- [redacted]

[redacted]

[redacted]

[redacted]

5.3.1 Project options

The integrated project team has explored options aligned with the business case requirements, the CSP and outcomes of the scope refinement to reach a preferred option which is summarised in the below.

Options' Scope Development

For each option, the project team considered the following:

- New Building: clinical and non-clinical scope (and supporting infrastructure) inclusions.
- Existing Assets: assets retained for continued service provision (extract from Base Case).
- Staging and timing (New Building and Existing Buildings).
- Dependencies (e.g. enabling works, planning approvals).
- Service Delivery Model: supply-demand analysis to confirm possible service gaps.
- CHS networking (NCH CSP and ACT HSP) (i.e. networked service provision)

The shortlisted scope prioritisation options are summarised in the table below:

[37] Refer to A.003 Strategic Functional Design Brief within Appendix A - Investment Logic supporting documentation

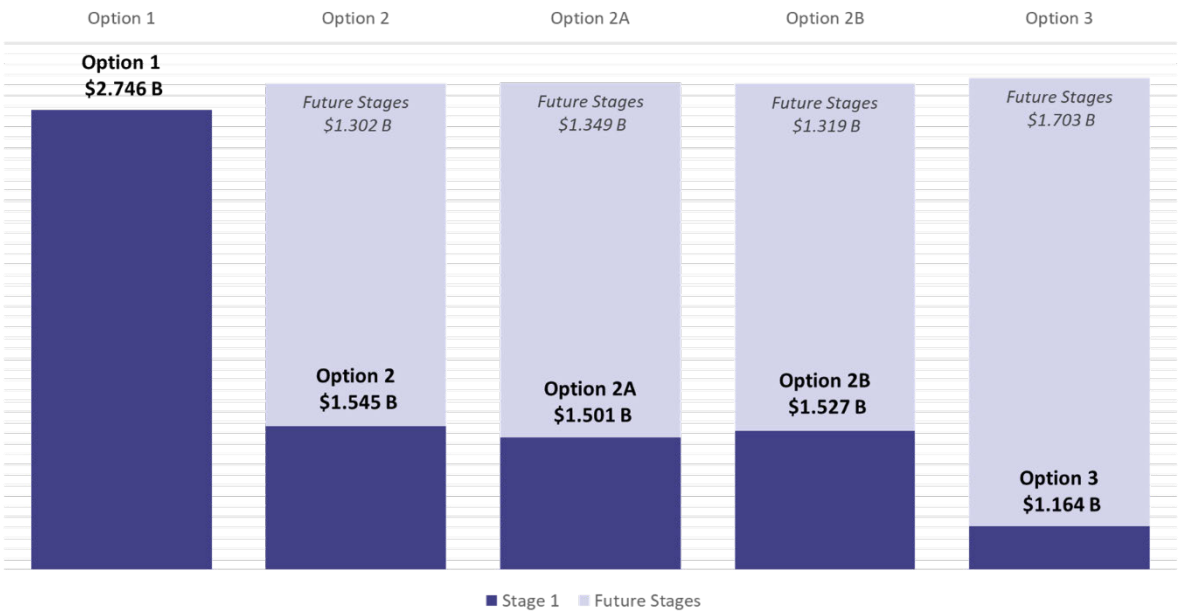
Table 12: Main Works Scope Short List Options

