SUBMISSION: EMERGENCY DEPARTMENT EXPANSION, ROYAL HOBART HOSPITAL

SUBMISSION TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS
28 November 2023

Department of Health

Tasmanian Government

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INTRODUCTION

The Royal Hobart Hospital (RHH) has undertaken a comprehensive initiative by developing a strategic masterplan aimed at addressing the growing healthcare demands of the community it serves. This masterplan attempts to fulfill the evolving health needs of the predominantly south and south-eastern Tasmanian population, while also recognising the imperative to provide advanced, tertiary care services to the broader state.

The impetus for this masterplan emanates from a rigorous analysis of clinical service activity, revealing a compelling trend of sustained growth in hospital admissions and Emergency Department (ED) presentations. Projections extend this trajectory well into the year 2050. Considering these forecasts, the Tasmanian Department of Health has embarked on a strategic endeavour to enhance the hospital's infrastructure. This undertaking includes a significant expansion in the capacity of emergency department services, coupled with several other planned infrastructure upgrades.

The existing Emergency Department (ED) was designed to accommodate approximately 45,000 presentations annually. However, the demand for emergency healthcare consistently surpasses this capacity. In the 2022-23 period alone, there were 75,258 presentations. Considering this trajectory, it's clear that the continuous increase in patient volume highlights the urgent need for an expanded healthcare infrastructure and additional resources. The analysis of clinical service activity paints a striking picture, projecting a significant and sustained growth in both hospital admissions and ED presentations. Forecasts indicate that by 2035, ED presentations are expected to reach a staggering 135,000 per year, highlighting the urgency of addressing this escalating demand.

In response to this challenge, a multi-phase project has been initiated to create space and facilitate a staged expansion over the next three and a half years. The initial phase, referred to as Phase 1, includes the relocation of the Paediatric Outpatient department to 3D. It also involves extensive renovations to the lower ground floor of H block, where a new fully contained ED Short Stay Unit (SSU) is established, equipped with 28 points of care. Notably, this unit will also serve as a dedicated pandemic response area, ensuring the hospital's readiness to address public health emergencies. This stage is now fully completed and functional, delivering Tasmanians quality healthcare standards.

The enabling work of Phase 2 of the project has commenced construction, signifying a significant step in the ongoing effort to expand and enhance the hospital's facilities to meet the ever-growing demand for emergency healthcare services. Phase 2 will deliver a state-of-the-art emergency department across two levels providing 121 points of care. It will also include a transition space so that ongoing emergency care can be provided to the community throughout the redevelopment project.

CURRENT HEALTH NEEDS AND PRIORITIES

Model of Care

While efforts are being made to respond to increasing ED service demand, including improving available inpatient bed stock and the development of hospital avoidance programs, the RHH ED must continue to

improve its operational efficiency. KP Health were engaged to undertake a model of care report. The detailed report for this project describes models of care for the RHH ED that inform infrastructure planning to 2035.

The methods used in the new RHH approved Model of Care for the ED included:

Review of relevant peer-reviewed and 'grey' literature.

Analysis of relevant THS data.

Targeted consultation with lead clinicians and decision makers.

The RHH ED has anticipated ongoing increase in service demand. The model of care report provides a summary of the ways the ED will care for patients across different treatment streams whilst demand continues to increase.

The model of care describes 121 treatment points that will be configured as follows to align with projections and analysis completed.

Zone	Points of Care
Resuscitation	6
Rapid Intervention and Treatment	6
Acute care	54
Lower acuity adult	14
Paediatric	13
Short Stay Unit	28
TOTAL	**121 points of care**

Triaging efficiency will be improved by increasing triage stations from five in the existing ED to nine including three dedicated ambulance triage positions. This will allow more timely access to triage and more rapid ambulance patient processing. Patients will then be directed to appropriate treatment areas (described below) or waiting areas. There is a dedicated paediatric waiting area which complies with contemporary child safety recommendations. In addition, there is a Rapid Intervention and Treatment Zone (RITZ) waiting area where rapid assessment and initiation of treatment will occur. There is also a dedicated medical imaging waiting area which will improve processing of patients.

The new resuscitation zone will have increased capacity to care for the most severely ill or injured patients presenting to the emergency department. Each resuscitation bay will have its own x-ray machine and there will be a dedicated CT scanner for the resuscitation area to allow for rapid access to imaging for the most critical patients. The resuscitation area will include a larger treatment space specifically for trauma patients and a negative pressure room for those patients requiring respiratory isolation for highly infectious diseases.

The rapid intervention and treatment zone (RITZ) is a new concept for the RHH ED. This area will allow for the rapid assessment of patients immediately after triage and sort patients into appropriate areas for ongoing treatment if necessary. Treatment can also be initiated in the RITZ for patients who are likely to remain ambulatory with the aim to increase early patient departure. This will improve the patient experience by reducing wait times and length of stay in the ED. This model has been successfully adopted on the mainland and has proven benefit for early diagnosis and treatment which improves patient experiences but also increases efficiency of processing.

The acute care zone is specifically designed to meet requirements for care of our older patients. Tasmania has the oldest population in Australia and it is well recognised that these patients are high users of emergency hospital facilities. In addition a section of the acute care zone has been designed to meet the specific care needs of Mental Health patients so that when they seek care this can be provided in a purpose built area. To maximise efficiency this area is designed as a multi-purpose area so that when there is low demand from Mental Health patients it can also be utilised for patients requiring care for other conditions. Increased privacy in this area will offer better quality care to vulnerable patients. The mental health zone has been designed with streamlined access which allows mental health patients to transit directly to the low stimulus area.

