


ACT
Government

Project Business Case – Canberra Hospital Expansion Interim on-grade parking

Project name:	Canberra Hospital Expansion - interim on-grade parking (capital to undertake works <\$10 million)
Tier:	3
Risk assessment (high/med/low):	Low
Total estimated project capital cost (Contingency, \$m, nominal):	\$7.089 million
Whole-of-life cashflow (Contingency, \$m, nominal):	n/a
Funding requested (\$m):	This business case is seeking \$7.089 million of capital funding across financial years 25/26 and 26/27 to fund capital works to deliver temporary car parking at the Canberra Hospital campus
Recommended delivery model:	Design and Construct
Sponsoring Agency:	Infrastructure Canberra (ICBR)
Sponsoring Minister:	Rachel Stephen-Smith MLA, Minister for Health
Contact officer:	Hayley Bell, Executive Group Manager, Delivery - Education, Health & Justice
Business Case advisors:	n/a

Infrastructure Canberra has separately submitted a Budget Business Case in relation to its financial sustainability seeking funding for its non-appropriated corporate costs. If that Budget Business Case is not approved the funding requested through this Business Case will need to increase by 3% to cover a corporate contribution to cover Infrastructure Canberra's non-appropriated corporate costs.

Sign-off

Sponsoring Agency:

Print Name
Signature

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Basis of authority for consideration in 2025-26 Budget: Canberra Hospital Expansion – Interim On-Grade Parking.

Brief Description: The proposal would fund an interim carparking solution for The Canberra Hospital Campus while a long-term, holistic campus mobility and access solution is explored at the Yamba Precinct Site. The proposal would provide a short-term, cost-effective carparking solution to accommodate the immediate demand for carparking at The Canberra Hospital Campus.

Wellbeing domain 1: Health

Wellbeing domain 2: Access and connectivity

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

- | | | | |
|--|--|---|--|
| ☒ Older Canberrans | ☒ Women and/or gender diverse people | ☒ LGBTIQA+ | ☒ 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: All

Existing projects or program(s): This project aligns and/or interacts with other projects that are currently in progress or in planning, including:

- Improving Canberra's Health Infrastructure – Implementation of the Canberra Hospital Master Plan – Transforming the Canberra Hospital Campus (Budget 23/24)

Year to cease funding or ongoing: Cease funding at completion of FY26/27.

Link to Budget consultation: No

Budget implications**Budget impacts summary (\$'000, nominal) ¹**

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Capital impacts						
Capital injection	\$2,835,763	\$4,253,644				\$7,089,408
Capital inflows						
Capital offset – existing provision						
New capital provision						
iCBR fee – resources received free of charge (if applicable) ²						
Net Capital						
Expense impacts						
Expenses						
Expenses – offsets						
Expenses – offsets – existing provision						
New expense provision						
Depreciation						
Revenue/Commonwealth contribution/savings impacts						
Revenue						
Commonwealth contribution						
Savings						
Net Expense						
Staffing impact						
Total additional FTEs (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	 20/2/25

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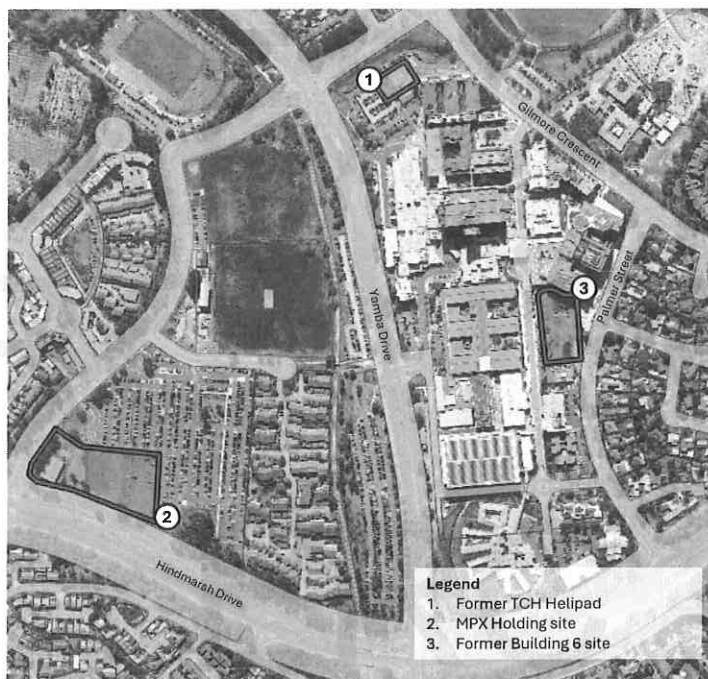
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Executive summary

What is this Business Case for?

This business case demonstrates the need for immediate capital investment of \$7.089 million for the construction of interim at grade carparking solutions at three sites for the Canberra Hospital campus (Figure 1). The requested funding will be used while a new carpark is explored at the Yamba Precinct Site through a Tier 1 Detailed Business Case.

Figure 1: Proposed interim car parking sites – The Canberra Hospital Campus and vicinity



Source: ACTmapi, 2025

Combined, the three sites have the potential to provide a range of 490-540 additional car parking spaces, at or close to the Canberra Hospital campus. The investment amount will be used to fund a range of minor capital works including site preparation, surface works, stormwater and drainage, bitumen seal, line markings and safety fixtures necessary to retrofit each site.

The request for the funding to deliver the project is being presented for consideration in the 2025-26 Budget. This business case is not seeking funding for any supplementary external roadworks that may be required.

What benefits will the investment provide?

Delivery of interim car parking at the three sites will provide several benefits including:

- Cost effective interim solutions to improve access to health services at Canberra Hospital.
- Increasing the amount of on-campus and/or adjacent car parking to meet immediate needs.
- Improving the reliability, security and convenience of car parking around the hospital precinct.
- Improving staff, patient and visitor efficiency at, and access to, the Canberra Hospital campus (for example through reduced travel time searching for car parks on-site and missed appointments and staff shift interruptions).

Why is this investment needed?

The ACT Government developed the Canberra Hospital Master Plan (CHMP) to guide the development of the campus over the next 20 years. A key challenge highlighted by the CHMP will be the increasing need for parking to support future demand. The Government has also committed to build more parking at the Canberra Hospital to make it easier for patients, visitors and staff³.

Analysis of current and projected demand for carparking against existing supply completed as part of the CHMP and the 2023 Yamba Precinct Car Park Detailed Business Case indicates a current shortfall of 520 permanent on-site spaces. This will be further exacerbated with the reversion of the 1,161 spaces currently available off-campus at the former Canberra Institute for Technology (CIT) site when and if this site is required for a new school. The current lease expires in 2028 and further consultation will occur as part of the multi-storey carpark Business Case at the Yamba precinct to confirm the latest date the site can be relied on for parking prior to development.

Note this Business Case is intended to address the immediate shortfall of on-site car parking and is not intended as a solution to address the further shortfall in car parking if the CIT site is unable to be used for car parking when the current agreement expires in 2028⁴. A longer-term solution to this is being addressed in a Tier 1 Detailed Business Case which is currently seeking project funding.

Consultation during the development of the CHMP identified the lack of car parking on-campus as the single most recurrent concern. Key concerns include lack of safe and convenient 24/7 parking options for staff, increasing public dissatisfaction, increasing application of fines for exceeding their parking stay, incidence of vandalism of Canberra Hospital staff vehicles and parking overflow onto neighbouring streets and properties.

How will this project be delivered?

The project is recommended to be delivered using a design and construct delivery model across two stages, reflecting the current levels of readiness across the three sites:

- **Stage 1:** Immediate delivery of Site 1 (Former Canberra Hospital Helipad), reflecting advanced design and minimal capital works requirements (~60-70 spaces).
- **Stage 2:** Subsequent delivery of Site 2 (Contractor Holding Site) and Site 3 (Former Building 6 Site) following more detailed design and yield estimates for both sites, as well as consultation and management of potential operational disruption during delivery of solution at former Building 6 site given its location on Palmer Street and proximity to the new critical services building (possible yield subject to detailed design ~430-480 spaces)

Project governance will be administered through Infrastructure Canberra (ICBR) and supported by the development of an overarching stakeholder engagement plan. ICBR will manage the procurement of contractors and project delivery and oversight will be supported through appropriate Project Working Groups and executive Steering Committee.

What are the next steps?

Following approval of this business case and requested funding amount, the next immediate steps will be to: finalise interim carpark design for Site 1 and commence procurement and approvals; and undertake detailed design for Sites 2 and 3 and confirm the car parking space yield for each site, commence procurements and approvals.

³ ACT Labour Policy Position Statement 2024

⁴ While the current license expires in 2028 and CIT have indicated the future development of the site for a school, CIT has not received a mandate or funding for redevelopment.

Introduction

Key messages

- The availability of safe, convenient on-campus car parking at Canberra Hospital has been identified as a critical issue to the future development of the Canberra Hospital.
- This business case requests capital investment of \$7.089 million for the construction of interim at grade carparking solutions at three sites on The Canberra Hospital campus.
- The requested funding will be used to retrofit each site for interim parking while a long-term, holistic campus mobility and access solution is explored at the Yamba Precinct Site through a Tier 1 Detailed Business Case.

Overview

This business case recommends the construction of interim car parking solutions across the Canberra Hospital campus and its vicinity.

Three separate sites have been identified for interim on campus car parking. These are:

1. **Site 1 – Former Canberra Hospital Helipad:** The former helipad site located on top of an existing car park in the north of the campus, bounded by Kitchener Street to the north and accessed via Gilmore Crescent and Yamba Drive. The estimated range of additional car parking spaces to be provided on this site is 60-70 spaces.
2. **Site 2 – Contractor Holding Site:** Currently vacant site adjacent to the temporary Canberra Hospital off-site car parking at CIT, accessed via Ainsworth Street. The estimated range of additional car parking spaces to be provided on this site is 300-330 spaces.
3. **Site 3 – Former Building 6 site:** Former Building 6 site on Canberra Hospital campus, bounded by Hospital Road and Palmer Street and accessed via Palmer Street. The estimated range of additional car parking spaces to be provided on this site is 130-140 spaces.

Project background and objectives

The ACT Government has recently completed the Canberra Hospital Master Plan (CHMP) to guide the development of the Canberra Hospital (Canberra Hospital) campus over the next 20 years. The CHMP acknowledges that a key challenge for the continued expansion of the Canberra Hospital will be the increasing need for on-campus parking to support future demand and growth. The Government has also committed to build more parking at the Canberra Hospital to make it easier for patients, visitors and staff to access health services⁵.

The project seeks to provide immediate additional on-campus car parking, whilst a more permanent mobility and access solution is developed for the Yamba Precinct. The vision and objectives of this project include:

- To provide cost effective, interim carparking solutions to improve access to the Canberra Hospital for consumers and visitors.
- To increase the amount of on-campus car parking to help meet immediate and short-term future on-site parking demand needs for staff and patients
- To improve the reliability, safety, security and convenience of car parking around the hospital precinct

⁵ ACT Labour Policy Position Statement 2024

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- To improve staff, patient and visitor efficiency at, and access to, the Canberra Hospital Campus

Current state

The Canberra Hospital currently has a total parking supply of 3,191 parking spaces across several sites throughout the campus. In addition, the Canberra Institute of Technology (CIT) site located west of the Canberra Hospital campus is also currently being leased by Canberra Health Services for use as a temporary extension of campus parking, providing an additional 1,161 parking spaces, bringing the total number of available parking spaces to 4,352.

CIT has indicated there are other uses earmarked for this site and have suggested that the site will not be available for parking indefinitely. The Canberra Hospital is currently in discussions with CIT to extend the lease until 2028+, which will continue to provide temporary parking options while further detailed work is completed for a more permanent access and mobility solution at the Yamba Precinct (see *Business Case for Project Development Funding - Yamba Precinct Tier 1 Business Case*).

Parking demand analysis completed as part of the CHMP estimated a current shortfall of 520 permanent on-site spaces (i.e. excluding temporary off-site parking at the CIT site). This analysis used a benchmarking approach to calculate parking demand based on current and projected number of overnight beds at the Canberra Hospital. It is important to note, that the previous analysis is yet to be validated with actual traffic counts and modelling to underpin the demand profile and documented shortfall. Additionally, the previous analysis does not factor in opportunities to shift a greater number of trips to public transport. Validation of previous demand calculations are proposed to be reviewed as an element of a future business case for the Yamba Precinct.

Further parking demand analysis was completed as part of the 2023 Yamba Precinct Car Park Detailed Business Case based on ACT Territory Plan Parking and Vehicular Access General Code. This analysis estimated a current shortfall of 686 permanent *on-site* spaces (i.e. excluding temporary *off-site* parking at the CIT site). This analysis also requires validation and potential additional traffic and transport modelling.

Needs Analysis

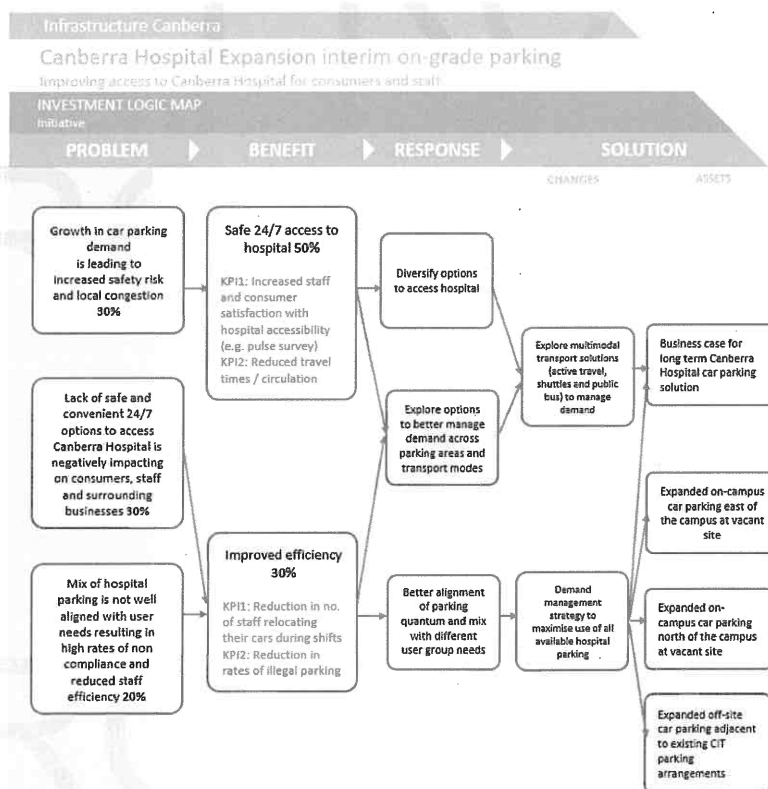
Key messages

- High-level benchmarking completed as part of the 2023 Yamba Precinct Car Parking Detailed Business Case identified a current shortfall of a 520 permanent on-site car parking spaces at The Canberra Hospital.
- Lack of safe and convenient on-campus parking options is increasing safety risks and local congestion and is negatively impacting patients, staff and surrounding businesses and residents.
- The absence of contemporary technologies in existing car parking assets makes it challenging to use existing on-campus car parking assets effectively.

Through Investment Logic Mapping (ILM), the following three problem statements were identified as investment drivers for interim on-grade car parking solutions for Canberra Hospital:

- Growth in car parking demand is leading to increased safety risk and local congestion
- Lack of safe and convenient 24/7 options to access Canberra Hospital is negatively impacting on consumers, staff and surrounding businesses and residents
- Mix of hospital parking is not well aligned with user needs resulting in high rates of non-compliance and reduced staff efficiency because staff (and patients/visitors) drive around campus searching for a parking space

Figure 3: Investment Logic Map



Source: iCBR (based on ILM completed as part of 2023 Yamba Precinct Car Park Business Case)

Problem (or opportunity) and strategic responses

Problem 1: Growth in car parking demand is leading to increased safety risk and local congestion

There is an ongoing increase of the number of staff, patients and visitors who are frequenting the Canberra Hospital. Parking demand studies completed as part of the CHMP and 2023 Yamba Precinct Detailed Business Case have indicated there is already a current shortfall of suitable on-campus parking. This is resulting in both staff and the general public parking in nearby streets. This increase in pedestrian traffic is causing additional stresses on local road networks that result in safety risks. The impacts of the increased pedestrian access are exacerbated by the rapidly growing population in the Woden Valley.

Current Car Parking Supply

The Canberra Hospital currently has a total parking supply of 3,191 on-campus parking spaces and temporary extension to Campus parking that brings the total number of available parking spaces to 4,352. Out of the total number of spaces available, approximately 75% are allocated to staff and 25% are allocated for public parking.

Future Demand

The Canberra Hospital CHMP Parking Demand Study (Parking and Traffic Consultants, 2021) provides an estimate of the future parking demand of Canberra Hospital based on car park space to overnight bed provision ratios, projected in line with known increases to overnight bed numbers across the life of the CHMP. This ratio was used to estimate the number of people (staff and public) who would access the Campus, and consequently, the parking demand that would be generated. A summary of the parking estimates is shown in the Table below. Note that this analysis is based on a benchmarked ratio and does not consider detailed traffic and transport modelling or opportunities to increase the number of trips taken by public transport.

Table 1: Parking demand estimates – CHMP (Parking and Traffic Consultants, 2021)

Parking Demand		
	Current (2021)	Future (2032)
Total staff/permit parking	2,826	3,522
Total public parking	885	1,101
Total no parking spaces needed	3,711	4,623

Source: Yamba Precinct Car Park Detailed Business Case, 2023

Sensitivity analysis was conducted as part of the 2023 the Yamba Precinct Car Park Detailed Business Case to check for compliance with local requirements. The parking demand analysis indicated that around 3,877 parking spaces are currently required based the Territory's Parking and Vehicular Access General Code parking rates. In 2032, the analysis suggests 4,760 parking spaces will be required based on estimates of the number of peak shift employees and the number of beds derived from the CHMP Parking Demand Study growth assumptions.

Table 2: Overview of Parking Requirements

	On-Campus Current	CIT Current	Total Car parking spaces
Total current no. parking spaces	3,191	1,161	4,352
Current parking spaces required (current)			3,711
Current <u>on-campus shortfall</u> of parking spaces (excl. CIT)			520
Future parking spaces required based on CHMP forecast demand in 2032			4,623
Future <u>total shortfall</u> of parking spaces (on-and off campus) in 2032			271

Source: Yamba Precinct Car Park Detailed Business Case, 2023

Problem 2: Lack of safe and convenient 24/7 options to access Canberra Hospital is negatively impacting on consumers, staff and surrounding businesses and residents

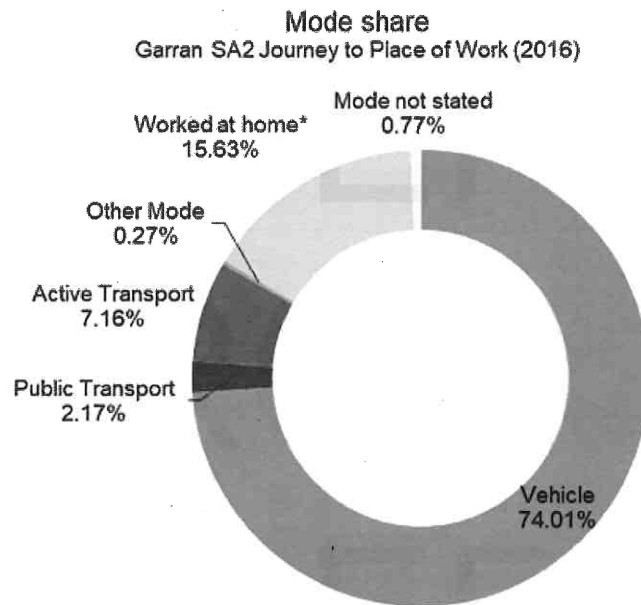
The hospital currently has a limited number of 24/7 parking options which are located safely near the hospital, requiring patients and staff to park in other off-campus locations. There has been anecdotal reports of patient and staff cars being vandalized in these areas.

Due to the safety and risk concerns, many of the hospital staff and visitors are parking in areas that are deemed to be safe however are often some distance from the campus. This in turn is delaying staff getting to work and patients getting to their appointments on time. During consultation on the CHMP, there were reports of drivers circling the Canberra Hospital and surrounding streets to find parking, sometimes missing their appointments altogether, or parking illegally and risking penalties such as fines or towing. Consultation also highlights impacts on local business, as car parks which are meant to be servicing local businesses are being used by hospital patrons.

Current Travel Modes

As illustrated in Figure 4 the high share of trips made by private vehicles highlights the car-dependent transportation culture in the Garran area⁶ of which Canberra Hospital is a major component (~74% of trips for work are car based). Conversely, only ~2% of trips are taken via public transport highlighting an opportunity to improve public transport accessibility as part of a wider, long-term parking and mobility strategy for the Canberra Hospital precinct. Future public transport options from the City Centre to Woden is expected to enhance north-south connectivity across the Territory and provide a more efficient way of travelling to/from areas south of Canberra Hospital. This is anticipated to positively impact public transport mode share of trips to and from Canberra Hospital and will provide an opportunity to rethink mobility and parking for the whole Canberra Hospital precinct.

⁶ Garran SA2 is the ABS Statistical Area that Canberra Hospital sits within and for which the data for the figure has been sourced from.

Figure 4: Transport Mode share to place of work in Garran SA2

Source: Yamba Precinct Car Park Detailed Business Case, 2023

Problem 3: Mix of hospital parking is not well aligned with user needs resulting in high rates of non-compliance and reduced staff efficiency

The hospital currently has a limited number of parking spaces which have varying time limits and are within close proximity to the hospital buildings.

The current time limits of these respective parking spaces do not reflect the needs of many hospital patients, visitors or staff. This is evidenced by the number of parking tickets which the hospital has issued, results of staff and community surveys which indicate that the hospital does not provide appropriate parking facilities, and by reduced staff efficiency which is seen when staff have to continuously move their cars around when at work.

Benefits

Hospital car parking is critical infrastructure for health service provision, and it should provide convenient, flexible access to hospital facilities for staff, patients and visitors. Given the problems identified with current car parking and general access to Canberra Hospital, the key benefits sought from new car parking infrastructure – as identified through the ILM process – include:

Safe 24/7 access to hospital resulting in:

- Improved safety and security for staff and visitors
- Improved staff attraction and retention
- Improved experience and satisfaction rating for staff, patients, visitors and local residents

Improved efficiency resulting in:

- Reduced travel time for staff and visitors (associating with ease and reliability of parking)

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- Reduced number of 'fail to attend' patients
- Ability to provide car parking for people with special needs
- Reduced staff shift interruptions resulting in improved productivity
- Reduced vehicle operating costs (associated with ease of parking)
- Improved opportunities for future site redevelopment plans

Economic Assessment

The Project is expected to bring a range of economic benefits to users of Canberra Hospital including both staff and visitors, as well as the adjacent community. The key economic benefits identified include:

- Time savings from searching for car parks on-site
- Time savings from parking on-street
- Improved parking reliability
- Improved safety
- Reduction in missed appointments
- Amenity benefits for local residents (improving Canberra Hospital's relationship with neighbours)

In addition to the benefits identified during the ILM, the Project has the potential to deliver broader community benefits including:

- Less use of local public roads for parking by hospital patrons and staff, resulting in less impact on local business and community
- Improved car/vehicle safety

Strategic Alignment

Key messages

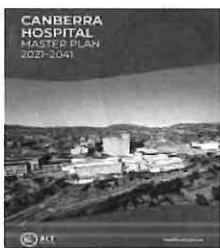
- The project will benefit both patients and staff at the Canberra Hospital by helping to sustain effective and responsive hospital operations that are critical to support the Territory' to provide high quality healthcare services.
- Interim parking will provide an immediate, temporary response to current parking challenges, while a long-term parking, mobility and access solution is explored at the Yamba Precinct Site through a Tier 1 Detailed Business Case.