Option	Delivered Scope	Cost
Option 1 – Single Stage delivery of the full CSP	An **82,000m²** new building	**Total - $2.746B** Minor additional costs for retained assets
Option 2 -Optimised building form with a current stage 1 and a future stage to achieve the full CSP. Vacate existing Marian, Xavier and ICU buildings.	A **56,800m²** new building in Stage 1 with approximately 30,000m² in a future stage. Prioritised services include: • Emergency Department • Medical Imaging • Theatre complex • ICU • Maternity and Birth Centre • Main entry and front of house • Loading dock and logistics • Pharmacy and pathology • Clinical sterilising • Mortuary • Kitchen • Biomedical • Security and operational flow	**Stage 1 – Circa $1.7B*** (at Jan 2026 for Feb 2026 CabSub advice) Development of the project and refinement of the budget estimate included: - Design development and optimisation - Budget rates and provisions review - Cost risk and contingency assessment - Value and scope management Current estimate following value management - **$1.545B** Future stage estimate - $1.302B Additional planned replacement costs for retained assets $102.54M (nominal) over 30 years.
Option 2A - Further optimised building form to enable incremental fit-out and vacate existing Marian, Xavier and ICU buildings.	A **53,617m²** new building with 1,700m² shelled space to reduce initial capital outlay. Same prioritised services to option 2.	**Stage 1 - $1.501B** Future stage estimate - $1.349B Additional planned replacement costs for retained assets $102.54M (nominal) over 30 years.
Option 2B (Recommended Option) - Further optimised building form to enable incremental fit-out and vacate existing Marian, Xavier and ICU buildings.	A **53,617m²** new building with shelled areas of new facilities utilised to provide medium term accommodation for administration and clinical support where required. Further refinement through design to determine specific uses of unallocated spaces. Same prioritised services to option 2.	**Stage 1 - $1.527B** Future stage estimate - $1.319B Additional planned replacement costs for retained assets $102.54M (nominal) over 30 years.
Option 3 - A value managed scope (shell-spaces) with reliance on future stage fit out of shell space and remaining scope. Option 3 is a sub-set of Option 2 design with substantial unfitted out space however provides the envelop in the right location to unlock the campus long term.	A **46,500m²** new building with 11,300m² as cold shell for future projects to fit out Theatres, Maternity and two surgical IPU's. Heavy reliance on all existing ageing assets. Same prioritised services as option 2 excluding: • ICU • 4 x medical IPU's • Outpatients	**Stage 1 - $1.164B** Future stage estimate - $1.703B Additional planned replacement costs for retained assets $585.92M (nominal) over 30 years.

* The early and enabling works scope is consistent across all main works scope options. Option development post initial cost estimates etc. Noting ACT Government direction to consider initial capital investment limited to $1.164B the do -nothing option has not been re-prosecuted.

The figure below depicts the difference in initial capital investment in each option, and the subsequent investment level estimated for future stages.

Figure 25: Estimated cost across option stages (FY2025$)



The endorsed infrastructure requirements table, summarising the clinical points of care to be achieved to meet future service demand, to be delivered by the preferred option is outlined in the infrastructure table[38]. The table identifies department spaces to be delivered as part of the main works, to be shelled for future fit out, and to be retained in existing buildings. The services identified for future stages of development are also highlighted.

A summarised version of this table outlining key services to be delivered across each of the options is in the below figure.

[38] Refer to D.009 Infrastructure Table within Appendix D - Project Brief for further detail

Figure 26: Clinical Scope (Points of Care) Comparison Between Options.