Within the rest of the acute zone, all the treatment spaces will be single rooms, some with glass sliding doors and some open bays. There will also be several isolation rooms with ensuites to provide emergency care to patients with complex infection control requirements. In preparation for future pandemic events, the acute care zone has been designed to have two stand-alone zones each having a dedicated ventilation system in order to safely isolate airborne pathogens.

The rebuild offers a greater number of acute (lie down) treatment spaces to cater for the increasing percentage of unwell older persons with increasingly complex illness anticipated to present to the hospital over the coming years. A large percentage of these patients require lie down treatment spaces and subsequent admission to hospital. Additional spaces will not only improve ambulance offload KPIs but will provide a better quality of care to the Tasmania public.

The new low acuity adult area will be configured with four procedure rooms, including one specifically for the assessment of eyes. The increase in procedure rooms will allow common emergency procedures, such as fracture reduction and wound repair, which often require intravenous sedation, to occur more efficiently.

The medical imaging area will have two x-ray machines, a CT scanner and ultrasound room. This is in addition to the medical imaging facilities in the resuscitation zone. This will improve patient flow through the ED as there will be reduced waiting time for medical imaging. A dedicated medical imaging wait area will improve efficiency in patient processing.

The RHH ED is committed to providing emergency care appropriate to the needs of children and young people. The new paediatric area will be a space that is physically separated from other areas of the ED and will include a dedicated paediatric waiting room and procedure room. A dedicated paediatric area where

children are separated from adult patients is a requirement of the new Safeguarding of Children and Young People regulations.

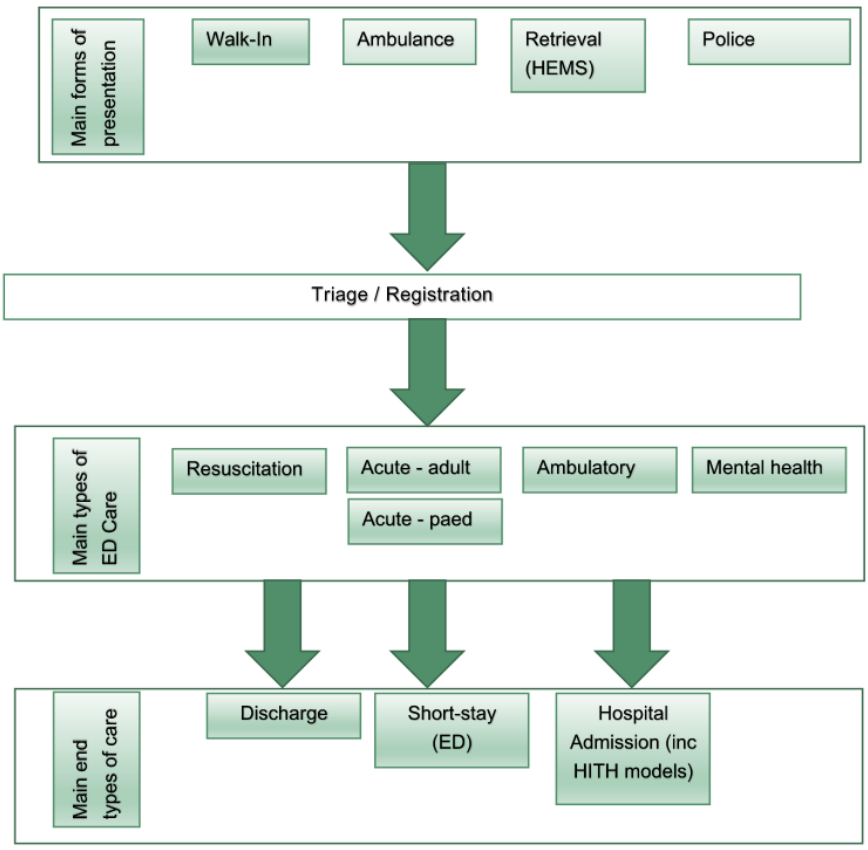
The RHH ED needs to continue to function throughout the build process. The greatest risk to patient safety is disruption to resuscitation and acute care areas. Neither area can have any down time. The completion of Phase 1 of the Short Stay Unit in LG H Block will facilitate the capacity required to complete the major component of the ED Expansion in Phase 2 of the project. The emergency department will temporarily be relocated to H Block to allow for the main building works to progress.

Existing Facilities

In 2007, the Emergency Department (ED) was established within the existing J Block Lower Ground Floor facilities, initially providing 64 Points of Care in a subterranean space beneath an open-air ground floor equipped with car parking and a drop-off area. Unfortunately, this space has been consistently plagued by issues, including recurrent water leaks throughout the facility.

In early 2023, the Emergency Departments' capacity was expanded with the addition of a Short Stay Unit, introducing an additional 28 Points of Care as part of this Project Group. As part of the transition to a new care model, the facility must undergo reconfiguration and upgrades to align with the latest standards and address pre-existing building issues.

The existing facility is broadly summarised as follows as per outlined in the Model of Care document:



Together with the challenges posed by the outdated existing physical facility, stakeholders have voiced concerns about critical issues impacting patient flow within the RHH ED. These challenges are listed below and some could potentially be mitigated through improved care models:

1. Delays in Securing Inpatient Beds ("Access Block"): Challenges persist in promptly transferring admitted patients to inpatient wards. These patients occupy ED beds that would otherwise be available to patients in the waiting room and those under the care of Ambulance Tasmania, resulting in impaired "flow" of patients through the ED.
2. Prolonged Ambulance Offloading Wait Times: During peak demand periods, significant delays in unloading patients from ambulances, often referred to as "ambulance ramping," is a recurring issue. Access block contributes significantly to this problem.
3. Extended Patient Wait Times in a Shared ED Waiting Room: Patients from diverse categories, including paediatrics, adults, mental health, and correctional patients, experience extended waiting periods in a single RHH ED waiting room.

