
LAUNCESTON GENERAL HOSPITAL

PROPOSED NEW MULTI-STOREY

CARPARK

SUBMISSION TO THE

PARLIAMENTARY STANDING

COMMITTEE ON PUBLIC WORKS

10 December 2024

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I. EXECUTIVE SUMMARY

1.1 Document Purpose

The purpose of these documents is to provide information to the Parliamentary Standing Committee on Public Works (PSCPW) regarding the proposed Multi-Storey Carpark at Launceston General Hospital (LGH) (the Project). The documents discuss the need for the Project, evaluate that need, the related conditions and constraints and propose resolution of these.

The document includes the following:

- Detail analysis of need for parking
- Confirmation that the proposed investment in infrastructure is the most appropriate means to support improved management of carparking in support of Launceston General Hospital.
- Confirmation that the Project is consistent with the Department of Health (DoH) (the Department) Strategic Plan.
- Confirmation that the Project is consistent with the DoH Launceston General Hospital (LGH) Masterplan.
- Evaluation of the suitability of the proposed design of the Project; and
- Discussion of 'value for money issues' relating to the design and construction of the Project.

Project Overview

The Launceston General Hospital (LGH) Masterplan has proposed the construction of a multi-storey carpark on the corner of Charles and Howick Street to help address the increased demand for car parking over the course of the Masterplan. As a result of both planned and unforeseen development in the area, the need for carparking has increased and is likely to be a condition of development approvals for other Department Projects, such as the construction of the Mental Health Precinct on the 52 Frankland Street site and the construction of the new helipad on the existing Cleveland Street Multi-Story Car Park. As a result, there is pressure for the Department to deliver the new car park, both to satisfy consumers at the hospital and to satisfy the planning requirements of the local council.

The proposed multi-storey carpark will be a major landmark and will form a significant part of the new entry to the LGH. The new car park design must consider the scale and form of the existing surroundings at the same time as providing a notable architectural outcome. This significant new building must make a positive contribution to the streetscape and act as a design benchmark for future building development within the health precinct.

Related Projects LGH Master Plan – refer Launceston General Hospital Precinct Masterplan - Implementation Program March 2022 (the Masterplan).

Objectives

The proposal for the project will ensure that car parking is readily available to meet the demand. This will support the LGH in meeting the ever-increasing and changing demands of the future.

In summary, the proposed work for the Project involves:

- Delivery of a fully compliant, safe and efficient multi-storey carpark
- Direct access from the carpark to the hospital for staff and visitors
- Separation of staff and visitor parking
- The provision of an accessible toilet
- Cleaners store
- Secure Staff bicycle parking and change area
- Provision for EV charging external to the carpark
- Minimum vertical clearances to structure must be sufficient to allow access by emergency vehicles and crane access, and otherwise no less than 4000mm at ground floor level and 2300mm to typical levels.
- The proposed multi-storey carpark's relationship to the existing buildings and proposed future developments must be carefully considered in the overall massing and form to address the streetscape and the incorporation of future wayfinding measures.
- New car parking bays must include designated disabled bays and designed in accordance with applicable Australian Standards (including AS1428 and AS2890).
- Provision of an electronic car park management system and electronic signage providing advance advice of car bay availability, externally and on a floor-by-floor basis.
- Achieve as many carpark spaces as possible on the site whilst respecting the site parameters

1.2 Project Budget

Funding of \$40 million has been allocated to the Launceston General Hospital Multi-Storey Carpark as a total budget included in the Stage 2 Masterplan. Current cost planning confirms the Project can be delivered within budget.

1.3 Project Program

The preliminary program that is being developed suggests that construction will require 15 months to achieve project completion. The existing ground level carpark will be unavailable during this period which requires an alternative temporary parking solution to be developed. The former Anne O'Byrne which is adjacent to the LGH precinct has been identified as a suitable temporary parking solution to offset the loss of 120 parking bays during construction.

Once a preferred contractor is engaged, efforts to investigate the suitability of delivering a staged handover will be discussed.

To understand if it is practical to open the first two levels once they have been constructed, the proposal is to open the carpark and continue construction on the levels above in the same way as the Cleveland Street carpark, where the carpark extended by two levels whilst it remained operational. This proposal will be determined by consultation with the successful contractor with consideration to safety and financial impacts.

Design and tender documents are completed, and the project is anticipated to go to tender Saturday 23rd November. Subject to the required approval processes, construction would commence in June 2025 following the completion of the proposed temporary carpark works on the Anne O'Byrne site. The construction program is scheduled to take approximately 15 months, with Practical Completion estimated by July 2026. The defects liability period will run for 12 months after Practical Completion when final completion is expected.

General Project Scope

Scope of the Project includes provision of the following:

- The multi-storey carpark located at the corner of Howick and Charles Streets Launceston
- Carparking bays and circulation
- Motorcycle parking
- DDA compliant access parking and compliant pathways to the LGH building
- Secure bicycle parking for staff
- Stairs
- Lifts
- Ramps
- Access Toilet
- Cleaners store
- Electric vehicle charging station located externally
- Separate staff and visitor parking
- Signage and wayfinding

1.4 Design Approach

In the concept stages four options were tested to see what the most efficient and cost-effective solution would be.

These options ranged from 7 levels with a total area of 19,308 which achieved 531 car parks to the preferred solution of 475 cars over 7 levels and a total area of 17,802m².

All Parking Bays (other than accessible bays) should be designed as User Class 3 in accordance with Table 1.1 of AS2890.1:2004.1.

Minimum vertical clearances to structure must be sufficient to allow access by emergency vehicles and otherwise no less than 4,000 mm at ground floor level, 2,000 mm to typical floors and otherwise in accordance with applicable Australian Standards.

The 4,000 mm vertical clearance on the ground floor is required for crane access to the crane stand area adjacent to the rear QV entry.

The proposed multi-storey carpark's relationship to the existing buildings and proposed future developments must be carefully considered in the overall massing and form to address the streetscape and the incorporation of future wayfinding measures.

The design of the new car park facades must facilitate natural cross flow ventilation while providing for safety and security.

