

SUBMISSION

SORELL EMERGENCY SERVICES HUB 47 COLE STREET, SORELL, TAS 7172

OCTOBER 2020

SUBMISSION TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS







Table of Contents

| 1. EX | ECUTIVE SUMMARY | 4 |
|---------------------|--|----|
| 2. IN | TRODUCTION | 5 |
| 2.1. | Purpose of this submission | 5 |
| 3. PROJECT OVERVIEW | | |
| 3.1. | Project Background | 5 |
| 3.2. | Project Site | 7 |
| 3.3. | Existing Emergency Response Facilities | 8 |
| 3.3.1 | . Tasmania Police | 9 |
| 3.3.2 | . Tasmania Fire Service | 9 |
| 3.3.3 | . State Emergency Service | 10 |
| 3.4. | Existing Emergency Response Capability | 11 |
| 3.5. | Project Objectives | 11 |
| 3.6. | Value for Money Statement | 12 |
| 4. CO | NSULTATION AND DESIGN BRIEF | 12 |
| 4.1. | Working Group, Key Stakeholders and Governance | 12 |
| 4.2. | Design Brief | 13 |
| 4.3. | Design Review | 14 |
| 4.4. | Tasmanian Government Art Scheme | 15 |
| 5. PROPOSED WORKS | | |
| 5.1. | Site Planning | 16 |
| 5.2. | Architectural Statement | 16 |
| 5.3. | Building Services and Engineering | 17 |
| 5.3.1 | . Mechanical Services | 17 |
| 5.3.2 | . Electrical Services | 18 |
| 5.3.3 | . Communications & Security Services: | 19 |
| 5.3.4 | . Fire Services: | 19 |
| 5.3.5 | . Hydraulics, Civil Engineering & Structure | 19 |
| 5.3.6 | . Acoustic Engineering | 20 |
| 5.3.7 | . Building Materials and Interior Design | 20 |
| 5.3.8 | . Sustainable Design | 21 |
| 5.3.9 | . Landscape Design | 22 |
| 5.3.1 | 0. Traffic Management | 22 |

| 24 |
|----|
| 25 |
| 25 |
| 26 |
| 27 |
| 28 |
| 28 |
| - |

1. EXECUTIVE SUMMARY

The Department of Police Fire and Emergency Management (DPFEM) is presenting this submission to the Parliamentary Standing Committee on Public Works for approval to construct an Emergency Services Hub at 47 Cole Street, Sorell. The site is currently owned by the Sorell Council, with the transfer title to be handed over to the Tasmanian Government for \$1, as the Council's contribution towards an emergency services facility, that will serve the rapidly growing South East region well into the future.

The South East geographic region is one of the fastest growing regions in Tasmania, and the Sorell Community is one of Tasmania's fastest growing municipalities, with current growth exceeding state averages.

At present, the Sorell township has an existing police station but does not have a fire station, nor a dedicated State Emergency Service (SES) facility in the area. Volunteer fire brigades are located in nearby townships, with the nearest SES unit being the State Emergency Service's Southern Regional Unit located in Mornington, 20km away. Of key concern is the current restricted Road Crash Rescue (RCR) capability to service the region.

The Emergency Services Hub's design has catered for a RCR response capability being a possible combination of both State Emergency Service and Tasmania Fire Service members. It allows response crews from each emergency service to be directly based in the same area, thus greatly improving critical response times and enhancing community safety in the South East region.

The site itself is ideal for shared emergency services purposes, as it is centrally located and provides plenty of space and easy access for emergency response vehicles and personnel.

The proposed Emergency Services Hub has been designed to ensure that public funds are efficiently utilised to create a facility that will support both the individual and collective needs of Tasmania Police, Tasmania Fire Service and the State Emergency Service now and well into the future.

Funding of \$12 million was allocated for the project and covers both the construction and non-construction costs, which includes architectural fees, furniture and IT plus an \$80,000 public art works component. Funding has been allocated across four years 2018-19 through 2021-22.

In summary, the proposed development will ensure that emergency services personnel can continue to conduct effective response to emergency incidents including RCR, in line with current and future requirements of the dispersed and rapidly growing South East community. This facility will achieve this by providing a modern and efficient state of the art building.

2. INTRODUCTION

2.1. Purpose of this submission

The Tasmanian Government has committed \$12 million to build a contemporary, fit for purpose Emergency Services Hub (Hub) located at 47 Cole Street, Sorell, that will accommodate the combined needs of:

- Tasmania Police;
- Tasmania Fire Service; and
- The State Emergency Service.

The purpose of this submission is to seek approval from the Parliamentary Standing Committee on Public Works for the development of a shared Emergency Services Hub (Hub) located on a greenfield site in Cole Street, Sorell. The development will see the expansion of the Department of Police Fire and Emergency Management's (DPFEM) operational capabilities and emergency response delivery. This exciting development represents the first in Tasmania to accommodate these key services within a shared purpose built complex, that will provide Sorell and the greater South East Tasmanian geographic region with a substantial increase of emergency services capability now and into the future.

The submission is presented at the schematic design phase and illustrates how the functional layout has taken full advantage of the site. The building design framework ensures the Hub is fit for purpose and will cater for the individual and combined needs of each emergency service, in order to effectively provide emergency response to the rapidly growing South East community, now and well into the future.