Service	*Base Case (Existing Assets)*	*2041 CSP*	*Option 1*	*Option 2*	*Option 2a*	*Option 2b*	*Option 3*
Acute Overnight Beds	156	224	2041+ Delivered	2031+ Delivered	2031+ Delivered	2031+ Delivered	Existing Asset & New Cold Shell
Intensive Care	10	14	2041 Delivered	2041 Delivered	2041 Delivered	2041 Delivered	Existing Asset
Birthing Rooms (Birthing Suites and Birth Centre Suites)	8	7	2041 Delivered	2041 Delivered	2041 Delivered	2041 Delivered	Existing Asset & New Cold Shell
Maternity Beds	27	22	2041 Delivered	2041 Delivered	2041 Delivered	2041 Delivered	Existing Asset & New Cold Shell
Maternity Same-Day	7	Support Service	Service Delivered	Service Delivered	Service Delivered	Service Delivered	Existing Asset & New Cold Shell
Maternity Outpatient (Consult Rooms)	Not Provided	Support Service	Service Delivered	Service Delivered	Service Delivered	Service Delivered	New Cold Shell
Maternity Outpatient (Birth Centre Consult Rooms)	Not Provided	Support Service	Service Delivered	Service Delivered	Service Delivered	Service Delivered	New Cold Shell
Neonatal Services	14	11	2041 Delivered	2041 Delivered	2041 Delivered	2041 Delivered	Existing Asset & New Cold Shell
Operating Theatre Suites	7	10	2041 Delivered	2041 Delivered	2031 Delivered & New Cold Shell	2031 Delivered & New Cold Shell	Existing Asset & New Cold Shell
Endoscopy Suites	2	3	2041 Delivered	2041 Delivered	2031 Delivered & New Cold Shell	2031 Delivered & New Cold Shell	Existing Asset
Procedure Rooms (Theatres & Endoscopy)	Not Provided	2	2041 Delivered	2041 Delivered	2041 Delivered	2041 Delivered	Not Delivered
Pre-Operative Hold (DOSA Hold) (Theatres & Endoscopy)	Not Provided	Support Service	2041 Delivered	2041 Delivered	2041 Delivered	2041 Delivered	Not Delivered
Recovery Spaces (Theatres & Endoscopy)	30	59	2031+ Delivered	2031+ Delivered	2041 Delivered	2041 Delivered	Existing Asset & New Cold Shell
Emergency Department (ED)	43	64	2041 Delivered	2041 Delivered	2031+ Delivered	2041 Delivered	2031+ Delivered
ED Short Stay Unit Paediatric	Not Provided	10	Included in ED Spaces	Included in ED Spaces	Included in ED Spaces	Included in ED Spaces	Included in ED Spaces
ED Short Stay Unit Adult	15	18	2031+ Delivered & New Cold Shell	2031+ Delivered & New Cold Shell	2031+ Delivered & New Cold Shell	2041 Delivered	2031+ Delivered & New Cold Shell
ED Behavioural Assessment	Not Provided	Support Service	Service Delivered	Service Delivered	Service Delivered	Service Delivered	Service Delivered
Outpatients	19	72	2041 Delivered	2041 Delivered	Less than 2031 Delivered	2041 Delivered	Less than 2031 Delivered
Hospital in the Home	16	27	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)
Medical Same Day Beds	Not Provided	39	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)	CHS to address (MoC / Offsite)
Surgical Same Day Beds	Not Provided	28	Included in Recovery Spaces	Included in Recovery Spaces	Included in Recovery Spaces	Included in Recovery Spaces	Included in Recovery Spaces
Adult Psychiatry Mental Health Acute	42	57	2041 Delivered	Future Stage	Future Stage	Future Stage	Future Stage
Mental Health Short Stay	Not Provided	Support Service	Service Delivered	Future Stage	Future Stage	Future Stage	Future Stage
Sub-Acute Adult Beds	Not Provided	45	2041 Delivered	Future Stage	Future Stage	Future Stage	Future Stage
Sub-Acute Palliative Care Beds (Clare Holland House)	5	5	2041 Delivered	Future Stage	Future Stage	Future Stage	Future Stage
Cath Labs	Not Provided	2	2041 Delivered	Future Stage	Future Stage	Future Stage	Future Stage

Option 1 – Single Stage Investment

Option 1 meets projected service demand to 2041, alongside clinical support, facility support and other services and fully enables Northside Hospital to perform its role within the Territory health system. Option 1 delivers the CSP 2041 projections in a single stage new build facility. Option 1 was the basis for Functional Briefing with the PUGs. Throughout the facility planning process, several PoC figures were adjusted to:

- Align with staffing ratios and patient flows.
  - Reduce provision in a less active department to meet demand elsewhere at the direction of CHS i.e. Paediatric ED and Paediatric Short Stay in lieu of Paediatric IPU.
  - Included functional departments which were not projected on the CSP i.e. Medical Imaging, Transit Lounge.

Figure 27: Single Stage Infrastructure View

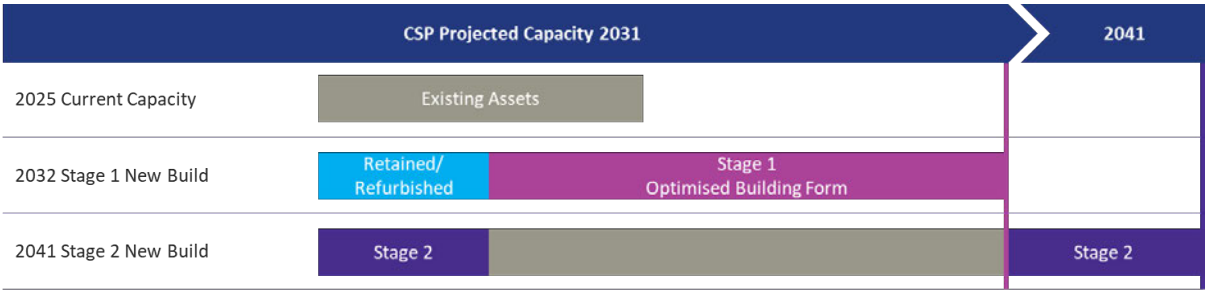
Identified issues with this approach to the NHP include:

- Over investment in high-cost health assets which will initially be underutilised and may not provide the anticipated benefits until much later in the asset's lifecycle.
- Higher recurrent maintenance costs relative to the cost-of-service delivery due to oversizing the asset in the early years of operation.
- Increased impact on the site through a larger initial stage of investment, which may require staging to maintain operations regardless of investment. Comparison with other options this impact is partially offset by avoiding future developments on the campus for some time.