Alignment with Government commitments and policies

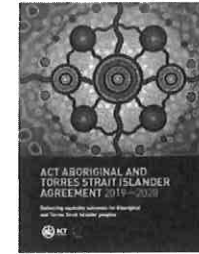
For the ACT Government, the project aligns with several strategic objectives, policies and legislation, as set out in the Table 3 below delivering alignment with the:

- CHMP contributing critical health infrastructure that supports accessibility by the community.
- ACT Parking General Code that requires minimum parking requirements for sites operated and/or owned by the ACT government.
- ACT Government's Framework for the ACT Public Health System (2020-2030) that anchors the Government's vision and provides the foundation for a person-centred, innovative, high performing public health system for the Territory.

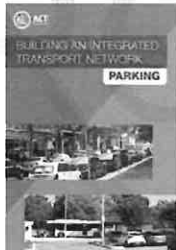
Table 3: Strategic Alignment

Supporting Studies and Policies	Focus and Key Findings
The Canberra Hospital Master Plan (CHMP) 	The ACT Government is focused on providing a public health system which is accessible, accountable and sustainable, and provides the right facilities to meet the future health needs of the growing ACT and the surrounding regions. The CHMP outlines a path for the development of the Canberra Hospital campus over the coming 20 years, which is based on demand data projections, known asset condition, community consultation, healthcare principles and planning principles. The CHMP also ensures appropriate levels and locations of car parking, minimising travel distances.
The CHMP - Parking Demand Study	The CHMP outlines a path for the development of the Canberra Hospital campus over the coming 20 years. This vision is based on demand data projections, known asset condition, community consultation, healthcare principles and planning principles. As part of developing CHMP, Canberra Hospital undertook a parking demand study which focused on the parking habits and requirements of both the hospital employees and visitors.
Municipal Infrastructure Standards 11: Off Street Parking	The Standards provides design and documentation for off street parking areas owned by the ACT Government and maintained by Transport Canberra and City

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	Services or areas that will be transferred to the ACT Government for ownership and maintenance. The Standards detail designs for the number of parking spaces required for a development or facility, be landscaped to an appropriate level to provide shade and screening for vehicles, provide a safe environment for users and meet the requirements of this Design Standard and the relevant standards, codes and guidelines.
Framework for the ACT Public Health System, 2020-2030 	The ACT Government is providing a strong policy and population health capability based on a foundation of world-leading health and medical research. This Framework anchors the Government's vision and provides the foundation for a person-centred, innovative, high performing public health system for the Territory. The Framework is focused on integrating services across three areas of health—preventive health, community-based services and care in hospital. The Government is working to ensure the ACT's public health system is innovative, effective and sustainable now and into the future. One of the framework's strategic priorities is to provide the right service, at the right time, in the right place, by the right team, which will be achieved through the Project. It is critical ACT's health infrastructure is accessible to a range of users. Mobility and accessibility (including parking) are key elements of this.
ACT Aboriginal and Torres Strait Islander Agreement, 2019-2028 	The Agreement recognises Aboriginal and Torres Strait Islander peoples as Australia's first people. First people have the right to self-determination which is an ongoing process of choice to ensure that Aboriginal and Torres Strait Islander communities are able to meet their social, cultural and economic needs. One of the significant areas of focus is that Aboriginal and Torres Strait Islander peoples have equity in health and wellbeing outcomes as any other members of the community.
ACT Climate Change Strategy, 2019-25 	The ACT Climate Change Strategy sets out a vision that by 2045 the ACT will be a leading net zero emissions territory that demonstrates that a healthier, smarter future is possible. Consistent with the policy, the delivery of the project will seek to reduced emissions and optimise the use of sustainable materials where appropriate.

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ACT Transport Strategy 2020 	ACT Transport Strategy 2020 outlines the ACT Government's approach to achieving the vision of a world-class transport system that supports a compact, sustainable, and vibrant city. It provides the framework for how investments in transport would be planned and delivered over the next 20 years. Central to this strategy is the creation of well-connected, reliable, and flexible transport networks that will facilitate the efficient movement of people and goods. The strategy places emphasis on providing a wider range of transport choices for users and promoting more sustainable modes of travel such as public transport, cycling, and walking. The health care industry is one of several industries where private car use plays a critical and irreplaceable role in addressing special transport needs. People accessing hospitals and seeking medical care are likely to have specific transport or mobility needs that cannot be accommodated by other modes of transport. However, patients and hospital visitors only take up a portion of medical facilities' transport activities.
ACT Government Parking Action Plan 	The ACT Government acknowledges the role of creating better parking solutions as an important pillar of building an integrated transport system. The Parking Action Plan provides guidance on the strategic approach to the provision and management of parking in the Territory. The Parking Action Plan sets out the following four key policies: • Understanding parking demand • Improving parking efficiency • Managing parking demand • Managing parking supply

Wellbeing Impact Assessment

As part of project planning and development, a Wellbeing Impact Assessment was conducted on the proposed project, which is classed under the Health Wellbeing domain. The project will benefit both patients and staff at the Canberra Hospital by helping to sustain effective and responsive hospital operations that are critical to main the Territory's high standard of healthcare services.

The project will contribute to:

- Meeting the growing patient demand and associated parking demand
 - Improving staff morale and safety, especially at night, when they walk to their cars after work - currently majority of staff park off-campus in poorly lit areas
 - Reducing undue stress experienced when unable to find appropriate parking which will improve visitor and patient experiences
 - Reducing occurrences of visitors, patients and/or staff car parking off-campus in neighbouring local streets or illegally (e.g. over time limits or at inappropriate locations)
 - Reducing occurrences of patients being late or missing appointments because they could not find parking
- Reducing occurrences of staff being late for their shifts because they could not find parking

A copy of the full Wellbeing Impact Assessment is provided at Appendix A.

Alignment with other projects, Programs and Precincts

This Project aligns and/or interacts with other projects that are currently in progress or in planning, including:

- The development of a long-term, permanent mobility and car parking solution for the Canberra Hospital at Yamba Precinct.
- The cessation of the current lease that Canberra Hospital has on the CIT site.
- The development and implementation of future phases of the CHMP.

Yamba Precinct Car Park

In 2023, a Detailed Business Case for a proposed Yamba Precinct Car Park was developed to deliver new car parking supply on-campus. This offered a longer-term solution to Canberra Hospital car parking demand. The business case envisaged delivering at least 3,000 new car parks on-campus across a 4-5 level split design with access off and exit on to Yamba Drive, bringing on-campus supply to 5363 – enough to meet projected demand until 2042. The project's indicative capital cost was \$205.2 million and there would be no paid parking, however there would be time-based restrictions, in line with wider Canberra Hospital campus car parking.

At the time, the Yamba Precinct Car Park business case was not endorsed by government. However, there is ongoing interest in updating the analysis to better consider commercial and value capture opportunities, placemaking as part of the wider Canberra Hospital precinct, and opportunities to increase the number of trips taken by public transport. The interim car parking solution is proposed until a long-term solution is developed as part of a proposed Tier 1 Business Case for the Yamba Precinct (see *Business Case for Project Development Funding - Yamba Precinct Tier 1 Business Case*).

Woden Canberra Institute of Technology site

The former Woden CIT site is currently leased by Canberra Health Services to use as a temporary car park and provide additional 1,161 car spaces. The site has been identified for a future high school and subsequently cannot be leased to the Canberra Hospital indefinitely. When the lease expires, parking demand modelling completed as part of the CHMP indicates that Canberra Hospital will be in severe shortage of car parking spaces and will not meet associated planning requirements in regard to the minimum quantity of car parking spaces required on site. The Yamba Precinct would provide a permanent solution for the hospital and supply sufficient capacity to meet planning requirements and future demand. However, an interim solution is needed while the planning and development of a longer-term parking, access and mobility solution is developed for the Yamba Precinct Car Park (see *Business Case for Project Development Funding - Yamba Precinct Tier 1 Business Case*).

Options Analysis

Key messages

- The do minimum base case includes investigating options to improve the efficiency of existing parking assets and opportunities to improve public transport mode share.
- Three currently vacant sites have been identified to provide interim car parking at the Canberra Hospital. The recommended project option is to convert all three sites to interim car parking.
- Combined, the conversion of these three sites has the potential to provide a range of 490-540 additional car parking spaces, on or in proximity of the Canberra Hospital campus.
- This business case recommends that delivery of interim car parking at these sites is staged, with immediate delivery of Site 1 (Former Canberra Hospital Helipad), reflecting advanced design and minimal capital works requirements

Preferred strategic solution

A preferred strategic solution of providing additional interim on campus car parking at Canberra Hospital has been identified.

'Do minimum' Base Case

The do minimum base case includes:

- investigating options to improve operational demand management of existing on campus parking
- investigating opportunities to improve public transport mode share.

The do minimum base case assumes no additional interim car parking is made available on Canberra Hospital campus or its immediate vicinity, while further detailed work is undertaken for the development of a long-term car parking and mobility solution at the Yamba Precinct.

It is noted that the Base Case option is not the preferred option as it does not sufficiently address the problems identified in the Needs Analysis (Section 3), being:

- It does not improve safe and convenient access to Canberra Hospital, leaving staff, visitors and the public at increasing levels of risk trying to access the hospital
- It does not meet parking demand. No new car parking will mean Canberra Hospital continues to negatively impact surrounding businesses and community through increased traffic congestion and parking limitations
- Car parking remains unaligned with user needs, staff, patients and visitors risk non-compliance by overstaying time limits, parking illegally or having to move their cars multiple times during shifts/visits.

Project Options

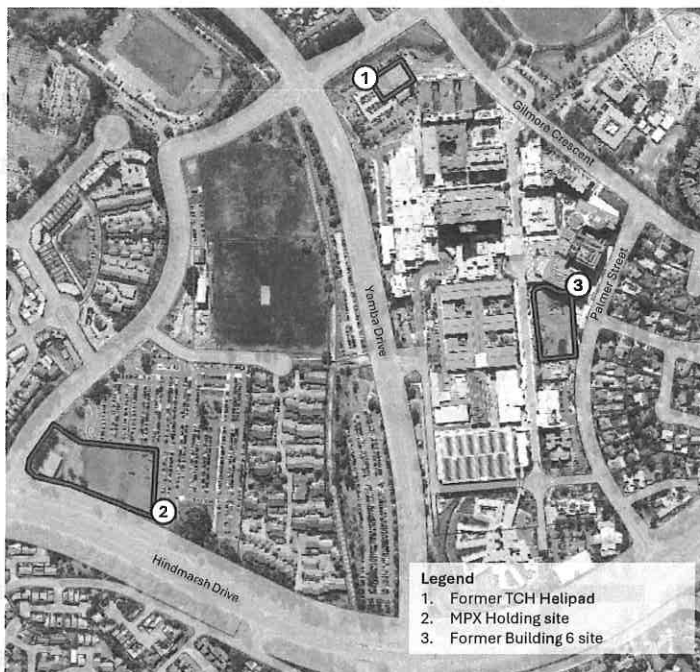
Three separate sites have been shortlisted to provide interim car parking at the Canberra Hospital. These sites are shown at Figure 5 and include:

- **Site 1 – Former Canberra Hospital Helipad:** The former helipad site located on top of an existing car park in the north of the campus, bounded by Kitchner Street to the north and accessed via Gilmore Crescent and Yamba Drive. The estimated range of additional car parking spaces to be provided on this site is 60-70 spaces.
- **Site 2 – Contractor Holding Site:** Currently vacant site adjacent to the temporary Canberra Hospital off-site car parking at CIT, accessed via Ainsworth Street. The estimated range of additional car parking spaces to be provided on this site is 300-330 spaces.
- **Site 3 – Former Building 6 site:** Former Building 6 site on Canberra Hospital campus, bounded by Hospital Road and Palmer Street and accessed via Palmer Street. The estimated range of additional car parking spaces to be provided on this site is 130-140 spaces.

This shortlist was guided by a range of selection criteria, including:

- *Site availability* - the site is vacant and/or requires minimal decanting and preparatory works
- *Proximity* - the site is located on or in proximity to the Canberra Hospital campus
- *Deliverability* – the site has low deliverability risk and minimises disruption to the Canberra Hospital campus
- *Safety and security* - the site location provides passive surveillance, reduces length of pedestrian movement across the Canberra Hospital campus and allows for provision of lighting.

Figure 5: Proposed interim car parking sites – Canberra Hospital Campus and vicinity



Source: ACTmapi, 2025

Site characteristics and preliminary yields and cost estimates

Combined, the conversion of these three sites has the potential to provide a range of 490-540 additional car parking spaces, on or in proximity of the Canberra Hospital campus. A summary of the key site characteristics, potential parking yields and cost estimates are summarised in the table below.

The yield estimates for Sites 1 and 3 have been informed by conceptual design and drawings for tendering purposes. The yield for Site 2 is a high-level estimate based on the site area and benchmarks for car space dimensions and circulation requirements in line with Parking and Vehicular Access General Code (PVAGC). Further design work will be completed to refine the yield on this site.

Table 4: Interim car parking site characteristics and yield

	Site 1 – Former Canberra Hospital Helipad	Site 2 – Contractor Holding Site	Site 3 – Former Building 6 Site
<i>Location</i>	Site located in the north of the Canberra Hospital campus, bounded by Kitchner Street to the north and accessed via Gilmore Crescent or Yamba Drive	The site is located at former contractor holding yard adjacent to temporary Canberra Hospital off-site car parking at CIT, accessed via Ainsworth Street.	Site located in central Canberra Hospital campus bounded by Hospital Road and Palmer Street and accessed via Palmer Street.
<i>Site conditions/status</i>	Site currently vacant following the relocation of the helipad to the new Critical Services Building. Existing surface suitable for car parking use.	The site is currently vacant. Some demolition required to remove existing shed structure and bulk earthworks to level site and prepare for surface works.	The site is currently vacant following the demolition of Building 6 on Canberra Hospital campus. Bulk earthworks required to level site to prepare for surface works.
<i>Deliverability / risk</i>	Low risk, minimal capital works required.	Low risk, minor bulk earthworks and site preparation required. Existing access to site provided.	Medium risk, potential disruption to access along Palmer Street during construction. Minor bulk earthworks and site preparation required.
<i>Estimated Project Cost</i>	\$0.54 million	\$4.28 million	\$2.27 million
<i>Estimated yield</i>	~60-70 spaces	~300-330 spaces	~130-140 spaces

Recommended project option(s)

To address the car parking shortfall in the interim—and improve access to health services located on the Canberra Hospital campus—the **recommended project option is to convert all three sites to interim car parking.**

Further, this business case recommends that delivery of interim car parking at these sites is staged, reflecting the current levels of project readiness across the three sites:

- **Stage 1:** Immediate delivery of Site 1 (Former Canberra Hospital Helipad), reflecting advanced design and minimal capital works requirements (~60-70 spaces).
- **Stage 2:** Subsequent delivery of Site 2 (MPX Holding Site) and Site 3 (Former Building 6 Site) following more detailed design and yield estimates for both sites, as well as consultation and management of potential operational disruption during delivery of solution at former Building 6 site given its location on Palmer Street and proximity to the new critical services building.

Table 5: Preferred/Recommended Option Details

Preferred Option – Construct interim parking at all three sites	
Intended outcomes	The intended outcomes of the recommend option are to • Provide cost effective, interim carparking solutions to improve access to health services located at Canberra Hospital • Increase the amount of on-campus car parking to help meet immediate and short-term future on-site parking demand needs for staff and patients • Improve the reliability, safety, security and convenience of car parking around the hospital precinct • Improve staff, patient and visitor efficiency at, and access to, the Canberra Hospital Campus (for example through reduced travel time (searching for car parks on-site), missed appointments and staff shift interruptions).
Value for money	The preferred project options deliver a cost-effective solution, with an average cost per space of \$15,142 across three sites. A staged approach delivers interim parking sooner bringing ready sites for immediate use helping to achieve the intended outcomes faster.
Scope	The scope of works comprises minor capital works to retrofit each of the three sites to accommodate interim car parking. The capital works will be delivered in line with relevant components of the ACT's <i>Off Street Parking Municipal Infrastructure Standards 11</i>, as well as an any additional safety standard required for key workers (for example, lighting and security cameras). In addition, scope of works also includes retrofitting approximately 2,000 car parking spaces in existing undercover car parks on the Canberra Hospital campus with occupancy lights.
Implementation	Funding of \$7.09 million over 2 years will result in the project being completed in 2027 using a staged delivery approach.

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Disadvantages	The capital investment is for an interim solution only to alleviate existing on-campus parking concerns, while a long-term permanent solution is developed at the Yamba Precinct.
Infrastructure	The car parking will be designed and built as an interim solution in line with safety standards required for key workers.
Additional Benefits	The investment in interim parking will support the development of a long-term, permanent solution at Yamba Precinct Drive.
Risk Assessment	See Risk Analysis at page 28.

Project Scope

Key messages

- The project scope comprises a range of minor capital works including site preparation, surface works, stormwater and drainage, bitumen seal, line markings and safety fixtures (such as barriers and lighting) necessary to retrofit each of the three sites into interim carparking at Canberra Hospital.
- This business case is not seeking funding for any supplementary external roadworks that may be required and is out of scope.
- This project is being recommended as an interim solution, while a long-term, permanent parking solution is developed for the Yamba Precinct.

Scope of works

Interim Car Parking

The scope of works comprises capital works to convert each site to accommodate interim car parking on the Canberra Hospital campus.

The capital works will be delivered in line with relevant components of the ACT's *Off Street Parking Municipal Infrastructure Standards 11*⁷, as well as any additional safety standards required for key workers (for example, lighting and security cameras).

A high-level scope of works for the interim parking is provided in the table below for each site. The characteristics and status of each site means that differing scopes of works are required across each site. It is currently envisaged that the interim parking will be constructed at grade. However, during the design phase, the team will review the opportunity to deliver a similar number of parking space using modular/prefabricated multi-story solutions. Should these prove to be cost effective, measured by average cost per parking space, this will be pursued at delivery stage.

Further detailed breakdown of capital works costings for all options can be found at the Financial Analysis Chapter and Appendix C.

⁷ The Standards provides design and documentation for off street parking areas owned by the ACT Government and maintained by Transport Canberra and City Services or areas that will be transferred to the ACT Government for ownership and maintenance.

Table 6: Scope of Works by Site

	Site 1 – Former Canberra Hospital Helipad	Site 2 – Contractor Holding Site	Site 3 – Former Building 6
<i>Background</i>	Former Helipad site on top of existing 2 story carpark at north of Canberra Hospital Campus. Currently vacant.	Site previously used as a construction holding site. Large shed on site. Currently vacant.	Vacant site following the demolition of Building 6.
<i>Location</i>	On-campus	Off-campus	On-campus
<i>Site Area</i>	1,650 SQM	12,893 SQM	4,708 SQM
<i>Estimated Project Cost</i>	\$0.54 million	\$4.28 million	\$2.27 million
<i>Estimated yield</i>	~60-70 spaces	~300-330 spaces	~130-140 spaces
<i>Required Capital Works</i>	• Site preparation • Minor concrete works (Kerbs) • Installation of safety barriers & bollards • Pavement markings • Public lighting installation • Traffic management	• Detailed design preparation • Demolition of existing structures • Bulk earthworks • Stormwater / drainage works • Hardstand • Pavement markings • Public lighting installation • Traffic management	• Bulk earthworks and site leveling • Stormwater / drainage works • Hardstand • Construction of access ramp • Pavement markings • Public lighting installation • Traffic management
<i>Delivery risk assessment</i>	Low	Low	Medium
<i>Project Readiness</i>	Ready now	Further design required	Further design required
<i>Estimated average cost per car space (range)</i>	\$9,948 - \$8,527	\$15,685 - 14,259	\$19,200 - 17,829

Out of Scope

This business case is not seeking funding for any supplementary external roadworks that may be required.

Project interdependencies

This project is being recommended as an interim solution, while a long-term, permanent parking solution is developed for the Yamba Precinct. It is assumed that the three sites used for interim car parking will be repurposed once this permanent solution has been agreed and delivered at the Yamba Precinct.

Risk Analysis

Key messages

- Many of the key risks relate the construction phase of the project and include:
 - Capital funding provision does not align with program delivery milestones
 - Design development delays
 - Development Approvals delays
 - Work health and safety
 - Stakeholder management
- The key mitigation strategies to manage the risks are:
 - Align program with the budget review cycle for capital funding provision
 - Design delivery and approval program management
 - Implement effective stakeholder engagement throughout the delivery of the project
 - Engage prequalified suppliers to deliver design and construction

Risk analysis process

The project will adopt the ACT Insurance Authority (ACTIA) risk management framework to inform the risk management strategy to be applied to the Project. The risk management strategy applied to the Project is to proactively prevent risk events from occurring. This approach forms the basis for any risk mitigation consideration or decision as part of a continuous improvement process. Additionally, this approach to controlling identified risks and maximising available opportunities will help align all processes and practices with ACT Government expectations for capital works delivery.

The current state of the risk assessment is consistent with the definition of the Project's scope, the level of information available to the Infrastructure Canberra, and the Project requirements as understood at the time of this Business Case. The risk assessment has made provision for both inherent and contingent risks which extend beyond the base cost estimate.

Key project risks

Enclosed in Appendix B is the Risk Register for the delivery of the project, which is a live document. It is recommended that the project risk register be continually monitored, assessed and updated in line with the ACTIA risk management framework. It is noted operational risks are excluded with the exception of those that can be mitigated during the project's development, planning and construction phases.

Some of the key project risks are summarised including specific mention of Environment / Climate and Operation and Maintenance risks in the Table below. A traffic light system has been used to identify the risk rating following the recommended mitigation strategy where red represents a High Risk Rating, orange represents a Medium Risk Rating and green represents a Low Risk Rating.

Table 7: Key project risks

Project risk	Mitigation strategy	Status of mitigation strategy implementation (Red / Amber / Green)	Risk Allocation
Community disapproval of the car parks	The community has expressed interest in the delivery of the car park and will be consulted as part of the development process.	In progress and Ongoing	ACT Government
Timely stakeholder engagement	Development of a clearly defined stakeholder engagement plan which articulates when certain groups are required to be engaged in the development of the car park design. Identification of key stakeholder groups who will need to be engaged regularly, so clear channels of communication can be maintained which will allow for easy project approvals. An agreed regular meeting schedule with key government agencies, to ensure that all key stakeholders are engaged at appropriate times which will support the approval process.	In progress and Ongoing	ACT Government
Undesirable construction market conditions causing cost and program risks	Completion of cost plans by qualified Quantity Surveyor, and inclusion of appropriate level of contingency.	In progress and Ongoing	ACT Government
Poor Budget Management during delivery	Dedicated and experienced project manager / team allocated to project delivery and responsible for managing budget, time, scope and quality. Regular reporting to maintain executive oversight.	Ongoing	ACT Government
Errors / Omissions with Cost Plan	Cost plans to include contingency line items to allow for cost discrepancies arising during design development.	Ongoing	ACT Government
Latent condition during construction (unexpected site conditions encountered)	Due diligence and invasive site investigation work during design phase (where possible) Contingency for construction to be included.		