COVID-19 Response and Requirements

COVID-19 has had a significant and profound effect on both the healthcare system and the people of Tasmania. The Phase 1 component of the project, Lower Ground H Block (refer to attachment 1) has been identified as an area of the hospital that will be able to be quickly adapted in the future to address any new pandemic situations. The new Short Stay Unit has been established and engineered to be self-sufficient with external access as well as fast access to the Intensive Care Unit (ICU). A 'negative air flow' environment will facilitate dealing with airborne viruses and provide a value for money design for 28 Points of Care. All 28 points of care are single rooms allowing for easier adherence to infection control procedures and an improved patient experience.

Stakeholder Consultation

The ED Expansion Project has demonstrated a strong commitment to engaging multiple stakeholders throughout the project's development process. In 2020 and 2021, a series of broad stakeholder workshops were convened, allowing valuable feedback to shape the evolving design.

The strategies that this project has adopted are as follows:

Identify and engage all stakeholders – In late September 2021, a group of 22 stakeholders, many of whom had previously participated in early-stage concept design discussions, collaborated to establish a new ED Model of Care. This model, slated for implementation from the completion of the build onwards, is instrumental in guiding the detailed design of the project. This included the Tasmania Aboriginal Community, Hobart City Council, Tas Fire, Heritage Tasmania, and Ambulance Tasmania to inform the design process. Their contributions have played a vital role in moulding the current design, achieving a delicate balance among diverse interests.

Effective Communication – Establish a clear and open line of communication with stakeholders. The project team conducts regular Microsoft Teams meeting to provide regular updates on project progress, timelines, and any changes with the stakeholder teams.

Feedback Mechanisms – Stakeholder teams are encouraged to provide feedback, ideas, and concerns through email or through feedback sessions during Team meetings.

Impact Assessment – We completed a Safety in Design risk management document that delineates the inherent risks stemming from the project's current condition. This document undergoes updates at each stage to proactively eliminate risks, communicate them to the Royal Hobart Hospital (RHH), and mitigate systematically. We conduct impact assessments to gain insight into how the project could potentially impact various stakeholders. This invaluable information serves as the foundation for devising strategies to mitigate adverse effects and maximize the positive outcomes.

Continuous Improvement – Continuously assess and refine the stakeholder consultation process based on feedback and outcomes. Regularly review stakeholder engagement strategies and adjust as needed.

The indispensable input of clinicians has been pivotal in shaping the design by providing their expertise in understanding how the ED functions. This iterative approach, involving multiple workshops at various levels of detail, ensures a well-considered and holistic design, reflective of the collective insights and needs of the stakeholders involved.

Public Interest

The expansion of the Emergency Department (ED) at the Royal Hobart Hospital is a matter of significant public interest and importance for people of Tasmania. The community is deeply invested in various aspects of this expansion:

Improved Access to Care: The public is eager to see how the expansion will result in reduced waiting times and more prompt access to emergency healthcare, ensuring that their needs are met in a timely manner.

Enhanced Facilities: Patients and their families are interested in the improvements to the facilities, including the creation of private rooms, upgraded equipment, and a more comfortable environment, all of which contribute to a more positive patient experience.

Patient Outcomes: The community is keen to understand how the expansion will positively impact patient outcomes, such as improved treatment, fewer complications, and enhanced recovery rates.

Capacity to Handle Surges: In times of crises, such as pandemics or natural disasters, the public wants assurance that the expanded ED will be well-prepared to manage increased patient volumes effectively and efficiently.

Specialised Services: The availability of specialised services within the ED, particularly dedicated units for paediatrics and mental health are of great interest to those who may require these specialised forms of care.

Community Health: The public is interested in the broader impact of the expansion on the overall health and well-being of the community. They want to see reductions in health disparities and increased access to care for vulnerable populations.

Safety Measures: Safety is paramount for individuals seeking emergency care. The public desires transparency regarding safety measures, including infection control and patient security, to ensure peace of mind.

Efficiency and Streamlined Care: The public is looking for a more efficient and streamlined patient journey within the ED. They hope that the expansion will lead to reduced administrative burdens and quicker diagnoses.

Staffing and Expertise: Patients and their families want reassurance that the expanded ED will have well-trained and sufficient staff capable of providing high-quality care.

Community Involvement: Members of the public and those with lived experience have and will continue to have opportunity to participate in the planning and design process. They and the broader

stakeholders will be informed about how their input has influenced the expansion, emphasising the importance of community involvement during the development process.

Impact on Costs: The public is interested in how the expansion will affect the cost of healthcare services, with an eye toward more affordable care in the long run.

Accessibility: Ensuring accessibility for individuals with disabilities and those from diverse cultural backgrounds is a significant concern, and the public expects that the expansion will address these issues comprehensively.

Engaging with the public and addressing these concerns through effective communication and transparency is essential throughout the expansion process. This approach ensures that the community is well-informed and supportive of the changes, ultimately resulting in an ED that meets their needs and expectations.

PROPOSED WORKS

At the core of this envisioned project lies the dedication to prioritise people through a "Patient First" ethos. This approach extends beyond the mere establishment of a healthcare facility; it envisions the creation of a nurturing environment where the paramount focus is on the well-being, comfort, and specific needs of the community it serves. It embraces the guiding philosophy of "Designing for Place and People," recognising the paramount significance of customising the healthcare facility to harmoniously blend with the local context, ensuring seamless integration with the surrounding environment and a precise alignment with the unique requirements of the community. A defining characteristic of this project is its profound respect for the local indigenous culture, with the intention of not only acknowledging and honouring indigenous practices, knowledge, and cultural elements but also weaving them into the very essence of the healthcare facility. Moreover, there is a sincere aspiration to collaborate closely with the local community to imbue the building with a deeper sense of purpose, utilising the stories shared by the Palawa people to create rich, meaningful connections within the facility.

