁹

A summary of the condition and functionality assessments is provided in Figure . In the SAMP, all critical or high-priority assets were found to be below the target condition and functionality rating. Assets below the target condition rating indicate they are at a level of deterioration that does not meet the targeted needs of CH, while assets below the target functionality rating indicate they are at a condition below the target fitness-for-purpose. This includes aspects across spatial relationships (scale, layout), amenity, environmental comfort, legislative compliance, aesthetics and adaptability.

¹⁷ Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

¹⁸ The SAMP uses an asset priority index which determines the relative strategic importance or mission alignment of each asset. An asset priority description of critical asset is the highest level of asset priority.

¹⁹ Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

Figure 11: SAMP Condition and Functionality Assessment²⁰

Outdated buildings with poor condition and functionality can lead to:

- Inability to deliver contemporary models of care in modern and safe environments;
- Restrictions in effectively implementing new technologies to support pathology, endoscopy, imaging and pharmacy services;
- Inability to support sustainability goals in line with *ACT Climate Change Strategy 2019-2025* and *CHMP Zero Emissions Strategy*;
- Inability to meet the growth and demand of the community;
- Insufficient clinical service delivery; and
- Catastrophic failure of assets.

The impact on CH if this problem is not addressed are outlined further below.

Inability to deliver contemporary models of care

The design philosophy that guided the development of existing buildings reflect an outdated model of care. Generally, these buildings were not future proofed or physically equipped to be able to respond to the challenges and demands of current and future health care delivery. However, over time, CH has undertaken conversions and modifications to respond to changes as best as the existing infrastructure would allow. As a result of continual change, several services are currently being delivered in settings that are no longer suitable, and any further upgrades and modifications to the existing structures would likely deliver a sub-optimal result and only hinder the implementation of contemporary models of care. These challenges and impacts are outlined in Table 5.

Table 5: Building 10, no longer fit-for-purpose for Pathology

Service and location	Issue	Consequences
Pathology is the study and diagnosis of diseases through the examination of tissues, organs and bodily fluids.	With the pathology service at CH being in operation for almost four decades, it is currently accommodated in ageing infrastructure which lacks the space to	The impact is a sub-optimal level of service including issues associated with quality, consistency, accuracy and timeliness which are all factors that could affect health outcomes.

²⁰ Source: ACT Government Health, The Canberra Hospital Strategic Asset Management Plan 2017, accessed 29 August 2023

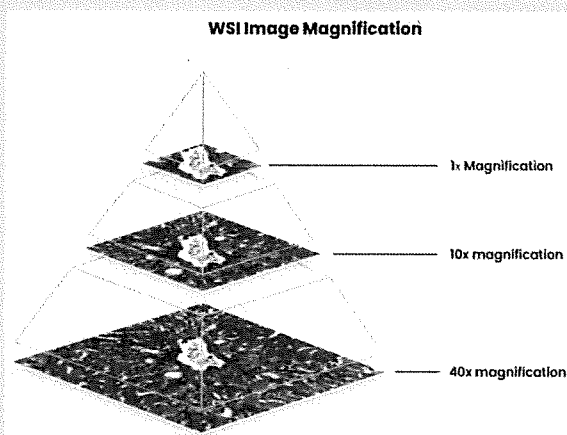
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Service and location	Issue	Consequences
These services are currently located in CH Building 10.	expand and meet increasing demand over time. The limited space restricts the integration of new technologies which can be used to increase the speed and volume of testing undertaken. This is one measure that would be of substantial benefit to CH in meeting growing demand. Demand for pathology services will continue to increase due to several factors. This includes a backlog of demand since the COVID-19 pandemic, a growing and ageing population with an increasing prevalence of chronic disease. The pathology service at CH is the only public pathology service in the ACT, servicing the ACT and surrounding NSW communities with a broad range of testing capabilities. Without an expansion, the quality, consistency and efficiency of the service may fall behind other states and compromise patient care. Building 10 presents a high-level risk to Work, Health and Safety (WHS), with the electrical switchboard requiring a recent upgrade due to an extreme risk of failure. In addition, the Level 3 – Anatomical Pathology Unit is currently being upgraded due to extreme WHS risks to staff. Many other WHS-related risks remain in Building 10.	There is also the potential for service disruption due to building faults. In the event of an identified WHS risk forcing the closure of Building 10, the Pathology service would be rendered inoperable while repairs are carried out. This presents an unacceptable risk to service continuity across the Territory. In preventing closure, there is a significant financial burden associated with the increasingly frequent maintenance required to keep B10 operational.

Restricted ability to implement new technologies to support pathology services

The healthcare industry has undergone significant changes in the way care is delivered, including the adoption of remote care models, increased automation, and the utilisation of AI in diagnosis and care delivery pathways. Adopting these technologies is crucial to meet the growing demand for healthcare services and maintain delivery of high-quality healthcare.

Case Study: How AI technology is transforming pathology



Source: Mobidev²¹

AI is playing a crucial role in addressing workforce shortages in pathology and enabling the delivery of more effective diagnoses and timely care to individuals.

In particular, Whole Slide Imaging (WSI) is transforming the Anatomical Pathology field, enabling the magnification of high resolution, large format scans of human tissue (as illustrated in the adjacent figure).

However, the Category 7 cabling needed to install WSI and the transmission of large volumes of data cannot be retrofitted into Building 10, without significant redevelopment. Therefore, the benefits from such technology cannot be realised until the appropriate infrastructure is made available.

In the Canberra Health Services Strategic Plan 2020-23,²² technology is recognised as both an opportunity and an enabler for exceptional healthcare. However, with outdated facilities – including the underlying services infrastructure such as power, data, water etc. – the ability to effectively implement and utilise new technology is constrained.

There has been a marked shift in the use of technology to increase the efficiency of hospital operations and improve patient outcomes. For example, robotics is fundamentally reshaping the operations of pathology laboratories and pharmacy dispensaries. Manual handling is being replaced with automation, standardising workflows, improving reliability and increasing throughput. However, the current state of Building 10 is unable to support the effective implementation health technologies that could improve patient outcomes.

Outdated pathology facilities also place a restriction on the range of in-house testing performed, and in some cases forcing the health service to outsource more specialised tests which are costly and time-intensive to undertake. As a result, CH incurs a cost, rather than a revenue source for these types of tests. Expanded capacity to accommodate new equipment could enable CH to undertake these tests in-house.