Façade treatments must be developed to ensure proposed materials and finishes used in the façade composition provide a high-quality appearance commensurate with the LGH precinct's new buildings and structures.

The integrated incorporation of public art into façade treatments or wayfinding elements should be considered.

Building signage and wayfinding devices are to be integrated with façade treatments.

The proposed multi-storey carpark design must be an economical structural solution of contemporary design and be comprised of resilient, durable, vandal and damage resistant materials and finishes.

The design of the exterior façade treatments must address screening, ventilation and security and must be of a high-quality appearance commensurate with the significant location of the new structures.

2. PROJECT DEFINITION

2.1 Primary Objectives

The Launceston General Hospital (LGH) commenced on its current site from 1863. It received a major upgrade in the early 1980's and is currently working to a three-stage upgrade and redevelopment plan which will extend into the early 2040's. The LGH is the major hospital in Northern Tasmania. It is also a teaching hospital associated with the University of Tasmania. The hospital is fully accredited by the Australian Council on Healthcare Standards.

The hospital site is 3.87 Ha. This supports buildings currently up to 6 levels. These provide acute and general hospital services to Northern Tasmania and the Bass Strait Islands. It is the principal referral hospital for the North-West and West Coast Regions.

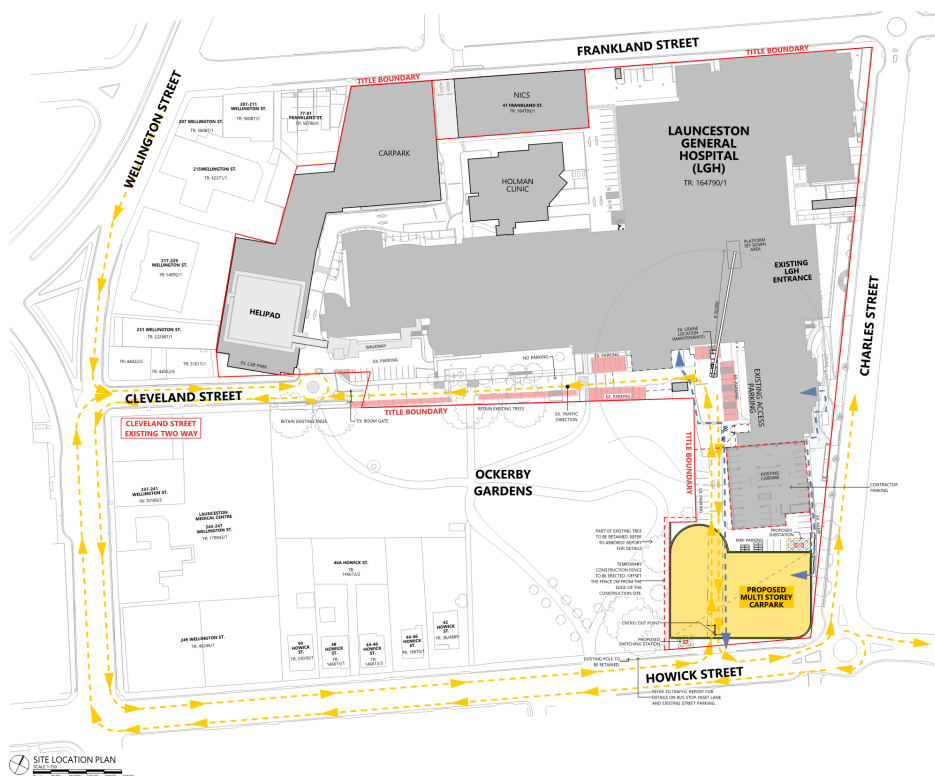


FIGURE 1 Artas A00-Sk05 Site plan including Ockerby Gardens and immediate neighbours

In late 2022 the Tasmanian Government released the final version of Advancing Tasmania's Health as part of its Our Healthcare Future Stage Two reforms; and with the LGH remaining a key component of service provision, particularly in the North. A strategic ambition of these reforms is "Delivering the Health Infrastructure of the Future".

The Project ensures the LGH can be accessed directly by those who need to, it maximises certainty in the delivery of lifesaving treatment and improved regional health.

The intended works anticipate achieving the following outcomes:

- Increase the immediacy of access to the emergency and general treatment available.

- Create an environment that exceeds quality and safety requirements for patients and staff.
- Provide appropriate health services to the local community.
- Improve health and wellbeing for all Tasmanians
- Meet evolving health needs and service demand.
- Provide more appropriate and greater ease of access to health services for the local community
- Be part of a supportive and flexible environment
- Create efficient assets that support effective services that are responsive to change.
- Increase care capacity and Increase client and staff satisfaction with service and environment
- Provide a workplace that retains and attracts staff
- Increase capacity for training and research, including linkages with training providers
- Assist in meeting evolving future health needs and service demands

The Car park Project is intended to address the parking needs of the LGH precinct, including car parking as well as providing significant master planning and design flexibility to facilitate future car park expansions. Once the LGH redevelopment masterplan projects are completed, the Department has identified a total capacity for the proposed multi-storey carpark of up to 500 parking spaces.

3. NEED FOR THE PROJECT

The hospital is currently deficient in parking provision and ease of access:

- Patient and visitor access is impacted
- Secure local staff parking is in short supply to the point of impacting satisfaction
- Lower satisfaction compromised efficiency and best practice

Launceston General Hospital provides just over 60 000m² of built space excluding existing car parking buildings. It provides a full range of health-related services. Demand for car parking is acute.

3.1 The Solution

The Launceston General Hospital (LGH) Masterplan has proposed the construction of a multi-storey carpark on the corner of Charles and Howick Street to help address the increased demand for car parking over the course of the Masterplan.