Option 2, 2A, 2B - Optimised Scope around base design solution

Option 2, 2A and 2B deliver prioritised services, to varying projection horizons in the Clinical Service Plan, alongside select clinical support, facility support and other services, while retaining some existing infrastructure for clinical and non-clinical services. Option 2 and sub options 2A and 2B propose an optimised building form as Stage 1, with a future stage to deliver scope to achieve the full CSP planning horizon to 2041.

Figure 28: Infrastructure staging and alignment with CSP projections Option 2



Option 3 – informed by originally provisioned budget (not recommended).

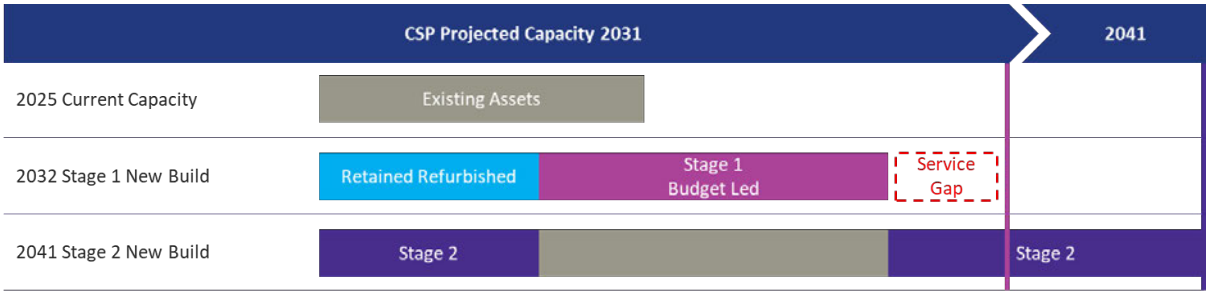
The Budget-led option was developed based on the Option 2 design basis to demonstrate how prioritised services, less than or equal to the projected service demand to 2031, alongside select clinical support, facility support and other services, while retaining extensive existing infrastructure for clinical and non-clinical services can be delivered within an equivalent building chassis.

The base building design and approach aligns to the intent of the NCH site plan for the campus and would provide the opportunity for incremental investment in fit-out of areas nominated as shell as funding becomes available.

The demonstrable issues with this option which lead to it not being recommended are:

- Significant reliance on the existing ageing assets
- disjointed service models distributed across the combination of new and retained facilities
- Increased clinical risk of patient transfer between services
- Increased operational costs associated with maintaining existing assets, and dispersed workforce
- Reduced efficiency and connection between clinical and non-clinical teams between service reducing efficiency and responsiveness
- Investment in substantial construction costs to establish the building envelop and nominated shell space with limited operational and non-financial benefits
- Uncertainty around substantial additional investment required to fit-out the identified shell may not align to the growth in demand for services
- Disruption to services through the subsequent fit-out of the included cold-shell spaces
- Community expectations and loss of confidence in Government commitment as objectives for the health service are not met even with the very significant $1B+ capital investment.

Figure 29: Infrastructure staging and alignment with CSP projections Option 3



5.3.2 Treatment of Existing Assets

The treatment of existing assets varies between the options as reliance on existing areas increase. As shown in Table 12 (below) the lowest-cost scenarios reflect minimal retained-asset footprints, indicating only modest reuse potential and a small scale of existing infrastructure being carried forward.

Table 13: Cost comparison of retained assets between options.

	Existing Asset Area (m^2)	Total Planned Replacement Costs for Existing Assets Retained (nominal, over 30-years analysis)
Base Case	40,914	$886.24M
Option 1	2,890	$62.96M
Option 2	4,707	$102.54M
Option 2A	4,707	$102.54M
Option 2B	4,707	$102.54M
Option 3	27,762	$585.92M

Source: iCBR Project Team and Chapter 9 Financial Analysis.

Figure 28 (below) highlights the specific services which are to be retained, demolished, decommissioned, decanted and refurbished existing assets within each proposed option.