3. PROJECT OVERVIEW

3.1. Project Background

The South East geographic region is one of the fastest growing regions in Tasmania, and the Sorell Community is one of Tasmania's fastest growing municipalities, with current growth exceeding state averages. The Department of Treasury and Finance's recently published population projections confirm the Sorell municipal area has recently been growing between 5 to 6 times the state average and is forecast to continue this growth rate to 2042. The Sorell Municipality has a population of approximately 14,400 and Sorell itself was founded in the 1800's making it one of Tasmania's oldest towns.

Figure 1 below, prepared by the Department of Treasury and Finance, provides a comparison between the 2014 and 2019 population projections for the Sorell Municipality.



Figure 1: Sorell Municipality Projections

In addition to existing development footprints of the main metropolitan areas of Sorell, Midway Point and Southern Beaches, an additional 568 to 737 lots in Sorell and 288 lots in Midway Point will progressively be released onto the market commencing during the 2020-2021 financial year. The variation in the range of lots in Sorell is dependent upon the construction of a new kindergarten to year 12 private school that may consume a portion of the area available to be subdivided.

The above lot release figures do not include a future eastern growth corridor in Sorell (east of the future Arthur Highway bypass and extending toward Mount Garrett) designed to provide a forty-year supply of residential, open space, education and employment generating land use. The potential eastern growth corridor land development is subject to the review of the Southern Tasmania Regional Land Use Strategy.

In 2016 the Sorell Council approached the DPFEM to discuss the future of emergency services in the Sorell municipality and surrounding areas. The Sorell Council expressed a desire for and outlined the need to establish an emergency services hub in Sorell, citing that the population of the area is likely to increase by up to ten thousand people in the short term. The need was consistent with the strategic work commissioned by the South Eastern Region Development Association (SERDA) undertaken by KPMG in 2015. This report stated that the region is being shaped by a range of economic drivers that could see the population of the region increase

between 20 000 and 90 000 over the next 10-15 years, suggesting the timely provision of emergency services and associated infrastructure will become increasingly significant for the area.

The Sorell Council agreed to quarantine approximately five (5) hectares of land opposite the Sorell Council Chambers. The site being large enough to accommodate an emergency services hub, as well as being centrally located within the Sorell township.

DPFEM briefed the then Minister for Police, Fire and Emergency Management on the proposal, who supported the concept, particularly as Sorell is strategically located between the East coast and the Tasman Peninsula.

In 2016, high level concept drawings were prepared and through the engagement of a quantity surveyor, a construction cost estimate for the proposed project was presented, which assisted in determining the estimated \$12 million budget for the project.

3.2. Project Site

The property is 1.310 hectares and part of a larger allotment that encompasses other community services, including a health centre, the Sorell Council Chambers, RSL, Lions Club and a men's shed. The site itself is a section of the Sorell Council's proposed subdivision plan to subdivide the property into four separate titles.

In September 2019, the Sorell Council agreed to transfer the title of the land identified as Lot 1, 47 Cole Street, over to the Tasmanian Government for \$1, as their contribution towards an emergency services facility that will serve the South East region for many years to come. Lot 1 is an internal lot approximately 250 metres west of Sorell's main business centre. The Sorell Council recently advertised the proposed four (4) lot subdivision, with no objections received. The transfer of the land title will be finalised once the development application has been approved.

Lot 1 in Figure 2 below, is the proposed site for this development.

In lieu of purchasing the parcel of land for \$775 000 (ex GST), being the 2019 statutory value determined by the Valuer-General, the project will contribute \$100 000 to the Sorell Council towards the completion of a right of way link road from the Sorell Council Chambers to Dubbs and Co. Drive (marked in orange in Figure 2). This access will be for emergency services only and will provide the Hub with an additional exit point, should the need arise.



Figure 2: Project Site (Lot 1)

3.3. Existing Emergency Response Facilities

Sorell township has an existing police station but does not have a fire station, nor a dedicated State Emergency Service facility in the area.

The current Sorell Police Station provides policing services to the Sorell municipality, which includes Sorell township, Midway Point, Forcett, Lewisham, Dodges Ferry, Primrose Sands and Orielton. It also services the needs of and provides backup to the one person stations at Richmond and Nubeena and the two-person station at Dunalley.

State Emergency Services' Southern Regional unit is the closest SES response to Sorell, located in Mornington 20km away.

The nearest volunteer fire stations are located in Midway Point, Dodges Ferry, Orielton and Wattle Hill. Of note, Midway Point (population 2 900) and Dodges Ferry (population 3,300) are similar sized townships to Sorell (population 2 900). Orielton (population 355) is a much smaller community with Wattle Hill being a more remote rural community with a population of only 187.

Figure 3 pictorially illustrates the locations of each emergency service in the South East Region.



Figure 3: Existing Emergency Service Locations South East Region

3.3.1.Tasmania Police

The existing police station located at 8 Sommerville Street, Sorell was built in 1966 as a rural police station and included a residence. Later the station became the divisional headquarters of the Sorell Division with a refurbishment undertaken in 1996. The co-located residence was absorbed into that renovation. This refurbishment was only intended to be a temporary configuration pending construction of a new station. Since the 1996 refurbishment, the building has not undergone any further upgrades.

The building has inadequate foundations, leaks during heavy rains and as a result suffers from structural issues as noted in the Property Assessment Survey undertaken by the DPFEM in 2017. The layout is disjointed and neither practical nor functional. The facility has a lack of adequate parking and storage, particularly the lack of secure storage for the marine vessel and associated marine equipment. It also has poor disability access and suffers from regular rodent infestation.