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Scope creep	Define and lock user requirements. Noting that the design is to be adaptable and allow for flexibility in use.	Ongoing	ACT Government
Staging of the work	Impact on the operation of the hospital and parking availability. Stage and coordinate work with Canberra Hospital Services to minimise impact. Program to be reviewed and assessed by Canberra Hospital Services.	Ongoing	Contractor & ACT Government
Impact on high voltage electricity lines	Injury / death to workers, damage to services and disruption to public over a large area. Use small, lower height machinery under power lines as well as appropriate qualification processes and site assessments.	Ongoing	Contractor & ACT Government
Impact on services due to services not shown correctly on DBYD or with substandard protection / cover	Injury to workers, damage to services. Contractor to locate and sight services by use of hydro excavation only. No mechanical excavation is permitted. Contractor to hold daily toolbox reminders	Ongoing	Contractor
Benefits of the car park are not realised	Assess and document user requirements and expected benefits early including metrics for success. Implement and adhere to a rigorous governance framework which assesses progression against Project deliverables. Adjust benefits / KPIs should project direction, requirement etc. change during project development, planning, delivery or operational phases beyond what is presented in business case.	Ongoing	ACT Government
Climate / Environment related risks			
Sustainable/ Net Zero construction goals are unable to be achieved.	The design team to look to optimise the inclusion of sustainable materials in the design.	In progress and Ongoing	Designer and ACT Government

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Construction of car park reinforces carbon intensive transport modes	Adapt car park throughout life to cater for further zero emission transport modes (e.g. EVs or active transport)	In progress and Ongoing	ACT Government
Operation and Maintenance related risks			
Insufficient budget for operation & maintenance	Poor maintenance of carpark along with insufficient services (e.g. security). Canberra Hospital Services to ensure adequate budget provided to deliver expected service quality		ACT Government
Increased traffic around Canberra Hospital	Provision of additional parking capacity risks increasing traffic on and around Canberra Hospital campus. The CHMP guides access and accessibility on the site and will be used to ensure increased traffic is managed effectively.	Ongoing	
Legend			
Colour		Risk Rating following Mitigation	
		High Risk Rating	
		Medium Risk Rating	
		Low Risk Rating	

Delivery Model Analysis

Key messages

- This business case recommends Design and Construct as the most suitable procurement option for delivery of the Project
- A two-stage delivery approach is recommended, reflecting the current levels of project readiness across the three sites:
 - *Stage 1:* Immediate delivery of Site 1 (Former Canberra Hospital Helipad), reflecting advanced design and minimal capital works requirements.
 - *Stage 2:* Subsequent delivery of Site 2 (MPX Holding Site) and Site 3 (Former Building 6 Site) following more detailed design and yield estimates for both sites.

Recommended delivery model

This business case recommends Design and Construct as the most suitable procurement option for delivery of the Project, based on the following:

- **Effective timeliness of procurement and delivery** – The Design and Construct Model provides an opportunity to fast-track the appointment of a contractor.
- **Price certainty** – The Design and Construct Model generally provides a greater degree of price certainty to the Territory when compared to the Construct Only model.
- **Risk allocation and transfer** – The Design and Construct of delivery will in this case be a better option as a fixed price contract will offer better price certainty. With the Construction team working closely with the directorate with a view to early warning around previously unknown risks allowing an ability for both government and contractor to mitigate the risk in its early stages.
- **Market interest and capability** – The Design and Construct Model (and the GC-21 contract) in this case will represent less risk to a contractor who is considering entering a fixed price contract, due to robust design and contingency for the discovery of latent conditions. This should maximise the pool of contractors wishing to tender for the works. The effect of this is to represent greater value for money and more options of the Territory.

Financial Analysis

Key messages

- The estimated capital costs of the recommended project option is \$7.089 million. The estimated non-capital costs over the forward estimate period are \$268,401.
- To fund the capital costs this business case is seeking \$7.089 million of funding across FY 25-26 and FY 26-27.

Estimated project capital cost

The following costs are based on the cost plan developed by WT in January 2025 and is attached at Appendix C.

Table 8: Estimated project capital cost (contingency, nominal, excl. GST)

Cost item	Recommended Option
Capital costs	
Demolition	\$220,000
Earthworks	\$432,785
Minor Concrete Works	\$38,525
Fences & Barriers	\$361,170
Pavement	\$1,835,690
Pavement Marking	\$90,495
Stormwater	\$362,020
Public Lighting	\$648,800
Road Furniture	\$148,690
Preliminaries / Margin	\$570,609
Total raw capital costs	\$4,708,784
Contingency allowance	\$1,394,034
Total risk allocated costing	\$6,102,818
Escalation	\$188,351
Total nominal capital costs	\$6,291,169
Other costs	
Fees (e.g. design fees, authority fees, other fees)	\$659,230
Other costs (resources received free of charge)	
iCBR fee (2% of total raw capital costs)	\$139,008
Total estimated project capital cost	\$7,089,407

Whole-of-life cashflows

The whole of list cost estimates for maintenance are presented below but do not form part of this funding request. These costs would need to be allocated to the asset owner, the Canberra Hospital, expense funding is not being requested by this business case.

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Table 9: Example whole-of-life cashflows estimate (contingency, \$m, nominal, excl. GST)

Cost item	2027-2028	2028-2029	2029-2030
Operating costs			
Operating costs	-	-	-
Maintenance costs	\$47,008	\$94,176	\$94,176
Lifecycle costs (where applicable)	-	-	-
Total raw operating costs	\$47,088	\$94,176	\$94,176
Contingency allowance (10%)	\$4,709	\$9,418	\$9,418
Total real operating cashflows	\$51,797	\$103,593	\$103,593
Escalation (4%)	\$1,884	\$3,767	\$3,767
Total nominal operating cashflows	\$53,680	\$107,360	\$107,360

Project contingency

The Capital Framework allows for the quantification of contingency allowances for project funding for Tier 3 projects through a deterministic method, by applying a fixed percentage contingency to the project costs.

The cost planner for the Project has applied an average of 29% contingency for the purposes of the capital cost estimates across the four components of the recommended project option. This level of contingency reflects the early stage of site due diligence and design, limited knowledge about latent site conditions and the relatively small budget with which to address site constraints and risks if discovered during detailed planning and design and construction phases.

Table 10: Project capital contingency (\$m, nominal)

Cost item	
Total raw capital costs	\$4,708,784
Contingency allowance (average across all three sites)	\$1,394,034
Total estimated project capital cost	\$6,102,818
Contingency allowance as a proportion of total estimated project capital cost (%)	29%

Summary assessment

Table 11: Net Present Value (contingency, \$m, date)

Cost item	Option 1 (Recommended option)
Total estimated project capital cost	\$7,089,407
Whole-of-life cashflows (excluding capital costs)	\$268,401
Total cashflow	\$7,357,808

Budget implications

Table 12: Financial impacts summary (contingency, nominal)

	2025-26	2026-27	2027-28	2028-29	Total
Capital injection	\$2,835,763	\$4,253,644			\$7,089,408
Capital inflows					
Capital offset – existing provision					
New capital provision					
iCBR fee – resources received free of charge (if applicable) ⁸					

Timeline

Key messages

- Following approval of this business case and requested funding amount, the next immediate steps will be to:
 - Finalise interim carpark design for Site 1 and commence procurement and approvals
 - Undertake detailed design for Sites 2 and 3 and confirm the car parking space yield for each site, commence procurements and approvals

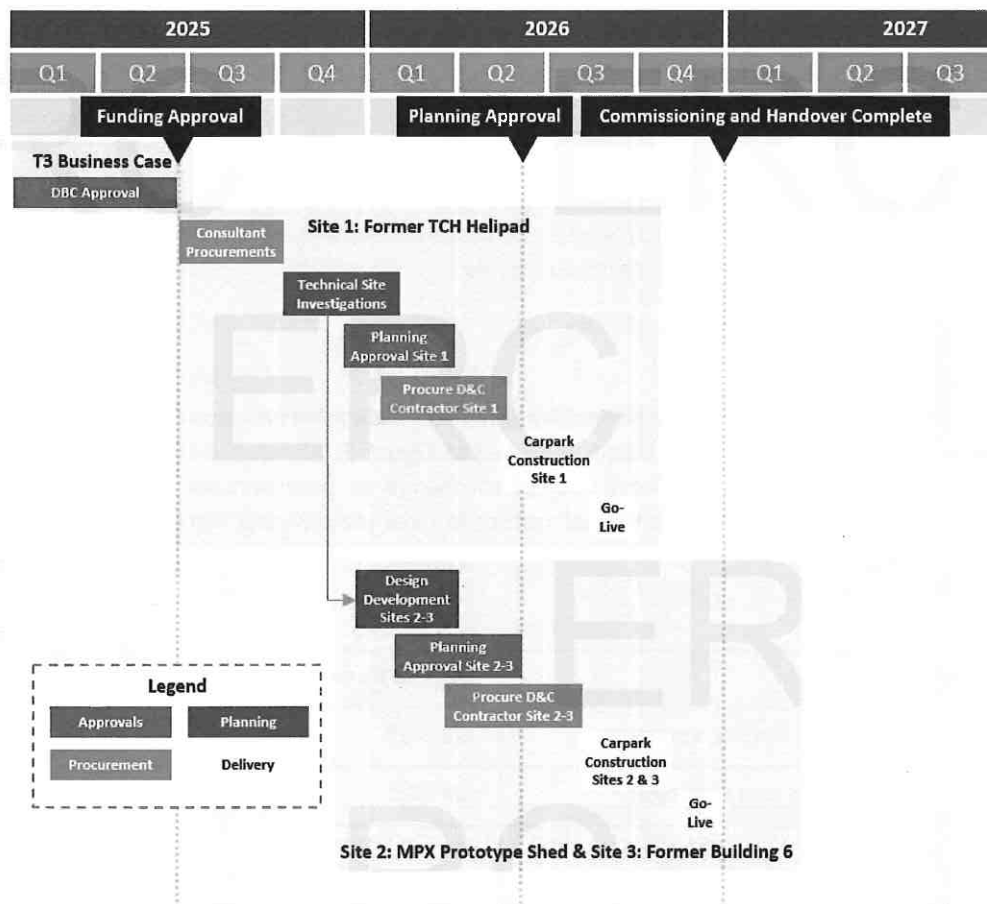
Project timeline

A preliminary indicative delivery program has been developed. Key indicative milestones are outlined in the Table below and a high-level Gantt Chart is included at Figure 6. All dates are based on the assumption detailed in this business case and subject to change as procurement and planning processes progress. Additionally, the realisation of potential risks may impact significantly upon anticipated project timing.

Table 13: Key milestones

	Milestones	Date to be completed
1	Government decision and funding approval	Q2 2025
2	Funding announcement as part of Budget	Q2 2025
3	Consultant (design, planning, technical etc.) engagement	Q3 2025
4	Preliminary Sketch Plan (PSP), including technical investigations / studies (where required) completed	Site 1: Q4 2025 Sites 2 & 3: Q1 2026
5	Planning approvals (building approval) completed	Site 1: Q1 2026 Sites 2 & 3: Q2 2026
6	D&C Contractor procurement and engagement	Site 1: Q2 2026 Sites 2 & 3: Q3 2026
7	Construction, commissioning & handover complete	Site 1: Q3 2026 Sites 2 & 3: Q4 2026
	Final project completion date	January 2027

Figure 6: Project Timeline



Project decision points

Key project decision points, subject to the approval of this Business Case, include:

- Confirming the delivery model
- Confirming the proposed staging
- Project design and necessary planning approvals.

Timing for key project decisions will be determined by Infrastructure Canberra in consultation with other Government stakeholders as appropriate.

Project timeline assumptions

Delays to funding or planning approvals, including the risk that approvals are not obtained in time or unforeseen approvals are required for construction that have not been obtained would delay program

It is assumed that delivery would be staged, commencing with the delivery of Stage 1: Former Canberra Hospital Helipad, while designs for the other two sites are being finalised. Planning approvals would therefore be staggered, and procurement of the D&C Contractor would be conducted via two separate processes – there may be scope to conduct a single procurement if program efficiencies can be found through expedited planning, design and approvals for Sites 2: MPX Prototype Shed and Site 3: Former Building 6.

Appendices

Appendix A - Wellbeing Impact Assessment

Appendix B - Risk Register

Appendix C - Detailed Cost estimates (includes elements of scope that were not pursued as part of the preferred option in this Business Case.)

Appendix D - Concept and tender drawings for Site 1 and Surveys for Sites 2 & 3

WELLBEING IMPACT ASSESSMENT

Yamba Hospital Precinct Car Park	ACTHD	Wellbeing Impact 1
Purpose of proposal This proposal seeks funding for design and construction of a new multi-storey car parking structure located at the Canberra Hospital's Yamba Precinct to respond to growing patient and visitor demand for car parking as population and services grow at the hospital. The proposal also addresses staff safety risks associated with not being able to park on campus.		
Impact description The proposal will benefit both patients and staff at the Canberra Hospital as it will provide critical health infrastructure that enable normal hospital operations to be maintained and support the provision of high standard healthcare services. The proposal will contribute to: - Meeting the growing patient demand for health care services, and associated parking demand, at the Canberra Hospital - Providing sufficient car parking spaces to meet projected parking demand by visitors, patients and staff - Improving staff morale and safety, especially at night, when they walk to their cars after work - currently majority of staff park off campus in poorly lit areas - Reducing undue stress experienced when unable to find appropriate parking which will improve visitor and patient experiences - Reducing occurrences of visitors, patients and/or staff parking off campus in neighbouring local streets or illegally (e.g. over time limits or at inappropriate locations) - Reducing the need for staff to move their cars during shifts due to timed parking restrictions on campus - Reducing vandalism to staff cars - Reducing community hostility towards staff who park off campus - Reducing occurrences of patients being late or missing appointments because they could not find parking - Reducing occurrences of staff being late for their shifts because they could not find parking The location of the proposed car parking structure is on Yamba Drive and away from Garren Primary School and should ease the amount of road congestion which occurs near and around local streets. The inclusion of First Nations artwork for the structure's façade demonstrates the ACT Government's commitment to ensuring that First Nations community is felt and reflected in the community and are recognised as the Traditional Custodians of the land. This proposal is aligned with three (3) wellbeing domains – predominately Health, followed by the Access & Connectivity and Safety domains. HEALTH DOMAIN - Proposal will provide critical health infrastructure to the hospital campus that will support the normal operations of the hospital by providing appropriate parking solutions for staff, patients and visitors. - There are instances of patients being delayed or missing their medical appointments, as they are unable to find appropriate parking, resulting in them parking in local streets, illegally (e.g. over time limits or at inappropriate locations and receiving fines) or far away in order to receive health care services at the hospital. This may also cause patients and visitors to experience undue stress during the process. - Similarly, due to the lack of parking options on campus, staff may be late for their shifts and/or have to move their cars during their shifts as on campus parking is timed – potentially having an impact on health service delivery. Staff may also experience undue stress when unable to find appropriate parking. Staff have also at times resorted to parking in local streets, illegally or far away. ACCESS & CONNECTIVITY DOMAIN - The proposed car park structure resolves the issue of lack of parking on site which is currently prohibiting easy and seamless access to health care services provided at the hospital. - As part of the proposal, End of Trip (EOT) facilities will also be included to cater for users of active transportation and encourage transportation modal shift. SAFETY DOMAIN - As there is lack of long term or untimed parking on campus, it has resulted on visitors, patients and staff to park in nearby local streets, increasing congestion and impacting surrounding businesses and community (e.g. Garren Primary School has employed parking inspectors to ensure cars parked on their grounds are visiting the school). - Staff cars have been vandalized and staff have been approached by members of the community expressing their anger and frustration about hospital users parking in the local streets / off campus. - The acts of vandalism and approaches by community has resulted in staff not feeling safe when going to work or leaving work at night.		

WELLBEING IMPACT ASSESSMENT

Who is affected?

The proposal predominately aligns with the Health wellbeing domain and is considered to have a positive impact on the community, including the Aboriginal and Torres Strait community. It is not expected to increase or decrease gender equality or directly target a group or sub-group where women and/or girls are disproportionately represented.

The proposal also aligns with the Access & Connectivity and Safety domains.

Wellbeing domain

Health

Timeframe

Between one and five years.

Evidence base and data

What do we know now?

During the development of the Canberra Hospital Masterplan, the outcomes of the stakeholder engagement process found that:

- There was significant interest in increasing the number of car parking spaces across the campus, as parking is currently at a premium. This was confirmed when the EPSDD issued the Development Approval for the new Critical Services Building (CSB) on the condition an additional 2,811 parking spaces were provided.
- The lack of parking has caused safety concerns amongst Canberra Hospital staff as there have been reports of vandalism to staff members' cars when parked outside of hospital grounds during the evening
- The Canberran community is also being impacted as the limited parking options has resulted in some patients being late or missing their medical appointments
- The local streets surrounding the hospital campus are often used by staff, patients and visitors, and has caused issues for local residents including increased congestion and confrontations

Accountability and evaluation – how will we know this proposal has been successful?

The evaluation of this proposal will be based on key stakeholder endorsement of design documentation and successful delivery of the project scope within the approved budget and program. Evaluation of the proposal outcomes and the effect upon the wellbeing of the Canberrans will be completed in consultation with delivery partners and key consumer groups.

In addition, the following project evaluation criteria will be adopted:

- Key project milestones completed in accordance with approved project programme
- Project expenditure within the approved project funding allocation
- Completion of all project scope
- Key project deliverables completed in accordance with all required legislation, standards and codes

Key relationships

Consultation has not yet occurred with key stakeholders who will be directly impacted by the proposal. However, stakeholder consultation that was undertaken as part of the Canberra Hospital Masterplan development has informed this proposal. Over 530 individuals and representative groups were involved in the Masterplan development stakeholder consultation process and included hospital staff, hospital campus users, general community, nearby neighbours, government staff, non-government organisation (NGO) stakeholders, campus tenants, and regional NSW Health providers and services in the trauma referral department.

As this proposal progresses, stakeholder consultation will be undertaken in developing design options associated with the proposal to ensure user outcomes are documented and the project delivers on key requirements for patients, staff and the community. This consultation will include key consumer groups, unions, staff representatives and Aboriginal and Torres Strait Islander representative bodies.

ACT Health Services - Yamba Carpark Precinct												
RISK CATEGORY:				Environmental / Climate Operation & Maintenance								
Financial Political Program Delivery Safety				Scope Disruption / Inconvenience Stakeholder Support Technical								
Date: 2/08/2022												
Ref #	Risk Category	Risk Description	How can it happen (Cause)	What can happen (Effect)	Pre-mitigation rating			Post-mitigation rating		Comments		
					Likelihood	Consequence	Rating	Action / Mitigation Plan	Likelihood	Consequence	Rating	
1	Disruption / Inconvenience	Disruption / inconvenience to others during construction/ loss of carpark	Construction causing disruption and interference to hospital parking.	Complaints, impatient dissatisfaction, delayed recovery.	Possible	Major	High	Design considerations (and staging) to minimise disruption to surrounding users. Early set up and establishment of temporary carpark.	Possible	Moderate	Medium	
2	Disruption / Inconvenience	Temporary carpark is not approved	The location of the temporary carpark is not approved.	CHS has an increased demand for carparking and provides additional parking stress.	Possible	Major	High	Early agreement on temporary parking requirements	Possible	Moderate	Medium	
3	Disruption / Inconvenience	CIT carpark lease is not extended to 2028	ACT Government decides it wants to use the former CIT site for something else, concluding existing lease agreement in 2026	CHS would have 1,161 less spaces - significant car parking supply shortage while project is being built	Unlikely	Severe	Medium	Ongoing engagement with ACT Government to reinforce need for CIT carpark until 2028. Investigate alternative temporary carparking locations as a backup (beyond what has already been explored)	Unlikely	Major	Medium	
4	Environmental / Climate	Contamination of waterways	Construction and ongoing operation of carpark results in material entering and contaminating adjacent creek	Contamination of creek threatens wildlife and ecosystem	Possible	Major	High	Design to avoid possible contaminants from operation entering creek, and implement appropriate construction process that minimise risk of contamination	Possible	Moderate	Medium	
5	Environmental / Climate	Construction of carpark reinforces carbon intensive transport modes	Construction of carpark reinforces preference for the use of cars as a means of transport to the hospital	Increased carbon dioxide emissions	Likely	Moderate	High	EV charging infrastructure to be implemented as per government requirements, alongside end of trip facilities that encourage active transport. Adapt carpark throughout life to cater for further zero emission transport modes (e.g. EVs or active transport)	Likely	Minor	Medium	Broader macro trends indicate increasing use of EVs. ACT Gov.
6	Environmental / Climate	Materials end up in landfill	End of life not considered when selecting materials used in construction	used materials sent to landfill as no option for reuse or recycling considered.	Likely	Moderate	High	Consider all materials end of life use or recyclability upfront to ensure minimisation of future landfill requirements	Likely	Minor	Medium	
7	Environmental / Climate	Sustainable/Net Zero construction goals are unable to be achieved.	Minimal consideration of 'green' or sustainable materials in construction and O&M	Results in the project having a large carbon footprint	Possible	Minor	Medium	The design team to look to optimise the inclusion of sustainable materials in the design. The carpark design to make allowances for sustainable practices when utilising the carpark.	Possible	Minor	Medium	Associated with Stakeholder Support of project
8	Financial	Insufficient budget for program delivery	Initial project assumptions mislead contingency and budget estimates	Project cannot be delivered on budget	Possible	Moderate	Medium	Review project assumptions and develop information gathering strategies to resolve any gaps improve and test budget estimates include sufficient contingency allowance	Possible	Minor	Medium	
9	Financial	Undesirable construction market conditions	External factors relating to construction market conditions, such as number of concurrent projects, restrictions, decreased supply of materials etc, having negative impacts on the project	Increased cost for labour and material (low supply) or to expediate	Likely	Moderate	High	Completion of cost plans by qualified Quantity Surveyor, and inclusion of appropriate level of contingency	Likely	Minor	Medium	
10	Financial	Scope creep	Unrelated parking functions are integrated or added Business needs not clearly defined	Project expands beyond budget allocation and delivery is delayed or fails	Possible	Major	High	Define and lock user requirements inclusive of what will be using the carpark.	Possible	Moderate	Medium	
11	Financial	Design accuracy	Design does not align with business needs or stakeholder expectations	The carpark is not effective or useable requiring rectification or rework	Possible	Moderate	Medium	Documentation of stakeholder needs Confirmation of design solution Stakeholder and end user (clinical team) reviews throughout design process	Possible	Minor	Medium	
12	Financial	Poor Budget Management during delivery	Overspend of budget	Loss of Government and stakeholder confidence Project not delivered on budget	Possible	Moderate	Medium	Dedicated and experienced project manager / team allocated to project delivery and responsible for managing budget, time, scope and quality. Regular reporting to maintain executive oversight	Possible	Minor	Medium	
13	Financial	Errors / Omissions with Cost Plan	Elements of the project were missed or underappreciated during cost plan development. Changes in user and/or functional requirements during design development	Project expands beyond resource allocation (over budget) and delivery is delayed or fails	Possible	Major	High	Cost plans to include contingency line items to allow for cost discrepancies arising during design development.	Possible	Moderate	Medium	
14	Financial	Insufficient budget for operation & maintenance	Budgeted operational spend not sufficient to meet design requirements	Poor maintenance of carpark along with insufficient services (e.g. security).	Possible	Major	High	CHS to ensure adequate budget provided to deliver expected service quality	Unlikely	Moderate	Medium	
15	Operation & Maintenance	Increased traffic around TCH	Project induces increased car traffic on the streets around TCH as there are more spaces to park in	Increased safety risk for local community. Negative impact on liveability of surrounding neighbourhood	Likely	Minor	Medium	Project is located at major intersection away from key interaction/egress areas of TCH, minimising safety risks and use of local streets for parking.	Unlikely	Negligible	Low	Recommended Option doesn't use Helped carpark (Options 2 and 3), which would have induced significantly more safety risk
16	Operation & maintenance	Changing technology makes carpark unusable	new technology creates new forms of travel that the carpark does not conform to	Carpark not fit for purpose	Unlikely	Major	Medium	CHS and ACT Government to remain in constant dialogue as to broader transport mode trends and react when required to ensure carpark remains fit for purpose	Unlikely	Moderate	Medium	