Figure 30: Treatment of existing assets across all options

	Base Case	*1*	*2*	*2a*	*2b*	*3*
B01 – Xavier	Retained	Demolished	Decanted	Decanted	Decanted	Mostly Retain
B02 – ICU/CCU	Retained	Demolished	Decanted	Decanted	Decanted	Retained
B03 – Marian	Retained	Demolished	Decanted	Decanted	Decanted	Mostly Retain
B04 – Keaney	Retained	Retained	Retained	Retained	Retained	Retained
B05 – O'Shannassy	Retained	Demolished	Retained	Retained	Retained	Retained
B06 – Lewisham	Retained	Demolished	Demolished	Demolished	Demolished	Demolished
B07 – Engineering	Retained	Demolished	Demolished	Demolished	Demolished	Demolished
B08, 09 – Residence A&B	Retained	Demolished	Demolished	Demolished	Demolished	Demolished
B11 – BRECC	Retained	Demolished	Demolished	Demolished	Demolished	Demolished
B12, 13, 17, 19 – CAMHS	Retained	Demolished	Demolished	Demolished	Demolished	Demolished
B14 – Secure Unit (Gawanggal)	Retained	Demolished	Refurbished	Refurbished	Refurbished	Refurbished
B18 – AOD (Arcadia)	Retained	Demolished	Demolished	Demolished	Demolished	Demolished

Option 2,2A and 2B enable Xavier, Marian and ICU building to be completely decanted and decommissioned. Demolition is out of scope, to be completed in a future stage. The majority of campus clinical and non-clinical functions are relocated into new infrastructure, enabling operational efficiencies and improved patient safety, by avoiding split services.

Retained original assets include only Keaney building (mental health) and O'Shannassy (administration), remaining operational after go-live.

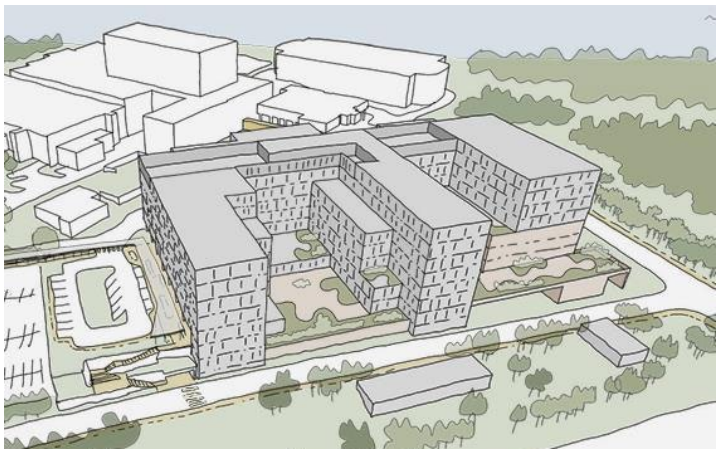
The existing secure unit on the Northern Block will be refurbished as part of enabling works to accommodate outpatient services and will be operated beyond commissioning of the new build.

5.3.3 Recommended Project option

Investment Prioritisation Workshops and meetings were held with senior stakeholders. The outputs from these workshops were endorsed through the PCG and Advisory Board with a clear direction to

pursue Option 2 in Schematic Design and the recommended Option 2B specific scope for the purpose of the Business Case and to further develop in detailed design / ECI phase.

Figure 31: Artist Impression - Aerial View from North-West *Concept Design Report*



The preferred Project option offers an investment solution that enables efficient vacation of the Marian, Xavier and ICU buildings while meeting current and future infrastructure capacity needs for prioritised services. Investing at the correct scale avoids the continued reliance on end-of-life assets or potential under-supply of services which can lead to capacity and functionality issues. This approach also mitigates the risk associated with over-supply of services, which can lead to unnecessary capital and operational expenditure.

Option 2B is the preferred scope option recommended for investment.

- This option delivers the full-service profile of the Northside Hospital CSP in two distinct development stages. This includes fit-out to beyond 2031 capacity and up to 2041 capacity for some services to optimise recurrent costs and utilisation on commissioning.
- The proposed Stage 1 investment scope and design arrangement of clinical and non-clinical services in a contemporary layout will enable efficient logistical, clinical and public flow of urgent and non-urgent movements through the facility.
- This option delivers the CHS requisite scope priorities of the CSP with the base building capacity and service configuration sized to meet the projected service demand in 2041. As described in figure 12 priority areas like endoscopy and operating theatres include cold shell structure to enable future fit out to meet CSP demand. Fit-out of these spaces will rely on additional funding, is feasible with minimal disruption to the clinical operations of the services, and can be managed safely.
- The investment option prioritises relocation from two adjacent aged assets on the Campus (referred to as the Marian and Xavier buildings) to enable readiness for full decommissioning with demolition of these facilities out of scope to be completed in a future stage.