With the region rapidly growing, the station no longer has appropriate space, layout nor supporting infrastructure to adequately allow police operations to effectively continue and doesn't have capacity to accommodate a further increase in police numbers. The deterioration of the building impacts on the efficiency, security and safety of staff working in the station.

3.3.2. Tasmania Fire Service

The neighbouring community volunteer fire brigades located in Midway Point, Dodges Ferry, Orielton and Wattle Hill are owned by the State Fire Commission and offer a cadet and junior programme. The Midway Point Fire Station, at 14 Penna Road, was built in 1970, is approximately 214m2 (excluding the land size) and home to 25 active members. The station has insufficient space and limited training and storage facilities. Parking is unsecure and in a residential area, with no disabled access. This station is also in need of a major upgrade/replacement as it has been added on to over the years incorporating a communal toilet block as part of the facilities, however the site has limited capacity to redevelop. This station also has responsibility of response either side of the two causeways, particularly for incidents impacting the causeway blocking vehicle movement in and out of Sorell.

Dodges Ferry Fire Station is a newer facility, with modern fixtures and home to 35 active members. The station is able to accommodate the membership and suitable appliances to provide emergency incident coverage to the Dodges Ferry and surrounding community.

Orielton Fire Station is an older facility built in 1991, is approximately 82m2 consisting of a garage type construction and a meeting room alongside a single appliance bay. It is home to 16 active members and is predominantly responds to vegetation fires. Additionally, these facilities have reached their capacity limit due to the lot size and like Midway Point, the Orielton Fire Station has insufficient space and limited training and storage facilities, parking is unsecured, with no disabled access. The site has limited capacity to redevelop.

Wattle Hill Fire Station is an older facility, approximately 60m2 consisting of a garage type construction and a meeting room alongside a single appliance bay. The station is home to 17 active members and like Orielton predominantly responds to vegetation fires. The station has insufficiencies in space and design including limited training facilities, limited and unsecured parking, limited storage facilities, no disabled access and limited capacity to redevelop.

3.3.3. State Emergency Service

The nearest State Emergency Services unit to Sorell is the Southern Regional Unit (SRU) located in Mornington, 20km away. This unit trains in general rescue, storm and flood response, search and rescue and communications. The unit also plays a significant role in public relations for the State Emergency Service and responds to emergency calls throughout the Southern region. The Southern Regional Unit also supports Tasmania Police and Tasmania Fire Service operations as required.

At present the State Emergency Services Southern Regional Unit services the Greater Hobart area, which includes Sorell but also Clarence, Hobart, Kingborough and Glenorchy. This is a concern, as the existing facility is located within the densely populated eastern shore residential zone of Clarence and as such, can face issues with resource allocation and traffic congestion on all roads exiting Hobart, particularly during peak periods. This can increase callout times when the State Emergency Service responds to emergency situations within the greater South East region, particularly in extreme weather conditions, which is when they are most called upon. Consequently, the Mornington complex is not suitable to solely service the growth in the South East region.

3.4. Existing Emergency Response Capability

With the present growth rate in the Sorell Municipality and the South East region, of concern is the restricted Road Crash Rescue (RCR) capability to service this growth trend. Currently RCR response comes from the:

- Tasmania Fire Service capability from Mornington Career Fire Fighters;
- Nubeena SES unit on the Tasman Peninsula;
- Swansea SES unit on the east coast; or
- Triabunna Volunteer Firefighters on the East Coast.

The State Emergency Service's RCR service delivery within the Nubeena and Swansea areas is appropriately resourced, however, factors such as protracted response time and diminished service delivery during out of area responses (such as to the Sorell municipality) are problematic and not feasible.

The establishment of a fire station in Sorell will provide supplementary RCR capability in addition to providing fire services to the Sorell Municipality.

Whilst there are volunteer fire brigades in the surrounding areas, capacity to provide emergency assistance particularly from the Orielton and Wattle Hill brigades within normal business hours is very limited, due to the majority of members being employed full time and largely employed outside the municipality.

3.5. Project Objectives

Once considered a rural community, with a volunteer base that was more readily available to respond to daytime incidents, Sorell township and the immediate surrounding communities have, over recent years experienced a demographic shift to a more residential area, with the residents largely employed outside the municipality.

The establishment of a purpose-built Emergency Services Hub will initially enable Tasmania Police, Tasmania Fire Service and the State Emergency Service to provide ongoing essential emergency services to the greater South East region.

Co-locating the services into the one complex makes sound operational sense, given much of the DPFEM's emergency response work involves multiple emergency services. The site itself is ideal for shared emergency services purposes, as it is centrally located and provides plenty of space and easy access for emergency response vehicles and personnel.

The Emergency Services Hub's design has catered for a Road Crash Rescue response capability being a possible combination of both State Emergency Service and Tasmania Fire Service members. It allows response crews from each emergency service to be directly based in the same area, thus greatly improving critical response times and enhancing community safety in the South East region.

Additionally, accommodating each service within the one complex will:

- Improve response performance time to incidents in the South East;
- Provide a modern and efficient operating environment contained within the building's functional layout, including state of the art IT technologies;

- Reduce maintenance and operating costs resulting from facility sharing and building efficiency;
- Increase capacity to deliver emergency service functions to meet the demands of the rapid growth in the South East region now and into the future;
- Create an additional location for incident management and incident staging, due to the inclusion of a major incident room/incident control centre;
- Improve the Work Health and Safety of employees and volunteers through the provision of state of the art, purpose-built facilities; and
- Improve access, safety and security for the local community.