Furthermore, this initiative envisions the hospital not merely as a static institution but as a dynamic and interconnected ecosystem, considering not only the physical structure but also the intricate network of relationships, processes, and services within. In its core, it seeks to provide "Accessibility to World-Class Healthcare," aspiring to offer state-of-the-art medical services, thus ensuring that the community has access to the best possible healthcare resources. It places significant emphasis on enhancing the "Optimised Patient and Staff Experience," aiming to streamline processes, improve communication, and foster a supportive and positive environment within the facility, benefiting both those receiving care and those providing it.

By amalgamating these principles, this project aspires to create a healthcare facility that not only delivers exceptional medical care but also fosters a sense of community, inclusivity, and profound respect for local traditions and cultures. To realise this vision, collaboration with stakeholders and experts in healthcare and indigenous culture is paramount, ensuring that these ideals are not just words but integral components of the design and operation of the facility.

Moreover, it's worth noting that the internal health planning for the Expansion of the Emergency Department at Royal Hobart Hospital adheres to the Department of Health's Model of Care, developed by KPH in October 2021. This revised model of care is structured around distinct ED 'zones,' each with its own

considerations and infrastructure needs, aligning the expansion project with contemporary healthcare standards and best practices.

The proposed Emergency Department Zones are:

Zone	Point of Care
Triage and Registration	n/a
Resuscitation	6
Acute Care	54 + Interview Room
Lower Acuity Adult	14
RITZ	6
Paediatric Short Stay + Acute	13 + 3 Assessment Rooms
Short Stay Unit (Completed)	28

To ensure the successful execution of the entire project without any potential disruptions to the essential Resuscitation and Acute Care areas, the expansion of the Emergency Department will involve a meticulous division into stages, as elaborated in the "Staging of Works" section of this report.

The "Proposed Concept Staging Plans," accessible in the attached documents, offer a visual depiction of the phased relocation of the existing Emergency Department. This strategic staging process is of paramount importance, as it plays a pivotal role in realising the core objectives of this project.

Furthermore, in addition to the physical expansion and reconfiguration, the project encompasses several essential elements:

- Procurement of all Group 1 and 2 items and coordination of Group 3 items.
- Incorporation of IT Infrastructure to support electronic health records, telemedicine, communication systems and data security
- Relocation of electrical risers and distribution boards.
- Fire egress and safety works
- Upgrade of mechanical and hydraulic services to suit the amended layout
- Safety and security consideration to include security systems, surveillance, access control and emergency response plans to ensure the safety of patients, staff, and visitors
- Regulatory Compliance with healthcare regulations, Infection Control Requirements and building codes
- Environmental Consideration in building materials and minimising the staging of project to minimise building waste
- Operational Planning for staffing, patient flow, and logistic for day to day operation.
- Community Integration with the landscape work

Health Planning and Emergency Department Design

The consulting architectural team, led by JAWS Architects, has coordinated the design plans with input from many stakeholders. These plans are aligned with the Model of Care and have been developed in close collaboration with the Department of Health, RHH ED staff, and NTC Architects.

The following are the guiding principles that underpin the process of health planning and the design of the Emergency Department project:

1. Strategic Planning: Health planning for the Emergency Department entails the development of long-term strategies for healthcare systems and facilities. This involves an in-depth assessment of both current and future healthcare needs within the population and the formulation of effective plans to meet those needs proactively.

2. Needs Assessment: Thorough analysis of data and demographics has been conducted to pinpoint specific healthcare needs within Tasmania. These findings have been articulated in the Model of Care document, which underscores the necessity for Tasmania to enhance and modernise its existing Emergency Department facility to accommodate the growing number of cases.

3. Resource Allocation: Stakeholders have played a pivotal role in determining the allocation and distribution of current and future resources to meet the identified healthcare needs effectively.

4. Health Infrastructure Development: Building upon the identified needs, the current project has established a clear vision for the requisite health infrastructure development. This includes the development of an updated Model of Care to cope with the demands of the healthcare system. The project may involve the creation of new healthcare facilities, the expansion of existing ones, or the establishment of outreach programs to better serve the community.

5. Regulatory Compliance: Adherence to local, state, and Federal regulations, encompassing zoning and building codes, is imperative to ensure that healthcare facilities meet all legal requirements.

6. Australian Health Facility Guideline: The design plans also adhere to the fundamental principles outlined in the Health Planning Unit of the Australian Health Facility Guidelines. This ensures that the layout aligns with the best practices in health planning and emergency department design.

Due to the complicated nature of the services work, the consulting architectural team has worked closely with mechanical, hydraulic, fire, structural and electrical engineers from the start of the design process.

Architectural Statement

The design for the new emergency department entrance of the Royal Hobart Hospital aims to strike a balance between functionality as an emergency department, cultural respect, integration with the urban fabric and celebration of kunanyi / Mt Wellington and the River Derwent. The design respects the requirements of a busy healthcare facility, honours the rich cultural history of the land and its traditional custodians, and seamlessly integrates with the surrounding urban environment. By incorporating these considerations, the building creates a space that is practical, culturally sensitive, and enhances the urban

fabric of the precinct.