- The Change Management Strategy[39] has been drafted to outline the general approach to transitioning from the current state to the new facilities and future service profile. Key benefits have been outlined in the strategy and summarised below.

[39] Refer to D.006 Change Management Strategy within Appendix D - Project Brief for further detail

5.3.3.1 Benefit Indicators across Options

Table 14: Options Benefits Assessment

Benefit Indicators	Option Alignment to Benefit Indicators					
	Base Case	1	2	2A	2B	3
Access *State-of-the-art facilities that enable the delivery of contemporary models of care.*	Low	High	High	High	High	Medium
Accountability *Patient focussed care delivered through co-ordinated systems and processes that enable safe environments.*	Low	High	High	High	High	Low
Sustainability *Cost efficient delivery of services that minimise waste and maximise workforce outputs.*	Low	High	Medium	High	High	Low
Delivery and operating risks *Infrastructure capacity aligned to meet service demand that can be managed safely and effectively managed.*	Low	Medium	High	Medium	High	Low

Option 2B has the highest level of alignment to the project benefit indicators. The preferred option provides fit-for-purpose environments to enable the implementation of improved and contemporary models of care which are supported by new technologies that improve patient safety and asset utilisation and performance. The opportunity to reduce the operating footprint at NCH through Option 2B provides a cost-efficient asset maintenance profile which enables a controlled investment in clinical and support services aligned to a staged recurrent funding profile for expanded services profile for expanded services.

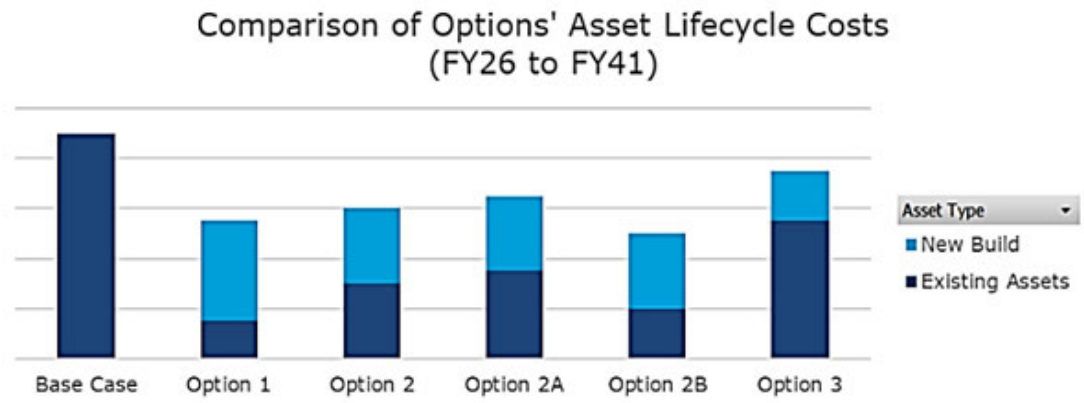
5.3.4 Value Management

To support a robust comparison of the Base Case and scope options, an initial assessment of lifecycle cost implications has been undertaken. This analysis focuses on the relative cost outcomes associated with retaining, maintaining, or replacing existing assets, recognising that greater reliance on aging infrastructure typically results in higher ongoing asset management and Repair Maintenance and Replacement (RMR) expenditure. The following figures illustrate the current working assumptions for total and annualised lifecycle costs over FY2026–27 to FY2041, highlighting how differing asset-retention strategies drive variations in long-term cost profiles across the Base Case and Options.

Lifecycle Cost Considerations

The below figure provides a representational view of the current assumptions regarding relative values of Lifecycle Costs. They assume that retaining greater area of Existing Assets results in higher Lifecycle Costs.