3.6. Value for Money Statement

The Emergency Services Hub has been designed to ensure that public funds are well spent on the facility from the project's inception. The facility will support both the individual and collective needs of Tasmania Police, Tasmania Fire Service and the State Emergency Service now and into the future.

Whilst each emergency service has distinct individual requirements, the building incorporates shared facilities throughout, including CCTV, telecommunications, IT services, training facilities and a major incident room/incident control room, which will reduce overall operating and maintenance costs.

4. CONSULTATION AND DESIGN BRIEF

4.1. Working Group, Key Stakeholders and Governance

A project working group (PWG) was established consisting of nominated representatives from Tasmania Police, Tasmania Fire Service and the State Emergency Service, along with the DPFEM Project Manager and other appropriate consultants and personnel as the need arises.

Participants on the working group were chosen to not only provide input into the functional needs of the facility, they also represent the requirements of the following key stakeholders:

- Police Association of Tasmania;
- Tasmanian Volunteer Fire Brigades Association;
- Tasmanian Retained Volunteer Firefighters Association;
- United Firefighters Union of Australia Tasmanian Branch; and
- DPFEM Staff

The Sorell Council is also identified as a key stakeholder as the Council expressed a desire and need for an Emergency Services Hub, following review of the SERDA Economic Infrastructure Development Study (2015). Consultation with and advice from the Sorell Council is ongoing, with the project manager providing regular project updates to the council's General Manager.

A governance model including the formation of an internal Capital Investment Program Steering Committee (CIPSC) was also established. The CIPSC committee consists of senior representatives from Tasmania Police, Tasmania Fire Service and the State Emergency Service. The CIPSC's role is to provide strategic oversite of the major infrastructure capital investment projects across the DPFEM and is responsible for approving budgetary strategy, defining and realising benefits, and monitoring risks, quality and timeliness.

4.2. Design Brief

During the early concept phase in 2016, the DPFEM assessed the service delivery functionality of the Emergency Services Hub and determined that the building design should:

- Include a new police station to accommodate up to twenty-one (21) police officers;
- accommodate a crew of up to fifty (50) Tasmania Fire Service Volunteers;
- accommodate a crew of up to forty (40) State Emergency Service Volunteers;
- Include shared training and major incident facilities; and
- include in the overall design footprint a future career fire station for four (4) career firefighters.

The functional design brief was developed based on the service delivery model above and formed the starting point for the design.

In line with the State Government's procurement guidelines, following a procurement process for architectural services, in June 2019 ARTAS Architects (ARTAS) was awarded the contract to design a contemporary, fit for purpose Emergency Services Hub to accommodate Tasmania Police, Tasmania Fire Service and the State Emergency Service.

The project working group met with ARTAS regularly over a five-month period from July 2019 to November 2019. Plans were presented, comments incorporated, and the draft schematic design was developed.

The key features of the initial schematic design shown in figure 4, incorporated:

- suitable shared facilities;
- a police station;
- separate meeting areas and shared turnout facilities for Tasmania Fire Service volunteers and State Emergency Service volunteers;
- separate engine bays for Tasmanian Fire Service volunteers and State Emergency Service volunteers; and
- the footprint for a Tasmanian Fire Service career firefighter section, including an engine bay to be built at a later stage.



Figure 4: Early Schematic Concept of Site Planning

4.3. Design Review

The preliminary order of cost estimate received in November 2019 indicated at the early design stage the project would be over the \$12 million allocated budget. It should be mentioned that some cost creep was be expected between the initial budget estimate prepared in 2016 and the 2019 preliminary cost estimate, noting that unlike the 2016 cost estimate, the 2019 preliminary cost estimate was prepared based on the detailed scope the design team put together on behalf of the key stakeholders, which then defined the full extent of each emergency service's needs.

Following the initial order of cost estimate, the design team undertook further refinements, in order to realign the project within the \$12 million budget. A second order of cost estimate was then prepared and again estimated a budget cost overrun.

Based on the projected cost overrun, the Tasmania Fire Service conducted an internal review utilising resource to risk modelling against the current population growth rate. The review also considered present and future emergency service requirements for the South East region and the overall service delivery model of the Hub.

Following the internal review, ARTAS reduced the proposed schematic design footprint by 276 m2.

Figure 5 below illustrates the adjusted schematic drawing. Minimal changes were made to the shared facilities and the police station, as both these areas were deemed fit for purpose. The revised schematic design was endorsed in June 2020 and the project then entered the detailed design phase.



2 ENGINE BAYS, FINAL SCHEMATIC PROPOSAL

TOTAL GROSS COMBINED FLOOR AREA = 2,543m²

Figure 5: Final Schematic Proposal with 2 Engine Bays

4.4. Tasmanian Government Art Scheme

The development creates an opportunity for significant artwork to be incorporated into either the building's fabric or landscape. The artist's brief has not yet been developed, however representatives from the DPFEM and ARTAS Architects have met with Arts Tasmania to discuss suitable ideas for the Hub's art component.

5. PROPOSED WORKS

5.1. Site Planning

The site is located on the main road (47 Cole Street), which runs directly from the centre of the Sorell township. Access to the site is currently via a service road directly opposite the existing Sorell Council Chambers accessed from Cole Street. It also has direct road frontage to Cole Street but presently no formal vehicular access. Overall, the gradient of the site is very gentle and rises a total of about 1.5 metres over its length of 157 Metres.

Currently the site is undeveloped, open and free of substantial vegetation except for a group of trees on the southern Cole Street boundary. Evidence and outline of prior use as a football oval/ sports ground is apparent from aerial images, with recent use as a community market.