Inability of existing infrastructure to support sustainability goals

The ACT Government is committed to achieving net-zero emissions by 2045 and has outlined a Climate Change Strategy, including a milestone target in 2025, which seeks to reduce emissions from Government operations from 2020 levels by 33 per cent without the use of offsets.²³ For the health sector, this includes establishing and implementing a pathway towards achieving net zero emissions by 2040. However, the current state of the CH campus prevents it from reaching this goal due to the

21 Source: Anthony Kantseml. 19 July 2022. How AI Helps in Whole Slide Image Analysis for Cancer Detection. (<https://mobidev.biz/blog/ai-digital-patology-helps-whole-slide-imaging-for-cancer-detection>)

22 Source: Canberra Health Services. Canberra Health Services Strategic Plan 2020–2023, (https://www.canberrahealthservices.act.gov.au/__data/assets/file/0005/1933178/CHS-Strategic-Plan-2020-23_AA-DIGITAL-FA.pdf)

23 Source: ACT Government. ACT Climate Change Strategy, (<https://www.climatechoices.act.gov.au/policy-programs/act-climate-change-strategy>)

deteriorating condition of building façades and the significant reliance on natural gas to power hospital services.

The CH currently relies on natural gas to power numerous equipment and functions including hot water systems, air conditioning units, heating plants, steriliser steam generators, and cooking facilities. To achieve the vision of the climate change strategy, existing natural gas plants will need to be replaced with electric plants. This is currently unachievable due to insufficient available area in existing buildings to support required plant upgrades.²⁴

The power usage and efficiency of existing buildings is well below existing building standards. Building façades – including for Buildings 1, 10 and 12 – have reached the end of their usable lives, resulting in uncontrolled exchange of air and leakage. This affects the efficiency of heat pumps, increasing electrical load and the need for defrost measures.

The construction of new plant rooms with more sustainable heating processes would support the ACT Government to meet its sustainability goals. However, the delivery of these works would require the temporary diversion of electrical services to the effected buildings. This would likely result in the interruption of existing clinical and non-clinical functions unless appropriate decanting and relocation arrangements are put in place. This indicates that a campus-wide solution is needed to sustainably manage the hospital's long-term energy needs.

Evidence 2.2 – Existing facilities are fragmented and poorly configured leading to operational inefficiencies and increased risk to staff and patients

Poorly configured and fragmented facilities in Buildings 1, 12, 10 and 7 lead to operational inefficiencies and adverse patient outcomes (e.g., increasing ALOS) driven by:

- Poor coordination and collaboration between key functional relationships;
- Difficulty in enabling separation of users and secure paths of travel; and
- Inefficient use of space and equipment.

The need to address these challenges are discussed further in the following sections.

Poor coordination and collaboration between key functional relationships

Pathology and clinical support services face significant challenges due to the layout of the existing infrastructure. Currently, pathology is accommodated over multiple levels within Building 10, which compromises the ability to collaborate with, and coordinate across, key functional adjacencies.

There is an increased trend towards collaborative Diagnostic Genomics (DG) approaches between genomic experts, haematologists, anatomical pathologists, microbiologists, and infectious disease experts, highlighting the shortcomings of the existing functional distribution of laboratory units across Building 10.

At present, the current laboratory space for DG is not fit-for-purpose and does not meet all of the National Association of Testing Authorities (NATA) requirements including the need for appropriate clean and dirty separations. This compromises the effective treatment of patients, especially those with metastasised cancer or other life-threatening and/or rare diseases. Further examples of poor coordination and collaboration between key functional relationships is outlined in 6.

²⁴ Silver Thomas Hanley. Canberra Hospital Master Plan – Zero Emissions Strategy – Building Services Design Report.

<https://www.health.act.gov.au/sites/default/files/2021-12/Canberra%20Hospital%20Master%20Plan%20-%20Zero%20Emissions%20Strategy.pdf>. Accessed on 1 December 2023.

Table 6: Issues with current clinical support service adjacencies and consequences

Clinical Service	Adjacency required	Issue with existing infrastructure	Consequences
Immunopathology	Collocated with Specimen Reception, Haematology and Chemical Pathology	Immunopathology was moved to Level 6.	Staff must travel between four floors to collect and deliver samples. This results in delays in sample processing and affects the overall efficiency of the pathology service, which could lead to longer waiting times.
Subspecialties of Pathology (e.g., Anatomical Pathology, DG, Microbiology and Molecular Pathology)	Collocated with other subspecialties of Pathology across a limited number of floors	The subspecialties are spread over 6 floors.	Limited operational efficiency, space efficiency and synergy between subspecialties. Resources such as equipment, personnel and supplies may need to be duplicated or divided among different locations leading to suboptimal resource allocation. The fragmentation of the subspecialties may also result in challenges to effective communication and coordination. This could restrict efficient decision-making and impact patient outcomes.
Mortuary	Collocated with Pathology	The mortuary is located in a separate building requiring body transfer through hospital grounds.	Currently the deceased are transferred between buildings using public spaces, including lifts. Such public pathway invades the privacy of the deceased and their families and pose the public at risk of infection transmission.
Diagnostic Genomics	Collocated with other Pathology specialties	Current laboratory space is too small to meet NATA accreditation requirements.	A lack of space to hold new equipment, such as Next Generation Sequencing, restricts the hospital's ability to keep up with advancements in medical technology that may improve overall operational efficiency and patient outcomes.

In addition, a poor working environment – including for example, ageing and dilapidated building fabric, as well as configuration, lighting, ventilation and accessibility issues – raises significant safety and operational risks in conflict with existing work and health safety (WHS) policies. CH has a duty of care to its current staff to provide a safe and conducive working environment to deliver quality patient care, as well as making CH an attractive destination for the ongoing development of the next generation health workforce.

Case Studies:

Ageing and dilapidated building fabric is presenting a catastrophic and unacceptable risk to staff and patients

Source: CHS -FM

1

Incident: November 2024 – An incident involving a mechanical fault in the B1 HVAC system caused the cooling in the “Telstra Hut” room to fail, resulting in rising temperatures. However, due to insufficient Building Management Systems, no alerts were issued to notify staff of the problem. Once the temperature exceeded 68°C, the building sprinklers on level 10 were activated leading to flooding and the shutdown of all building lifts. This meant that staff were forced to use the buildings internal stairs to access other levels which had also been significantly impacted by flooding. This severely restricted accessibility and circulation around the building,

including the ability of staff to (1) respond promptly and effectively to medical emergencies, and (2) transport patients into or out of the building.

Consequences: This posed a potentially catastrophic scenario that could have resulted in sentinel events – that is, avoidable incidents that result in serious injury or death to a patient.

2 **Incident:** Increasing outages of the existing pneumatic tube system is resulting in (1) the delay in processing pathology samples due to increased transit times between collection points and laboratories, and (2) the increasing loss of pathology samples during transportation. Building 1 is the main Hub that connects Pathology (in B10) and the rest of the campus, including B5, however the pneumatic tube system running through this building has reached the end of its useful life and no longer able to support current and future demand. The system needs to be replaced and supported by new modern infrastructure, including redundancy to minimise the likelihood of outages in the future.