Ref #	Risk Category	Risk Description	How can it happen (Cause)	What can happen (Effect)	Likelihood	Consequence	Rating	Action / Mitigation Plan	Likelihood	Consequence	Rating	Comments
17	Political	Benefits of the carpark are not realised	Benefits are incorrectly defined Consensus of the expected benefits across stakeholders is not reached	Incorrect outcomes are delivered and stakeholder expectations are not met	Possible	Major	High	Ensure user requirements and expected benefits are assessed and documented early including metrics for success Implement and adhere to a rigorous governance framework which assesses progression against Project deliverables Adjust benefits / KPIs should project direction, requirement etc. change during project development, planning, delivery or operational phases beyond what is presented in business case	Unlikely	Major	Medium	Not considered as a risk cost
18	Political	Inappropriate measurement of economic value of the carpark	Applying an inappropriate measurement tool premised on standard economic applications	Value of the carpark not holistically measured resulting in Government not supporting	Possible	Major	High	Capturing non-market benefits (intangibles) reflecting the values of all users - cost effective analysis consistent with PM&C Standards	Unlikely	Major	Medium	Not considered as a risk cost
19	Political	Change to hospital parking policy	ACT Health may change it's parking policy for staff and visitors.	The requirements of the carpark may change and this could lead to a design change, which would also lead to project delays.	Possible	Major	High	Project team to continue to work with ACT Health and CHS, and make sure open lines around parking requirements is maintained.	Possible	Moderate	Medium	
20	Political	Changes to broader policy regarding EV which could lead to inadequate EV spaces.	ACT Government may make changes to its EV policy.	Not enough EV spaces are allowed for or the wrong type of spaces are allowed, which could limit the use of the carpark.	Possible	Major	High	Continue to work with ACT Health and talk around the ACT Government EV Fleet vehicles and their requirements.	Possible	Moderate	Medium	
21	Program Delivery	Project delays due to insufficient timing for updates to documentation during design development	Minimal amount of time between stakeholder consultations.	Project is delayed as there is not enough time between user groups consultations to prepare or update relevant documentation	Likely	Moderate	High	CHS to assign dedicated Project Managers to ensure realistic timeframes are included in delivery program and manage consultants.	Possible	Moderate	Medium	
22	Program Delivery	Site following further geotechnical investigation proves to be unacceptable for delivery	Technical or constructability issue is identified	Project delays or project not realised Stakeholders lose confidence in project	Likely	Moderate	High	Technical investigation of site and revisit if required Adjust design to account for existing technical / infrastructure and consider constructability	Possible	Moderate	Medium	
23	Program Delivery	Speed of delivery reduces investment documentation standard	Compressed timeline	Compelling investment argument not delivered to Government expectations, requiring resubmission	Possible	Major	High	Commence drafting of DBC early CHS review of draft deliverables / DBC prior to submission to Treasury to ensure consistency of messaging and product finalisation	Unlikely	Major	Medium	
24	Program Delivery	Unable to remove remnant tree	EPSPD can not come to an agreement about the tree 64. Lack of communication and engagement with stakeholders and agreement between stakeholders.	Significant delays in project delivery due to stakeholder opposition	Possible	Moderate	Medium	Developing a detailed design brief prior to consultation, Maintain strong relationships and communication with key stakeholders throughout the design process Establish consensus on the critical nature of this carpark to health services at TCH Follow up with stakeholders for design comments / feedback Alternate (not preferred) options reconsidered if tree cannot be moved	Unlikely	Moderate	Medium	Remnant tree 64 impacts Option 2 as well as Option 1
25												

A	B	C	D	E	F	G	H	I	J	K	L	M
Ref #	Risk Category	Risk Description	How can it happen (Cause)	What can happen (Effect)	Likelihood	Consequence	Rating	Action / Mitigation Plan	Likelihood	Consequence	Rating	Comments
25	Program Delivery	Undesirable construction market conditions affecting procurement lead times and capacity of contractors	External factors relating to construction market conditions, such as number of concurrent projects, restrictions, decreased supply of materials etc, having negative impacts on the project	Delays in construction Prolonged procurement times Lack of labour / material causing delays	Likely	Moderate	High	Completion of cost plans by qualified Quantity Surveyor, and also completion of market sounding to determine likely supply levels of labour and capacity for the project Fast track / early procurement where possible Early consultation with industry on methods of delivery (delivery model) - e.g. Early Contractor Involvement	Possible	Moderate	Medium	Cost plans will include contingency
26	Program Delivery	Latent condition during construction	Unexpected site conditions encountered	Delay to construction program with flow on effects to budget	Possible	Moderate	Medium	Due diligence and invasive site investigation work during design phase (where possible) Contingency for construction to be included	Possible	Minor	Medium	
27	Program Delivery	TCCS doesn't approve of the proposed traffic impacts.	TCCS isn't consulted early enough and doesn't approve of any potential traffic impacts which could occur due to the development of carpark.	Delays to the construction of the carpark and the requirement for design rework and approvals.	Likely	Major	High	Early establishment of the engagement with TCCS, so any potential impacts can be mitigated. Ongoing engagement should occur with TCCS which will ensure that TCCS are happy with the development of the project, and limit the potential impacts it will have on Yamba Drive.	Possible	Major	High	
28	Program Delivery	Car park demand overestimated	projected demand for car spaces is overstated or unrealised due to, for example, increase in other forms of transport or decrease in demand for TCH services	Car park underutilised with significant amount of empty spaces constantly	Unlikely	Negligible	Low	Opportunity to repurpose parking spaces at the Yamba Precinct or elsewhere on campus	Unlikely	Negligible	Low	
29	Safety	Incidents-accidents during construction	Construction incidents and accidents	Site closure due to fatality (low probability) LTIs, MTIs Negative publicity	Possible	Severe	High	Contractor / Builder to be responsible for site safety CHS / MPC (delivery authority) to undertake site WHS inspections or surveillance on regular basis Safety / WHS considerations to be included as part of tendering evaluations (history, management plans and systems etc)	Possible	Moderate	Medium	Cost covered in contractual arrangements - will be contractor's responsibility
30	Safety	Incidents-accidents during operations including Equipment and Machinery incidents	Incident -accident, near misses involving use of equipment on-site and day-to-day operations	Injury to staff	Possible	Major	High	Will be addressed in design (Safety in Design review) of facility and through safe work operational procedures put in place by CHS, including fire and evacuation management plans	Possible	Moderate	Medium	
31	Safety	COVID Pandemic effects delivery of Project	Delay to government decision making Lockdown activity impacting delivery in design or construction	Delay to project and escalation of costs	Unlikely	Major	Medium	Develop COVID-19 policies and planning so it is clear what CHS will / can do to reduce effects of delays and its contractual obligations and standing Implement a business continuity plan for all stakeholders and staff, including evidence of COVID-safe plan and business continuity documents from Project Managers Data is kept securely, and redundancies are built into team resourcing Obtain contractors and consultants COVID-19 safety and business continuity plans at the start of engagement Discuss with and indicate to Minister the effect of any government delay / restrictions on project	Possible	Moderate	Medium	Potential for Gov shut down and approval delays
32	Safety	Facade does not take into consideration the various facilities at the hospital and has an adverse impact on patients and staff.	Facade does not take into consideration the Hospital Campus and the needs of the patients (inclusive of patient privacy and security)	CHS patients privacy is compromised and patients have an adverse response.	Possible	Major	High	Work with ACT Health and engage with CHS when reviewing the facade and make sure is complementary to the needs of the campus.	Possible	Moderate	Medium	
33	Safety	Inadequate safety features are included in the carpark design and a safe and secure environment is not fostered.	Insufficient security and safety measures are allowed for in the design.	Unsafe conditions are created or allowed for in the carpark and that which could allow for an incident to occur.	Possible	Severe	High	Undertake a number of reviews of the carpark design which promotes safe practices, inclusive of CCTV and CPTED design.	Possible	Moderate	Medium	
34	Scope	User expectations, budget and design brief are misaligned	Inaccurate understanding and communication of each functional element's requirements	Project delays Project does not meet user requirements Increased project costs	Possible	Major	High	Early and clear consultation and communication plan implemented at early stages Obtain written approvals from relevant stakeholders on expectations, design brief etc.	Possible	Moderate	Medium	
35	Scope	Parking requirements have been under estimated.	CHS parking usage and Canberra growth grows and it's not taken into account.	The carpark does not meet the basic requirements.	Possible	Moderate	Medium	Project team to work with EPSSD and ACT Health on looking for ways to develop carpark and look to future proof the carparks. Consideration of demand management mechanisms also possible	Possible	Minor	Medium	
36	Scope	Unexpected growth in Canberra which impacts CHS parking needs	Canberra population grows faster than expected.	More pressure is placed on CHS and as a result the CHS parking requirements and CHS fails to meet the community needs.	Possible	Major	High	Look to implement a carpark design which maximises the parking numbers, and is able to be built upon (if planning regulations allows such activities).	Possible	Moderate	Medium	
37	Scope	Solar panel roof reimplemented at future date	ACT Government revisits option to include solar panels on roof	Carpark design does not allow for solar panels on roof or the associated batteries with the facility	Unlikely	Major	Medium	CHS and ACT Government to ensure adequate renewable energy provided from alternate sources to avoid installation of Solar panel roof on carpark	Unlikely	Minor	Low	Solar panel roof option rejected following Feasibility Study due to likely cost and resulting from the significant infrastructure work required to deliver and operate such an installation.

Ref #	Risk Category	Risk Description	How can it happen (Cause)	What can happen (Effect)	Likelihood	Consequence	Rating	Action / Mitigation Plan	Likelihood	Consequence	Rating	Comments
38	Stakeholder Support	Lack of engagement around the Facade and community disapproval	The project team develops a facade (which is required to be visually appealing and reflects the local community) and does not engage with key stakeholder groups during the development of the facade	Local community groups will complain which could result in rework and will delay the project.	Possible	Moderate	Medium	Ongoing stakeholder engagement with the community and traditional owners during the development of the facade.	Possible	Minor	Medium	
39	Stakeholder Support	Inadequate project definition	Misunderstanding of user requirements	Carpark does not deliver the desired outcomes / requirements	Possible	Moderate	Medium	Ongoing consultation with all stakeholders, specifically users, to ensure accurate definition and alignment of user specifications through program delivery	Possible	Minor	Medium	
40	Stakeholder Support	Additional stakeholder requirements or services required to be included to satisfy stakeholders	Future engagement and consultation with stakeholders result in additional requirements for Yamba Carpark.	Delay to project and escalation of costs Dissatisfied stakeholders if additional requirements are not provided	Unlikely	Moderate	Medium	Regular stakeholder workshops and PCG steering groups Client approvals hold points	Unlikely	Minor	Low	
41	Stakeholder Support	Lack of community support will impact the success of the carpark, particularly during construction.	The community may not be prepared for the delays and impacts related to the construction of the carpark.	Dissatisfied community, which could create negative community support for the project.	Unlikely	Moderate	Medium	A strong communications plan will be produced which will focus on making sure that the community is well informed of the development of carpark and the issues which it may cause.	Unlikely	Minor	Low	
42	Technical	Parking infrastructure requirements not fully considered	Insufficient investigation and misunderstanding of facility's infrastructure requirements	Unexpected upgrades required Project delays Increase in project costs	Likely	Moderate	High	Early engagement with key stakeholders Thorough site assessment in the early stages of planning Robust design analysis in early stages of planning	Possible	Moderate	Medium	
43	Technical	Additional fire engineering provisions are required due to the increased risk of fires.	Due to the EV requirement charging facilities there is a higher chance of fires occurring.	Relocation and/or installation of new fire walls, fire hose reels which will add to the program due to additional assessment on coverage compliance, commissioning etc.	Possible	Major	High	Design to consider additional locations of fire walls and fire hose reels. Early advice and discussions with certifier and engineers on options - to be further tested / confirmed with further investigations	Possible	Moderate	Medium	
44	Technical	Basement flooding	The basement is built along a creek line.	Flooding in the basement could occur if a crack in the building foundations occur or if major flooding occurred, there would be limited options to release the water.	Possible	Severe	High	Design needs to consider the impacts of building on top of a creek line, and include mitigation strategies in the design. Early advice and discussions with certifier and engineers on options - to be further tested / confirmed with further investigations	Possible	Major	High	
45	Technical	Requirement for the carpark to be repurposed may impact on the design.	The design team don't take into account the requirement to be able to repurpose various areas.	The carpark does not meet the requirements to be reused, and the carpark space becomes unused real estate.	Possible	Major	High	The design team to consider looking at creating spaces which could be reused, so in the event new space needs to be achieved it is able to be changed.	Possible	Moderate	Medium	
46	Technical	Allowances for EV charging types	ACT Government may invest in a number of EV types of car which have unique charging functions.	Currently there is no universal charger for EV vehicles and there is potential that the chargers which are allowed do not meet the ACT Government Fleet requirements.	Possible	Major	High	Continue to work with ACT Health and talk around the ACT Government EV Fleet vehicles and their requirements.	Possible	Moderate	Medium	
47	Technical	Use of EoT Facilities	EoT facilities do not properly meet the requirements of CHS staff.	CHS staff do not use the EoT Facilities and the space becomes superfluous.	Possible	Major	High	Continue to work with ACT Health and CHS staff when developing the EoT Facilities and make sure that they are a reflection of what is required.	Possible	Moderate	Medium	

	Table 1: Category of Risk
1	Safety
2	Scope
3	Stakeholder Support
4	Financial
5	Program Delivery
6	Disruption / Inconvenience
7	Technical
8	Political
9	Environment / Climate
10	Operation & Maintenance

Table 2: Risk Consequence Description									
Category of Risk	Safety	Scope	Stakeholder Support	Financial	Program Delivery	Changes / Inconvenience	Technical	Political	Environment / Climate
Highly Visible	Major work safety incidents, only if or minor economic changes	Some minor design changes with budget	Some reports of user dissatisfaction	Significant financial loss (\$10,000 to \$50,000 to remedy)	Program is able to be met	Not a limited minor inconvenience to others	Not a limited minor technical issue encountered	Issues managed within PMO	No material environmental or climate impacts
Minor	Minor injury requiring medical attention, minor burns, abrasions, minor burns, abrasions	Some minor design changes with budget	Small number of user expectations not met, a number of services not provided to user	Minor financial loss <\$1M to remedy, minor adjustments to program delivery	Delays experienced to program delivery (up to 6 months)	Some minor inconveniences to others, minor program delays (<2 weeks)	Minor technical issues encountered on program (<1 month)	Unilateral response or intense media scrutiny and/or government investigation	Minor impact to O&M but can be managed with existing processes
Stakeholder Support	Some minor injury or illness, hospitalization for broken ribs, burns or regular treatment	Some moderate design changes with <10% increase in budget	A number of user expectations not met, a number of services not provided to user	Moderate financial loss <\$1M to remedy, financial estimates require review, financial estimates require review	Delays experienced to program delivery (6-12 months)	Moderate inconveniences to others, moderate program delays (<3 months)	Moderate technical issues encountered with minor impact on program (<2 months)	Minor media or issues covered in Parliament	Significant environmental or climate impacts, may or may not be managed with existing processes
Financial	Life threatening injury or illness, hospitalization for broken ribs, burns or regular treatment	Some moderate design changes with 10-20% increase in budget	User expectations largely not met, a number of services not provided to user	Significant financial loss >\$1M to remedy, financial estimates require review, financial estimates require review	Delays experienced to program delivery (>12 months)	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>4 months)	Significant media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes
Program Delivery	Partial body injury or illness, hospitalization for broken ribs, burns or regular treatment	Some design changes with >20% increase in budget	User expectations largely not met, a number of services not provided to user	Extensive financial loss >\$5M to remedy, financial estimates require review, financial estimates require review	Overall program delay indefinite	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>6 months)	Major media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes
Disruption / Inconvenience	Partial body injury or illness, hospitalization for broken ribs, burns or regular treatment	Some design changes with >20% increase in budget	User expectations largely not met, a number of services not provided to user	Extensive financial loss >\$5M to remedy, financial estimates require review, financial estimates require review	Overall program delay indefinite	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>6 months)	Major media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes
Technical	Partial body injury or illness, hospitalization for broken ribs, burns or regular treatment	Some design changes with >20% increase in budget	User expectations largely not met, a number of services not provided to user	Extensive financial loss >\$5M to remedy, financial estimates require review, financial estimates require review	Overall program delay indefinite	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>6 months)	Major media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes
Political	Partial body injury or illness, hospitalization for broken ribs, burns or regular treatment	Some design changes with >20% increase in budget	User expectations largely not met, a number of services not provided to user	Extensive financial loss >\$5M to remedy, financial estimates require review, financial estimates require review	Overall program delay indefinite	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>6 months)	Major media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes
Environment / Climate	Partial body injury or illness, hospitalization for broken ribs, burns or regular treatment	Some design changes with >20% increase in budget	User expectations largely not met, a number of services not provided to user	Extensive financial loss >\$5M to remedy, financial estimates require review, financial estimates require review	Overall program delay indefinite	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>6 months)	Major media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes
Operation & Maintenance	Partial body injury or illness, hospitalization for broken ribs, burns or regular treatment	Some design changes with >20% increase in budget	User expectations largely not met, a number of services not provided to user	Extensive financial loss >\$5M to remedy, financial estimates require review, financial estimates require review	Overall program delay indefinite	Major inconveniences to others, requiring significant changes to operational activities or results in delays to contribution (>3 months)	Significant technical issues encountered with major impact on program (>6 months)	Major media or issues covered in Parliament	Major environmental or climate impacts, may or may not be managed with existing processes

Table 3: Risk Rating / Consequence									
Likelihood		Annual Occurrence	Frequency	Highly Visible	Minor	Medium	Major	Severe	
Likelihood	Annual Occurrence	Is expected to occur in most circumstances	> 1 in 10	Low	Medium	Medium	Major	Severe	
	Unlikely	Will probably occur	1 in 10 - 100	Low	Medium	Medium	Major	Severe	
	Possible	May occur at some time in the future	1 in 100 - 1,000	Low	Medium	Medium	Major	Severe	
	Unlikely	Could occur but doubtful	1 in 1,000 - 10,000	Low	Medium	Medium	Major	Severe	
Rate		May occur but only in exceptional circumstances	1 in 10,000 - 100,000	Low	Low	Low	Medium	Medium	



23 January 2025

INFRASTRUCTURE CANBERRA
Attention: Patrick Atkinson
PatrickGAtkinson@act.gov.au

Dear Patrick,

THE CANBERRA HOSPITAL - CARPARK WORKS
CONCEPT DESIGN ESTIMATES

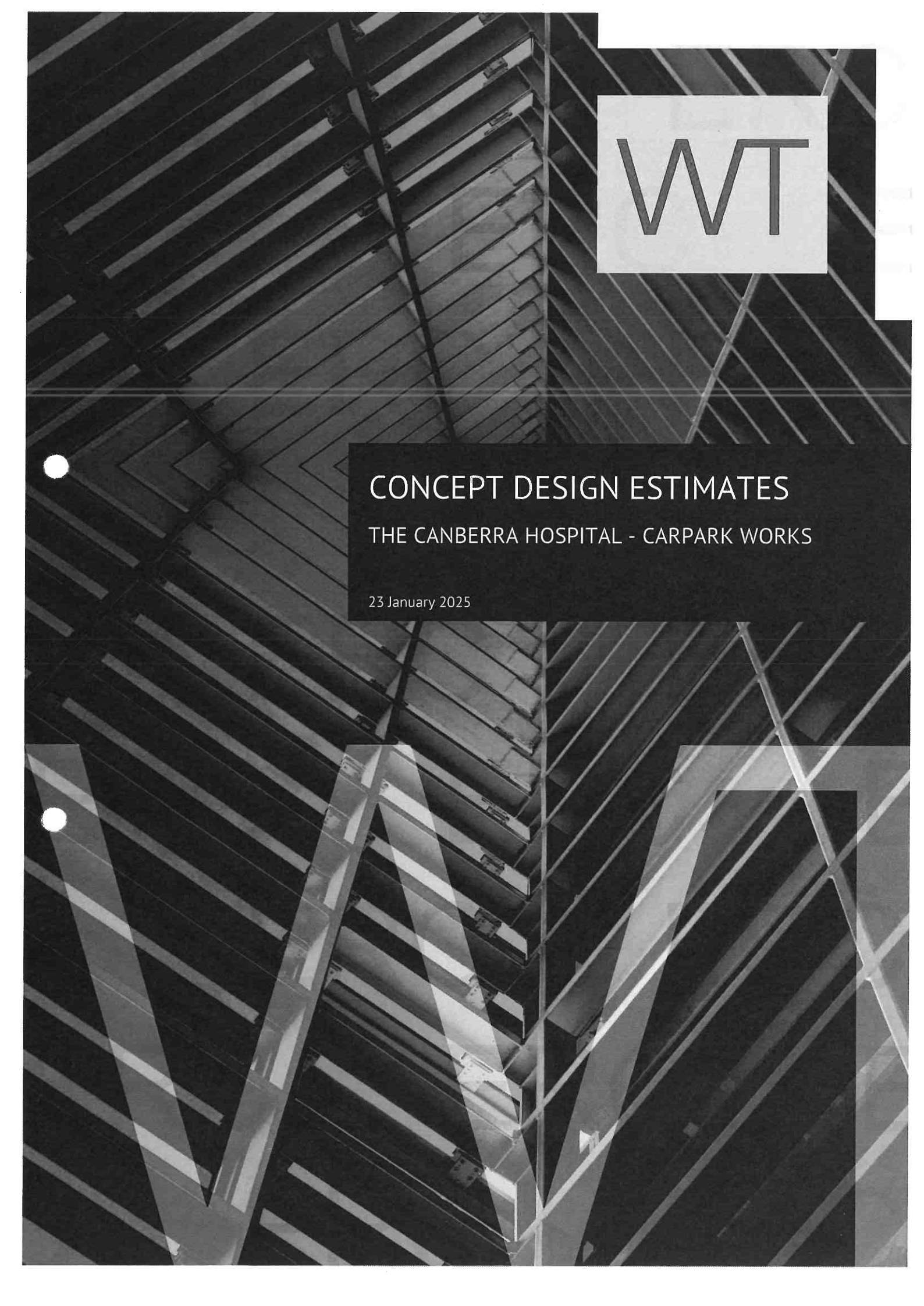
Please find attached our estimates and report for the proposed carparking works at The Canberra Hospital.

Please do not hesitate to contact us to discuss any aspect which requires clarification or amendment to the assumed scope of works on our part.

Yours sincerely

JAMES OSENTON
WT Partnership
Executive Director

WT REF: PR-027920 - TCH carpark works



WT

CONCEPT DESIGN ESTIMATES
THE CANBERRA HOSPITAL - CARPARK WORKS

23 January 2025

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APPENDICES

APPENDIX A: HELIPAD CONVERSION TO CARPARKING

APPENDIX B: BUILDING 6 SITE CONVERSION TO CARPARKING

APPENDIX C: CIT SITE CONVERSION TO CARPARKING

APPENDIX D: CARPARK GUIDANCE SYSTEM TO EXISTING CARPARK

1 QUALITY ASSURANCE

	INITIALS	DATE
DRAFT PREPARED BY	JO	21-22 January 2025
REVIEWED BY	JO	23 January 2025
APPROVED BY	JO	23 January 2025

2 ESTIMATE SUMMARIES

The estimate can be summarised as follows:

APPENDIX A: HELIPAD CONVERSION TO CARPARKING		\$
Gross Construction Costs (GCC) Total - Exc GST		372,023
Fees		66,964
Contingency		93,006
Other Costs		10,640
END TOTAL COST (ETC) - Exc GST		542,633
GST		54,263
END TOTAL COST (ETC) - Inc GST		596,897

APPENDIX B: BUILDING 6 SITE CONVERSION TO CARPARKING		\$
Gross Construction Costs (GCC) Total - Exc GST		1,503,124
Fees		270,562
Contingency		450,937
Other Costs		44,492
END TOTAL COST (ETC) - Exc GST		2,269,115
GST		226,912
END TOTAL COST (ETC) - Inc GST		2,496,027

APPENDIX C: CIT SITE CONVERSION TO CARPARKING		\$
Gross Construction Costs (GCC) Total - Exc GST		2,833,636
Fees		510,055
Contingency		850,091
Other Costs		83,876
END TOTAL COST (ETC) - Exc GST		4,277,657
GST		427,766
END TOTAL COST (ETC) - Inc GST		4,705,423

APPENDIX D: CARPARK GUIDANCE SYSTEM TO EXISTING CARPARK		\$
Gross Construction Costs (GCC) Total - Exc GST		2,023,250
Fees		364,185
Contingency		606,975
Other Costs		59,888
END TOTAL COST (ETC) - Exc GST		3,054,298

GST	305,430
END TOTAL COST (ETC) - Inc GST	3,359,728

OVERALL SUMMARY		\$
Gross Construction Costs (GCC) Total - Exc GST	6,732,033	
Fees	1,211,766	
Contingency	2,001,009	
Other Costs	198,896	
END TOTAL COST (ETC) - Exc GST	10,143,704	
GST	1,014,370	
END TOTAL COST (ETC) - Inc GST	11,158,075	

3 INTRODUCTION

3.1 PROJECT DEFINITION

The sites are located within close proximity of the Canberra Hospital campus in Woden, Canberra, ACT.