Flanking the northern and western boundaries of the site is a residential development with commercial use i.e. Council chambers, Wise employment and Sorell Memorial Hall to the eastern boundary and precinct. The Sorell Council is in the process of subdividing to create a separate title to allow the inclusion of a necessary stormwater management infrastructure consisting of an open swale drain as required for a potential 1 in 100-year storm event. This stormwater swale will ensure adequate drainage from the site and protection from potential flooding. Its construction is scheduled to be undertaken concurrently with the Emergency Services Hub. As the stormwater swale runs the entire length of the western boundary, this also forms an effective buffer or setback from the residential zone adjacent.

From a functional sequence the Tasmania Fire Service and State Emergency Services operational areas, including volunteers have been located adjacent to and with direct and logical access to the engine bays.

Most of the parking and training areas within the site have been deliberately positioned away from the core activity of the site i.e. to the rear or northern boundary. Except for disabled parking and deliveries, all other public parking has been located on Cole Street, thus negating the need for public visitor access, and avoiding potential traffic conflict. Police parking forms a separate and secure compound as required.

5.2. Architectural Statement

A key component of the design of the Emergency Services Hub was the development and refinement of the functional brief, which informed and assisted in determining building and project requirements.

The design features coupled with bringing together multiple emergency agencies into a shared facility, has allowed a process of negotiation and understanding between each of the stakeholders with clear definitions between commonality and individual emergency service use. Therefore, in the resolution of the design, the intent is to allow users the required flexibility and adaptability of use and conversely functional separation where required. To enhance flexibility within common and shared spaces, furniture has been selected which is

easily reconfigurable, stackable and or folding with potential layout configurations increased by the use of perimeter and strategic nodes for IT and power locations.

Equally within the shared training and major incident room/incident control centre areas, walls can open and close to allow for full flexibility of these spaces.

An important aspect of the individual and detailed design is to ensure not only safe movement and accessibility, but also to create an environment where there is an opportunity for external natural light and view and a sense of defendable personal space between users in a contemporary, healthy, and pleasant work environment. The ability to further extend and separate users in a COVID-19 environment has been considered in terms of density and functional configuration.

The form and design of the building is driven in part by the prerequisites of budget cost and function of a shared Emergency Services Hub. Thus, the pallet of materials chosen have been selected based on being cost effective and offering extended lifecycle and low maintenance properties, balanced against sound sustainability principles.

As the proposed Emergency Services Hub sits within the precinct of a residential and commercial zone the building has developed from a single level form, which is intended not to dominate the residential character of the street. The street elevation form is further broken into parts to reduce perceived scale, with a material reference of brick and use of Colorbond roofing echoing the adjacent buildings in character with the precinct. Additionally, the building has been set back from the street with the roof lowest point adjacent to the residential boundary, thus further reducing a dominance of perceived scale. Notwithstanding the contextual elements, the buildings functional use is evident from the street with large garage doors and visual connection to the engine bay and equipment identifying and expressing the buildings use as an emergency facility.

The building is contemporary, unashamedly modern and purposeful in function and reflective of character of the Sorell precinct. In a considered response the building seeks to respect and understand the aspirations and needs of the community it serves.

5.3. Building Services and Engineering

5.3.1. Mechanical Services

The primary design aim of the mechanical services including the heating, ventilation and air conditioning systems (HVAC) systems is to provide a safe, efficient and comfortable environment, ensuring optimum thermal comfort for all building occupants. Mechanical solutions will focus on cost-effective strategies that offer 'best value' for the DPFEM, while promoting energy efficient design.

HVAC systems will be provided to all areas deemed habitable, with the majority of areas being serviced from three (3) dedicated roof mounted plant areas. (one for each service area). Plant areas are to contain primary heating and cooling plant, ventilation intakes and discharges, air handling, heating, and cooling and then distribution through the roof spaces.



Practical, sustainable and cost-effective solutions will be achieved by integrating the following:

- Supplementary unitary reverse cycle, air source heat pumps Packaged or split ducted, cassette or wall mount styles will be provided as required;
- Separate designated ducted exhaust systems will be provided to amenities and kitchen areas, with a focus on minimising required roof penetrations;
- Ducted or local exhausts will be supplied to specific rooms such as drying rooms as required;
- High security supply and exhaust air will be provided for holding cells;
- A humidity control system will be provided in police weapons storage areas;
- Positive pressurised ventilation will be provided to airlocks, which open into both engine bays to mitigate fume transfer, including controlled exhaust ventilation (general or local) in engine bays;
- Dedicated direct vehicle exhaust connections (8 in total) will be supplied in engine bays; and
- The facility will be provided with Direct Digital Control (DDC) systems.

5.3.2. Electrical Services

Preliminary electrical services plans have been developed through initial consultation sessions with key stakeholder groups to determine specific requirements to ensure installations are fit for purpose, with strategies to optimise energy efficiency and the required security infrastructure also integrated. Key aspects of electrical services to be integrated into the development include:

- Suitable internal lighting, including controls will be supplied to each space based on its properties, in line with the relevant Australian Standards. Lighting controls to be via a combination of presence detection and Dali/DSI dimming functions;
- A monitored exit and emergency lighting system will be integrated in accordance with the relevant Australian Standards;
- New distribution switchboards (DSB's (5 new)) and associated submains cabling will be provided. Note switchboards generally to have 2 sections, Non-essential and essential;
- General power outlets and USB charger outlets will be provided throughout the facility to meet specific contemporary user requirements;
- Provisions will be made for current and future cabling access including skirting ducts, services poles, floor boxes etc. Dual cable trays in ceiling for wiring access (Light & Power, Data);
- Vehicle engine pre-heating power supplies required to be provided to both engine bays to meet firefighter operational requirements; and
- Metering will be provided for each chassis at each switchboard for NCC/BCA requirements, but can also be used for apportioning individual emergency service energy use if required.