Consequences: Delayed diagnosis and treatment, as well as an increased risk of clinical deterioration.

3 **Incident:** Building 1 fire dampers and some of the air conditioning AHU dampers are controlled by pneumatic controls supported by air compressors. This system was substituted by electronic controls linked to the BMS more than 50 years ago. Given the age of the system, it is increasingly difficult to maintain due to a lack of readily available parts which delays repairs impacting (1) the flow of air conditioning around the building, (2) air leaks and system ineffectiveness, and (3) compressor faults.

Consequences: Poor environmental conditions for staff and patients.

Difficulty in enabling separation of users and secure paths of travel

The configuration of, and interconnection between, existing buildings make it difficult for patients and staff to navigate the campus creating disorientation and confusion.

The current configuration of buildings also creates challenges in separating and maintaining the privacy of different patient groups being transferred between buildings. For example, deceased persons are currently transferred to the mortuary via hospital corridors and grounds shared with the general public. Access from The Oncology ward in Building 3 and the medical wards in building 1 is gained via Building 2 Level 3 pathway into the Building 1 Level 3 lifts, these lifts are also used by members of the general public similarly to the corridors. It is essential to establish designated and secure pathways for the transfer of deceased persons within the hospital premises to maintain the dignity of the deceased and the privacy of their families and to mitigate potential risks associated with contamination.

Greater separation of users and secure paths of travels are required expedite Medical Emergency Response Teams, staff and interpatient transport. Medical response teams currently are having to utilise lifts that are shared with the general public (Building 1), similarly these same lifts are required for transport of patients for procedures creating significant inefficiencies.

There is a substantial flow of patients transiting through Buildings 1 and 2 to access services in other buildings, particularly from 3, 11, 19, 20, this is essential to access building 12 services (medical imaging). This is not only inefficient but also for some patients, the consequences can increase when they have a compromised immune system. Cancer patients who regularly transit high-traffic public

areas to access imaging services or be transferred to a higher level of care (Intensive Care Unit) are placed at risk.

Patient transport, especially paediatric patients and oncology patients, often leads to nursing staff being off the ward for lengthy periods of time. They are required to escort their patients to medical imaging, delaying care, treatment, admissions and discharges of other patients in their care.

Improved separation of users, secure pathways and efficient inter-building linkages are needed to support wayfinding, maximise privacy and security and reduce the risk of infection spread.

Inefficient use of space and equipment

The fragmented layout of the hospital's buildings has led to spaces on campus that are not utilised effectively, for example:

- Common spaces and administration areas such as educational spaces, meeting rooms, staff rooms and break rooms, are located far from clinical areas, requiring staff to walk to different buildings to access these facilities. This makes it difficult for staff to efficiently reach these spaces within allocated break times or to undertake mandatory education.

Problem 3 – Insufficient capacity to meet demand puts the health of Canberrans and the broader catchment at risk and jeopardises benefits of the B5

The ACT community has changed significantly since the CH facilities were built over 50 years ago. The ACT Health Services Plan indicates that the Territory's population increased by 14% between 2016-21 and is projected to increase by a further 10% over the decade to 2030²⁵

Furthermore, the Territory's population in the 70+ age category increased by 34% between 2016 to 2021. This is forecast to rise by a further 23% by 2030, which is more than double the growth rate for the population as a whole.²⁶ Older age groups have a higher prevalence of chronic diseases and other health conditions, resulting in higher rates of hospital admission and extended lengths of stay.²⁷

Chronic conditions are the leading contributors to the burden of disease across the ACT, with one in two adults in the ACT having a chronic condition such as asthma, arthritis, cancer, diabetes or mental illness.²⁸ Canberrans living with complex chronic disease often have multiple co-morbidities,²⁹ which requires a coordinated healthcare approach and has put further strain on hospital resources. For example, the rise in obesity cases in the ACT is increasing demand for bariatric services, which are challenging to deliver due to a shortage of dedicated facilities and equipment within CH to serve these patients. Whilst B5 has addressed this issue for the surgical patients there is still a need for infrastructure for the medical patients to ensure they are cared for in the required specialty.

Changing climate conditions have also seen a spike in comorbidities and heat-related conditions which are increasing the strain on existing services across the Territory. Global evidence suggests that a 1 degree increase in temperature is associated with a 0.5% increase in emergency hospital

25 Source: ACT Government Health, ACT Health Services Plan (2022-2030) (https://www.health.act.gov.au/sites/default/files/2022-09/ACT%20Health%20Services%20Plan_2022%20to%202030.pdf), accessed 23 August 2023

26 Source: ACT Government Health, ACT Health Services Plan (2022-2030) (https://www.health.act.gov.au/sites/default/files/2022-09/ACT%20Health%20Services%20Plan_2022%20to%202030.pdf), accessed 23 August 2023

27 Source: ACT Government Health, ACT Health Services Plan (2022-2030) (https://www.health.act.gov.au/sites/default/files/2022-09/ACT%20Health%20Services%20Plan_2022%20to%202030.pdf), accessed 23 August 2023

28 As above

29 As above

admissions.³⁰ With climate events increasing in frequency and severity, the demand for health services is likely to increase.

While there is increasing service demand more broadly for elective and emergency surgery, chronic disease management, cancer treatment, and mental health, these have been exacerbated by COVID-19.³¹

The demand for health services will also continue to rise as life expectancy and the prevalence of chronic and multi-morbid conditions increase.

The forecasted demand for services for inpatient and outpatient services, as well as pathology and clinical support services at CH is discussed in Table 7.

Table 7: Forecasted demand for services

Service	Demand forecasted to increase
Inpatient & Outpatient services	The increasing burden of disease along with a growing and ageing population will drive an increase in demand for inpatient and outpatient services.³² There has also been significant growth in demand for surgeries, which has seen public hospital theatres operating at or near capacity.³³ With CH as the primary referral hospital in the region, demand is forecasted to increase across both same day and multi-day admissions: • Same-day admissions will increase by approximately 3.7% per annum to 2030.³⁴ • Multi-day admissions will increase by approximately 3.1% per annum to 2030.³⁵ Demand for public services at Canberra hospitals (including CH and North Canberra Hospital) are also forecast to increase over the period to FY31. • Demand for medical services is forecasted to increase by 3.5% per annum to 62,625 separations by FY31. FY41 separations will reach 75,495.³⁶ • Demand for palliative care services is forecasted to increase by 3.7% per annum to 1,159 separations by FY31. FY41 separations will reach 1,397.³⁷ • Demand for surgical services is forecasted to increase by 2.6% per annum to 49,002 separations by FY31. FY41 separations will reach 57,951.³⁸ With inpatient and outpatient services already at capacity, this will further increase waiting times.
Pathology & Clinical Support Services	As a result of increasing inpatient and outpatient same-day, multi-day stays as well as ED presentations, the demand for pathology services will continue to increase. As at FY20, ACT Pathology perform 2.5 to 2.6 million testing annuals each year.³⁹ Pathology at CH is a Territory-wide service, with the CH expected to become the primary pathology provider (to a capability Level 6), supporting other major health