The emergency department entrance is designed to prioritise functionality and efficiency. The layout ensures a smooth flow of patients, staff, and emergency vehicles, adhering to the specific requirements of an emergency department. Clear signage and wayfinding systems guide visitors and help them navigate the space effectively. The design also incorporates necessary security measures and accessibility features to ensure the safety and convenience of everyone using the entrance.

Respecting the diverse indigenous cultures of lutruwita /Tasmania, the design incorporates elements that are inspired by cultural stories, inclusivity, and the natural environment in consultation with representatives of the Tasmanian Aboriginal Centre. The cultural elements are interwoven into the functional aspects of the entrance, interior design, and material selection. The significance of the Casuarina/She-oak Forest is subtly acknowledged, as it communicates with the 'river bank,' offering edible fruit and sour drink. These elements are then abstracted into architectural features to create a sense of place, urban connection, and respect, acknowledging the Palawa heritage of the region.

The design for the emergency department entrance considers the surrounding urban fabric, aiming for seamless integration with the existing built environment. The architectural style and materials chosen for the entrance harmonize with the surrounding context, ensuring a cohesive appearance. Consideration is given to the scale, massing, and proportions of the entrance, enhancing the overall visual appeal of the urban landscape.

The proposed works successfully balance functionality, cultural sensitivity, and integration with the urban fabric to foster a sense of connection, respect, and healing for all who enter the emergency department, while enhancing the overall amenity of the area.

Building Materials & Reference Images

Selecting appropriate building materials for a hospital is a critical decision that impacts the facility's safety, functionality, durability, and maintenance. Several factors are considered when choosing building materials for this development.

Infection Control: Hospitals must prioritise materials that are easy to clean and disinfect. Non-porous and smooth surfaces are essential to prevent the buildup of bacteria and pathogens. Materials like solid surface countertops, antimicrobial paint, and seamless flooring are commonly used.

Durability: Hospitals are high-traffic environments with a constant flow of people, equipment, and often heavy machinery. Materials should be durable and resistant to wear and tear. For example, impact-resistant wall coverings and flooring designed for high traffic areas are ideal.

Maintenance and Repair: Consider the ease of maintenance and the availability of replacement materials. Building materials that require minimal maintenance and can be easily replaced or repaired reduce downtime and operational disruption.

Fire Resistance: Hospitals are required to adhere to strict fire safety regulations. Building materials should be fire-resistant and contribute to the overall fire safety of the facility. Fire-rated doors, walls, and ceilings are common in hospital design.

Sound Control: Hospitals require a quiet and healing environment. Sound-absorbing materials can be used to reduce noise levels. Acoustic ceiling tiles, sound-absorbing wall panels, and noise-reducing flooring can be considered.

Chemical Resistance: Hospitals often deal with various chemicals for cleaning and medical procedures. Materials should be resistant to the effects of these chemicals to maintain their integrity.

Patient Comfort: Patients should feel comfortable in the hospital environment. Choosing materials that create a warm and welcoming atmosphere can improve the patient experience. Soft colours, wood finishes, and comfortable furniture can contribute to this.

Sustainability: Increasingly, hospitals are considering sustainable building materials that are eco-friendly and energy-efficient. This includes using recycled materials, low-VOC (volatile organic compound) paints, and energy-efficient lighting and HVAC systems.

Cost Efficiency: Budget considerations are crucial. It's essential to balance the quality and performance of materials with budget constraints.

Light: With limited daylight available down in the subterranean space, it is crucial to prioritise choices that can maximize the use of available light. Efficient artificial lighting and well-designed interior spaces should also be part of the strategy to ensure a well-lit, inviting environment even in areas with limited daylight.

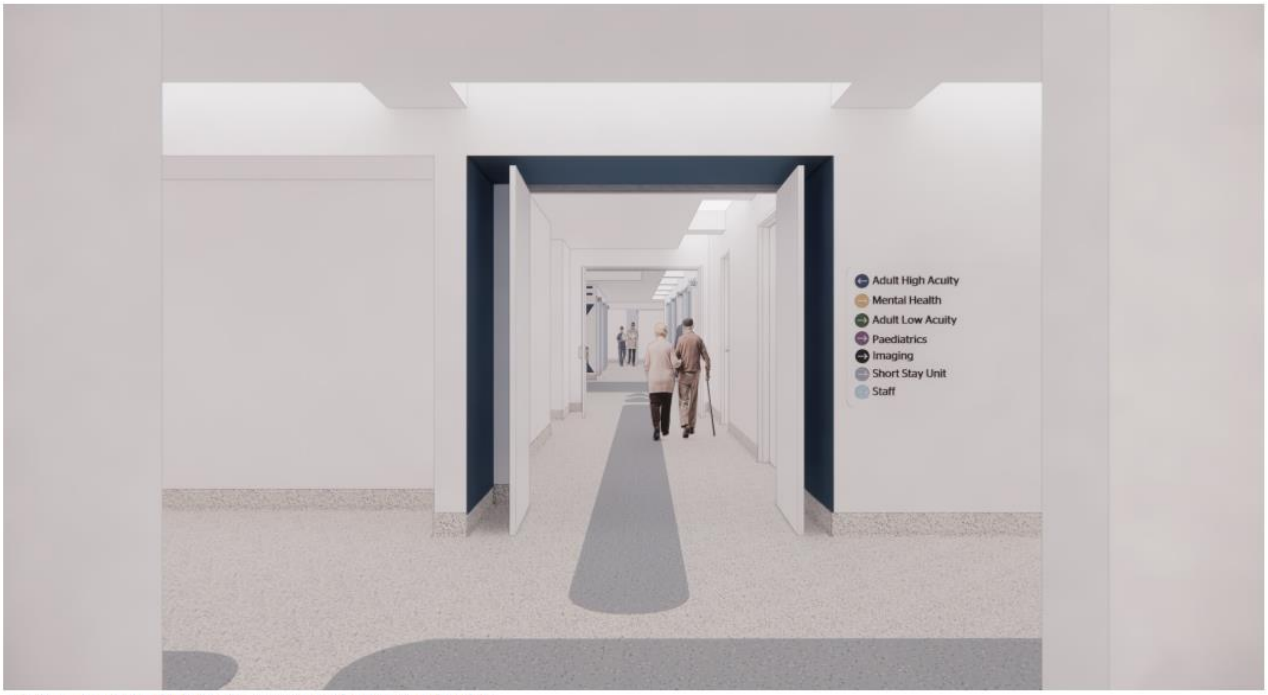
Proposed Street Frontage viewed from Liverpool Street