Scope of the Project includes provision of the following:

- Upgrades to existing building structure and services will be completed in addition to the installation of new building services required to facilitate the proposed works.
- All Parking Bays (other than accessible bays) should be designed as User Class 3 in accordance with Table 1.1 of AS2890.1:2004.1.
- Minimum vertical clearances to structure must be sufficient to allow access by emergency vehicles and otherwise no less than 4,000 mm at ground floor level, 2,300 mm to typical floors and otherwise in accordance with applicable Australian Standards.
- Provide a suitable interface with pedestrian movements, ensuring the safety of pedestrians and right of way for emergency vehicles.
- Implement methods to ensure that vertical clearances are always maintained.
- Provide associated signage, lighting, pavement and kerbing treatments, landscaping etc.
- Under cover motorcycle bays must be provided at the proposed multi-storey carpark, satisfying the minimum requirements under the Tasmanian Planning Scheme.
- A minimum of 2% of new car parking bays must be designated as disabled bays and designed in accordance with applicable Australian Standards (including AS1428 and AS2890).
- The design must maximise access to natural light using translucent materials where practical.
- Integrate lighting and signage.
- Address design for wind loadings and uplift and integrate with façade treatments.

Provision must be made within the proposed multi-storey carpark to house all plant and equipment required for the operation and maintenance of the building.

Provision of lighting in accordance with applicable Australian Standards, ensuring that high quality night lighting is provided to all accessible areas including external pedestrian walkways. Lighting must be of a high architectural standard.

Provision of an electronic car park management system and electronic signage providing advance advice of car bay availability, externally and on a floor-by-floor basis.

Public access toilets are to be provided, as a minimum, at ground floor near major entry/exit points to the proposed multi-storey carpark.

Vertical transportation to / from main entry points to the new car park decks be provided at a minimum by a combination of lifts and stairs underpinning project principles.

The following objectives have guided the design approach for the proposed multi-storey carpark:

- The design was to be an economical structural solution of contemporary design and be comprised of resilient, durable, vandal and damage resistant materials and finishes.
- The design of the exterior façade treatments was to address screening, ventilation and security and must be of a high-quality appearance commensurate with the significant location of the new structures.
- The proposed multi-storey carpark's relationship to the existing buildings and proposed future developments must be carefully considered in the overall massing and form to address the streetscape and the incorporation of future wayfinding measures.

3.2 Design Philosophy

The following schematic design is informed by the original project commission brief and has been further developed with the Project Working Group (PWG).

Consultation with the Launceston City Council about the building height and facade treatment has also informed the design.

The schematic design encompasses the below summary of design decisions and should be read in conjunction with the documentation set referenced in Attachments.

Design Statement

The LGH Masterplan has proposed the construction of a multi-storey car park on the corner of Charles and Howick Street to help address the increased demand for car parking over the course of the Masterplan.

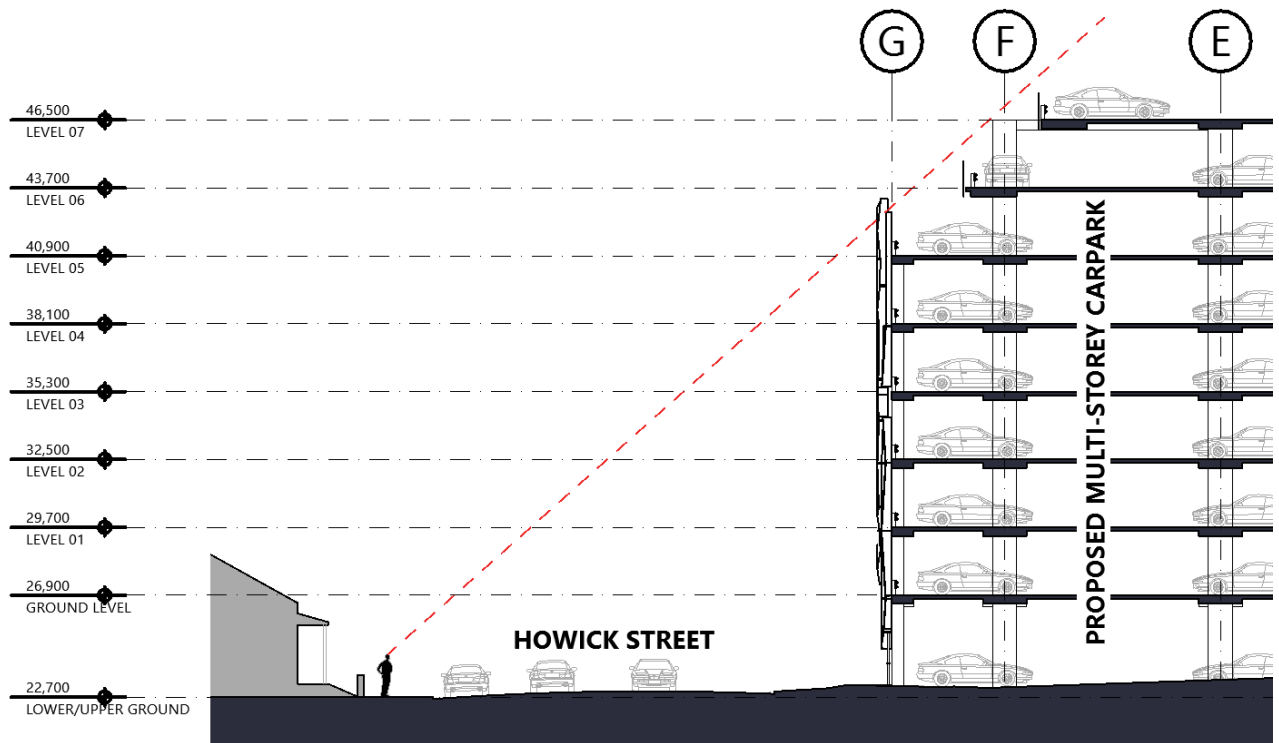
The LGH and associated health facilities are major generators of traffic and parking demand in South Launceston. Off-street parking (including the current LGH multi-deck car park built in mid-2012) is reported to be insufficient to meet demand.

As a result, there is pressure for the Department to deliver the new car park, both to satisfy consumers at the hospital, and to satisfy the planning requirements of the local council.

The following is a list of key design considerations.