TCH helipad conversion

- The works comprise of reworks necessary to convert the existing helipad to be able to be used for carparking.

Building 6 site

- Creation of a temporary carpark on the site of the former Building 6 including access from Palmer street, bulk earthworks, stormwater, access ramp, bitumen, line marking, lighting/safety to meet standards for key workers.

CIT carpark

- Creation of a temporary carpark on the site of the former CIT carpark including bulk earthworks, stormwater, access ramp, bitumen, line marking, lighting/safety to meet standards for key workers.

Existing carpark

- Retrofitting @ 2000 existing car parks that currently exist on the campus with occupancy lights.

3.2 METHODOLOGY

The methodology used for the preparation of this report is as follows:

- Review of the issued documents outlining scope of works.
- Measurement of indicative quantities and the use of current day rates and prices to prepare estimates for the required works for the project.

4 DOCUMENTATION

The estimate is based on the following documentation:

- RG 24062 CHS helipad conversion tender documents produced by R D Gossip Pty Ltd dated 8 November 2024.
- 209109 - TTW-10-SK-CV-Parking options 1/2/3 for the Building 6 site.

5 SPECIFIC EXCLUSIONS

Generally excluded from the estimates are the following items:

- Testing for Hazmat
- Removal of HAZMAT and any other contaminants
- Make good costs to existing premises
- IT hardware and software including PC's, routers, switches, racks and UPS
- Strengthening / adjustments to existing surrounding structures
- Legal fees
- Finance Costs
- Unknown site conditions in excess of allowances made
- Landlord incentive and contribution costs (i.e. supply of base building carpet and ceiling tiles)
- Staged delivery costs
- Client project contingency
- Prolongation and time extension costs
- Digital signage

6 INCLUSIONS

The following allowances have been included:

TCH helipad conversion

- The % has been applied to the Gross Construction Cost (GCC)
- Authority Fees and Charges - 1%
- Insurance - 1%
- CHS Internal PM Costs - 10%
- Commission and Transition - 2%
- Escalation - 4%
- Planning Contingency - 5%
- Design Contingency - 5%
- Construction Contingency - 5%
- Client Contingency - 10%
- This % has been applied to GCC plus Fees & Contingency
- ICBR - 2%

Building 6 site

- The % has been applied to the Gross Construction Cost (GCC)
- Design Fees - 10%
- Authority Fees and Charges - 1%
- Insurance - 1%
- CHS Internal PM Costs - 0%
- Commission and Transition - 2%
- Escalation - 4%
- Planning Contingency - 5%
- Design Contingency - 10%
- Construction Contingency - 5%
- Client Contingency - 10%
- This % has been applied to GCC plus Fees & Contingency
- ICBR - 2%

CIT carpark

- The % has been applied to the Gross Construction Cost (GCC)
- Design Fees - 10%
- Authority Fees and Charges - 1%
- Insurance - 1%
- CHS Internal PM Costs - 0%
- Commission and Transition - 2%

- Escalation - 4%
- Planning Contingency - 5%
- Design Contingency - 10%
- Construction Contingency - 5%
- Client Contingency - 10%
- This % has been applied to GCC plus Fees & Contingency
- ICBR - 2%

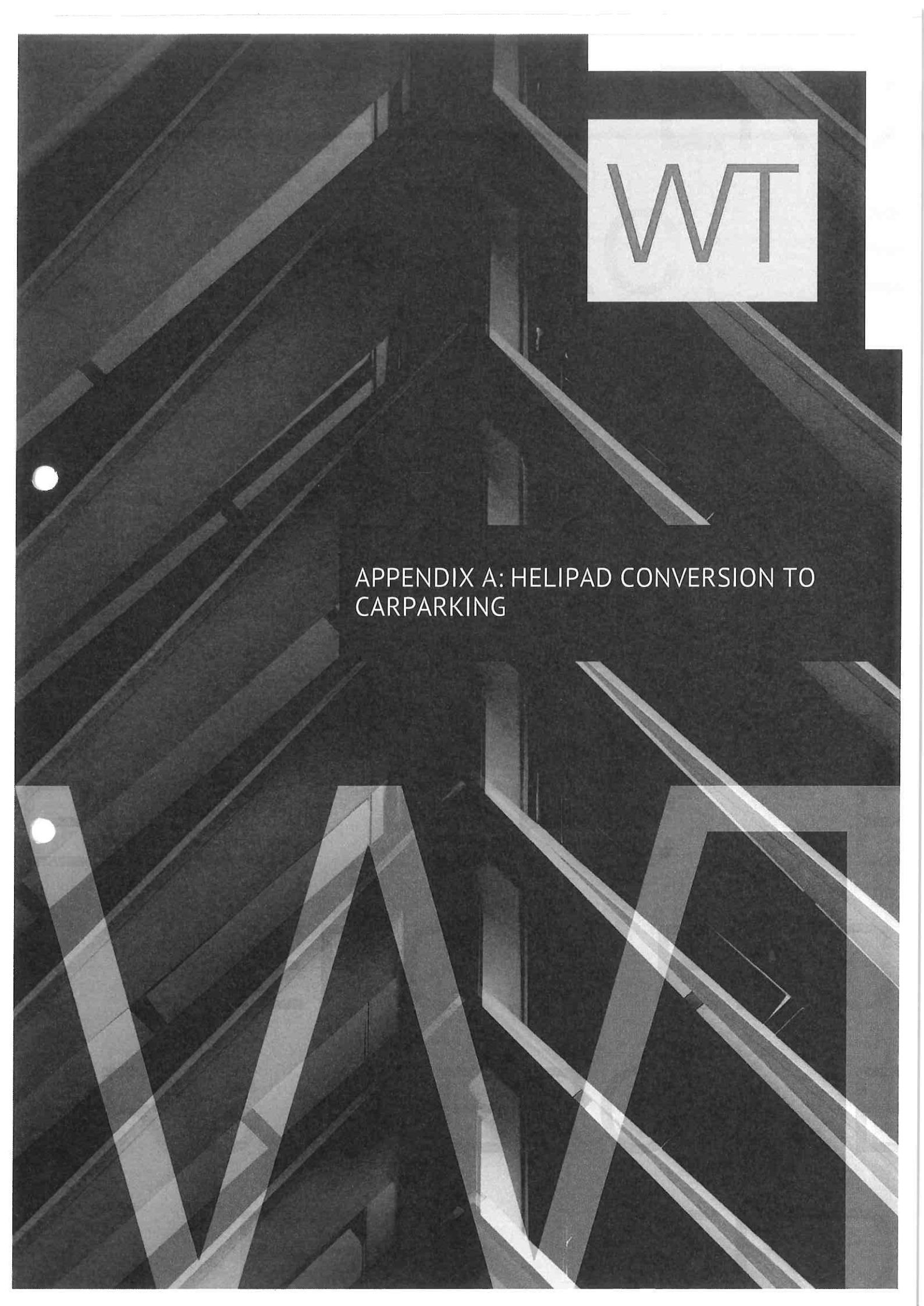
Existing carpark

- The % has been applied to the Gross Construction Cost (GCC)
- Design Fees - 10%
- Authority Fees and Charges - 1%
- Insurance - 1%
- CHS Internal PM Costs - 0%
- Commission and Transition - 2%
- Escalation - 4%
- Planning Contingency - 5%
- Design Contingency - 5%
- Construction Contingency - 10%
- Client Contingency - 10%
- This % has been applied to GCC plus Fees & Contingency
- ICBR - 2%

7 CONCLUSION / DISCLAIMER

Where WT has not been provided with sufficient information, we have made assumptions and allowances which will require detailed review once the design is developed. Please review the detail of our estimates, in particular the many assumptions as to scope, quality, performance and finishes of the current design intent to ensure it generally reflects your requirements.

The estimate has been prepared expressly for ICBR for the purpose of preparing budgets and is not to be used for any other purpose or distributed to any third party.



WT

APPENDIX A: HELIPAD CONVERSION TO
CARPARKING

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Summary 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
	Minor Concrete Works				38,525
	Fence & Barriers				3,670
	Pavement Marking				53,695
	Public Lighting				155,800
	Road Furniture				37,190
	Trade Works Total - Exc GST				288,880
	Preliminaries / Margin				83,144
	Gross Construction Costs (GCC) Total - Exc GST				372,023
	Fees				66,964
	Contingency				93,006
	Other Costs				10,640
	END TOTAL COST (ETC) - Exc GST				542,633
	GST				54,263
	END TOTAL COST (ETC) - Inc GST				596,897
	Total Cost				596,897

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
MINOR CONCRETE WORKS					
Concrete Kerbs and Open Drains					
2/A	PKO	32	m	300.00	9,600
2/B	PKO 'U' BARS	55	m	35.00	1,925
Concrete Paths Driveways Medians					
2/C	Plate and concrete void (anti-shrink admixture)	30	no	900.00	27,000
Total - Minor Concrete Works					38,525
FENCE & BARRIERS					
2/D	Remove Fence and 2 gates including posts and make good concrete surface	62	m	35.00	2,170
2/E	Steel bollard 1.3m high - Base Plate fixed	3	no	500.00	1,500
Total - Fence & Barriers					3,670
PAVEMENT MARKING					
2/F	Eradication of Redundant Pavement marking	1	item	50,000.00	50,000
2/G	Set Out of Pavement Marking	1	item	1,000.00	1,000
Paint – Longitudinal Lines					
2/H	Barrier Line (B1) PRIME & YELLOW PAINT	15	m	6.00	90
2/J	Parking Line (P1) PRIME & YELLOW PAINT	395	m	4.50	1,778
2/K	Parking Line (P2) PRIME & YELLOW PAINT	6	m	4.50	27
2/L	Parking Line (P3) PRIME & YELLOW PAINT	27	m	7.00	189
Paint – Symbols, Legends, Arrows, Chevrons, Traffic Islands and Kerbs					
2/M	Chevron - PRIME & YELLOW PAINT	3	m2	30.00	90
Long Life Material (LLM) - Symbols, Legends and Arrows					
2/N	Pavement Arrow (A1) PRIME & YELLOW PAINT	3	no	85.00	255
2/P	Pavement Arrow (A2) PRIME & YELLOW PAINT	1	no	96.00	96
2/Q	Pavement Arrow (A3) PRIME & YELLOW PAINT	2	no	85.00	170
Total - Pavement Marking					53,695
PUBLIC LIGHTING					
2/R	8m Column (SQ black base plate)	13	no	2,800.00	36,400
2/S	50-99 W Luminaire (Weef VFL 530)	29	no	2,200.00	63,800
2/T	Demolition and Disposal of Columns	5	no	700.00	3,500
2/U	Disconnect, Terminate and Disposal of Recessed Luminaires	30	no	500.00	15,000

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
<u>PUBLIC LIGHTING</u>					<i>(continued)</i>
3/A	Disconnect, Terminate and Disposal of Conduit and Cables for Recessed Luminaires to distribution board and making good fastener voids	500	m	25.00	12,500
3/B	Disconnect, Terminate and Disposal of car park mounted hinge column and associate wind sock and lighting and beacon. Includes making good of existing substrate	1	item	1,200.00	1,200
3/C	Disconnect, Terminate and Disposal of rooftop mounted hinge column and associate wind sock and lighting and beacon. Includes making good of existing substrate	1	item	1,200.00	1,200
3/D	Extra to rooftop column removal - cold cut dismantling insitu	1	item	5,000.00	5,000
3/E	Disconnect, Terminate and Disposal of car park mounted landing beacon. Includes making good of existing substrate	1	item	3,200.00	3,200
<u>Supply and Lay Conduit</u>					
3/F	Supply and install additional conduit to match existing including joint boxes and fixtures	200	m	40.00	8,000
3/G	Supply and Lay Cable (6mm 2 core plus earth)	400	m	15.00	6,000
Total - Public Lighting					155,800
<u>ROAD FURNITURE</u>					
3/H	Supply and Install Wheel Stops on concrete pavement	11	no	250.00	2,750
3/J	Supply and installation of Ingal Zee Park safety barrier with 1.3m anti climb mesh including connection to existing (Ingal supply cost \$21K)	84	m	410.00	34,440
Total - Road Furniture					37,190
<u>PRELIMINARIES / MARGIN</u>					
3/K	Site Establishment and Inductions	1	item	12,500.00	12,500
3/L	Coordination with Utility Authorities	1	item	500.00	500
3/M	Survey Set Out and Control	1	item	1,000.00	1,000
3/N	Additional Work - Allowance	1	item	20,000.00	20,000
3/P	Quality system documents and records	1	item	1,200.00	1,200
3/Q	Supervision	1	item	25,000.00	25,000
<u>Preparation of Works as Executed drawings</u>					
3/R	Civil - Provisional sum	1	item	5,000.00	5,000
3/S	Streetlight - Provisional sum	1	item	1,500.00	1,500
3/T	Control of traffic	1	item	2,000.00	2,000
3/U	Margin	1	item	14,443.98	14,444
Total - Preliminaries / Margin					83,144
<u>FEES</u>					

CONCEPT ESTIMATE

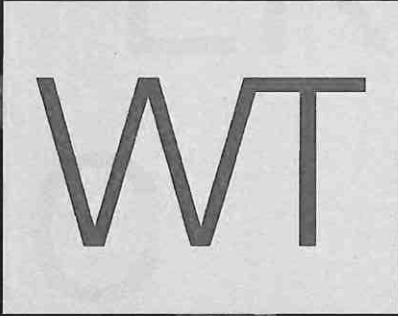
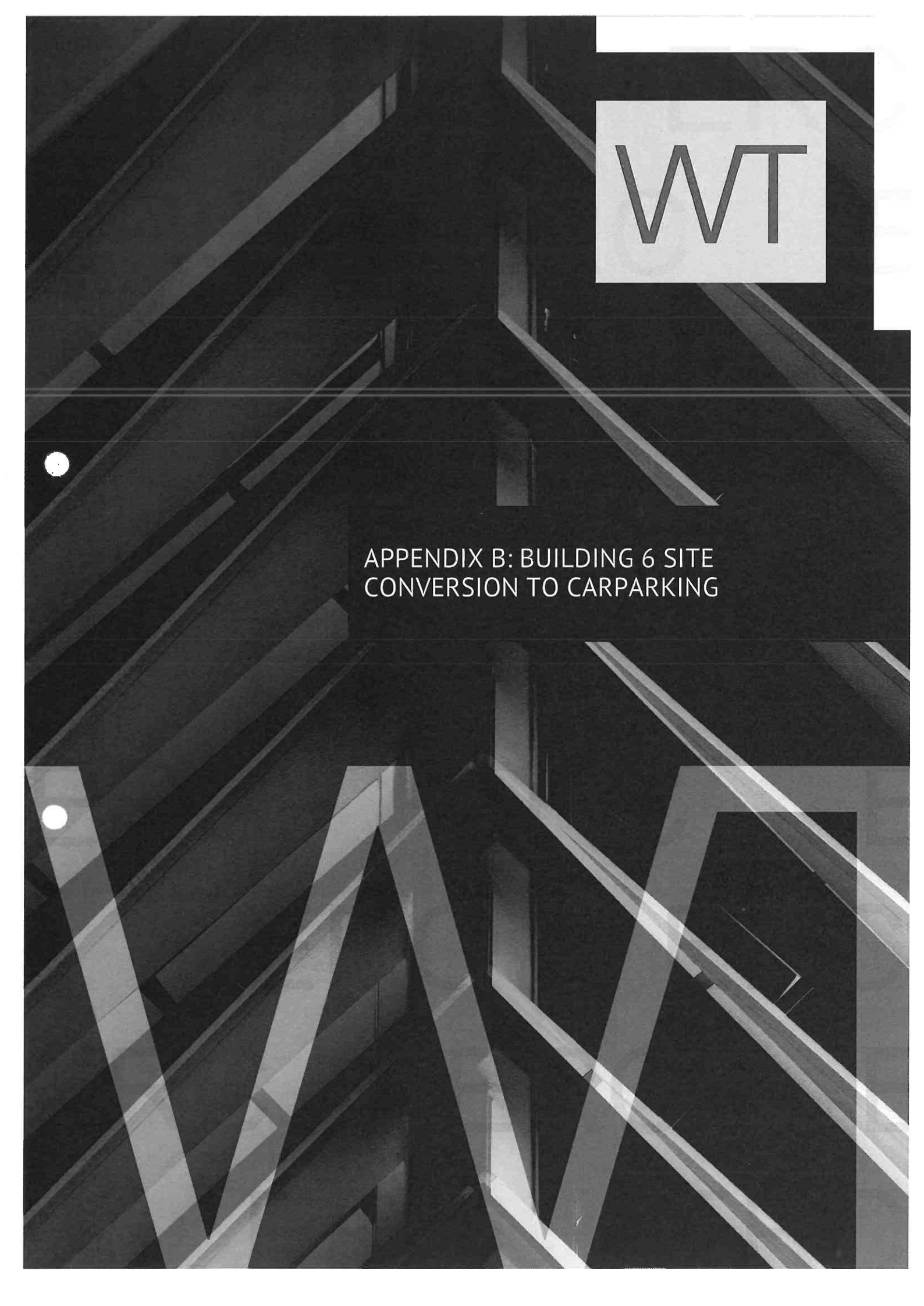
CONCEPT DESIGN

Estimate Details

21/01/2025

WT

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
FEES					<i>(continued)</i>
<u>Based on % of GCC</u>					
4/A	Authority Fees and Charges	1	%	372,023.48	3,720
4/B	Insurance	1	%	372,023.48	3,720
4/C	CHS Internal PM Costs	10	%	372,023.48	37,202
4/D	Commission and Transition	2	%	372,023.48	7,440
4/E	Escalation	4	%	372,023.48	14,881
Total - Fees					66,964
CONTINGENCY					
<u>Based on % of GCC</u>					
4/F	Planning Contingency	5	%	372,023.48	18,601
4/G	Design Contingency	5	%	372,023.48	18,601
4/H	Construction Contingency	5	%	372,023.48	18,601
4/J	Client Contingency	10	%	372,023.48	37,202
Total - Contingency					93,006
OTHER COSTS					
<u>Based on % of GCC plus Fees & Contingency</u>					
4/K	ICBR	2	%	531,993.58	10,640
Total - Other Costs					10,640



WT

APPENDIX B: BUILDING 6 SITE
CONVERSION TO CARPARKING

CONCEPT ESTIMATE

CONCEPT DESIGN

Estimate Summary 21/01/2025

WT

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
	Earthworks				188,320
	Fence & Barriers				300,000
	Pavement				504,390
	Pavement Marking				10,700
	Stormwater				99,160
	Public Lighting				152,000
	Road Furniture				36,500
	Trade Works Total - Exc GST				1,291,070
	Preliminaries / Margin				212,054
	Gross Construction Costs (GCC) Total - Exc GST				1,503,124
	Fees				270,562
	Contingency				450,937
	Other Costs				44,492
	END TOTAL COST (ETC) - Exc GST				2,269,115
	GST				226,912
	END TOTAL COST (ETC) - Inc GST				2,496,027
	Total Cost				2,496,027

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
EARTHWORKS					
6/A	Strip existing surface	4,708	m2	5.00	23,540
6/B	Cut / fill exercise	4,708	m2	35.00	164,780
Total - Earthworks					188,320
FENCE & BARRIERS					
6/C	Retaining wall to Palmer Street @ 3m high including footing	33	m	3,500.00	115,500
6/D	Retaining wall to ramp @ 2m high including footing	66	m	2,000.00	132,000
6/E	Allowance for bollards	5	no	500.00	2,500
6/F	Entry / exit boom gate & pay system	1	item	50,000.00	50,000
Total - Fence & Barriers					300,000
PAVEMENT					
6/G	Subbase / bitumen seal	4,708	m2	100.00	470,800
6/H	Kerbs	151	m	90.00	13,590
6/I	Vehicle crossing from Palmer Street	1	item	10,000.00	10,000
6/K	Adjustment to existing kerb / road	1	item	10,000.00	10,000
Total - Pavement					504,390
PAVEMENT MARKING					
6/L	Set Out of Pavement Marking	1	item	1,000.00	1,000
<u>Paint – Longitudinal Lines</u>					
6/M	Barrier / Parking Lines - PRIME & YELLOW PAINT	1,425	m	6.00	8,550
<u>Paint – Symbols, Legends, Arrows, Chevrons, Traffic Islands and Kerbs</u>					
6/N	Chevron - PRIME & YELLOW PAINT	5	m2	30.00	150
<u>Long Life Material (LLM) - Symbols, Legends and Arrows</u>					
6/P	Pavement Arrow - PRIME & YELLOW PAINT	10	no	100.00	1,000
Total - Pavement Marking					10,700
STORMWATER					
6/Q	Allowance for stormwater system - pipes / pits / grates	4,708	m2	20.00	94,160
6/R	Connection to existing system	1	item	5,000.00	5,000
Total - Stormwater					99,160
PUBLIC LIGHTING					
6/S	8m Column (SQ black base plate)	15	no	2,800.00	42,000
6/T	50-99 W Luminaire (Weef VFL 530)	30	no	2,200.00	66,000

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
	<u>PUBLIC LIGHTING</u>				<i>(continued)</i>
7/A	Footings for columns including excavation / concrete / reinforcement / backfill	15	no	1,200.00	18,000
7/B	Connection to electrical supply / board	1	item	5,000.00	5,000
	<u>Supply and Lay Conduit</u>				
7/C	Supply and install conduit including joint boxes and fixtures	300	m	40.00	12,000
7/D	Supply and Lay Cable (6mm 2 core plus earth)	600	m	15.00	9,000
	Total - Public Lighting				152,000
	<u>ROAD FURNITURE</u>				
7/E	Supply and Install wheel stops	146	no	250.00	36,500
	Total - Road Furniture				36,500
	<u>PRELIMINARIES / MARGIN</u>				
7/F	Site Establishment and Inductions	1	item	25,000.00	25,000
7/G	Coordination with Utility Authorities	1	item	2,500.00	2,500
7/H	Survey Set Out and Control	1	item	2,500.00	2,500
7/J	Additional Work - Allowance	1	item	20,000.00	20,000
7/K	Quality system documents and records	1	item	2,500.00	2,500
7/L	Supervision	1	item	75,000.00	75,000
	<u>Preparation of Works as Executed drawings</u>				
7/M	Civil - Provisional sum	1	item	10,000.00	10,000
7/N	Streetlight - Provisional sum	1	item	5,000.00	5,000
7/P	Control of traffic	1	item	5,000.00	5,000
7/Q	Margin	1	item	64,553.50	64,554
	Total - Preliminaries / Margin				212,054
	<u>FEES</u>				
	<u>Based on % of GCC</u>				
7/R	Design Fees	10	%	1,503,123.50	150,312
7/S	Authority Fees and Charges	1	%	1,503,123.50	15,031
7/T	Insurance	1	%	1,503,123.50	15,031
7/U	CHS Internal PM Costs		%	1,503,123.50	0
7/V	Commission and Transition	2	%	1,503,123.50	30,062
7/W	Escalation	4	%	1,503,123.50	60,125
	Total - Fees				270,562
	<u>CONTINGENCY</u>				