Proposed Perspective viewed from Corner of Liverpool Street and Argyle Street

Proposed Front Entry viewed from Liverpool Street

Proposed Perspective viewed from Corner of Liverpool Street and Campbell Street

Proposed interior material pallete for High Acuity Zone



3d View - View into High Acuity Zones 1 & 2 from Main Lift Lobby

3d View - High Acuity, approaching Zone 1 & 2 Staff Station from Lift Lobby

3d View - High Acuity, approaching Zone 1 & 2 Staff Station from Lift Lobby

3d View - Low Acuity, approaching Staff Station from Main Corridor

3d View - Low Acuity looking from waiting area toward Staff Station

3d View - Paeds Waiting approach

3d View - Paeds Waiting looking from entry into waiting

3d View - Paediatrics Staff Station approach

3d View - Paediatrics Staff Station

3d View - Lounge

3d View - Kitchen

The selection of materials considers environmental considerations. This involves thoughtful implementation of lighting, acoustic elements, reflectivity, and colour choices. Soothing and muted colours have been incorporated to create a comfortable and non-clinical atmosphere, aiming to enhance the patient experience.

The images provided serve as a general representation of the design concept. It's important to note that the procurement of Group 3 items will ultimately be subject to the selection process by RHH (Royal Hobart Hospital).

Infection Control & COVID-19 Response

Since the beginning of the COVID-19 pandemic, it has become apparent that infection control needs to be a key feature of our society moving forward. In response to this imperative, we have implemented a comprehensive plan to enhance infection control measures within our healthcare facility. The following initiatives are being undertaken to ensure the safety and well-being of both our patients and healthcare providers:

1. Increased Availability of Handwashing Stations: To encourage proper hand hygiene, we have increased the number of handwashing stations throughout the unit. Patients, visitors, and staff will have easy access to these facilities. Additionally, Personal Protective Equipment (PPE) will be readily available at all handwashing stations, promoting the proper use of PPE.

2. Enclosed Patient Bays with Motion Sensor Operated Sliding Glass Doors: We are taking proactive steps to minimize unnecessary contact with surfaces. Enclosed patient bays will feature motion sensor-operated sliding glass doors, reducing the need to touch door handles and enhancing infection control efforts.
3. Negative Airflow in Patient Bays: In our commitment to prevent the spread of potential airborne pathogens, specific patient bays have been designed with negative airflow. This means that the air within these bays will be continually replaced, ensuring that any potential contaminants are contained within the negative pressure bay.
4. Antiviral and Antibacterial Materials: To further bolster our infection control measures, we have chosen materials that meet the ISO 22196 antiviral and ISO 21702 antibacterial standards. This selection is aimed at reducing the risk of surface transmission and maintaining a clean and sterile environment.
5. Involvement of Infection Prevention and Control Unit: The expertise of the infection prevention and control unit at our institution, represented by dedicated professionals, has been integral to the redevelopment project. Their insights, guidance, and feedback have been instrumental in ensuring that infection control measures are effectively integrated into the design process.

With these proactive measures in place, we are committed to safeguarding the health and well-being of our patients, visitors, and healthcare providers, both during the COVID-19 pandemic and in the future. Infection control remains a top priority, and we are continuously striving to implement the latest best practices to create a safer healthcare environment.

Accessibility

In adherence to the fundamental principles of universal access, the proposed developments for the Emergency Department Project have been designed to ensure the highest level of accessibility for both staff and patients.

Comprehensive Accessibility:

- The design of the new project encompasses a comprehensive approach to accessibility, ensuring that every area within the facility fully complies with universal access standards.
- We have thoughtfully incorporated universal access toilet facilities that cater to the diverse needs of both staff and patients.

Corridors:

- Adhering to the guidelines specified in Australian Standards 1428.1, our corridor design prioritises generous space, enabling two wheelchairs to seamlessly pass one another. Moreover, we consistently perform on-site bed flow path assessments, considering the presence of immovable existing columns and services, to maintain accessibility standards.

This approach aligns with the guidelines outlined in the Australasian Health Facility Guidelines, specifically in Part C - Design for Access, Mobility, Safety & Security, Section 4 Human Engineering, Revision 6.0, dated 18 September 2018.

Our commitment to ensuring accessibility throughout the Emergency Department Project is unwavering, and we are prepared to address all aspects of universal access to meet the highest standards and requirements for the benefit of staff and patients alike.

Staging of Works

The Royal Hobart Hospital Emergency Department, especially the critical Resuscitation and Acute Care areas, must remain fully operational throughout the demolition and construction phases. Consequently, the meticulous staging of works is paramount to ensuring an uninterrupted build process. Additionally, the proposed space contains essential existing services that support various sections of the hospital, underscoring the need to maintain their functionality.

Below, we provide a concise overview of our planned project staging to meet these critical objectives with attached plans.