- **Building Form**

- The brief also required a total capacity of up to 550 car parking spaces to be provided and multiple iterations of the building form were tested to maximise the amount of parking provided. The building's overall form is determined by the required minimums to satisfy code compliance for a multi-level off-street parking structure.
- The issue of height has been addressed by stepping back and tiering the top two levels of the car park to minimize visibility from the street as well as any resultant overshadowing. The façade has also been layered to minimise and reduce the overall sense of mass from the street. Refer to sight line diagram below:



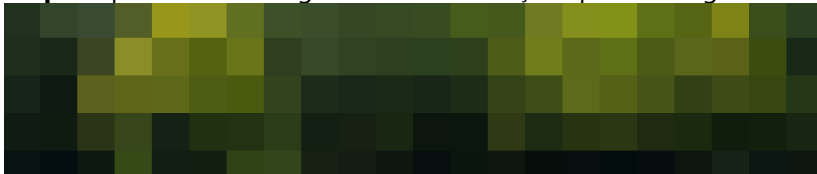
• Façade Treatment

- The façade treatment has been through rigorous testing to find a solution that will work against the varied typologies existing in the neighbouring context including Ockerby gardens, the varied sizing of residential/industrial/commercial structures along the south of Howick St and the Larger buildings (including LGH) along Charles St.
- Additionally visual impacts from a greater distance, such as the Southern Outlet, have been considered and included in renderings of the building.
- The final proposal uses a few key techniques to address these conditions as noted below:
 - Colour and form: two shades and shape of green perforated mesh are proposed in a selected pattern to provide visual relief from the length and bulk of the overall structure which has a restrained colour palette to help bring forward the feature elements as well as providing a gentle visual transition between the Ockerby gardens and the carpark building.
 - The panels mimic the sense of depth and variation in the tree forms and have been offset with timber look battens as further relief and reference to surrounding context adding a sense of granularity at ground level.
 - The methodology for determining the form of the feature façade panels is outlined below in 3 key steps.

Step 1 - use generic image of trees as reference to existing neighbouring context of Ockerby gardens to help tie the mass of the building into its context.



Step 2 – pixelate the image to determine façade panel sizing/ colour groupings.

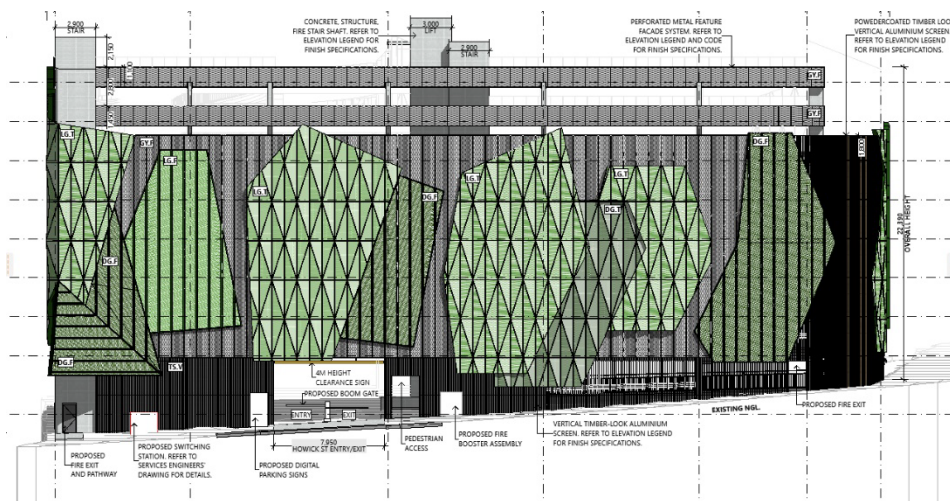


Step 3 – colour groups are highlighted and outlined to suggest potential forms and setbacks.



Final Result:

Forms are rationalised to suit buildings apertures and textures chosen so as not to feel repetitive.



- **Pedestrian/Vehicle Access/Connectivity**

- Refer plans for pedestrian and vehicular flow diagrams.
- The proposed design allows for a dual head EV parking/charging space and secure bicycle parking (45 spaces) for staff. Visitor bicycle parking is also provided on the north side and inside of the building (approx. 32 spaces)
- The proposed design allows for dedicated safe pedestrian access which is DDA compliant from Howick Street entry through to the existing LGH building to tie with future masterplan works and greatly improve the current pedestrian safety issues reported on site.
- Additional DDA compliant parking (10 spaces) has been provided at upper ground level to tie with existing DDA ramp access to the principal pedestrian entry off Charles Street to the LGH. These spaces have also been considered to tie in with future masterplan works to provide closer proximity to future planned principal entry points.

- **Wayfinding**

- The proposed design will incorporate all required wayfinding signage to BCA, NCC and local authority requirements, this is included within the current document set.
- Refer to drawing no. A001 Site Location Plan for pedestrian and vehicle circulation.

- **Drawing Overview**

- **Site Location Plan Drg A00-DA01**

- Shows the location of the proposed new carpark on the corner of Charles and Howick Street
- As informed by the traffic impact assessment, the existing traffic directional flow for entry and exit is maintained
- Entry/Exit point from Howick Street
- Retention of Two-way traffic from Howick Street to the existing access parking
- Retention of the crane parking spot for maintenance
- Retention of the one-way traffic system from the access parking to Cleveland Street
- Retention of the existing boom gate adjacent to the existing Cleveland Street roundabout
- The existing two-way traffic is maintained in Cleveland Street up to the roundabout
- Pedestrian traffic is highlighted in blue and shows entry off Howick Street through the carpark to connect to the existing path and crossing to allow access to the QV entry

An alternative access compliant path of travel is via the existing ramp on Charles Street which allows access to the existing front door.

Refer to the traffic report for additional information.

- **Lower / Upper Ground Floor Plan Drg A40-DA02**

Entry / Exit point form Howick Street-Refer Traffic engineer report for more detail.