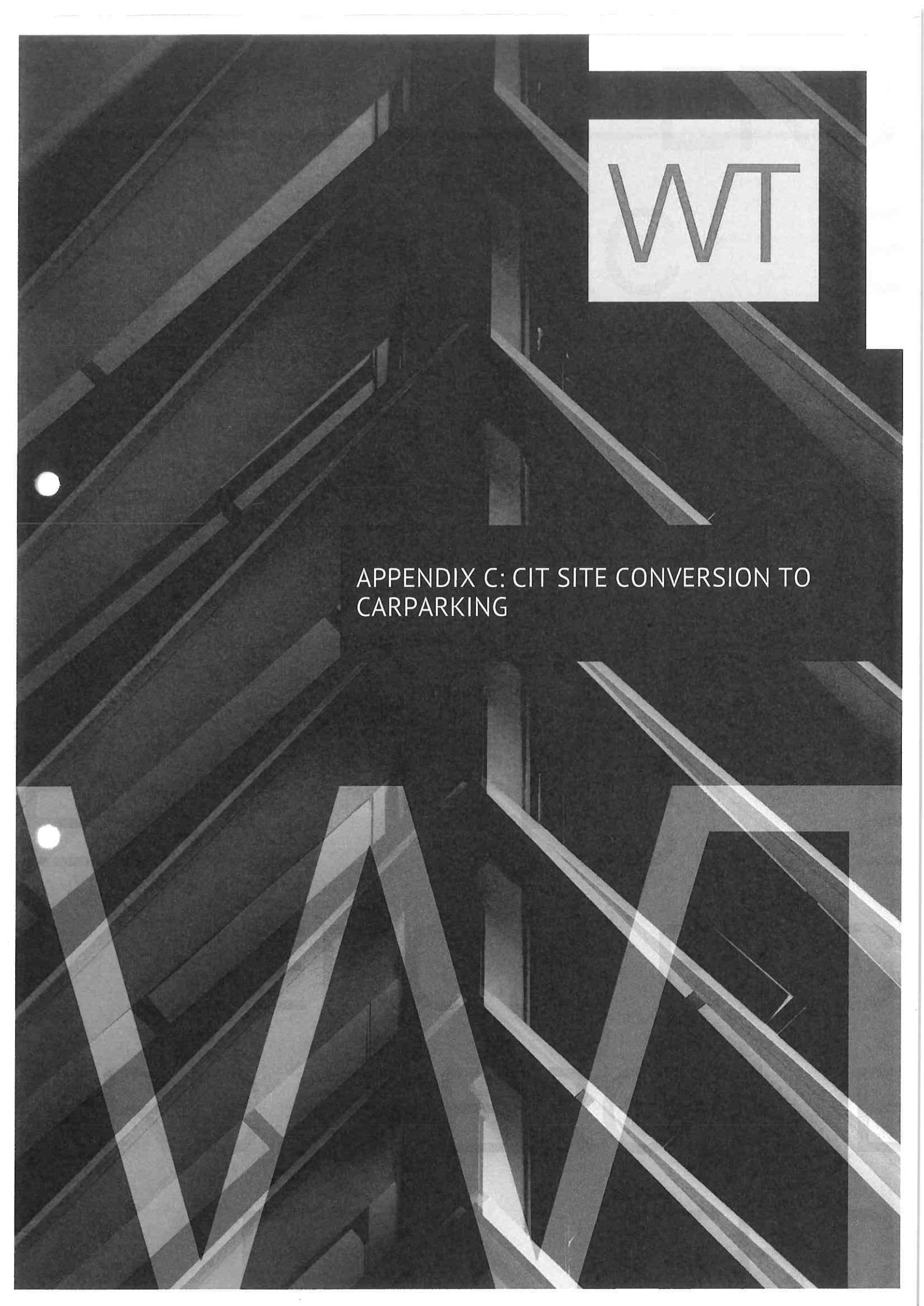
CONCEPT ESTIMATE

CONCEPT DESIGN

Estimate Details 21/01/2025 .

WT

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
CONTINGENCY					<i>(continued)</i>
<u>Based on % of GCC</u>					
8/A	Planning Contingency	5	%	1,503,123.50	75,156
8/B	Design Contingency	10	%	1,503,123.50	150,312
8/C	Construction Contingency	5	%	1,503,123.50	75,156
8/D	Client Contingency	10	%	1,503,123.50	150,312
Total - Contingency					450,937
OTHER COSTS					
<u>Based on % of GCC plus Fees & Contingency</u>					
8/E	ICBR fees	2	%	2,224,622.78	44,492
Total - Other Costs					44,492



WT

APPENDIX C: CIT SITE CONVERSION TO
CARPARKING

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Summary 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
	Demolition				220,000
	Earthworks				244,465
	Fence & Barriers				57,500
	Pavement				1,331,300
	Pavement Marking				26,100
	Stormwater				262,860
	Public Lighting				341,000
	Road Furniture				75,000
	Trade Works Total - Exc GST				2,558,225
	Preliminaries / Margin				275,411
	Gross Construction Costs (GCC) Total - Exc GST				2,833,636
	Fees				510,055
	Contingency				850,091
	Other Costs				83,876
	END TOTAL COST (ETC) - Exc GST				4,277,657
	GST				427,766
	END TOTAL COST (ETC) - Inc GST				4,705,423
	Total Cost				4,705,423

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
DEMOLITION					
10/A	Allowance for the demolition of the existing prototype shed	1	item	200,000.00	200,000
10/B	General demolition for trees / kerbs etc	1	item	20,000.00	20,000
	Total - Demolition				220,000
EARTHWORKS					
10/C	Strip existing surface	12,893	m2	5.00	64,465
10/D	Cut / fill exercise / surface preparation	1	item	180,000.00	180,000
	Total - Earthworks				244,465
FENCE & BARRIERS					
10/E	Allowance for bollards	15	no	500.00	7,500
10/F	Entry / exit boom gate & pay system	1	item	50,000.00	50,000
	Total - Fence & Barriers				57,500
PAVEMENT					
10/G	Subbase / bitumen seal	12,893	m2	100.00	1,289,300
10/H	Kerbs	300	m	90.00	27,000
10/J	Adjustment to existing kerb / road	1	item	15,000.00	15,000
	Total - Pavement				1,331,300
PAVEMENT MARKING					
10/K	Set Out of Pavement Marking	1	item	1,500.00	1,500
	<u>Paint – Longitudinal Lines</u>				
10/L	Barrier / Parking Lines - PRIME & YELLOW PAINT	3,500	m	6.00	21,000
	<u>Paint – Symbols, Legends, Arrows, Chevrons, Traffic Islands and Kerbs</u>				
10/M	Chevron - PRIME & YELLOW PAINT	20	m2	30.00	600
	<u>Long Life Material (LLM) - Symbols, Legends and Arrows</u>				
10/N	Pavement Arrow - PRIME & YELLOW PAINT	30	no	100.00	3,000
	Total - Pavement Marking				26,100
STORMWATER					
10/P	Allowance for stormwater system - pipes / pits / grates	12,893	m2	20.00	257,860
10/Q	Connection to existing system	1	item	5,000.00	5,000
	Total - Stormwater				262,860
PUBLIC LIGHTING					
10/R	8m Column (SQ black base plate)	35	no	2,800.00	98,000

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
<u>PUBLIC LIGHTING</u>					<i>(continued)</i>
11/A	50-99 W Luminaire (Weef VFL 530)	70	no	2,200.00	154,000
11/B	Footings for columns including excavation / concrete / reinforcement / backfill	35	no	1,200.00	42,000
11/C	Connection to electrical supply / board	1	item	5,000.00	5,000
<u>Supply and Lay Conduit</u>					
11/D	Supply and install conduit including joint boxes and fixtures	600	m	40.00	24,000
11/E	Supply and Lay Cable (6mm 2 core plus earth)	1,200	m	15.00	18,000
Total - Public Lighting					341,000
<u>ROAD FURNITURE</u>					
11/F	Supply and Install wheel stops	300	no	250.00	75,000
Total - Road Furniture					75,000
<u>PRELIMINARIES / MARGIN</u>					
11/G	Site Establishment and Inductions	1	item	25,000.00	25,000
11/H	Coordination with Utility Authorities	1	item	2,500.00	2,500
11/J	Survey Set Out and Control	1	item	2,500.00	2,500
11/K	Additional Work - Allowance	1	item	20,000.00	20,000
11/L	Quality system documents and records	1	item	2,500.00	2,500
11/M	Supervision	1	item	75,000.00	75,000
<u>Preparation of Works as Executed drawings</u>					
11/N	Civil - Provisional sum	1	item	10,000.00	10,000
11/P	Streetlight - Provisional sum	1	item	5,000.00	5,000
11/Q	Control of traffic	1	item	5,000.00	5,000
11/R	Margin	1	item	127,911.25	127,911
Total - Preliminaries / Margin					275,411
<u>FEES</u>					
<u>Based on % of GCC</u>					
11/S	Design Fees	10	%	2,833,636.25	283,364
11/T	Authority Fees and Charges	1	%	2,833,636.25	28,336
11/U	Insurance	1	%	2,833,636.25	28,336
11/V	CHS Internal PM Costs		%	2,833,636.25	0
11/W	Commission and Transition	2	%	2,833,636.25	56,673
11/X	Escalation	4	%	2,833,636.25	113,345
Total - Fees					510,055

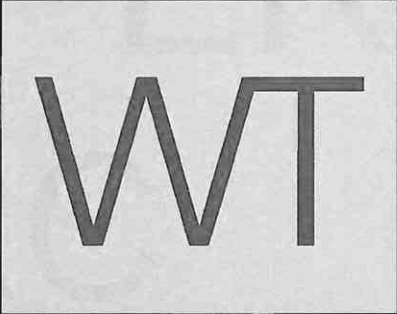
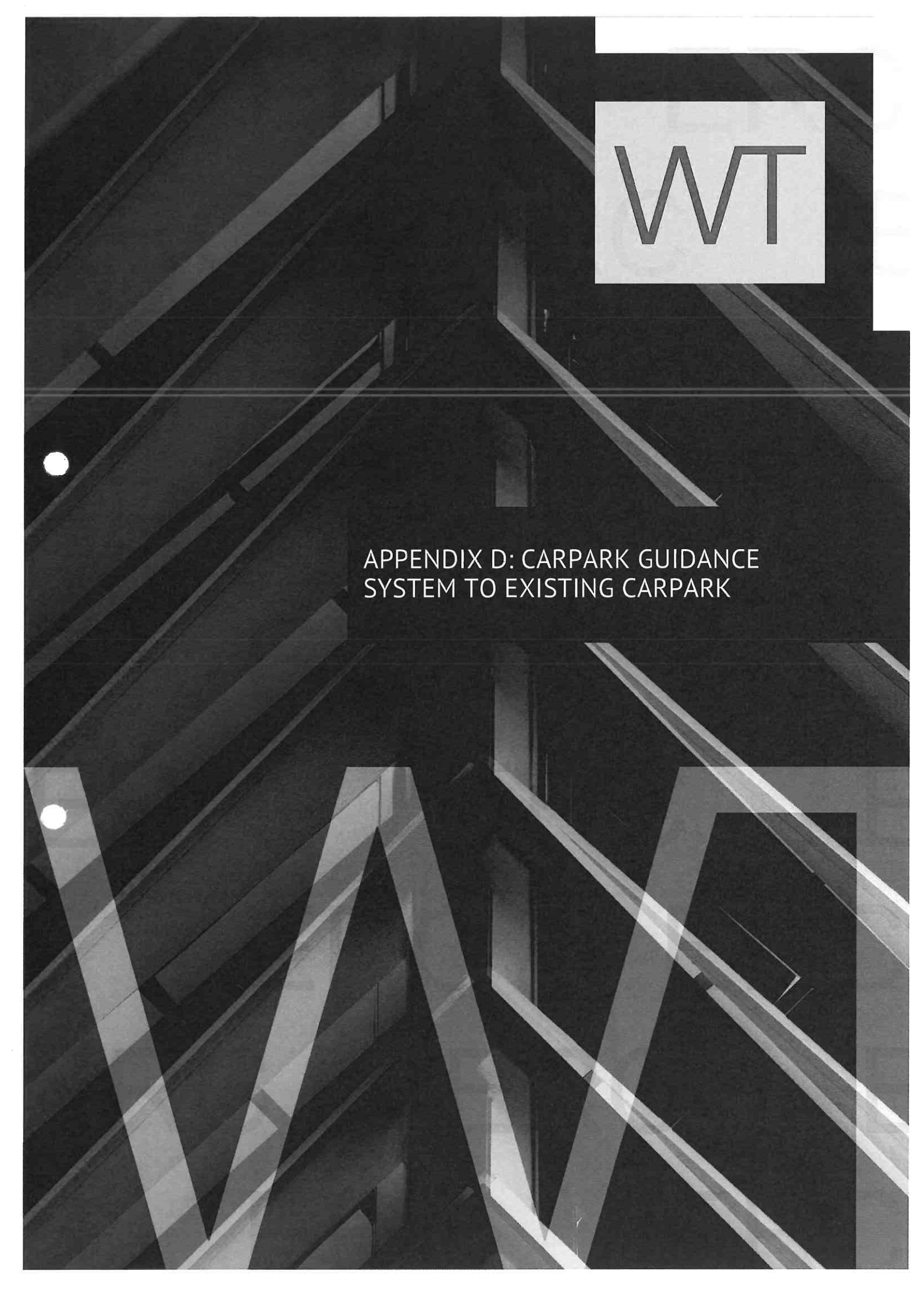
CONCEPT ESTIMATE

CONCEPT DESIGN

Estimate Details 21/01/2025

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REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
<u>CONTINGENCY</u>					
<u>Based on % of GCC</u>					
12/A	Planning Contingency	5	%	2,833,636.25	141,682
12/B	Design Contingency	10	%	2,833,636.25	283,364
12/C	Construction Contingency	5	%	2,833,636.25	141,682
12/D	Client Contingency	10	%	2,833,636.25	283,364
Total - Contingency					850,091
<u>OTHER COSTS</u>					
<u>Based on % of GCC plus Fees & Contingency</u>					
12/E	ICBR fees	2	%	4,193,781.66	83,876
Total - Other Costs					83,876



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APPENDIX D: CARPARK GUIDANCE
SYSTEM TO EXISTING CARPARK

CONCEPT ESTIMATE

CONCEPT DESIGN

WT

Estimate Summary 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
	Guidance system				1,725,000
	Trade Works Total - Exc GST				1,725,000
	Preliminaries				298,250
	Gross Construction Costs (GCC) Total - Exc GST				2,023,250
	Fees				364,185
	Contingency				606,975
	Other Costs				59,888
	END TOTAL COST (ETC) - Exc GST				3,054,298
	GST				305,430
	END TOTAL COST (ETC) - Inc GST				3,359,728
	Total Cost				3,359,728

CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
<u>GUIDANCE SYSTEM</u>					
14/A	Supply & install carpark space guidance system to existing concrete soffit	2,000	no	800.00	1,600,000
14/B	Parking guidance digital signage	1	item	20,000.00	20,000
14/C	Connection to electrical supply / board	1	item	5,000.00	5,000
14/D	Carpark gates / management system	1	item	100,000.00	100,000
Total - Guidance system					1,725,000
<u>PRELIMINARIES</u>					
14/E	Site Establishment and Inductions	1	item	15,000.00	15,000
14/F	Coordination with Utility Authorities	1	item	1,500.00	1,500
14/G	Survey Set Out and Control	1	item	2,500.00	2,500
14/H	Additional Work - Allowance	1	item	20,000.00	20,000
14/J	Quality system documents and records	1	item	5,000.00	5,000
14/K	Supervision	1	item	150,000.00	150,000
<u>Preparation of Works as Executed drawings</u>					
14/L	Light - Provisional sum	1	item	3,000.00	3,000
14/M	Control of traffic	1	item	15,000.00	15,000
14/N	Margin	1	item	86,250.00	86,250
Total - Preliminaries					298,250
<u>FEES</u>					
<u>Based on % of GCC</u>					
14/P	Design Fees	10	%	2,023,250.00	202,325
14/Q	Authority Fees and Charges	1	%	2,023,250.00	20,233
14/R	Insurance	1	%	2,023,250.00	20,233
14/S	CHS Internal PM Costs		%	2,023,250.00	0
14/T	Commission and Transition	2	%	2,023,250.00	40,465
14/U	Escalation	4	%	2,023,250.00	80,930
Total - Fees					364,185
<u>CONTINGENCY</u>					
<u>Based on % of GCC</u>					
14/V	Planning Contingency	5	%	2,023,250.00	101,163
14/W	Design Contingency	5	%	2,023,250.00	101,163
14/X	Construction Contingency	10	%	2,023,250.00	202,325

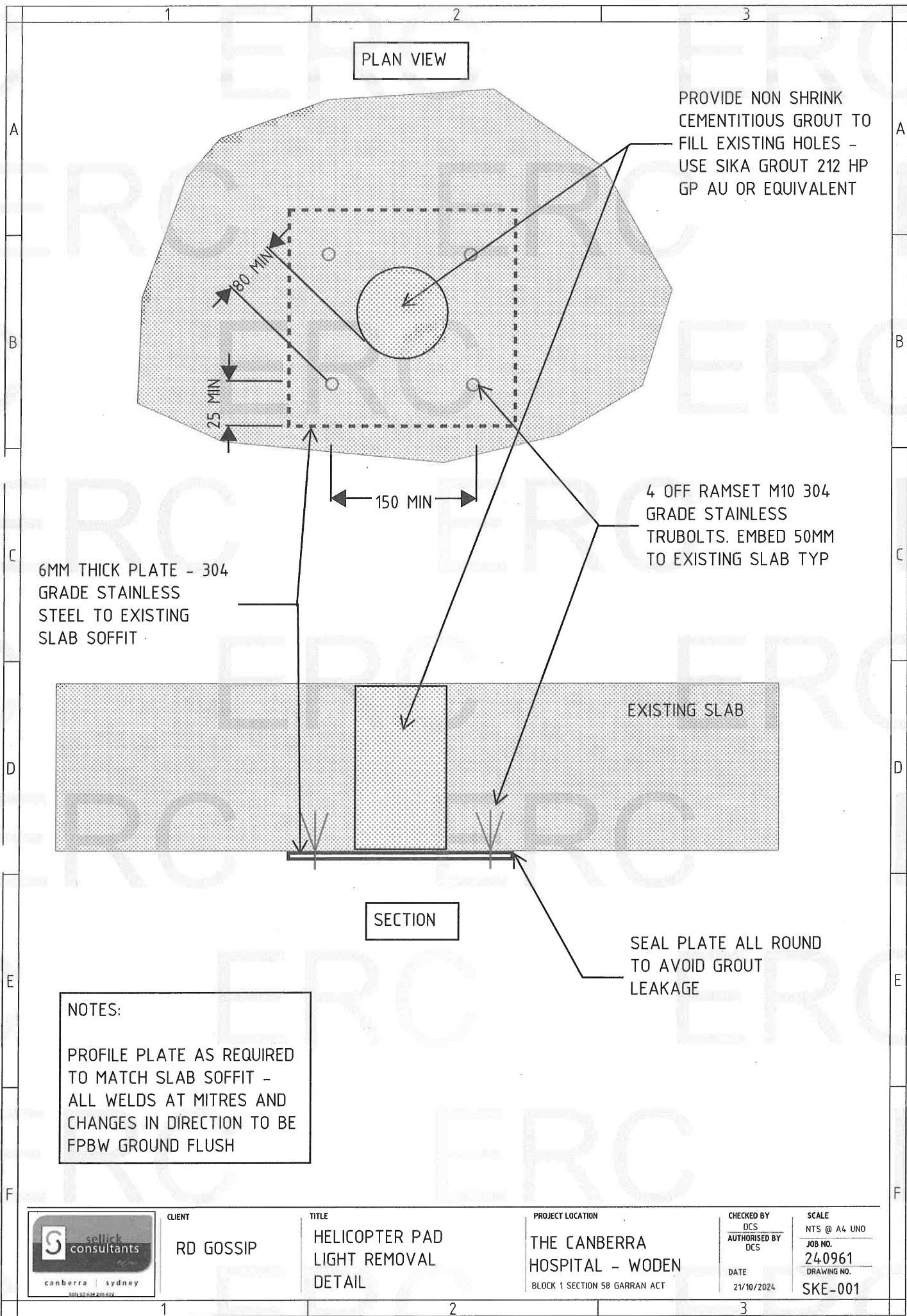
CONCEPT ESTIMATE

WT

CONCEPT DESIGN

Estimate Details 21/01/2025

REF.	DESCRIPTION	QUANTITY	UNIT	RATE	TOTAL
	<u>CONTINGENCY</u>				<i>(continued)</i>
15/A	Client Contingency	10	%	2,023,250.00	202,325
	Total - Contingency				606,975
	<u>OTHER COSTS</u>				
	<u>Based on % of GCC plus Fees & Contingency</u>				
15/B	ICBR fees	2	%	2,994,410.00	59,888
	Total - Other Costs				59,888



NOTES:

PROFILE PLATE AS REQUIRED TO MATCH SLAB SOFFIT - ALL WELDS AT MITRES AND CHANGES IN DIRECTION TO BE FPBW GROUND FLUSH



CLIENT
RD GOSSIP

TITLE
HELICOPTER PAD
LIGHT REMOVAL
DETAIL

PROJECT LOCATION
THE CANBERRA
HOSPITAL - WODEN
BLOCK 1 SECTION 58 GARRAN ACT

CHECKED BY
DCS
AUTHORISED BY
DCS
DATE
21/10/2024

SCALE
NTS @ A4 UNO
JOB NO.
240961
DRAWING NO.
SKE-001

CIT Car Park Extension

TCH HELIPAD CONVERSION TO CARPARKING TENDER DRAWINGS



LOCALITY PLAN

DRAWING INDEX	
DRAWING NO.	SHEET NO.
B.L. GOSSE	
RG 24062	DE01
RG 24062	NO01
RG 24062	NO02
RG 24062	NO03
RG 24062	TC01
RG 24062	CO01
RG 24062	SL01
RG 24062	SL02
RG 24062	SL03
RG 24062	SL04
SELLICK	
SKE-001	
DRAWING TITLE	
COVER SHEET, LOCALITY PLAN AND DRAWING INDEX	
NOTES	
CONSTRUCTION LEGEND AND TYPICAL PINNED KERB DETAILS	
CAMBERRA HEALTH SERVICES TCH REQUIREMENTS	
TRAFFIC CONTROL DEVICE PLAN	
CONSTRUCTION PLAN	
CARPARK LIGHTING NOTES AND LEGENDS	
CARPARK LIGHTING SCHEDULE	
CARPARK LIGHTING PLAN	
CARPARK LIGHTING LUX DIAGRAM	
HELICOPTER PAD LIGHT REMOVAL DETAIL	



ACT
Government

CHECKED & APPROVED
BY: M.Gordon
RG 24062 SHEET DE01
REVISION 0, 08/11/24



Consulting Engineers

STANDARDS AND SPECIFICATION NOTES

ALL WORKS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANADIAN HEALTH SERVICES ELECTRICAL INSTALLATIONS AND SHALL COMPLY WITH THE CURRENT EDITION OF THE CITY GOVERNMENT MUNICIPAL INFRASTRUCTURE TECHNICAL SPECIFICATION INTS1, THE MUNICIPAL DESIGN STANDARD DRAWINGS AND ITS ENGINEERING ADVISORY NOTES AND THE CURRENT VERSION OF THE TICS STREET LIGHT GUIDELINE FOR THIRD-PARTY WORKS. WORKS SHALL REFERENCE AND COMPLY WITH EVO ENERGY DOCUMENTS WHERE APPLICABLE. ALL ELECTRICAL WORK SHALL COMPLY WITH THE CURRENT EDITION OF AS/NZS3800 AND AS/NZS

WASTE MANAGEMENT PLAN

1. THE CONTRACTOR SHALL ENSURE THAT WASTE MATERIALS ARE DISPOSED OF AT AN APPROVED RECYCLING DEPOT.
2. UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT TIPPING OF MATERIALS AT THE "TIP FACE" SHALL NOT BE PERMITTED

SERVICES NOTES

1. EXISTING SERVICES/BE NOT SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ALL CLEARANCES FROM ALL SERVICE AUTHORITIES.
2. THE CONTRACTOR SHALL LOCATE ALL SERVICES THAT CROSS OR ARE ADJACENT TO THE WORKS. THE CONTRACTOR SHALL ALLOW FOR PAYMENT OF STANDOFF/CLEARANCE FEES AS REQUIRED BY SERVICE AUTHORITIES.