Car park and landscape lighting will be provided to external areas in line with Australian Standard and Sorell Planning Scheme requirements. Large light power poles that emit high levels of lighting across the proposed training area will have control systems in place to ensure that they are not utilised during the 'curfew' period between 11pm and 6am, to respect neighbouring residential property owners.

New site mains electricity connection plans are currently in development in co-ordination with TasNetworks to ensure that project delays are avoided and to allow for new connection costs to be determined and included in preliminary budget estimates.

5.3.3. Communications & Security Services:

Preliminary communications and security service provisions have been carefully designed through co-ordination with key project stakeholders. This process will continue throughout the detailed design and documentation phases to ensure solutions are both practical and cost effective.

Certified voice and data installations including communications racks will be included in the facility to tailor for all emergency services operations. Stakeholder IT personnel will be heavily involved in continued decision making to ensure final installations meet all operational requirements.

CCTV, access control and intruder detection systems will be provided in line with facility security requirements and the nature of specific spaces. Quantities and locations will be carefully considered in terms of integration, flexibility and value for money.

NBN provisions are currently in development in co-ordination with NBN.Co to ensure that project delays are mitigated through key infrastructure, requiring on site co-ordination with other services being fully resolved prior to construction.

5.3.4. Fire Services:

The facility will be provided with an addressable Fire Detection Alarm System (FDAS) including FDCIE (Fire Indicator Panel) incorporating Fire Fan Control Panel and EWIS Panel. System coverage to include all concealed spaces (roofs/ceilings) and remote buildings.

5.3.5. Hydraulics, Civil Engineering & Structure

The building structure for the majority of the main facility will be simple cost-effective timber stud wall framing and timber truss roof framing, which can be sourced and manufactured locally. Stronger structural elements such as masonry will be utilised in areas that require more attack proof security such as the armory, holding areas and sallyport.

The engine bays will utilise precast external wall panels to address attack proof security, with a supplementary steel beam and framing system to provide for sizeable spans, ensuring functionality of the space.

Site storage sheds will be practical, sustainable and cost-effective steel framed structures with sheet metal cladding. These will be designed to suit required spans for storage of a variety of small to large scale items and equipment.

Site sewer and stormwater strategies have been developed to ensure proposed new connections and pipework runs follow the most cost-effective paths, which will cause minimal disruption to existing site conditions and infrastructure. Preliminary drainage plans aim to mitigate rainwater run off across the site and minimise the risks associated with extreme flood events, in response to the site's flood prone characteristics.

5.3.6. Acoustic Engineering

Preliminary site acoustic assessments have been carried out based on the preliminary plans presented as an appendix to this submission.

Predictions show that light vehicle noise is the dominant noise source across the site, due to the proximity to a major road. It is very likely that noise emissions from existing traffic on the roads will be significantly above the predicted emissions from the development as measured for all residential locations.

Vehicle movements on site will be occasionally audible at all nearby residences. Since the levels are predicted to be lower than existing background noise levels, and much lower than noise from existing traffic, this noise is very unlikely to be perceived as intrusive.

Mechanical plant noise is unlikely to be audible at the neighbouring residences.

The predicted level of site noise emissions at the boundaries to the nearest residences during peak traffic on-site are between 23 and 30 dBA. This is well below the night-time criterion of 40 dBA as set out in the Sorell Council's planning scheme, and below the existing ambient noise levels measured on site.

Acoustic data and design strategies will continue to be analysed and developed throughout the detailed design and documentation phases of the development. As constructed investigations will be carried out post construction to ensure that the building is performing in accordance with the requirements of the design.

5.3.7. Building Materials and Interior Design

Building material selections have been chosen based on their appropriateness for a facility of this nature, with a key focus on sustainability, strength, longevity, and low maintenance. Externally the material palette is a mixture of red brick, precast concrete, and painted fibre cement sheet wall cladding, with powder coated aluminium window and door frames. Roof cladding is to be Colorbond sheet with a light-coloured finish to maximise energy efficiency. The material palette is designed to respond to the building's functional needs but also references historical and modern developments in the local area. Building materials, where possible, will be locally sourced.

The objective of interior design for the Emergency Services Hub is to create an efficient and contemporary workspace. The overall concept will reflect a contemporary design that enables future flexibility to accommodate changing policy requirements, ensuring longevity and minimising future fit-out changes where possible.

The preliminary color palette features colors referenced by each emergency service's designated colours notionally infused into the space to assist with potential wayfinding, belonging and brand recognition.

The following principles will continue to be reviewed and developed throughout the detailed design and documentation stages of the project:

- Fit-out elements will be designed as separate components that interconnect and can be disconnected and replaced or upgraded as required;
- Modularity will be utilised in built zone components, including furniture and fittings selections, supporting maximum flexibility at minimum cost;
- Layouts will be planned in functional zones, with arrangement of space to promote maximum adaptability to changing needs. Open plan areas will be located at the edge of the building footprint to maximise natural light and outlook;
- Alternative work settings will be provided for different types of work and work styles;
- Spaces and rooms will be designed to support and/or adapt to multiple uses;
- Consideration and checking against legislative obligations, such as workplace health and safety and accessibility will occur throughout the remaining design phases to ensure continued compliance; and
- Preliminary material selections have been carefully considered to ensure they align with Environmentally Sustainable Design (ESD) objectives, such as their durability, recyclability and local availability.