- Boom gates linked to existing carpark management system
- Signage at entry indicating number of spaces available for each level

- **Lower ground Parking**

- On grade - 26 parking spaces
- Motorcycle spaces
- Secure bicycle parking for 45 staff bicycles
- Main pedestrian access through the carpark

- **Upper ground Parking**

- On grade -12 parking spaces (10 access compliant parking-2 regular spaces)
- Stretcher lifts - 3 x fire stairs
- All gender access compliant toilet
- Cleaners store
- New access compliant ramp to link with the existing Charles Street access ramp.
- 16 bicycle parking spaces externally for the public
- 16 bicycle parking spaces internally for the public

- **Ground Level Parking**

- Access via a max 1:8 ramp from upper ground level below
- Stretcher lifts - 2 x fire stairs provide access via a 1:8 ramp above
- 1 fire stair provides direct access to this floor
- 27 parking spaces
- Traffic direction 2 way
- Recessed section to allow for the 4,000mm minimum clearance required for the crane between grid 3 and 4

- **Level 01-1a/Level 02-05 Floor Plan Drg A41-DA02**

- **Level 01**

- Access via a 1:16 ramp from upper ground level below
- Stretcher lifts - 2 x fire stairs provide access
- 23 parking spaces on two-part levels
- Traffic direction 2 way

- **Level 01A.**

- 32 parking spaces
- Traffic direction 2 way in a dead-end section
- 1 fire stair access

- **Level 02-05 Typical**

- Access via a 1:10 and 1:5 ramp from levels below
- Stretcher lifts - 3 x fire stairs provide access
- 62 parking spaces per level
- Traffic direction 2 way



(Entry / exit point off Howick Street)

- **Level 06/Level 07 Floor Plan Drg A42-DA02**

- **Level 06**

- Access via a 1:10 and 1:5 ramp from levels below typical
 - Stretcher lifts- 3 x fire stairs provide access
 - 42 parking spaces per level
 - Traffic direction 2 way

- **Level 07**

- Access via a 1:10 and 1:5 ramp from levels below typical
 - Stretcher lifts- 3 x fire stairs provide access
 - 47 parking spaces per level
 - Traffic direction 2 way
 - It is important to note that the top two levels have been recessed back from the street to reduce the visual impact on Howick Street. This was a request from council
 - The structure has been designed to allow these sections of the carpark to be added back at a future date
 - The sum of parking spaces that have been deleted for these two levels is 40

- **Building Height**

Refer sections and base structure perspectives.

The sections demonstrate the varying levels and heights of the carpark.

In summary:

- The minimum permitted clearance is 2,300mm typically per level
- On the lower/upper ground floor 4,000mm clearance for crane access is provided
- Level 7 is RL 46.500
- Level 6 is RL 43.700
- Level 5 is RL 40.900
- Level 4 is RL 38.100
- Level 3 is RL 35.300
- Level 2 is RL 32.500
- Level 1 is RL 29.700
- Level Lower ground is RL 22.700
- The overall building height to Charles Street is RL 23.400
- The average building height to Frankland Street is RL 25.135



(Overhead view showing recessed upper levels)

- **Materials And Façade Treatment Refer A45-DA02, A46-DA01**

Refer to the drawings for detail.

- The façade is a combination of the following material:
- Smooth natural finish grey concrete
- Perforated metal feature faced system in a vertical pattern
- Perforated metal feature faced system in a triangular pattern

The colour is varied by creating different size perforations in the panel.

50% of the façade must remain open to meet the ventilation requirements for an open deck carpark.

Aluminium SHS vertical timber look alike aluminium screen.

Galvanised balustrade / crash rail

The design response for the façade is to use a series of perforated prefinished metal shapes to simulate the effect of a large forest of mature trees.

Ockerby Gardens can currently be viewed through the site and forms an important part of the sense of place.

A subtle LED lighting effect will further enhance the façade at night to create a soft glow.



(View from Ockerby Gardens – looking East)

- **Sunshade Diagrams Refer A47-DA01, A48-DA01**

The sun diagrams show the shade as it currently exists and the shade as it will be upon completion of the carpark.

The 3 standard times for the summer and winter solstice are 9am, 12pm and 3pm.

Please refer diagrams for details.

As demonstrated in the diagrams there is no detrimental effect of overshadowing.

- **3D Montages**

The 3D montages show several views and the visual representation of the building modelled into the existing context.

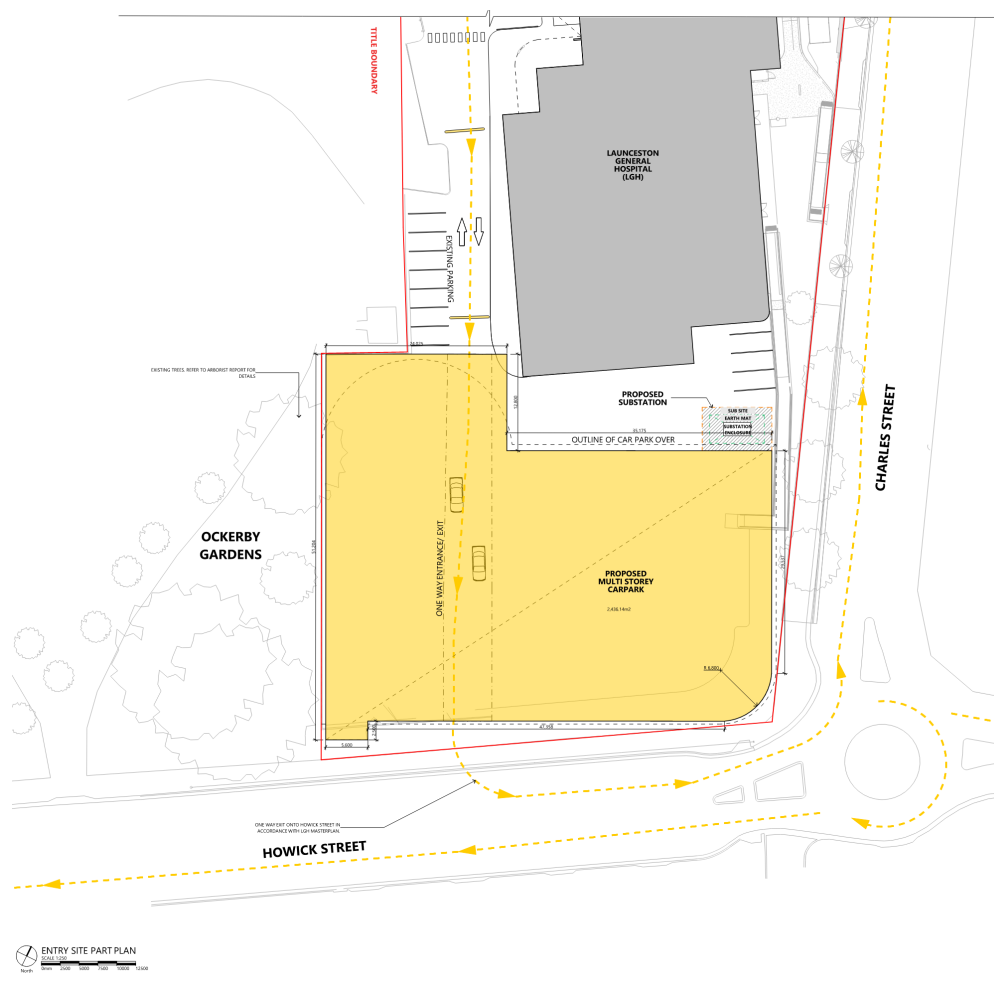
The long-range view from the Westbury Road overpass was requested specifically by council and shows the proposed carpark relative to the surrounding buildings. Please note the Ann Obyrne centre directly adjacent to the North of the carpark on Charles Street has been demolished during the development of these montages. We have retained the photo in its existing form to show the height relative to the former building.