30 Guo, C., Ge, E., Lee, S. et al. Impact of heat on emergency hospital admission in Texas: geographic and racial/ethnic disparities. *J Expo Sci Environ Epidemiol* (2023). <https://doi.org/10.1038/s41370-023-00590-6>

31 Source: Aspex Consulting, Canberra Hospital Redevelopment Draft Service Model 7 August 2023, accessed 7 August 2023

32 As above

33 As above

34 Source: Aspex Consulting, Canberra Hospital Redevelopment Draft Model of Care – Pathology and Clinical Support Services Building (June 2023), accessed 7 August 2023

35 Source: Aspex Consulting, Canberra Hospital Redevelopment Draft Model of Care – Pathology and Clinical Support Services Building (June 2023), accessed 7 August 2023

36 Source: EY analysis for Aspex provided demand figures. Accessed 7 December 2023.

37 Source: EY analysis for Aspex provided demand figures. Accessed 7 December 2023.

38 Source: EY analysis for Aspex provided demand figures. Accessed 7 December 2023.

39 Source: Aspex, Canberra Health Capital Planning Pathology Functional Design Brief. 4 September 2023. Accessed on 7 December 2023.

Service	Demand forecasted to increase
	facilities such as NH and UCH. With the expansion at NH, there will be additional demand for pathology services at CH. The demand for pathology services is forecasted to increase per the following from FY23: - For anatomical pathology, demand for surgical/procedural separations is expected to increase by 33.7% FY36, resulting in an additional 7,973 anatomical pathology examinations.⁴⁰ - For tests other than anatomical pathology, it is expected that these will increase by 37.7% growth in demand, or 631,990 additional tests by FY36.⁴¹ - Routine tests are forecasted to increase by 28.3% or 259,665 tests by FY36.⁴²

Appendix G - Aspex Consulting (2023). SoA Canberra Hospital Capacity detail 2021-22 Phase 2 scope 23Nov 1

Evidence 3.2. The demand for clinical services born from new precinct capacity cannot be met, putting a strain on clinical support services

The development of B5 has increased the capacity to treat patients with additional theatre suites and an expanded ED. The ICU has doubled the number of beds from 30 to 60⁴³ while the new ED has increased its treatment spaces by 72 new spaces to 147.⁴⁴ There are 22 new operating theatres and two additional wards with 64 surgical inpatient beds,⁴⁵ significantly increasing service levels from previous operations.

While the increased supply of clinical areas in the form of inpatient beds, operating theatres and additional wards has addressed some of the demand requirements, CH also requires a proportional increase in the supply of clinical support services for the additional clinical areas to function efficiently and effectively. Without a proportional increase in support services, this will lead to bottlenecks and reduced operational efficiency, such as increased length of stay and increase the risk of clinical deterioration due to a delay in the provision of care.

Furthermore, the poor location and distribution of clinical support services mean that delays often occur between the request and fulfillment of services, such as pharmacy, leading to potential delay and disruption in patient care. The responsiveness of clinical staff may also be affected by the increased distance between different areas of the hospital, resulting in delays and potential avoidable clinical deterioration. This lack of synergy can also contribute to a longer length of stay for patients and in turn longer waiting times.

The increased beds in the critical areas also significantly increases the requirement of pathology services with the majority of ED, ICU and CCU patients requiring daily blood analysis, similarly Operating Theatre patients require blood tests prior to and post the surgical treatments. This further flows onto the anatomical pathology department processing and analysing any surgical tissue that is removed.

40 Source: Aspex. Canberra Health Capital Planning Pathology Functional Design Brief. 4 September 2023. Accessed on 7 December 2023.

41 Source: Aspex. Canberra Health Capital Planning Pathology Functional Design Brief. 4 September 2023. Accessed on 7 December 2023.

42 Source: Aspex. Canberra Health Capital Planning Pathology Functional Design Brief. 4 September 2023. Accessed on 7 December 2023.

43 Source: ACT government. Key features of the Canberra Hospital Expansion's new Critical Services Building. (<https://www.act.gov.au/canberrahospitalexpansion/features/features>). Accessed on 30 November 2023.

44 Source: ACT government. Key features of the Canberra Hospital Expansion's new Critical Services Building. (<https://www.act.gov.au/canberrahospitalexpansion/features/features>). Accessed on 30 November 2023.

45 Source: ACT government. Key features of the Canberra Hospital Expansion's new Critical Services Building. (<https://www.act.gov.au/canberrahospitalexpansion/features/features>). Accessed on 30 November 2023.

A broader opportunity exists to improve the operational efficiency of the CHS to manage demand

The Business Case will consider the immediate infrastructure needs to maintain the delivery of existing services and to meet demand for a growing and ageing population. While this in and of itself would serve to deliver significant clinical, social and economic benefits, there are other service planning and model of care opportunities that could result in a more significant step-change in clinical and operational efficiency. These would enable CHS to deliver more services to meet greater demand without the need for additional physical infrastructure. While such service enhancements would be subject to further planning and development outside of this Business Case, they could include (but would not be limited to):

- Increasing Hospital-in-the-Home (HITH) capacity to deliver more care outside of the hospital walls which will ensure that patients needing hospital-based care have access when they need it.
- Reducing the average length of stay (ALOS) by leveraging new technologies that allow diagnostics and treatments to be delivered more efficiently and effectively, implementing effective discharge planning, and enhancing care coordination. These strategies can improve the efficiency of capital investment and reduce the need for investments over the long term.
- Developing a more efficient distribution of services across the Territory's major hospitals - including CH, NH and UCH - to meet the changing demand and demographic profile across the Territory's population. This would mean that the location and volume of services are optimised to ensure that patients have timely access to the services they need close to where they live.⁴⁶

⁴⁶ At the time of writing, this is subject to the outcomes of a separate project to assess the merits of a network-based approach to the Territory's service delivery model.