STAGE 1

- Short Stay Unit – Completed

STAGE 2a

- Transition Works – In Progress
- Basement H Block – Training and Storage areas
- A Block Lower Ground – Staff Amenities
- J Block Lower Ground – Transition works linking A and H Blocks
- H Block Lower Ground – Transition works for Temporary H Block Emergency Department
- Level 3 J Block – Transition works for Temporary Emergency Department Short Stay Unit

STAGE 2b

- J Block Ground Hospital forecourt – Demolish existing leaking surface slab, features, and café
- J Block Ground Hospital forecourt – Replace slab with services for ED Ground
- J Block Ground Hospital forecourt – Complete ED Ground build
- J Block Ground Hospital forecourt – Infill Eastern end ramp
- J Block Ground Hospital forecourt – Infill Western end ramp
- J Block Ground Hospital forecourt – Complete surface and street works

STAGE 2c

- J Block Lower Ground – demolish existing fit out
- J Block Lower Ground – Complete Stairwell and Lift Well
- J Block Lower Ground – Complete ED Lower Ground build

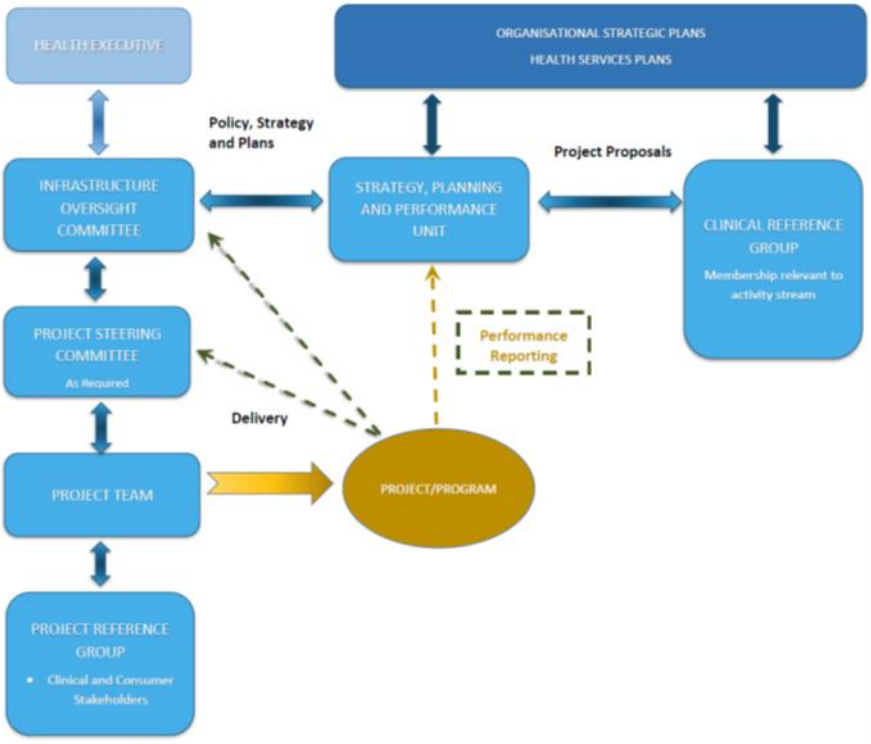
STAGE 2d

- H Block Lower Ground – demolish existing fit out
- H Block Lower Ground – Complete ED Lower Ground build

PROJECT MANAGEMENT

Project Control and Governance

The following diagram illustrates the Infrastructure Oversight Committee (IOC) Project Team and Project Reference Group relationships.



The Infrastructure Oversight Committee has approved the RHH Redevelopment Phase Stage 2 – Scope Definition Agreement.

Design Approval Process

The design process included:

- Initial stakeholder meetings to gain further understanding on clinical, infection control, health service planning and facilities and engineering requirements.
- Ongoing meetings where concept designs were presented to the project reference group, for agreement and development and sign off of schematic design.
- Infrastructure Oversight Committee at its April 2021 meeting endorsed the RHH Redevelopment Phase 2 Scope Definition including the scope of the ED Expansion Project.
- Schematic Design was presented to the Hospitals South Capital Works Steering Committee and Project Sponsor, Chief Executive Hospitals South, as the committee chair.
- During the project lifecycle monthly Project Status Reports for the Project Sponsor and Hospitals South Capital Works Steering Committee are provided.
- Staff of the Department of Emergency Management have been regularly consulted on the design and their feedback represented in the design.

- Consumer and lived experience representatives, First Nation People, and specialists will be consulted during the finalisation of the detailed design across December.

The design of each functional space is based on AHFG, and any departures can only be approved by the IOC with support of clinical risk assessment.

Funding and Budget Estimates

A funding allocation to the amount of $149 million has been provided by the Tasmanian State Government for the entire Emergency Department Expansion Phase 2 project from the RHH Redevelopment Stage 2 budget of $201 million.

A preliminary cost estimate has been completed for Phase 2 and is as follows:

Phase 2 Budget	Cost Estimate
Construction Costs	$95,739,700
Contingencies (Design, Construction, Escalation and Market) *	$34,665,000
Post Occupancy Allowance	$855,900
Professional Fees and Authority Fees	$8,300,000
Information and Communication Technology Infrastructure	$2,000,000
Tasmanian Art Scheme	$80,000
Furniture and Equipment	$7,500,000
PHASE 2 TOTAL	**$149,140,600**

* Contingencies are significant at this stage given the design stage and current economic issues surrounding escalated building costs. It is anticipated value management activities and resolution of uncertainties will support a reduced estimated project cost in the pre-tender phase.