- **Area Schedule** (Refer diagram below)

LEVEL	CAR PARKING ON NEW SUSPENDED SLAB (m2)	GRADED CAR PARKING (m2)	CAR PARKING ON UTILITY AREA GRADE (EXISTING LEVELS)(m2)	VEHICLE PEDESTRIAN RAMP (m2)	VEHICLE PEDESTRIAN RAMP(m2)	STAIR LIFT (m2)	LIFT (m2)	TOTAL (m2)	
LOWER/UPPER GROUND	60	477	1392	116	105	60	40	15	2265
GROUND	1140	NIL	NIL	NIL	130	NIL	32	15	1317
LEVEL 01	1280	520	NIL	NIL	105	NIL	40	15	1960
LEVEL 02	2010	NIL	NIL	NIL	120	NIL	40	15	2185
LEVEL 03	2010	NIL	NIL	NIL	120	NIL	40	15	2185
LEVEL 04	2010	NIL	NIL	NIL	120	NIL	40	15	2185
LEVEL 05	2010	NIL	NIL	NIL	120	NIL	40	15	2185
LEVEL 06	1715	NIL	NIL	NIL	120	NIL	40	15	1890
LEVEL 07	1560	NIL	NIL	NIL	15	NIL	40	15	1630
TOTAL(m2)	13795	997	1392	116	955	60	352	135	17802



(View from Ockerby Gardens – looking East)



(Plan-Project Location within the LGH Site)



(View from Charles Street Roundabout)



(View From Pedestrian Pathway on Charles Street)

4. ADDRESSING THE NEED

4.1 Environmentally Sustainable Design

The Tasmanian Government has set an energy consumption reduction target of 60 per cent across all Departments by 2050. The Project has been designed to incorporate integrated low energy consumption and sustainable features to support this aim. The environmentally sustainable development features of this building include the following:

- Inclusion of energy efficient light systems
- All unglazed walls, ceiling and roof cavity spaces enclosing internal spaces are insulated and sealed to meet Building Code of Australia mandatory requirements to mitigate heat loss and gain fluctuations.
- The operable area of all levels indicates more than sufficient free area to enable natural ventilation of the carpark without the need for supplementary ventilation supply or exhaust.

4.2 Cost Estimate

Slattery were engaged as Quantity Surveyors for the LGH Carpark Project. This cost estimate is based on the Detailed Design. Slattery have significant experience and expertise in providing cost estimates for health care facilities having completed several reviews on current medium to large scale facilities.

Item	Cost
Demolition	\$20,000.00
Building Works	\$27,741,000.00
External Works & Services	\$692,000.00
Provisional Sums	\$1,150,000.00
Tender Construction Cost	\$29,603,000.00
Construction Contingency	\$2,960,300.00
Total Construction Cost	\$32,563,300.00
Authority Fees & Charges	\$581,000.00
Professional Fees & Charges	\$3,096,000.00
Artwork	\$80,000.00
TasNetworks Pole Relocation	\$500,000.00
Total	\$36,820,300.00

4.3 Target Dates

- Submit to Planning – 5/06/2024
- Phase C – Design Development – 05/06/2024 – 17/07/2024
- Phase D – Construction Tender Documentation – 25/06/2024 – 31/10/2024
- Construction Request for Tender advertising – 23/11/2024
- Tender Period – 23/11/2024 – 25/04/2025 (including procurement and contractual engagement)
- Phase E – Construction Period – 29/05/2024 to 20/07/2026
- Defect Liability End – 20/07/2027

4.4 Building Surveyor

The car park is classified as an open deck carpark there are concessions available under the NCC. This allows for the removal of sprinklers, reduction in fire rating of the structure and would provide a great cost benefit to the project.

A fire engineer has been engaged to provide information about the risks that the Electric Vehicle charging station presents to the project. EV charging units have been removed from within the building to avoid a fully sprinklered building with a single dual head charging station being located externally.

The recommended project direction is to pursue the open deck car park option.

4.5 Traffic Impact Assessment - Overview

It is proposed to construct a new multi-level car park on the southeastern corner of the site occupied by the Launceston General Hospital located at 274-280 Charles Street in Launceston. The new car park would comprise 475 car parking spaces, 77 bicycle parking spaces and five (5) motorcycle parking spaces.

Considering the analysis presented in this report, it is concluded that:

- The proposed land use has no statutory requirement to provide any car, bicycle and motorcycle parking spaces, in accordance with the *Tasmanian State Planning Provisions – Launceston*.
- The proposed car parking design, bicycle and motorcycle parking layout and access design has been designed in accordance with the requirements of the *Tasmanian State Planning Provisions – Launceston* and/or the Australian Standard AS2890 series and is therefore considered satisfactory.
- Section 5.3 of “12631098-REP-LGH_Model_Traffic_Assessment” prepared by GHD, recommends that the access point along Howick Street remains two-way providing entry and exit, as per existing conditions which would assist access to/from the proposed multi-level car park.
- The left out (no right out) arrangement of the proposed access point along Howick Street is expected to have minimal impact on traffic patterns, as vehicles can use the Howick St and Charles Street roundabout to make a U-turn to head west.
- The proposed multi-level car park is not considered to be a traffic generator in itself. However, traffic generation associated with the proposed multi-level car park on the subject site has been estimated to reflect a potential full build out of the precinct and therefore full utilisation of this car park. Analysis of the intersection of Howick Street and the car park access demonstrates a suitable level of performance in the AM and PM peak periods.