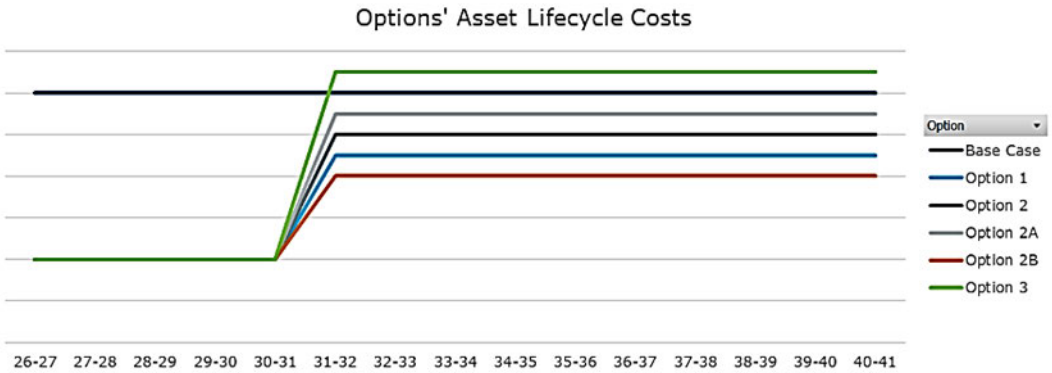
Figure 32: Base Case (risk-based approach) and Options comparison of Asset Lifecycle Costs – totals over FY2026-27 to 2041.



Source: iCBR Project Team

The Project options assume a minimal asset maintenance cost for existing assets during the construction phase of the project. That is, the scope options that propose decant and demolition of Existing Assets will not invest the same level of RMR as compared to the Base Case. Below shows the expected outcomes of the cash flowed Lifecycle Costs for the Base Case and Options over the 15 years to 2041.

Figure 33: Base Case and Options comparison of Asset Lifecycle Costs – annualised over FY2026-27 to 2041