4. Strategic and Policy Alignment

Key messages

- As part of its Territory-wide strategy to improve access to health services, the ACT Government has implemented an agenda for modern, person-centric healthcare that provides the community with access to the right services, at the right place, at the right time.
- CHMPP2 will support the government's priority for accessible healthcare through the development of fit-for-purpose infrastructure, enabling the CH campus to meet growing demand influenced by population growth and changing patient demographics.
- The new PCS building will include modern, fit for purpose facilities to future proof the provision of pathology and other clinical services. Failure to undertake the staged roll-out of capacity envisaged through the redevelopment of Building 10 and Building 6 will stall the implementation of the CHMP and, therefore, the ability of the tertiary hospital to increase capacity to respond to demand impacting on the health of the community it serves.
- Designed to integrate with the new B5 and to enable the co-location of clinical services, the new building will support improved clinical adjacencies and coordination between services, critical for person-centred care and maximising the benefits of B5.
- CHMPP2 will support the ACT's transition to a net-zero health sector by 2040: shifting buildings off natural gas, improving the climate appropriateness of new buildings, and upgrading back-of-house infrastructure to enable the electrification of facilities.
- Ongoing planning and development will continue to consider the service distribution and planning of the NH and ensure alignment in meeting the healthcare demands of the Territory and surrounding NSW regions. Early planning works undertaken to date suggests minimal impacts on the redevelopment of the PCS Building.

The ACT has experienced the fastest growing population of any jurisdiction over the last 10 years, growing from 370,000 to 455,000 people. The Territory is expected to reach half a million residents by 2027 and by June 2060 our population is expected to increase to 784,043 people. In addition, our population structure is ageing, with the population aged 65 years and over forecast to increase by 80% over the period of June 2021-June 2060. This presents several challenges to service delivery. An ageing population coupled with population growth places increasing demand on general and specialist medical and surgical services, with access to some services impacted by long wait times.

As part of its Territory-wide strategy to improve access to health infrastructure, the ACT Government has implemented an agenda for modern, person-centric healthcare that provides the community with the right services, at the right place, at the right time. CHMPP2 will support the government's priority for accessible healthcare through the development of fit-for-purpose infrastructure, enabling the CH campus to meet growing demand influenced by population growth and changing patient demographics.

4.1 Alignment with Government commitments and policies

The 2024 Labor Health Policy statement commits to continue to modernise the Canberra Hospital in line with the Canberra Hospital Master Plan 2021-2041. It commits to continue to deliver the next stage of design and planning for new specialist and inpatient facilities on the campus. This includes continuing to plan for a new Pathology and Clinical Services building, a new inpatient facility and planning for a new mental health precinct.

The ACT Government is responsible for the administration and management of CH, the provision of ambulance and emergency services and the regulation, licensing and monitoring of health premises. The key Territory commitments and policies relevant for CHMPP2 are described in Table 8.

Table 8: Alignment with ACT Government policies and commitments

Policies	Author	Description	Alignment with the CHMPP2 Project
Health Services Commitments and policies			
Accessible, Accountable, Sustainable: A Framework for the ACT Public Health System 2020-2030⁵⁰	ACT Health Directorate	The Framework provides a common vision for the policy and planning activities that will shape the future direction of the ACT health services for the next decade. The Framework is built around three strategic goals. These include: • Access • Accountability • Sustainability	<u>Accessibility</u> CHMPP2 will enable CHS to modernise and expand inpatient/outpatient, pathology as well as other clinical support services, to provide accessible health services to meet growing demand and evolving community expectations around care. <u>Sustainability</u> Under CHMPP2, modern and sustainable facilities will replace aged facilities, which supports delivering Strategic Goal 3: Strategic investment to support health services now and into the future.
ACT Labor Health Policy Position Statement 2024	ACT Labor	This statement outlines the policy position for the ACT Labor Government for the 11 th Legislative Assembly. It outlines the election commitments of the ACT Labor Government	The statement commits to continue to modernise the Canberra Hospital in line with the Canberra Hospital Master Plan 2021-2041. It commits to continue to deliver the next stage of design and planning for new specialist and inpatient facilities on the campus. This includes continuing to plan for a new Pathology and Clinical Services building, a new inpatient facility and planning for a new mental health precinct.
ACT Health Services Plan 2022 – 2030⁵¹	ACT Health Directorate	The Plan is an eight-year roadmap, which identifies priorities for redesigning, developing and investing in the health services funded by the ACT Government. The Plan	By providing modern, fit-for-purpose, integrated and tech-ready facilities, the project will strengthen core ACT Government-funded clinical support services and future proof

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		articulates four key areas of reform as follows: • Addressing key areas of service demand and reform • Transitions of care • ACT's role as a local, Territory and regional service provider • Strengthening core ACT Government-funded clinical support services	them to meet growing demand for clinical services. Clinical support services within scope of the CHMPP2 include: • Medical Imaging Services (MIS) • Pharmacy • Learning and teaching • Research • Administration and related support services
ACT Health Quality Strategy 2018 – 2028⁵²	ACT Health Directorate	The Strategy identifies strategic priorities and measures to monitor performance in: • Improving person centred care • Proactively reducing harm • Provide evidence based, effective and reliable care	<u>Quality</u> CHMPP2 will develop a purpose-built PCS building and Inpatient and Outpatient building to facilitate the latest applications in health technologies, support key clinical support service adjacencies critical to delivering effective and person-centre care, and in line with evidence-based delivery models. <u>Safety</u> CHMPP2 will proactively reduce harm to patients and staff by redeveloping deteriorating infrastructure prone to building faults. CHMPP2 will also develop secure paths of travel which allow the separation of users in line with modern, evidence-based infection controls.
ACT Wellbeing Framework 2020⁵³	ACT Chief Minister, Treasury and Economic Development Directorate	The Framework comprises twelve domains of wellbeing, reflecting key factors that impact on the quality of life of Canberrans. Examples of domains include health, safety, access, and connectivity.	CHMPP2 will support the wellbeing of the community by supporting the provision of the right care, in the right place, at the right time. CHMPP2 will provide inpatient & outpatient services and pathology & clinical support services which meet the growing and changing demand of the ACT community.