5.3.8. Sustainable Design

Where possible, sustainable design principles will be adopted. These Include:

- Minimisation of operational energy use and therefore environmental impact and operational costs, by splitting internal spaces into zones that require similar heating and cooling requirements and minimal energy use.;
- Minimising potable water consumption in the building and the broader site;
- Taking maximum advantage of passive design principles, such as solar access and natural ventilation;
- Minimising potential negative stormwater runoff impacts on the local environment from the building and broader site;
- Material selections that have a minimal impact on the environment over the life of the building, such as low volatile organic compounds (VOC) products;
- Providing a building that is designed for future flexibility and longevity to minimise additional costs and resource use over the life of the building;
- Employing energy saving devices such as low energy efficient appliances /equipment, building energy management systems and using renewable energy sources where possible; and

• Harvesting rainwater from roofs for reuse in the flushing of toilets and irrigation of gardens. Water tanks are being allowed for on the western façade of the building to maximise the potential for catchment of stormwater runoff.

5.3.9. Landscape Design

The landscape design is an integral part of the design with the intent to provide modern contemporary spaces of low maintenance, appropriate to the context of the commercial use of the Emergency Services Hub. Budget has determined a modest, restrained approach and response. Landscape elements have been used to sensibly reduce the total area of functional hardstand and where possible, to provide areas allowing for absorption of stormwater runoff.

The landscape areas can be categorised into several areas of functional requirement and use, with each area being intentionally different within a coherent design.

The landscape area to the front of the Emergency Services Hub is the public street face i.e. Cole Street, this contemporary and modern space is intended to be sympathetic to the adjacent residential neighbours, by continuation of pattern and acknowledgment of the inherent residential character. Functionally this street zone offers security protection with vehicle berms designed to restrict unauthorised vehicle access.

An opportunity to integrate art within the landscape design exists with the potential collaboration of the designated Tasmanian Government Art Site Scheme and Landscape Architects. Such combination of talents having potential to reflect a stronger, cultural, heritage understanding and design response. This street zone extends into external courtyard of shared vista between two sections of the building. This space allowing the sense of an internal private space and calming influence. Other areas include a designated area for recreational activity combined with a 'Green wall' and pergola opening roof to provide comfort and a sense of enclosure. Wide landscape zones flank the perimeter boundary to the adjacent residential properties and are an intended transition/buffer space between respective zones.

5.3.10. Traffic Management

A traffic impact assessment report was commissioned as part of the schematic design process to assess aspects of the proposal against the Sorell Interim Planning Scheme 2015.

The proposed development is designed to have two separate access routes.

- Entry and exit off the existing right of way at the Sorell Community Centre off Cole Street. This is for vehicles entering the staff and volunteer car park; and
- Emergency vehicles can enter and exit via the driveway directly onto Cole Street by way of the proposed driveway. Service vehicles can then have forward entry and exit from the site via the right of way and Cole street access (refer Figure 6).



Figure 6. Traffic Management Plan

Given the nature of the development as an Emergency Services Hub, multiple access points are considered necessary to allow for rapid deployment of emergency crews, while separating staff and visitor movements from operational traffic.

Visitor car parking is to be addressed by proposed changes to on-street parking arrangements on Cole Street, to provide a formal supply of visitor car parking near the public building entrance point.

The changes include the following:

• Conversion of the existing BAR treatment at Cole Street / Arthur Street to include a new, short channelised right turn lane treatment;

- Provision of five (5) formalised and indented parking spaces along the northern side of Cole Street at the site frontage. These could be signposted as 1P or 2P to ensure short-term car parking; and
- Provision of a new pedestrian refuge island crossing on Cole Street to allow visitors to cross and access the site safely.

The estimated increase of vehicle movements in a typical peak hour as a result of the proposal is just over one (1) vehicle every five (5) minutes. This proportional increase in traffic on Cole Street is low, representing around a 2% increase during the evening peak period. Having separate entry off the right of way and emergency service vehicles exiting directly onto Cole Street, will reduce the incidence of any queuing of vehicles on Cole Street at the emergency vehicle egress point.

Based on the above, the proposed development is not expected to significantly impact on the wider road network performance in typical circumstances.

Given the nature of the proposed Emergency Services Hub, there may be periods of very heavy activity during a major incident response or similar. The site has capacity to accommodate up to 111 personnel, with associated vehicle movements. Under this scenario, the number of hourly vehicle trips may increase to somewhere in the range of 50 to 70 vehicle movements per hour at varying times throughout the day.

With existing traffic volumes on Cole Street generally not exceeding 660 vehicles per hour, there is ample capacity in Cole Street and the road network to accommodate the likely traffic during a major incident, without significant delay or congestion developing. In particular, the increased traffic is unlikely to impact on response times for emergency vehicles.

There is expected to be no significant detrimental road safety impacts due to the project. This is based on the following:

- The existing vehicle crash history does not indicate any specific road safety deficiencies in the external road network. that might be exacerbated by the relatively minor additional traffic generated by the proposal;
- There is sufficient sight distance at each access point to comply with Planning Scheme requirements;
- A right turn lane from Cole Street eastbound into Arthur Street is proposed as part of the minor work upgrades associated with changes to the site frontage and access roadway; and
- The emergency service vehicles exiting the site directly onto Cole Street will be clearly visible to other vehicles.