Based on the findings of this report and subject to the recommendations stated within the report, the proposed development is supported on traffic and transport grounds.

4.6 Electrical Services

The proposed building is located on the same site as the Launceston General Hospital and will be interconnected to the existing buildings infrastructure. Currently there is no services available where the carpark is proposed, and new infrastructure is required to be extended to service the development.

Power Supply

It is proposed to extend the existing high voltage network to a new pad mounted 1MVA Kiosk substation.

This sub-station is to be supplied from the existing LGH HV ring main out of the Level 1 HV switchroom utilising an existing Circuit Breaker that once fed the old Co-Gen plant.

The proposed HV supply is to be run through Level 1 out into the lane beside the Maternity Entry and run underground in the road beside the Paediatric Inpatient Unit (PIU) building to the new Sub-Station.

TasNetworks

Existing TasNetworks overhead high and low voltage powerlines running along Howick Street are proposed to be relocated underground and a new switch station to be installed addressing 3 major design issues:

- There is an existing power pole located within the proposed widened driveway that needs to be relocated/ removed for access.
- Safety during construction as the contractor will need to work within the TasNetworks exclusion zone, this power feed forms part of the LG backup power supply, so isolation is not an option.
- Proximity of the completed structure to the overhead high voltage powerline once completed is within exclusion zones.

Backup Supply / Generator

It is not proposed to provide an alternative power supply for the development.

Main Switchboard

A new main Switchboard will be provided for the building. It is proposed to position this near the central core staircase, externally recessed into the façade at the bicycle parking.

Switchboards

New local distribution switchboards will be provided throughout the proposed development. Typically, there will be two to three switchboards across all levels to cater for the NCC Vehicle charging requirements.

Dedicated Car Charging switchboards will be provided at each level in accordance with Section J9D4 of the NCC.

All power and lighting sub circuits will be provided with earth leakage protection as per AS/NZS3000:2007.

Data and Communication

The installation will comply with DHHS ICT Services Communications Cabling Standards Incorporating a category 6A structured cabling system.

We are proposing a single 12 core single mode optical fibre as advised by DoH ICT and the OS2 fibre will be terminated on SC connectors.

The new communication edge rack will not any critical infrastructure and will be an externally rated cabinet located at the central stair on Level 3.

Security / CCTV / Access Control

A Honeywell Security Access control and CCTV system is currently utilised throughout. The new development will connect into these existing systems.

General Power

General purpose outlets will be provided at switchboard locations, stairwells and the lower ground amenities for general cleaning.

Lighting

New energy efficient surface mounted external LED will be provided throughout all areas. The lighting will comply with AS/NZS 1680.2.1 Table D1

Electric Vehicle Charging

In accordance with the NCC for a class 7a building associated with a class 9 building the capacity allowance for future EV charging is required to 20% of the available parking spaces which equates to 95 park spots over all levels with a capacity for each circuit to support an electric vehicle charger able to deliver a minimum of 12 kWh from 9:00 am to 5:00 pm daily.

Electric Scooter and Bicycle Charging

It is proposed to provide a charging outlets in the bicycle parking areas for the charging of electric scooters and bicycles. These will be in the form of 10Amp single phase outlets.

Exit and Emergency Lighting

A single point exit and emergency lighting system complying with AS/NZS 2293 will be provided throughout the building.

In accordance with E2D12 of the NCC no smoke detection is required as the building does not have any mechanical ventilation systems in accordance with AS1668.2 *Unless advised otherwise, no detection system will be installed.*

4.7 Hydraulics

Domestic Hot Water

Local domestic Electric hot water cylinders will be provided to service hand basins. Temperatures will be maintained below 45 degrees in accordance with AS 3500.4 requirements utilising TMV's in accordance with site policies.

Domestic Cold Water

New domestic cold-water service will be supplied by an extension to the existing cold water supply infrastructure. A new main connection will be required from the existing site infrastructure.

Sewer

The existing site sewer main will require relocation to miss the proposed new substation and superstructure. New sewer branch lines from the relocated site sewerage infrastructure will be provided to support the toilets.

Stormwater

Stormwater will be provided via grates and drains within the civil works. All inground and connection works are to be documented by others.

Fire Hose Reels

Fire Hose Reels will be provided to all levels to provide the required coverage accordance with the NCC and AS2441.

Fire Hydrants

Fire hydrants will be provided up each fire isolated stair in accordance with AS 2419.1 and TasFire requirements.

All new hydrants are to be connected to the existing fire hydrant ring main via buried dead-legs with a new booster assembly dedicated to this carpark located adjacent to the entry point.

4.8 Mechanical

General:

The operable area of all levels indicates more than sufficient free area to enable natural ventilation of the carpark without the need for supplementary ventilation supply or exhaust. This will continue to be tested at each stage of design and plans will be issued during the schematic design phase indicating compliance calculations across all levels.

The new amenities will be provided with exhaust ventilation in accordance with AS1668.2.

5. CONSULTATION AND GOVERNANCE

5.1 Consultation

Stakeholder consultation has flowed from the LGH Master Plan process and commenced formally for the Project in January 2023. The primary means of key stakeholder consultation has been undertaken through the establishment of a Project Working Group (PWG). The PWG has been involved in multiple meetings with the Project Manager and lead design consultants, Artas Architects, spanning a detailed consultation phase have been supportive of the scope of works to be delivered by the project.

Presentation sessions have been hosted by Artas Architects where the PWG has been able to review the overall proposal and provide feedback on the design. Traditional 2D plans and interior concepts were accompanied by a 3D virtual tour of the redevelopment, allowing current staff to provide valuable feedback and seek targeted clarification relating to future facility operation.