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			A Wellbeing Impact Assessment is provided in Appendix C.
Child and Adolescent Clinical Services Plan 2023 – 2030⁵⁴	ACT Health Directorate	The Plan sets out a holistic roadmap for children's health services funded by the ACT Government. It aims to work across ACT's health and early childhood systems to improve and strengthen existing services and programs for children, adolescents and their families.	CHMPP2 aligns with the objectives of the Plan, by improving care in ACT public hospitals including those for children and adolescents, improving care and services for children and complex conditions, improving care in outpatient settings and enabling the health system to respond better to the needs of children and families.
Digital Health Strategy 2019-2029⁵⁵	ACT Health Directorate	The Strategy presents a vision and direction to guide future activities and investments in technology across the Territory. The Strategy outlines the direction for the ACT public health system in building the digital capabilities needed to support a sustainable, innovative and world-class health system for the ACT.	CHMPP2 aligns with the themes of the Strategy by enabling the provision of contemporary health technologies and modern Information and Communications Technology (ICT) infrastructure that support service innovation and improved patient care. In line with the proposed redevelopment of the new PCS building into a tech-ready building, pathology is identified by the Strategy a priority area of investment, highlighting the importance of contemporary digital platforms for pathology.
Disability Health Strategy 2024-2033⁵⁶	ACT Health Directorate	The Strategy aims to ensure people with disability have equitable and appropriate access to healthcare in the ACT. It is one of the plans building on the ACT Disability Strategy 2024-2034.	CHMPP2 aligns with the principles included in the Strategy including person-centred care, ensuring that information, systems and services are best designed to meet patient needs. It also aligns with universal design to guide the planning, design and delivery of facilities, equipment and services to maximise accessibility for all people.
Infrastructure commitments and policies			
ACT Government Infrastructure Plan 2024– Health Update 2023⁵⁷	ACT Treasury	The Plan provides an update on the 2019 Infrastructure Plan. It provides key policies and strategic approaches in addressing the development of health infrastructure in the	Inpatient/outpatient, pathology and other clinical support facilities were built for the clinical and design standards of their day. Over time, service delivery models and standards have

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		Territory. The Plan identifies continued investment in the CH campus as priority in the next five years to future proof health care provision in the Territory.	evolved, with CHS facilities yet to catch up to these. CHMPP2 enables the redevelopment of aged facilities in compliance with the latest standards, future-proofing the ability of the CH Campus to support safe, efficient and effective person-centred care.
Canberra Hospital Masterplan (CHMP) 2021 – 2041⁵⁹	ACT Health Directorate	<i>CHMP</i> is a campus-wide view of CH and sets out the next steps in redeveloping the campus over the next 20 years. The <i>CHMP</i> will significantly increase the capacity of CH to address current and future demand pressures.	CHMPP2 is Phase 2 of the <i>CHMP</i> and aligns with its vision for redeveloping outdated CH buildings.
Canberra Hospital Masterplan: Zero Emissions Strategy⁶⁰	ACT Health Directorate	<i>CHMP</i> contains a <i>Zero Emissions Strategy</i> which outlines how the CH campus will deliver emissions reduction. It also provides a supporting building services strategy.	CHMPP2 delivers on the sustainability vision of the <i>CHMP</i> .
Health Infrastructure Communication and Engagement Strategy⁶¹	ACT Health Directorate	The overarching communication and engagement approach for the health infrastructure program. There is also a supporting <i>CHMP</i> communication and engagement overview.	Communication and engagement approach for next phase of the <i>CHMP</i> .
ACT Climate Change Strategy 2019-2025⁶²	ACT Government Environment Planning and Sustainable Development Directorate	The Strategy commits the ACT to reducing emissions to net zero by 2045 for the whole of the Territory. The <i>Zero Emissions Government Framework</i> commits the ACT Government including Canberra Health Services, to achieving zero emissions from Government operations earlier, by 2040. This reduction is limited to emissions from electricity and gas consumption with an initial target of 33% reduction by 2025.	The CHMPP2 will align with the ACT Government's pathway for an environmentally friendly and sustainable health sector. The CHMPP2 is the next phase in CHS' net-zero emissions pathway for the CH campus at Woden. It is a critical component for CHS to meet the ACT Government's 2040 net-zero commitment. CHMPP2 will adhere to future-driven sustainability practices and improved energy protocols, including shifting buildings off natural gas, improving climate

CHS Sustainability Statement of Commitment and Plan⁶³	Canberra Health Services	The CHS executive endorsed the Statement in December 2023. The Statement identifies areas of focus, enablers and objectives for CHS' sustainability work going forward. The vision for the built environment is to create, maintain and rehabilitate facilities that are accessible and designed to integrate ecosystem health and human health and comfort, are energy efficient, climate resilient, utilise passive design strategies, reduce urban heat island impacts, integrate sustainable resources and offset energy demands.	appropriateness of buildings and upgrading back-of-house infrastructure to support electrification. CHMPP2 aligns to the CHS vision for sustainable built environments as articulated by the Statement of Commitment and Sustainability Plan.
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4.2 Wellbeing Impact Assessment

The key aim of the CHMPP2 project is to replace ageing facilities with modern, more efficient, and sustainable facilities. Informed by the social economic analysis, the CHMPP2 project will deliver the following wellbeing impacts to hospital staff, patients, visitors and the broader community across the ACT catchment areas:

Improved patient access, health outcomes and satisfaction supported through a number of project features including:

- Additional capacity to reduce current wait times and accommodate future growth.
- Built-in flexibility to future-proof the CH campus to shifts in demand.
- Affording the opportunity for the CH to pursue service innovations.
- Improved synergies between clinical adjacencies, supporting patient-centric care.
- Supporting research and teaching activities across the CH campus.
- Improved workforce conditions enabled through the provision of purpose-built facilities, built around the workforce requirements and workflows of each department, resulting in a healthier and happier workforce expected to improve the retention of existing staff and attraction of new staff.
- Additional significant impacts on staff and patient wellbeing through improved safety and amenity of site, ensuring the compliance with modern safety standards, improved hospital's physical amenities and overall environment including additional green space.

During the construction period the new PCS Building, it is expected that the CHMPP2 project may cause short-term disruptions with noise, vibration, dust and accessibility impacts. Patients and staff with compromised immune systems and who are sensitive to dust, and fibres generated from construction activities may experience some negative impacts. ACTHD would seek to keep such impacts to a minimum and have appropriate engagement strategies and responses in place with CHS.

Such negative impacts are expected to be temporary, and all necessary precautions will be taken into account during the decanting and redevelopment activities to reduce any adverse effects on health and wellbeing. During the design process, it was noted that the new PCS and the current traffic management arrangements around Palmer St and Hospital Rd may impact the residential area around Palmer Street. To ensure that the new PCS Building does not dominate the views of the horizon for people residing and travelling along Palmer Street additional considerations will be undertaken considering landscape and urban design.

4.3 Alignment with other projects, Programs and Precincts

ACT Health currently has two critical projects which directly impact CHMPP2 - B5 and new northside hospital. This Business Case has been planned and developed with consideration of the opportunities that will arise from the new northside hospital.