SET OUT NOTES

1. THE CONTRACTOR SHALL CONTACT THE SUPERINTENDENT AND ARRANGE A SITE INSPECTION AFTER THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE NEW WORKS GEOMETRY HAS BEEN SET OUT. CONSTRUCTION IS NOT TO PROCEED UNTIL THE SET OUT HOLDPOINT HAS BEEN RELEASED BY THE SUPERINTENDENT.
2. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SET OUT EQUIPMENT (CHALK, SPRAY PAINT, ROPE, MEASURING TAPE, PEGS, ETC). THE CONTRACTOR SHALL ADJUST THE SET OUT AS REQUIRED IN CONJUNCTION WITH THE SUPERINTENDENT.
3. ALL DIMENSIONS / RAOI ARE TO FACE OF KERB, EDGE OF FULL DEPTH PAVEMENT, KERB UP ON CENTRE OF LINE-MARKING REFER PLAIN PER DETAILS.
4. THE SITE HAS BEEN SURVEYED BY ACT SURVEY TO MAG2020 CO-ORDINATES. TO ASSIST THE CONTRACTOR IN SETTING OUT THE WORKS A 20 AUTOLOD DING LITE WILL BE MADE AVAILABLE IF REQUIRED. PLEASE CONTACT BO GOSSEP PTY LTD PH. 6258379 FOR PROVISION OF ELECTRONIC DATA. TO ENSURE CONSISTENCY OF SURVEY THE CONTRACTORS SUPERVISOR SHALL CONTACT THE SUPERINTENDENT AND FIELD CHECK IN 3 DIFFERENT LOCATIONS THE CO-ORDINATED POINTS AND LEVELS USED AS THE BASIS FOR DESIGN.

SAFETY BARRIER NOTES

1. ALL SAFETY BARRIER INSTALLATIONS SHALL BE IN ACCORDANCE WITH AS 3862.1-2010 ROAD SAFETY BARRIER SYSTEMS AND DEVICES - PART 1 - ROAD SAFETY BARRIER SYSTEMS.
- APPROVED MANUFACTURERS INSTALLATION PROCEDURES.
2. THE CONTRACTOR SHALL FIELD CHECK THE PROPOSED SAFETY BARRIER POST LOCATIONS TO ENSURE THAT THERE IS NO CONFLICT WITH OTHER ASSETS, FINISHES, FIXTURES AND FITTINGS. THE PROPOSED DESIGN IS TO BE ACCURATELY FIELD CHECKED PRIOR TO MANUFACTURE OF THE NEW SAFETY BARRIER TO ENSURE NO CONFLICT.

GALVANIZING REPAIR NOTE:

- DEGRADE AND REMOVE ALL SURFACE CONTAMINANTS.
- REMOVE ALL ROUGH EDGES AND CORROSION PRODUCTS.
- CLEAN TO AS 162.1.21 S7 3 (SUITABLE POWER TOOLS INCLUDE POWER WIRE BRUSH, NEEDLE GUN, DISC SANDER, ANGLE GRINDER AND/OR CHIPPING HAMMER).
- APPLY 2 COATS OF EPOXY ZINC RICH PRIMER TOTALING 100-150 UN DFT (DFT FLY THICKNESS).
- APPLY 1 COAT OF A SILVER PAINT WITH AN ALUMINIUM PIGMENT

4680 SECTION 8 - REPAIR AFTER GALVANIZING
(<https://gaa.com.au/repair-hot-dip-galvanizing/>).

TEMPORARY TRAFFIC MANAGEMENT CONCEPT NOTES

1. ALL TRAFFIC MOVEMENTS ARE TO BE MAINTAINED AT ALL TIMES.
2. ALL TEMPORARY TRAFFIC MANAGEMENT DEVICES ARE TO BE IN ACCORDANCE WITH AS 1742.3-2019, AUSTRORADS - GUIDES TO TEMPORARY TRAFFIC MANAGEMENT: PART 1-10 AND MUNICIPAL INFRASTRUCTURE TECHNICAL SPECIFICATIONS 01-TRAFFIC MANAGEMENT.
3. ALL WORKERS SHALL WEAR HIGH VISIBILITY EXTERNAL CLOTHING IN ACCORDANCE WITH AS 1742.3-2019.
4. ALL SIGNS AND DEVICES SHALL BE ERECTED WITHIN THE LINE OF SIGHT OF THE ROAD USER. THEY SHALL NOT BE OBLSCURED BY OBSTRUCTION OR PARKED VEHICLES AND SHALL BE POSITIONED WHERE THEY DO NOT BECOME A HAZARD TO PEDESTRIANS OR VEHICLES.
5. PARABOL OR APPROVED EQUAL CONTAINMENT FENCES SHALL BE ERECTED AROUND THE PERIMETER OF ALL WORK AREAS WITH PUBLIC ACCESS.
6. THE CONTRACTOR SHALL PROVIDE INDIVIDUAL TTM PLANS FOR BOTH WORKING AND NON WORKING HOURS. GENERIC PLANS WILL BE ENDORSED SUBJECT TO APPROVAL OF USE BY TCH.
7. THE CONTRACTOR SHALL SUBMIT TTM PLANS TO THE SUPERINTENDENT FOR ENDORSEMENT AND THEN SUBMIT TO TCH FOR APPROVAL. AMENDMENTS TO THE DRAWINGS SHALL FOLLOW THE SAME ENDORSEMENT AND APPROVAL PROCESS.
8. THE CONTRACTOR SHALL ENSURE THAT ALL SIGNS THAT ARE TO BE COVERED ARE COVERED WITH AN APPROVED OPEIST OPAQUE MATERIAL, NOT HESSIAN, SHADY CLOTH OR THE LIKE. THE COVERINGS SHALL COVER THE ENTIRE SIGN FACE AND BE SECURELY FIXED TO PREVENT DISLORDERMENT BY WIND OR VANDALS.
9. MOBILE PHONES SHALL ONLY BE USED IN A PROTECTED AREA OR 10m CLEAR OF ADJACENT VEHICULAR TRAFFIC AND CONSTRUCTION VEHICLES. MOBILE PHONES SHALL NOT BE USED WHEN OPERATING ANY CLEAR OR EQUIPMENT.
10. NO WORK IS TO BE UNDERTAKEN IN POOR VISIBILITY CONDITIONS (BAD WEATHER, FOG, DUST, SMOKE, SUN GLARE, DARKNESS ETC).

AMENDMENTS		APPROVAL	DATE
AMENDMENT			
DRAWING STAGE - LATEST DATE INDICATES DRAWING STATUS			
Conceptual Design: 06/10/24	Final Sketch Plan: 07/11/24	Final Design: 30/10/24	
For tendering purposes only: 08/11/24	Issued for construction: 07/11/24	M.A.E.: 07/11/24	

Scale

Design Agent	Designed by BYA	Drawn by BYA	Checked by RD	Approved by MG
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Client

Project Officer: Piyu Goveindar
Project Number: 18A



ACT
Government

Project	TCH HELIPAD CONVERSION TO CARPARKING
Date	08/11/24

Drawing Title		
NOTES		
Dwg. No.	Sheet	Revision
RG 24.062	NO01	0

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RG 24062 CHS Helipad Conversion - Lighting Kurt Booth 07/11/2024, 4:07 PM

SAFETY NOTES

1. GENERAL NOTES FOR ALL PHASES OF THE PROJECTS LIFE.
 - a. THE CONTRACTOR SHALL COMPLY WITH THE CURRENT WORK HEALTH AND SAFETY ACT, REGULATIONS AND INDUSTRY CODES AND PRACTICE GUIDELINES.
 - b. REFER SAFETY IN DESIGN REGISTER

TEES

SERVICE LOCATION PRIOR TO COMMENCEMENT OF WORKS ON SITE

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL SERVICE CLEARANCES INCLUDING SERVICE THE LOCATION(S) FROM ALL SERVICE AUTHORITIES.
- THE CONTRACTOR SHALL HYDRO-POTTEST ALL SERVICES THAT CROSS OR ARE ADJACENT TO THE PROPOSED WORKS TO DETERMINE THE VERTICAL AND HORIZONTAL ALIGNMENT.
- THE CONTRACTOR SHALL IDENTIFY ALL OVERHEAD SERVICES WITHIN THE WORK SITE AREA AND PROTECT PLANT.
- FOR ALL GAS MAINS 15mm DIAMETER OR GREATER THAT HAVE A PRESSURE OF 1050 psi OR GREATER THAT ARE WITHIN 15m OF A PROPOSED EXCAVATION, THE CONTRACTOR SHALL CONTACT NEXUS ON (02) 695 6200 AND AGREE ON CONSTRUCTION PROCEDURES PRIOR TO EXCAVATION. ATTENDANCE ON SITE BY NEXUS AT THE CONTRACTOR'S EXPENSE MAY BE REQUIRED.

WORKS NEAR SERVICES AND STRUCTURES

- AVOID THE USE OF HEAVY MACHINERY OR HEAVY VIBRATING LOADS NEAR LARGE TRUNK GAS, WATER SUPPLY, COMMUNICATIONS INFRASTRUCTURE, RETAINING WALLS AND SUSPENDED SLABS. THE CONTRACTOR SHALL KEEP CLEAR OF ALL OVERHEAD SERVICES WITHIN THE WORK SITE AREA.

TEMPORARY TRAFFIC MANAGEMENT: (AST742.3)

- ALL TEMPORARY SAFETY, MANAGEMENT DEVICES ARE TO BE IN ACCORDANCE WITH AS 1742.3.
- ALL WORKERS SHALL WEAR HIGH VISIBILITY EXTERNAL CLOTHING IN ACCORDANCE WITH AS 1742.3.
- ALL SIGNS AND DEVICES SHALL BE ERECTED WITHIN THE LINE OF SIGHT OF THE ROAD USER. THEY SHALL NOT BE OBLSCURED BY OBSTRUCTIONS OR PARKED VEHICLES AND SHALL BE POSITIONED WHERE THEY DO NOT BECOME A HAZARD TO PEDESTRIANS OR VEHICLES.
- VEHICLES SHALL BE POSITIONED WITHIN THE LINE OF SIGHT OF THE ROAD USER AND PROVIDE PROTECTION AND DELINEATION IN ACCORDANCE WITH TABLE E1 OF AS 1742.3.
- THE CONTRACTOR SHALL SUBMIT TTM PLANS TO THE SUPERINTENDENT FOR ENDORSEMENT AND THEN SUBMIT TO ROADOS ACT FOR APPROVAL. AMENDMENTS TO THE TTM PLANS SHALL FOLLOW THE SAME ENDORSEMENT AND APPROVAL PROCESS.
- WHERE EXISTING OR NEW TTM SIGNAGE BY OTHERS CONFLICTS WITH THE PROPOSED TTM DEVICES, THE CONTRACTOR SHALL LIAISE WITH ROAD ACTS AND ADVISOR THE TTM SIGNAGE AS REQUIRED TO ENSURE THE TTM DESIGN INTENT IS MET AND REMOVE THE CONFLICT.
- ALL STAR PICKETS SHALL BE CAPED AT ALL TIMES.
- NO WORK IS TO BE UNDERTAKEN IN POOR VISIBILITY CONDITIONS (BAD WEATHER, FOG, DUST, SMOKE, SUN GLARE, DARKNESS ETC).
- MOBILE PHONES SHALL ONLY BE USED IN A PROTECTED AREA OR 10m CLEAR OF ADJACENT VEHICULAR TRAFFIC AND CONSTRUCTION VEHICLES. MOBILE PHONES SHALL NOT BE USED WHEN OPERATING ALL PLANT OR EQUIPMENT.
- THE CONTRACTOR SHALL IDENTIFY AND KEEP CLEAR OF ALL OVERHEAD OBSTRUCTIONS WITHIN THE WORK SITE AREA (TREES, BRIDGES ETC).
- ALL EXPOSED VERTICAL REINFORCEMENT BARS SHALL BE COVERED.
- THE CONTRACTOR SHALL UNDERTAKE A SITE SPECIFIC RISK ASSESSMENT PRIOR TO UNDERTAKING ANY WORKS ON THE SITE.
- THE CONTRACTOR SHALL PROVIDE A SILICA DUST ACTION PLAN FOR APPROVAL PRIOR TO COMMENCEMENT OF RELATED WORKS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO CUTTING, GRINDING, TRIMMING, SANDING, POLISHING AND DRILLING OF ALL MATERIALS THAT INCLUDE CRYSTALLINE SILICA EG. CONCRETE, CURBING, CEMENT, MORTAR AND BRICKS.

SILICA AWARENESS NOTE

1. THE CONTRACTOR SHALL PROVIDE A SILICA DUST ACTION PLAN FOR APPROVAL PRIOR TO COMMENCEMENT OF RELATED WORKS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO CUTTING, GRINDING, TRIMMING, SANDING, POLISHING AND DRILLING OF ALL MATERIALS THAT INCLUDE CRYSTALLINE SILICA EQ. CONCRETE, MASONSRY, GEMENT, MORTAR AND BRICKS.

CONSTRUCTION LEGEND

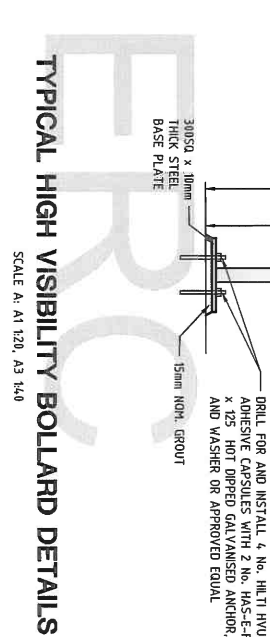
GRB

GRB

INSTALL APPROX. 84m OF INGAAL ZEE PARK POST WITH HANDRAIL AND ANTI-CLIMB MESH 1300mm OR APPROVED EQUAL.
- REFER INGAAL CIVIL PRODUCTS DRAWING STB-024 FOR DETAILS. PROVIDE INTEGRATION OF NEW TO EXISTING TRANSITIONS AND APPROVED 90° CORNER TREATMENTS TO THE HANDRAILS/TOWERS SPECIFICATIONS AND SUPERINTENDENTS CERTIFIED BY THE CONTRACTORS CERTIFIED PRACTISING STRUCTURAL ENGINEER. REFER PLANS FOR DETAILS.

EXISTING SAFETY NET AND STEEL FRAMING

CONSTRUCT KERB (TYPE SPECIFIED)

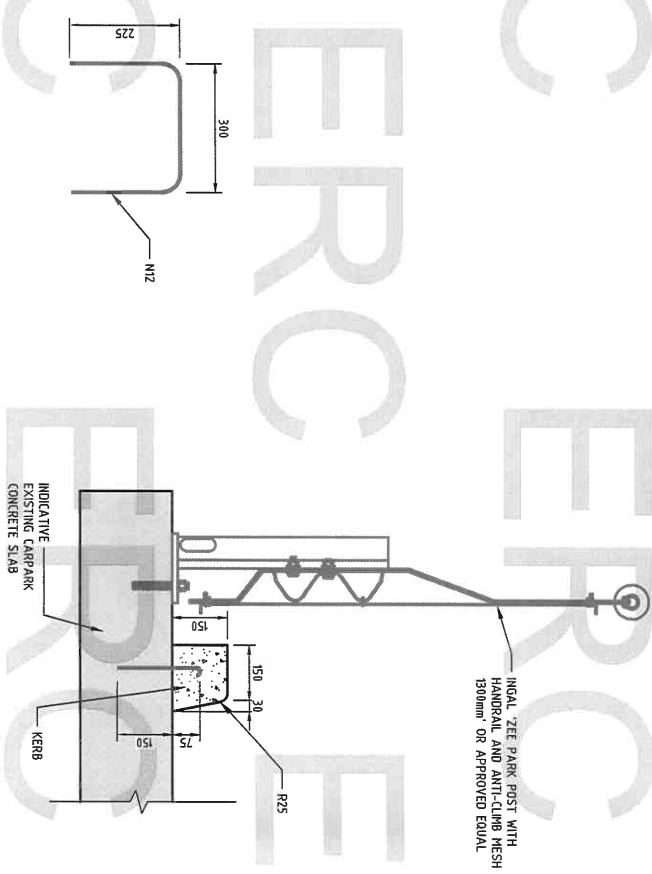


TYPICAL HIGH VISIBILITY BOLLARD DETAILS

SCALE: A1: 1:20, A3: 1:40

- NOTES
- ① HIGH VISIBILITY ARE TO BE 76.1mmØ STEEL BOLLARDS WITH CAP TO PROVIDE A FINISHED HEIGHT OF 1300mm ABOVE THE FINISHED SURFACE. HIGH VISIBILITY BOLLARDS SHALL BE POWDER COATED HAZARD YELLOW AND HAVE CLASS 400 REFLECTIVE TAPE APPLIED TO THE FULL BOLLARD CIRCUMFERENCE. IN STANDARD HIGH VISIBILITY ARRAY, REFER TO DETAIL.

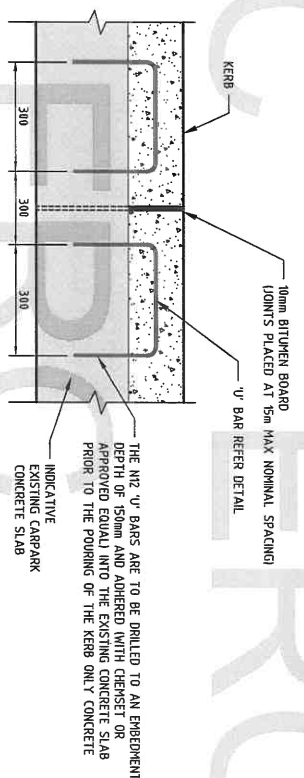
② REFLECTIVE TAPE ARRAY IS TO BE CLASS 400 REFLECTIVE TAPE APPLIED TO THE FULL BOLLARD CIRCUMFERENCE; - 100mm DEEP BANDS OF WHITE TAPE ABOVE AND BELOW 10mm DEEP BAND OF RED TAPE. TAPE ASSEMBLY SHALL BE LOCATED AT A MINIMUM 900mm HEIGHT TO UNDERSIDE.



U BAR DETAIL

PINNED KERB ONLY (PKO) SECTION

N.T.S



PINNED KERB ONLY (PKO) ELEVATION

N.T.S

AMENDMENTS			Scale	Design Agent	Client	Project	Drawing Title
AMENDMENT	APPROVAL	DATE					
						TCH HELIPAD CONVERSION TO CARPARKING	CONSTRUCTION LEGEND AND TYPICAL PINNED KERB DETAILS
Designed by BVA							
Drawn by BVA							
Checked by RD							

THE FOLLOWING SPECIFICATIONS / STD. DRG'S ARE TO BE USED FOR THIS CONTRACT:

SPECIFICATION:
CURRENT EDITION OF THE ACT GOVERNMENT MUNICIPAL
INFRASTRUCTURE TECHNICAL SPECIFICATION (IMTS).

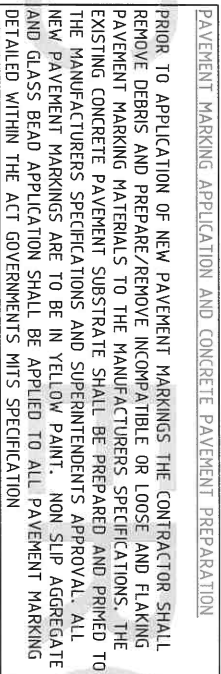
ACT GOVERNMENT STD. DRGS:
CURRENT EDITION OF THE ACT GOVERNMENT MUNICIPAL DESIGN
STANDARD DRAWINGS.

GENERAL NOTES:
ALL PAVEMENT MARKINGS AND SIGN POSTING ARE TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742 EXCEPT WHERE MODIFIED BY THE ACT GOVERNMENT MUNICIPAL DESIGN STANDARD DRAWINGS.

ALL SIGNAGE INSTALLED ON ELP'S ARE TO BE POSITIONED TO AVOID COVERING THE ELP ASSET NUMBER.

ALL SIGN BLADES ARE TO BE ERRECTED AT A HEIGHT TO UNDERSIDE OF BLADE THAT CONFORMS WITH A5.174.2.2 (2.0m MIN. GENERALLY, 2.5m MIN. IF OVERHANGING FOOTPATH OR IN PEDESTRIAN AREAS). EXISTING POSTS MAY BE USED IF PRACTICABLE OR SHALL BE EXTENDED OR REPLACED IF NOT.

ALL PAVEMENT MARKINGS TO BE REMOVED SHALL BE ERADICATED BY HYDRO / BEAD/SAND BLASTING OR GRINDING UNLESS APPROVED BY THE AUTHORIZED PERSON. BLACKING OUT OF PAVEMENT MARKINGS WITH PAINT AND/OR, COLD APPLIED PLASTIC OR OTHER SURFACE COATINGS IS NOT PERMISSIBLE.