Project Timeline

The key upcoming dates for the project are as follows:

Project Task / Phase	Completion Date
Completion of design development	December 2023
Transition works 2a	December 2023-Mid 2024
Anticipated Development Application approval (HCC)	Mid 2024
Undertake Public Tender	May 2024
Targeted Construction Start (subject to approval)	Mid 2024
Targeted Practical Completion of Construction	End of 2026
Targeted Commencement of operations	End of 2026

CONCLUSION

In collaboration with the Department of Health and the dedicated RHH ED Staff, the design team led by JAWS Architects has a proposal that not only aligns with the Emergency Department Models of Care but also harmonises with the visionary RHH Masterplan 2020-2050. This forward-looking design acknowledges the imperative expansion of the Emergency Department within its current footprint, contingent upon the identification of suitable space for relocated services.

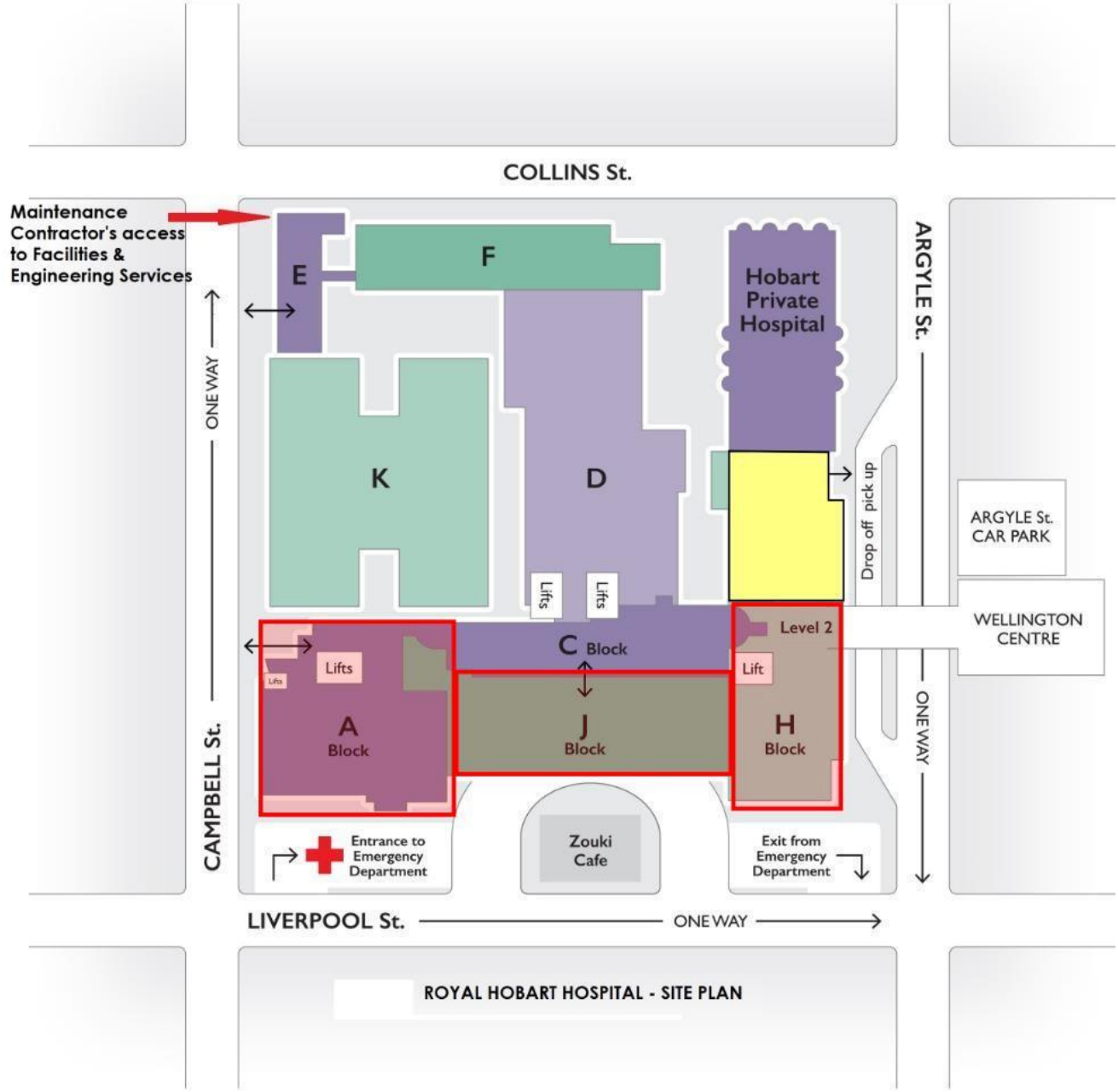
The upcoming construction of this expanded Emergency Department represents a beacon of hope for our healthcare system, addressing the mounting pressures brought about by increasing Emergency Department demands and the aging population. This facility will play a pivotal role in ensuring that Tasmania's Health System is not only better equipped to manage the existing challenges but is also prepared to mount a fast and effective response to future pandemics.

We wholeheartedly recommend to the esteemed Parliamentary Standing Committee on Public Works that the proposed expansion of the Emergency Department at the Royal Hobart Hospital proceed as detailed in this submission. By doing so, we will be making a significant and lasting contribution to the health and well-being of our community, reinforcing our resilience, and fortifying our capacity to meet the healthcare demands of the future.

ATTACHMENTS

1. Site Plan
2. Development Application for Main Works
3. Staging Plans

ATTACHMENT 1 – SITE PLAN



DRAWING LEGEND

Completed SSU

Proposed Emergency Department Footprint

ATTACHMENT 2 – DEVELOPMENT APPLICATION FOR MAIN WORKS

ATTACHMENT 3 – STAGING PLANS