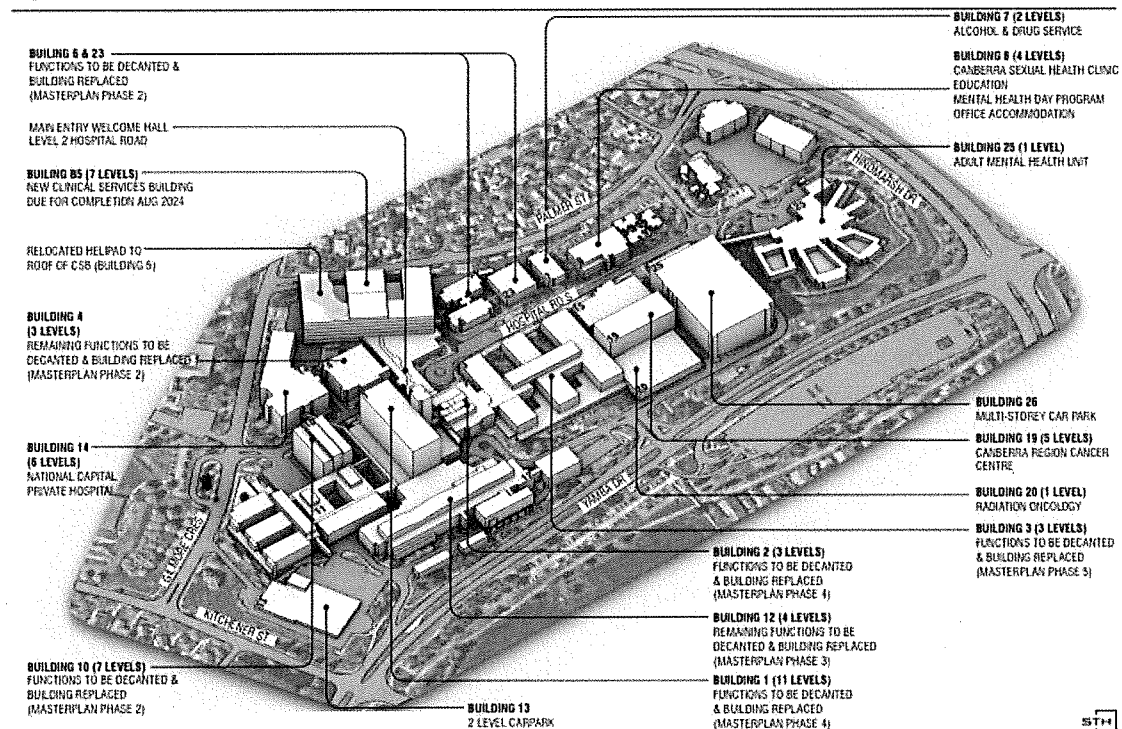
Canberra Hospital Expansion Project –Critical Services Building (B5)

The ACT Government has delivered B5 which has increased capacity to treat and support patients. It includes new critical and acute tertiary care infrastructure, additional theatre suites and expanded ED.

The new PCS Building will include cutting-edge technology to bolster pathology services and include modern fit-for-purpose infrastructure. The new PCS Building is adjacent to the new B5 and will have direct public and internal access, as well as pneumatic and physical connections to allow efficient and safe transfer of samples. Given its approximately 290 metres from the new B5, this will allow for greater integration of services between the buildings.

The service distribution and reference design of the buildings proposed in CHMPP2 have been developed in response to the services and design of B5 to ensure integration and appropriate linkages. **Figure 12** outlines the CH Campus.

Figure 12: Canberra Hospital Campus Map



North Canberra Hospital

iCBR is currently working to scope and plan the delivery of a new hospital in the northside of Canberra. The new hospital will replace ageing infrastructure, improving resilience and capacity of the Territory-wide health system. It will also bring together a range of contemporary hospital services, holistic consumer-centred care and flexible models of care to meet the growing and changing needs of the community now and into the future. CHS will operate the new NH, providing an opportunity for the Territory to plan and deliver a public hospital network under one operator.

Planning work relating to the service distribution for the new NH is currently being undertaken. To date, planning work shows minimal impact on the redevelopment of the PCS Building. To ensure successful planning of and delivery of healthcare services, synergy between the project teams of the CHMPP2 and NH will be leveraged during the next phase of detailed planning and development (to follow this business case). This will ensure that both projects efficiently and effectively cater to the Territory-wide health outcomes and priorities to increase accessibility.

4.4 Consideration of Commonwealth Government policies and priorities

The Commonwealth Government has national leadership and coordination responsibilities for the health system, overseeing a suite of initiatives, such as Medicare, Pharmaceutical Benefits Scheme (PBS), the Disability Insurance Scheme (NDIS), aged care subsidies and private health insurance rebates.⁶⁵

In May 2020, the Commonwealth contributed \$133.6 billion in funding to states and territories for public hospital services. Through the Addendum to the National Health Reform Agreement (NHRA),⁶⁶ the Commonwealth and jurisdictions agreed to four strategic priorities to guide the health system reform:

- Improving efficiency and ensuring financial sustainability;
- Delivering safe, high-quality care in the right place at the right time;
- Prioritising prevention and helping people manage their health across their lifetime; and
- Driving best practice and performance using data and research.

Whilst CHMPP2 is not seeking federal funding, the project is expected to contribute to the national healthcare reform. CHMPP2 is also aligned to other Commonwealth healthcare policies and strategies including the National Health and Climate Strategy, National Digital Health Strategy and National Preventive Health Strategy.

5. Options Analysis

Key messages

- The preferred solution – Option 1 (Base Case/Do Minimum) – ‘Staged’ – identified for the CHMPP2 Project is the result of an options identification and evaluation process underpinned by the ILM described in Chapter 3 – Needs Analysis. Selection of Option 2 as the preferred solution achieves the following outcomes:
 - Confirms Governments preferred staging and delivery option (1); and
 - Provides the required planning and development funding needed to progress the preferred delivery option (1) to a 50% PSP (Preliminary Sketch Plan) level.
- Three options, aligned to the needs of the CHMPP2 project, were assessed using a Multi-Criteria Analysis (MCA) structured around economic and social (wellbeing); financial and implementation evaluation criteria.

The options outlined in this chapter include the total estimated investment (TEI) required to deliver all stages in full. However, the TEI includes both indicative and non-indicative sums based on the staging strategy to deliver each option. For the preferred option identified in this Business Case, (1) the non-indicative amount would be committed and released by government to progress the planning and development of the preferred option, and (2) the indicative amounts would be committed and released at a later date – subject to satisfying any additional planning and development requirements in line with ACT Treasury requirements.