Drawing Title	DATE	BY	CHKD	APP'D	REVISION
TABLET CONTROL DEVICE IN AN					

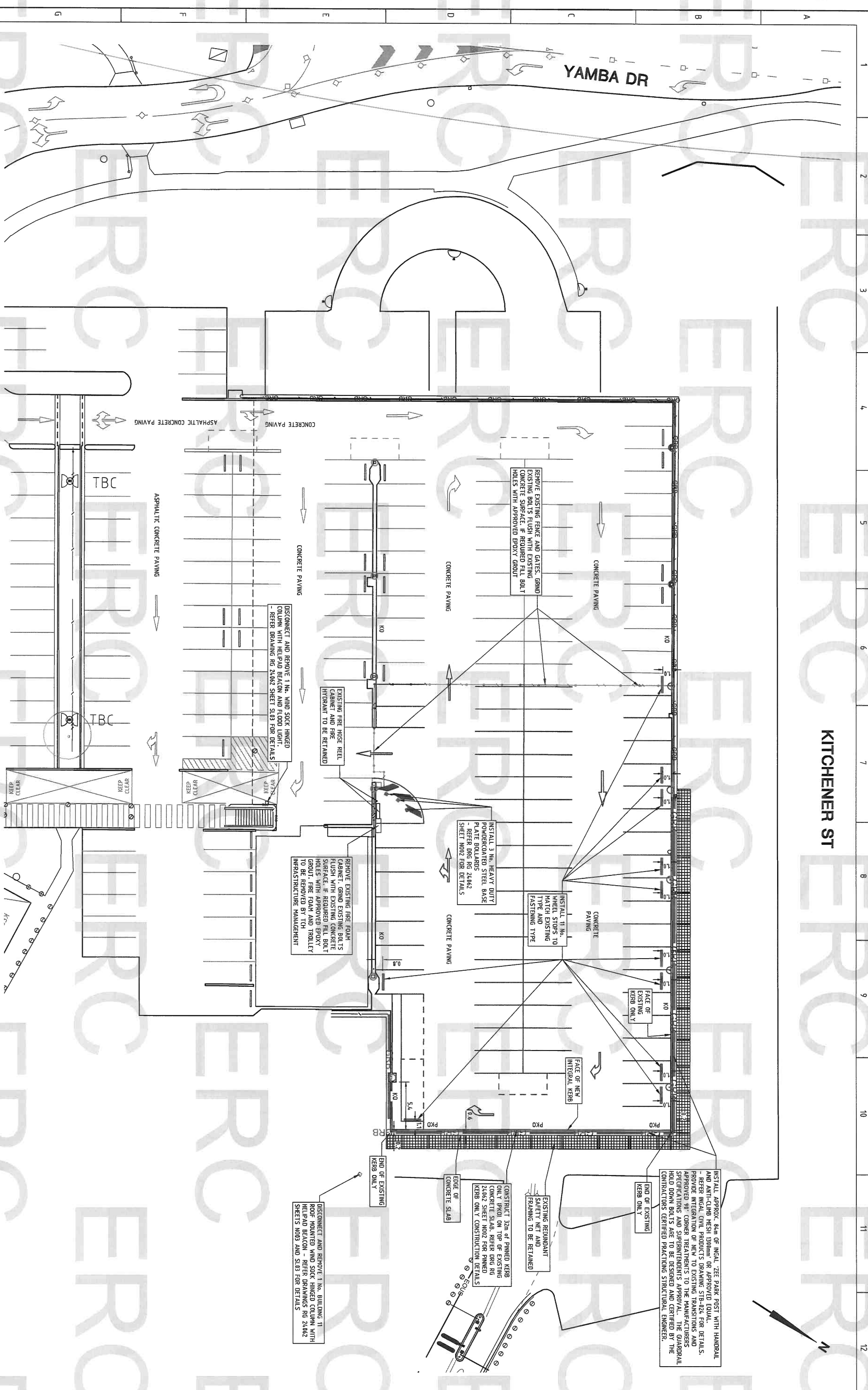
Dwg. No.	Sheet	Revision
RG 24062	TC01	0

RG 24062 CHS Helpad Conversion - Lighting Kurt Booth 07/11/2024, 4:07 PM

300mm ON A1 ORIGINAL

NOTE: ALL DRAWINGS ARE DESIGNED TO BE PRINTED AND READ IN COLOR

KITCHENER ST



AMENDMENTS			Scale	Design Agent	Client	Project	Drawing Title
	AMENDMENT	APPROVAL DATE	0m 5m 10m 15m SCALE: A1 1:200, A3 1:400	R.D. Gossip Pty Ltd Consulting Engineers Unit B9, 12 Mares Street Rydalmere NSW 2108 Ph: 80 4731 4333	ACT Government	TCH HELPAD CONVERSION TO CARPARKING	CONSTRUCTION PLAN
		Designed by BYA					
		Drawn by BYA					
		Checked by					
		RD					
		Approved by MG					
DRAWING STAGE - LATEST DATE INDICATES DRAWING STATUS							
Conceptual Design: 04/10/24	Final Sketch Plan: --/--/--	Final Design: 30/10/24			Date		
For tendering purposes only: 08/11/24 Issued for construction: --/--/--					08/11/24		
						Dwg. No.	Sheet
						RG 24062	C001
							Revision
							0

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 RG 24062 CHS Helpd Conversion - Lighting Kirt Booth 07/11/2024, 4:07 PM

300mm ON AT ORIGINAL

NOTE: ALL DRAWINGS ARE DESIGNED TO BE PRINTED AND READ IN COLOR

STREET LIGHTING NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANBERRA HEALTH SERVICES ELECTRICAL STANDARD INCLUSIONS, ACT GOVERNMENT MUNICIPAL INFRASTRUCTURE TECHNICAL SPECIFICATION (MITS), CURRENT EDITION OF THE ACT GOVERNMENT MUNICIPAL INFRASTRUCTURE STANDARDS (MIS), CURRENT EDITION OF THE ACT GOVERNMENT MUNICIPAL DESIGN STANDARD DRAWINGS, TCS ENGINEERING ADVISORY NOTES AND THE CURRENT VERSION OF THE TCS STREET LIGHT GUIDELINE FOR THIRD-PARTY WORKS. WORKS SHALL REFERENCE AND COMPLY WITH EVO ENERGY DOCUMENTS WHERE APPLICABLE. ALL ELECTRICAL WORK SHALL COMPLY WITH THE CURRENT EDITION OF AS/NZS3000 AND AS1938.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY EXISTING SERVICES INFORMATION FROM THE RELEVANT AUTHORITIES AND VERIFY ON-SITE.
- ALL NEW COLUMNS ARE TO BE APPROVED (CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL) BASE PLATE TYPE COLUMNS INCLUDE DOWN BOLT TO MATCH EXISTING WHERE EXISTING FOOTINGS ARE BEING RE-USED) WITH OUTREACH ARMS POWDER COATED GALV9000, SIGNAL BLACK, TO MATCH EXISTING WHERE EXISTING FOOTINGS ARE BEING RE-USED) WITH OUTREACH ARMS POWDER COATED GALV9000, SIGNAL BLACK.
- THE COLUMNS SHALL BE INSTALLED IN ACCORDANCE WITH THE COLUMN MANUFACTURER'S RECOMMENDATIONS AND THE CONTRACTORS CERTIFIED PRACTISING STRUCTURAL ENGINEERS FIXING REQUIREMENTS.
- THE COLUMNS AND SPIGOTS SHALL COMPLY WITH THE CURRENT EDITION OF AS1938.
- THE CABLE ENTRY TO THE COLUMN SHALL BE FROM THE CONDUITS. THIS SHALL BE TO THE CURRENT EDITION OF AS3000.
- ALL NEW COLUMNS SHALL BE CONNECTED TO NEW CABLEING (6mm - 2 CORE PLUS EARTH IN APPROVED ELECTRICAL HIGH IMPACT CONDUIT TO TCH ELECTRICAL SECTION APPROVAL AND APPLICABLE STANDARDS AND SPECIFICATIONS.
- UNLESS OTHERWISE APPROVED CABLES SHOULD NOT BE JOINED EXCEPT WITHIN A STREET LIGHT COLUMN. STREET LIGHT CONDUIT MAY BE JOINED BUT STREET LIGHT CABLE MUST BE INSTALLED FROM STREET LIGHT TO STREET LIGHT.
- REFER TO THE STREET LIGHTING PLAN FOR COLUMN AND LUMINAIRE DETAILS.
- EXISTING COLUMNS SHALL BE RE-USED WHERE POSSIBLE. THE EXISTING BREAKERS/S SHALL BE LOCATED AT THE BASE OF THE COLUMN ON AN APPROVED LAMP PANEL TO TCH ELECTRICAL SECTION APPROVAL AND APPLICABLE STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL ENSURE ALL LIGHT COLUMNS ARE EARTHED TO TCH ELECTRICAL SECTION APPROVAL AND APPLICABLE STANDARDS AND SPECIFICATIONS. PARTICULAR ATTENTION SHALL BE GIVEN TO NEUTRAL/ PEN CONNECTION METHODS AND DOOR/ HATCH EARTHING REQUIREMENTS.
- TEMPORARY LIGHTING SHALL BE PROVIDED WHERE REQUIRED TO MAINTAIN LIGHTING LEVELS DURING THE CONSTRUCTION PERIOD.
- ALL STREET LIGHTING DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL THE RELEVANT PROJECT DRAWINGS AND SPECIFICATIONS.
- THE SPECIFIED LAMP IS INTEGRAL TO THE LED LUMINAIRE. LUMINAIRE COLOUR SHALL MATCH THE COLUMN AND OUTREACH ARM TO THE SUPERINTENDENT'S APPROVAL.
- ALL LUMINAIRES SHALL BE ELECTRICAL CLASS 2 LUMINAIRES WITH A ZERO UPWARD LIGHT OUTPUT RATIO ONLY AND SHALL COMPLY WITH TCS SPECIFICATIONS COMPLETE WITH 7 PIN NEPA BASE, DALI DIMMABLE DRIVER, MEGOSCREEN VISION AND SHALL BE INSTALLED WITH ZERO DEGREE TCS SPECIFICATIONS.
- ALL EXISTING LUMINAIRES SHALL BE REMOVED AND THE EXISTING ELECTRICAL LEADS BY THE SUPERIOR TO ENSURE CLASS 2 INTEGRITY TO TCS SPECIFICATIONS.
- ALL REDUNDANT MATERIALS SHALL BE RECYCLED APPROPRIATELY.
- THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND QUANTITIES ON SITE AT EACH DRAWING STAGE TO ENSURE ACCURACY.
- THE CONTRACTOR SHALL CONDUCT COMMISSIONING, VERIFICATION AND TESTING ACTIVITIES IN ACCORDANCE WITH AS/NZS3000 AND AS 3017. ALL WORKS SHALL BE COMPLETED TO THE ABSOLUTE SATISFACTION OF THE SUPERINTENDENT AND THE TCH ELECTRICAL SECTION.

24 HOUR POWER SUPPLY ASSET LABELLING NOTES

- PRIOR TO HANDING OVER THE INSTALLATION, THE CONTRACTOR SHALL CLEARLY AND CORRECTLY LABEL ALL STREET LIGHT PANELS SUPPLIED BY 24 HOUR ELECTRICAL SUPPLY IF REQUIRED BY TCH ELECTRICAL SECTION.
- ALL STREET LIGHT PANEL "24 HOUR ELECTRICAL SUPPLY" LABELS SHALL BE A PERMANENTLY ATTACHED, APPROVED, WHITE ON RED TRAFALUITE LABEL. SCREWING AND GLE FIXING THE LABELS ONTO THE SURFACES WILL BE CONSIDERED AS PERMANENT.
- THE CHARACTERS OF ALL LABELS SHALL BE NOT LESS THAN 5mm HIGH AND ALL LABELING SHALL BE TO THE SUPERINTENDENT'S APPROVAL.

LIGHTING DESIGN CATEGORIES AND CONFORMANCE

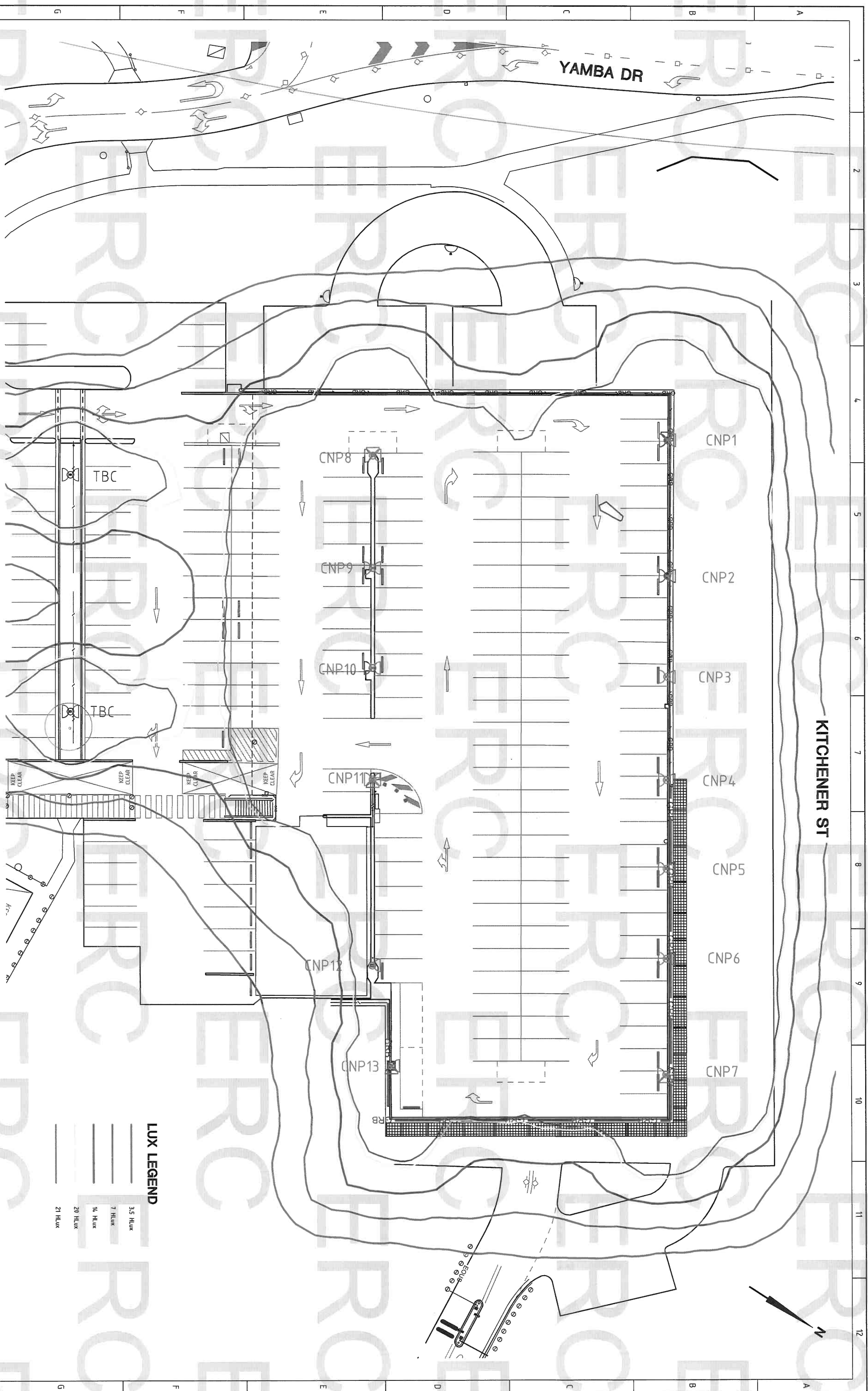
- UPGRADED LIGHTING HAS BEEN DESIGNED TO THE FOLLOWING CATEGORIES:
 - CANBERRA HEALTH SERVICES ELECTRICAL STANDARD INCLUSIONS CATEGORY 'CAR PARK SPACES FOR GENERAL USE WITHIN THE BUILDING LINE: 20 Lux.
 - CARPARK LIGHTING CATEGORY PCX: 21 Lux.
- COMPLIES WITH OBTRUSIVE LIGHTING REQUIREMENTS OF AS 4282.
- COMPLIES WITH AND IS IN ACCORDANCE WITH AT THE TIME OF THIS DESIGN, THE CURRENT EDITIONS OF THE CANBERRA HEALTH SERVICES ELECTRICAL STANDARD INCLUSIONS, ACT GOVERNMENT MUNICIPAL INFRASTRUCTURE TECHNICAL SPECIFICATION (MITS), ACT GOVERNMENT MUNICIPAL INFRASTRUCTURE STANDARDS (MIS), THE ACT GOVERNMENT MUNICIPAL DESIGN STANDARD DRAWINGS, TCS ENGINEERING ADVISORY NOTES AND THE TCS STREET LIGHT GUIDELINE FOR THIRD-PARTY WORKS, EVO ENERGY DOCUMENTS WHERE APPLICABLE AND AS/NZS3000 AND AS1938.

STREET LIGHTING TYPE		DETAILS	
TYPE A	TYPE F	INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' WITH 3 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 3 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 2 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 2 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 3 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 2 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
TYPE B		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 2 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 2 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
TYPE C		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 3 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 2 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
TYPE D		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 2 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 2 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
TYPE E		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 2 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 2 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	
TYPE F		INSTALL 8.6m LUMINAIRE MOUNTING HEIGHT 1050 BASE PLATE RIBD STEEL COLUMN POWER COATED 'RAL9000, SIGNAL BLACK' 1 No. SIDE ENTRY SPIGOTS (REFER PLANS AND SCHEDULE FOR CONFIGURATION) MOUNTED ONTO EXISTING HOLD DOWN BOLTS OR SECURED WITH APPROVED CHEMICAL ANCHORS TO THE EXISTING CONCRETE SLAB. GROUT BETWEEN BASE PLATE AND SLAB / TOP OF EXISTING FOOTING. INSTALL 1 No. 'RAL9000, SIGNAL BLACK' COLOURED WE-EF VHS40-SE, LED, 108-1252 72W 4000K LUMINAIRES AT 0° UP/LIFT. CONNECT CABLEING AND MAKE GOOD TO ALL APPLICABLE STANDARDS AND THE ABSOLUTE SATISFACTION OF THE TCH ELECTRICAL SECTION AND THE SUPERINTENDENT.	

STREET LIGHTING LEGEND

- EXISTING
- PROPOSED
- ETVS100
- ELECTRICITY CONDUIT (NO. & DIA. SPECIFIED)
- INSTALL LIGHT COLUMN AS DETAILED.
- REFER STREET LIGHTING SCHEDULE.
- REMOVE EXISTING LIGHT COLUMN AS DETAILED.
- REFER STREET LIGHTING SCHEDULE.
- EXISTING LIGHT COLUMN AS DETAILED

AMENDMENTS				Scale		Design Agent		Client		Project		Drawing Title	
AMENDMENT		APPROVAL		DATE		Designed by		Project Officer: Pyre Grovome		TCH HELIPAD CONVERSION TO CARPARKING		CARPARK LIGHTING NOTES AND LEGEND	
						Drawn by		Project Number: 18A					
						By A							
						Checked by							
						RD							
						Approved by							
						MG							



AMENDMENTS			Scale	Design Agent	Client	Project	Drawing Title			
AMENDMENT	APPROVAL	DATE	0m5m10m15m SCALE: A1 1:200, A3 1:400	 R.D. Gospi Pty Ltd Consulting Engineers Unit No. 3 Finesse Street PMB 4231 4331	 ACT Government	TCH HELPAD CONVERSION TO CARPARKING	CARPARK LIGHTING LUX DIAGRAM	Drg. No. RG 24062	Sheet S104	Revision 0
DRAWING STAGE - LATEST DATE INDICATES DRAWING STATUS										
Conceptual Design: 06/10/24	Final Sketch Plan: --/--/--	Final Design: 30/10/24								
For Tendering purposes only: 08/11/24	Issued for construction: --/--/--	W.A.E.: --/--/--								

X:\PROJECTS\2024\24062 CHS Helipad Conversion\Acad\4. Tenders
RG 24062 CHS Helipad Conversion - Lighting Kurt Booth 07/11/2024, 4:07 PM

300mm ON A1 ORIGINAL

NOTE: ALL DRAWINGS ARE DESIGNED TO BE PRINTED AND READ IN COLOUR

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TO COMMENCEMENT OF WORK OR PREPARATION OF SHOP DRAWINGS.
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ISSUE	DATE	STATUS
1	19/03/21	FOR INFORMATION
2	21/04/21	FOR BUILDING APPROVAL
3	09/10/21	FOR BUILDING APPROVAL
A	10/12/21	FOR CONSTRUCTION

CLIENT



CONSTRUCTION MANAGER

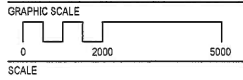
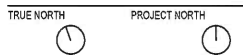
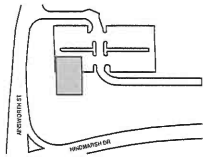
MULTIPLEX

CANBERRA HOSPITAL EXPANSION PROJECT
Block 1, Section 58, Garran, ACT

BVN PROJECT NUMBER

1912001

DRAWING KEY

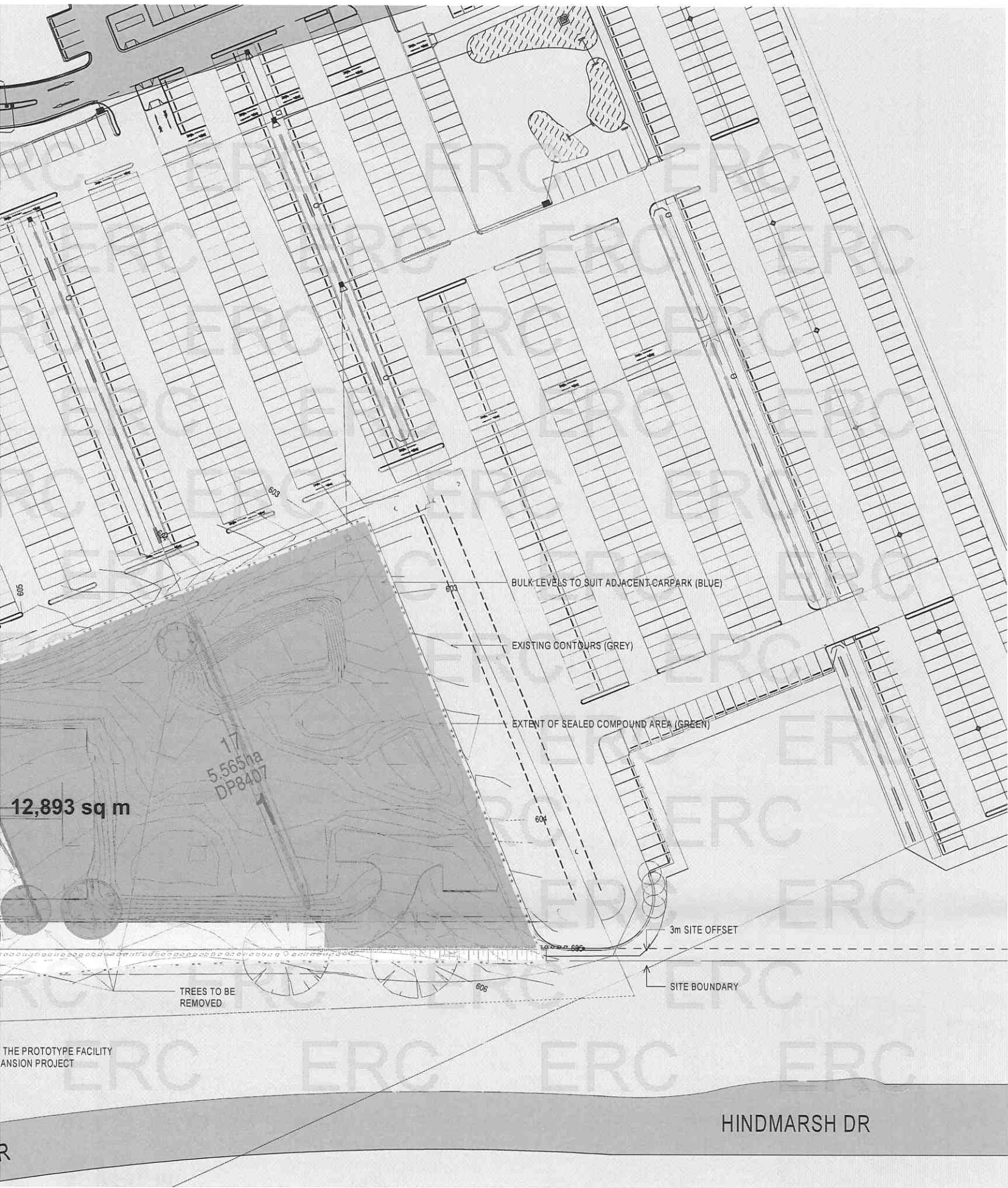


1 : 500@A1 DO NOT SCALE
STATUS

FOR CONSTRUCTION
DRAWING

SHED - SITE PLAN

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01A-NL-0001
A



● BOLLARD	□ ELECTRICITY PIT
△ COVER LEVEL	□ MISCELLANEOUS PIT
▶ STOP VALVE	—— CONCRETE - EDGE
⦿ SPRINKLER	—— GRAVEL EDGE
✴ LIGHT POLE	—— WALL
⦿ IRRIGATION CONTROL BOX	—— TOP - BANK
⦿ GROUND LIGHT	—— CHANGE OF GRADE
☆ UNCLASSIFIED	— . . . TOE - BANK
● SINGLE SHRUB-SM	—— KERB - BACK
● SEWER MANHOLE	—— KERB - LIP
○ STORMWATER MANHOLE	—— KERB - INVERT
⦿ ELECTRICITY POLE	
⦿ MISCELLANEOUS UTILITY	
▤ STORMWATER GRATED PIT	
⦿ SEWER VENT	
● MISCELLANEOUS POLE	
● FIRE HYDRANT	

Scale 1:200

Surveyed	J. WOO	20/11/2024
Drawn	I. STEWART	20/11/2024
Checked	B. SKEERS	20/11/2024
Approved	S. NOAKES	20/11/2024

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Surveyors Act 2007.

ProjectNo. 22024-054 VAR Rev A
Sheet No. 2 of 3 22024-054_ASBUILT_002-VAR.dwg
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