Source: iCBR Project Team

5.4 Staging Analysis

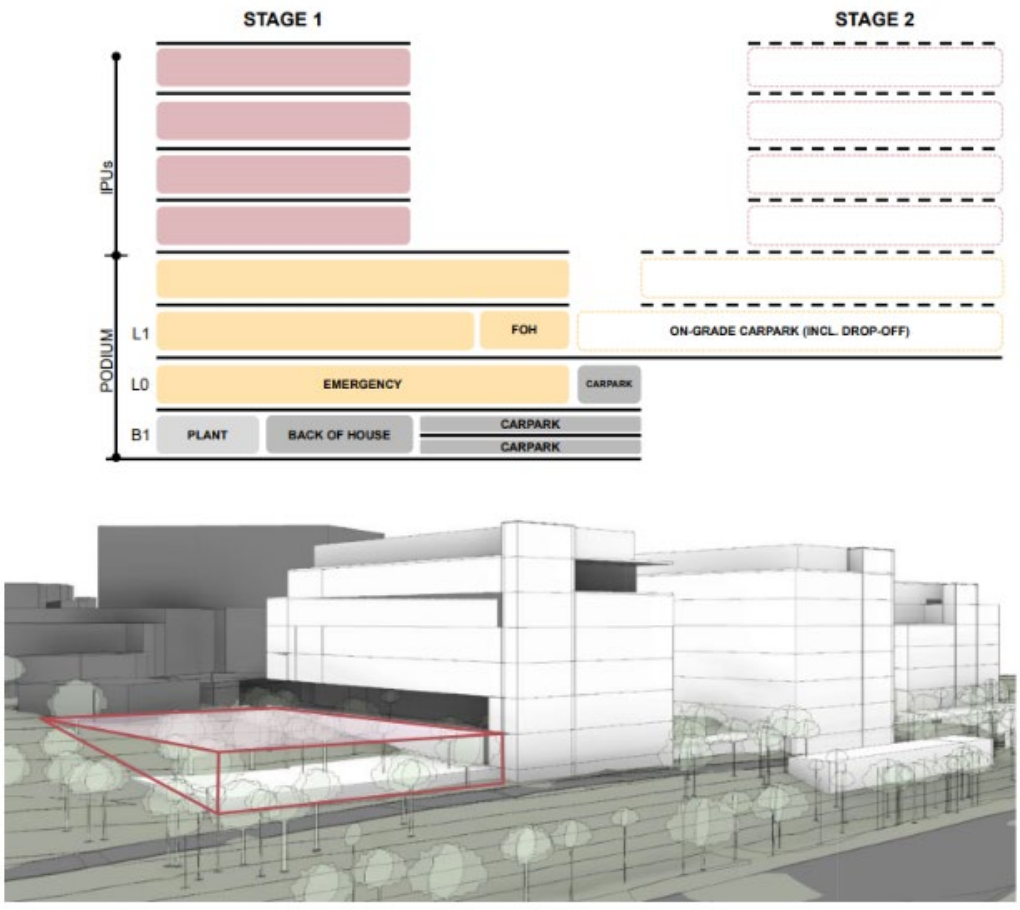
5.4.1 Future Stage

It is expected that the Stage 1 Clinical Building will be able to expand in future to respond to the 2041 planning horizon and address emerging service needs and those services which will remain in existing infrastructure under the recommended scope option (primarily inpatient mental health services in the Kearney Building) or not addressed until future stages (e.g. adult sub-acute inpatient capacity).

The design enables a future stage to be built over the on-grade carpark to the north of the site depicted in the image below, with replacement parking possible in the footprint of vacated and decommissioned existing buildings. An alternative whole of campus master plan may identify an alternative development approach and will be informed by emerging priorities beyond the timeframe and planning horizon for this project.

Stage 1 design of the new build in each option considers the seamless integration of the future stage. Further detailed design work is required through Schematic Design on the preferred option, occurring in parallel to the submission and review of this Business Case, to design a solution which minimises future moves and rework.

Figure 34: Indicative connections to Future Stage *Concept Design Report*



At the completion of Stage 1 for each option there are varying amounts of existing assets which are vacated that provide opportunity for demolition and repurposing the area for additional future developments. The preferred option includes the decant of the Xavier, Marian and ICU buildings which provides immediate opportunity for demolition of these existing assets for the efficient commencement of a future stage.

5.4.2 Preferred Option Staging

A limited number of services in the CSP are deferred to the future stage development, which includes services remaining in the O'Shannassy and Keaney buildings.

Figure 35: Stage 1 Site Plan Image *Concept Design Report*

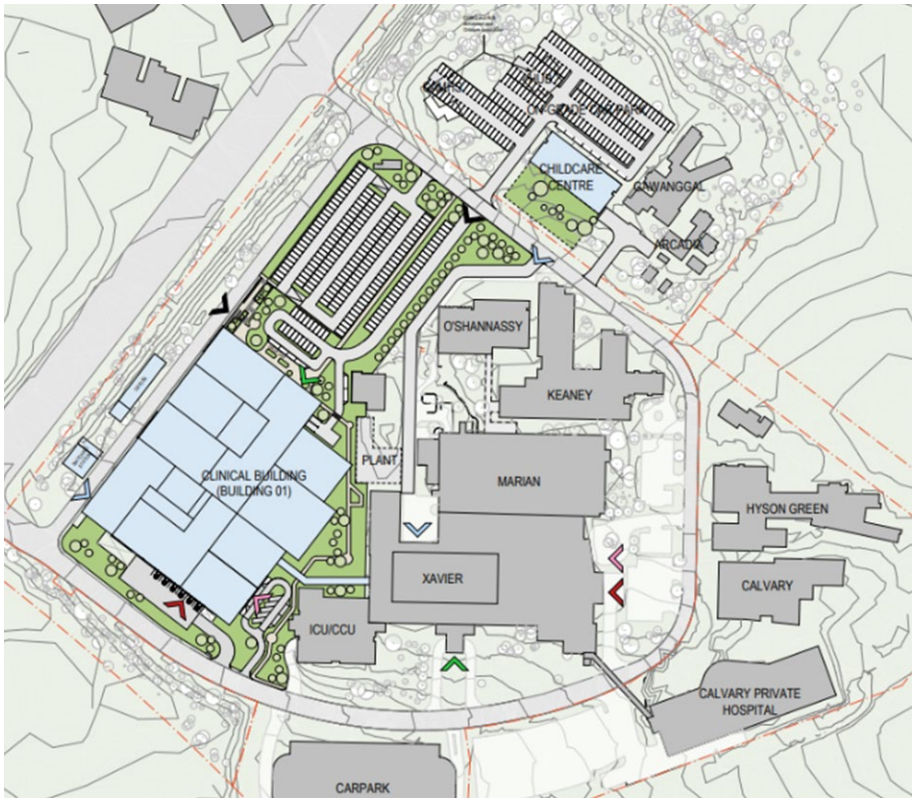


Figure 36: Future Stage Site Plan *Concept Design Report*