Option 1 (Base Case/Do Minimum) – ‘Staged’ – Build each PCS stage independently

- Option 1 delivers a like-for-like replacement and upgrade of several existing buildings in line with current standards and the characteristics of a contemporary and efficient facility. The buildings will be upgraded to comply with current standards (i.e., AS/NZS 2982-2010 and AS/NZS 2243.3-2022 and associated series) and AusHFG guidelines. The buildings include:
- A new Pathology and Clinical Services (PCS) Building replacing the existing Buildings 6, 23 and 7. A new Inpatient and Outpatient Building replacing the existing Building 10.
- Option 1 will (1) develop the PCS Building as two discrete buildings delivered in two sequential stages, and (2) deliver the new Inpatient and Outpatient Services Building in a single stage. Option 1 is sequenced as follows:
 - Phase 0: Planning and Development Funding – committing and releasing the minimum funding needed to (1) progress the CHMPP2 project to a 50% PSP level, (2) undertake a Territory-wide mental health feasibility study (including alcohol and other drugs (AOD)), (3) undertake a feasibility study for the demolition and redevelopment of Canberra Hospital Woden Valley Early Childhood Centre,
 - Phase 1: PCS Stage 1 – delivering 18,966m² GBA. This will involve the development of a new building on the southern end of the site to accommodate a reduced Pathology Unit (akin to a ‘like-for-like replacement and upgrade’ of the current Pathology Unit in the existing B10), Mortuary (as scoped in CHMPP2), Research (as scoped in CHMPP2) and administrative areas. The new facility will be compliant with current standards (i.e., AS/NZS 2982-2010 and AS/NZS 2243.3-2022 and associated series) and AusHFG guidelines.

- Phase 2: New Inpatient and Outpatient Services Building – delivering 60,122m² GBA [REDACTED]. This will involve the development of a new building on the existing B10 site to accommodate a range of inpatient, outpatient and diagnostic services as well as some administrative functions. This includes an additional two floors of inpatient wards (enabling an additional five 28-bed wards) over and above the like-for-like replacement of existing capacity. This will ensure that the building is equipped to meet projected demand for acute care services to 2041 levels. The proposed building includes 11,100m² for three levels of basement carparking.
- Phase 3: PCS Stage 2 – delivering 14,370m² GBA [REDACTED]. This will involve the horizontal expansion of the PCS Stage 1 building (towards the north) to accommodate the remainder of functions identified in the Schedule of Accommodation (SOA). This includes the expansion of Pathology Laboratory areas to meet 2041 capacity requirements.
- Option 1 presents the lowest initial capital investment of each of the options to address the like-for-like facility needs and the front of the pressing demand curve through 2030. It allows staging of the investment, enabling government to spread the cost of the total project over an extended program of work. Staging does not reduce the overall funding requirement for the full program of works and will result in a comparably higher total project end cost due to increased escalation and deliver costs associated with remobilisation. While government continues to operate in a capital constrained environment, Option 1 provides a pathway for staging the investment and reducing the initial funding requirement.
- While Option 1 presents additional deliverability challenges – including the risk of disruption to business continuity – the staging solution serves a dual purpose of meeting short-term demand, whilst future proofing the campus for longer-term growth. At the time of writing, it is assumed that (1) any disruption can be minimised and mitigated, and (2) the risk of Pathology incurring a double decant or significant reconfiguration during or following the delivery of Stage 2 can be avoided. *Note: the complete assessment of their level of impact and likelihood, as well as development of appropriate mitigation measures – are subject to further work.*
- Option 1 has been identified as the preferred solution for CHMPP2, staging the initial funding requirement to enable Government to commence the project sooner.

Option 2 – ‘Full Shell + Staged Fit-Out’ – Build the entire PCS building as cold shell and fit-out Stage 1 only and defer Stage 2 fit-out to a later stage [REDACTED]

- Option 2 comprises the same scope as Option 1 but is delivered via an alternate staging strategy. Option 2 will (1) develop the full PCS Building as cold shell and fit-out in two sequential stages, and (2) deliver the new Inpatient and Outpatient Services Building in a single stage. Option 2 is sequenced as follows:
 - Phase 0: Planning and Development Funding – committing and releasing the minimum funding needed to (1) progress the CHMPP2 project to a 50% PSP level, (2) undertake a Territory-wide mental health feasibility study (including alcohol and other drugs (AOD)), (3) undertake a feasibility study for the demolition and redevelopment of the Canberra Hospital Woden Valley Early Childhood Centre, and (4) enable CHS to develop new wayfinding systems in the immediate term [REDACTED]

- Phase 1: PCS Stage 1 – delivering 33,336m² GBA of cold shell, of which 18,966m² will be fit-out [REDACTED]. The areas accommodated in Stage 1 are the same as in Option 1. A remaining 13,820m² of cold shell space will be fit-out in PCS Stage 2.
- Phase 2: New Inpatient and Outpatient Services Building – delivering 60,122m² GBA [REDACTED]. The areas accommodated are the same as in Option 1.
- Phase 3: PCS Stage 2 – delivering 13,820m² of fit-out [REDACTED]. This will involve the fit-out of the remaining cold shell space delivered in Stage 1. This will accommodate the remainder of functions identified in the Schedule of Accommodation (SOA). This includes the expansion of Pathology Laboratory areas to meet 2041 capacity requirements.
- Option 2 presents a higher initial capital investment compared to Option 1 but realises a lower total project end cost due to a shorter program – and therefore lower escalation costs. The advantage of Option 2 is the delivery of additional cold shell in Stage 1 which will enable a faster, simpler and lower cost expansion in a future Stage 2, while also minimising the risk of disruption to existing operations. However, the additional upfront investment would be subject to budgetary constraints and its selection as the preferred option would likely increase the risk of further delivery delays.

Option 3 – ‘Single Stage’ – Build the entire PCS building in a single stage [REDACTED]

- Option 3 comprises the same scope as Option 1 and 2 but is delivered via an alternate staging strategy. Option 3 will (1) develop the full PCS Building in a single stage, and (2) deliver the new Inpatient and Outpatient Services Building in a single stage. Option 3 is sequenced as follows:
 - Phase 0: Planning and Development Funding – committing and releasing the minimum funding needed to (1) progress the CHMPP2 project to a 50% PSP level, (2) undertake a Territory-wide mental health feasibility study (including alcohol and other drugs (AOD)), (3) undertake a feasibility study for the demolition and redevelopment of the Canberra Hospital Woden Valley Early Childhood Centre, and (4) enable CHS to develop new wayfinding systems in the immediate term [REDACTED].
 - Phase 1: PCS Stage 1 – delivering 33,336m² GBA [REDACTED]. This will provide accommodation for all Departments and functions in the Schedule of Accommodation (SOA).
 - Phase 2: New Inpatient and Outpatient Services Building – delivering 60,122m² GBA [REDACTED]. The areas accommodated are the same as in Option 1.
- Option 3 presents the highest initial capital investment compared to Option 1 and 2 but realises the lowest total project end cost due to a shorter and more efficient program – and therefore lower escalation costs. The advantage of Option 3 is it avoids a more complex future expansion, and therefore, the operational and deliverability risks relevant to Options 1 and 2. However, the higher initial capital investment would be subject to budgetary constraints and its selection as the preferred option would likely increase the risk of further delivery delays.