5.3.11. Accessibility

The development will comply with building codes and relevant Australian Standards for accessibility. The main public entrance to the facility will be fully wheelchair accessible and the main waiting area will be provided with an accessible toilet facility. Hearing augmentation systems will be provided to the reception counter and training room for the hearing impaired in line with Australian Standards and National Construction Code (NCC) requirements. Braille

and tactile indicator signage will also be included in line with statutory requirements for the vision impaired.

The proposed development includes one (1) accessible car park located on the north side of the building, which meets statutory requirements. Amenities across the development will be provided with ambulant accessible facilities as per the requirements of the NCC and Australian Standards.

6. PROJECT MANAGEMENT

6.1. Funding and Budget Estimates

The allocated funding for the Emergency Services Hub development provided by the Tasmanian State Government is \$12 million. This funding covers both the construction and non-construction costs, which includes architectural fees, furniture and IT plus an \$80,000 public art works component. Funding has been allocated across four years 2018-19 through 2021-22.

As noted in section 2.1 the \$12 million budget was based on initial high-level concept drawings drafted in 2016, that were prepared in consultation with representatives from Tasmania Police, Tasmania Fire Service and the State Emergency Service.

The project working group provided the expert knowledge ARTAS needed to prepare the approved schematic Emergency Services Hub design. Currently a number of additional costs are being negotiated. These include:

- Offsite parking on the Cole street frontage;
- The determination of electrical connection requirements. TasNetworks has advised that the costs won't be fully quantifiable until TasNetworks completes the design options, which is estimated to take up to 12 weeks;
- The extent of the facility's security requirements; and
- Extent and type of hardstand surface and areas required for the site, noting load bearing requirements for heavy vehicles.

As is best practice, a contingency amount is included in the quantity estimate to allow for any cost creep, as well as design variations and unforeseen construction costs. The percentage allowance included in the current cost estimate is 5%, providing a suitable amount for the schematic design phase. An additional 2% construction contingency allowance has been allocated to cover the uncertainty of the affect Covid-19 will have on the building sector.

Noting that the original budget was prepared in 2016, an additional 3% cost allowance has been included in the current cost estimate to represent the expected cost escalation between the original 2016 cost estimate and current cost predictions.

Throughout the detailed design phase, further work will be undertaken with key stakeholders to refine the scope and identify further cost savings as the details of the Hub's design are developed.

6.2. Risks and Potential Project Constraints

The Sorell Emergency Services Hub is the first of its kind to accommodate Tasmania Police, Tasmania Fire Service and the State Emergency Service in the same facility.

If the purpose-built facility is not undertaken, the key operational risks include, but are not limited to:

- Inability to meet increasing community emergency response expectations;
- Inability to meet existing and future emergency service demands from an increasing population base (as defined in the SERDA report);
- Inability to reduce duplication within support functions across the agencies; and
- Reduced public access to RCR response in the Sorell Municipality.

Additionally, there are several external factors that have the potential to affect the budget, timeline and scope. These are outlined in the table below:

| Identified Risk | Risk Mitigation Strategy |
|---|---|
| Impact Covid-19 will have on the construction industry particularly with respect to the project timeline, available resourcing, material supply and cost is unknown. | This will be closely monitored and reported to key stakeholders throughout the project, with the scope of works and timeline managed according to identified risks. |
| Pre-tender estimate will exceed the total available budget | Cost reviews will be undertaken throughout the detailed design phase and key stakeholder meetings held regarding scope refinement. |
| Future site flooding and stormwater management | The building has been designed to have a floor level that minimises the potential impact of a 1:100-year flood event; while allowing for stormwater falls to be managed appropriately. Sorell Council has approved the construction of a new stormwater drain and title/easement as part of a separate project on the western side of the site, to help manage stormwater effectively in the future. This will be built concurrently with the construction of the Hub. |
| Planning approval will not be forthcoming to meet the time frame for tender issue. | The planning application is scheduled to be submitted in October 2020 to ensure approval is received prior to proceeding to tender |
| Delays occur during construction | Fortnightly site meetings will be held throughout the construction phase, to allow for continued review of progress against the construction program and to allow for appropriate forward planning in relation to identified issues on site. |

| | | Adequate programming will allow full documentation of the construction package, to minimise the risk of technical difficulties arising during construction. | | | |
|--|---|--|--|--|--|
| | Design does not meet the requirements of contemporary emergency services' operational requirements. | Regular project working group meetings with key representatives from all stakeholder groups, will continue to be held throughout the detailed design phase. | | | |
| | Community concern over design solution | The Sorell Council has undertaken considerable community engagement around the masterplan for the general locality. | | | |

7. CONCLUSION

The provision of a new Emergency Services Hub located in Sorell, will have significant benefits for the Sorell Municipality and the wider South East geographic region. The proposed development will ensure that emergency services personnel can continue to conduct effective response to emergency incidents including RCR, in line with current and future requirements of the dispersed and rapidly growing South East community. This facility will achieve this by providing a modern and efficient state of the art building for employees and volunteers.

Whilst the need to proceed with this development is high, it should be noted that the construction phase will generate significant employment with flow-on benefits to the Sorell Municipality and the broader Tasmanian community.

It is therefore recommended to the Parliamentary Standing Committee for Public Works that approval be granted for the major development works proposed for the Sorell Emergency Services Hub to proceed as detailed in this submission.



8.1. Attachment 1 – A0000 Site Plan – P11