Consultation has continued to occur with a dedicated project working group, all key services groups, other internal stakeholders, and associated services.

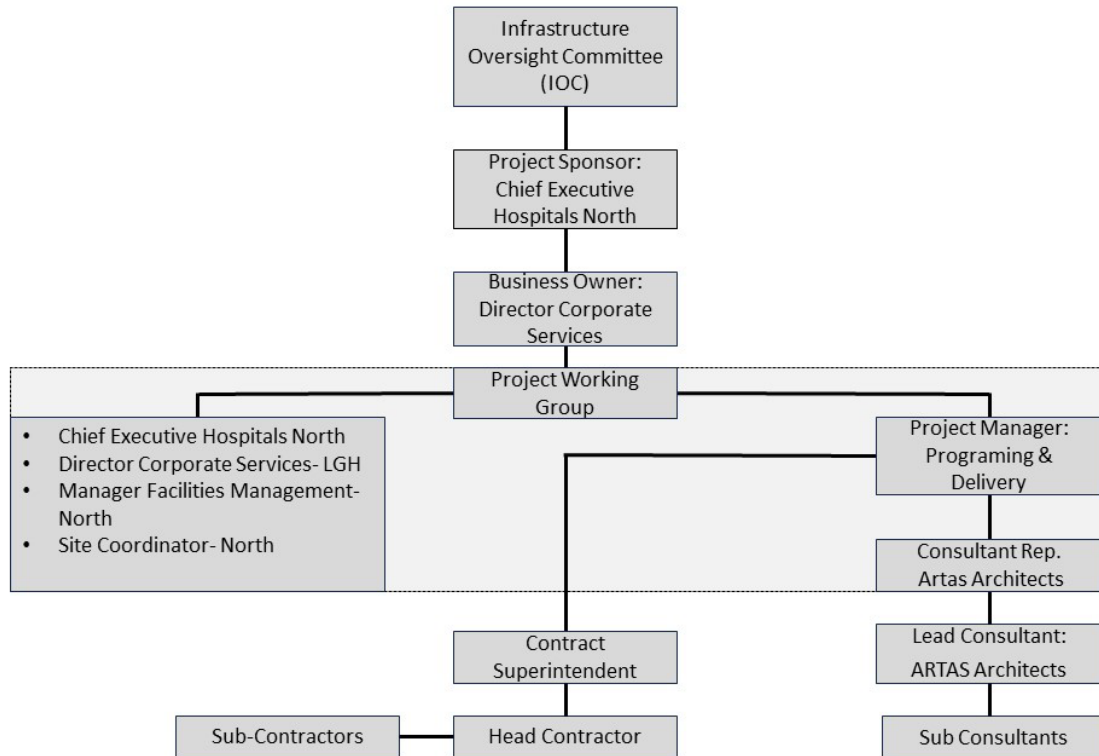
Consultation has occurred with the following key stakeholders:

- LGH Executive Staff, through participation in the PWG and briefings to Performance and Operations Meeting
- LGH Operational Staff, through participation in the PWG
- LGH Facilities and Engineering, through participation in the PWG and detailed site briefings and regular design review
- DoH Asset Management Services
- City of Launceston, before and during the Development Application process

A formal Stakeholder and Community Engagement Plan has been prepared for when the project proceeds to public advertising under the City of Launceston Development Application process and will guide ongoing consultation for the project moving forward.

5.2 Governance

The following diagram illustrates the Tasmanian Health Services (THS) Infrastructure Steering Committee, Project Working Group and Consultant Team relationships.



The PWG has been meeting as required to enable the project to evolve in line with the project timeline, providing an adequate consultation phase and sufficient time for Contract Documentation and Project Procurement.

5.3 Project Working Group

The PWG was established at the outset and prior to the announcement of the capital investment project to bring together key stakeholders to provide advice in relation to the design of the Project.

The PWG is coordinated by the Department of Health Project Manager. Membership includes people with knowledge and skills needed to oversee the management and design process of the redevelopment; this included Artas Architects, engineers, Tasmanian Health Service representatives with clinical skills and experience, LGH Chief Executive, LGH Director Hospital Corporate and Support Services, LGH Manager House Services, Regional Manager Facilities Management and Engineering Services. The PWG roles and functions have extended into the detailed design phase.

5.4 Design Approval

The Hospitals North Capital Infrastructure Committee at its April 2024 meeting endorsed the project schematic design and approved detailed design to proceed.

All desired project outcomes and key project risks have been tabled, discussed and then reviewed for compliance with the endorsed project brief have been tabled before this Committee. This consultative approach has resulted in a design that allows all desired outcomes to be resolved.

Final sign-off of the documented plans will be undertaken through the PWG, review by Asset Management Services and endorsement by the Project Sponsor.

5.5 Recommendations

The Tasmanian Health Service and Project Team have carefully assessed and explored the options and solutions available and have determined the design submitted provides the required project outputs as determined in the project functional brief. In addition, the design is consistent with the strategic long-term direction of the Department of Health and the Launceston General Hospital.

It is recommended that this submission be viewed favourably given the health services and economic benefits it will provide not only to the local Northern Tasmanian community, but also to many Tasmanians who visit or use this Hospital.

6. ATTACHMENTS

6.1 Schematic Design (Architecture)

Architectural Drawings Included in the Attachments:

- A00-DA01 Site Location Plan
- A04-DA01 Demolition Plan
- A40-DA02 Lower/Upper Ground (LGH Entry) & Ground Level Floor Plans
- A41-DA02 Levels 01-05 Floor Plans
- A42-DA02 Levels 06-07 Floor Plans
- A43-DA01 Sections AA & BB
- A44-DA01 Sections CC & DD
- A45-DA02 External Elevations
- A46-DA01 External Elevations
- A47-DA01 Sun Shade Diagrams (Summer & Autumn)
- A48-DA01 Sun Shade Diagrams (Winter & Spring)
- A60-DA01 3D Images
- A61-DA01 3D Images
- A62-DA01 3D Images
- A63-DA01 3D Images
- A64-DA01 3D Images
- A65-DA01 3D Images