

PROJECT

**SPRAY BOOTH**

CLIENT

**HASTING DEERING, ROCKHAMPTON**



**PROPOSED SPRAY  
BOOTH LOCATION**

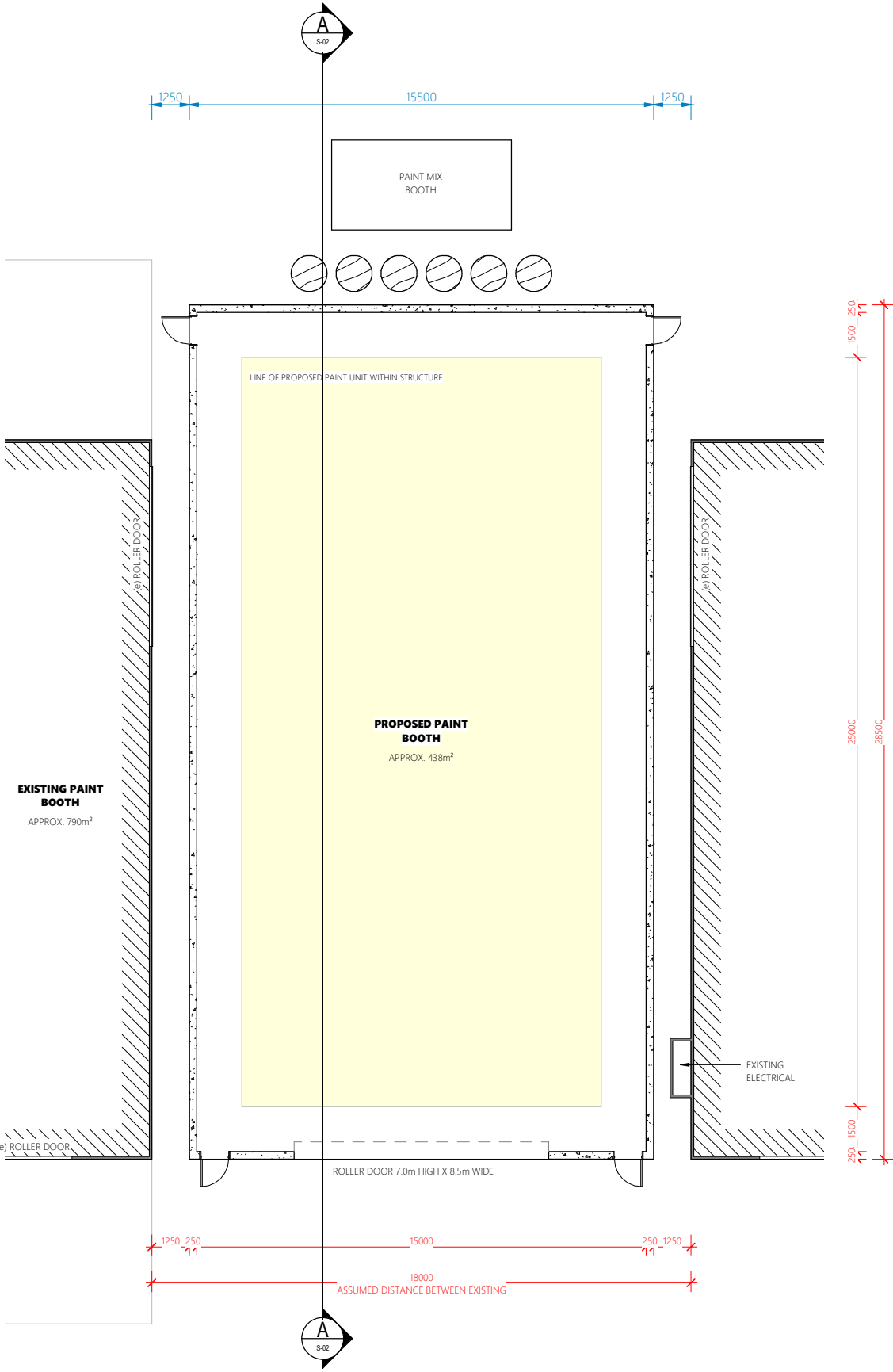
**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/23-2023**

**Dated: 2 June 2023**



**Proposed Floor Plan**

1 : 100

DO NOT SCALE DRAWING		
ALL DIMENSION IN MILLIMETERS		
No:	Description:	Date:

ISSUED FOR

**PRELIMINARY**

Project Details:

**SPRAY BOOTH**

**HASTINGS DEERING,  
ROCKHAMPTON**

Drawing Title:

**PROPOSED**

**dezi**nelements  
BUILDING DESIGNERS

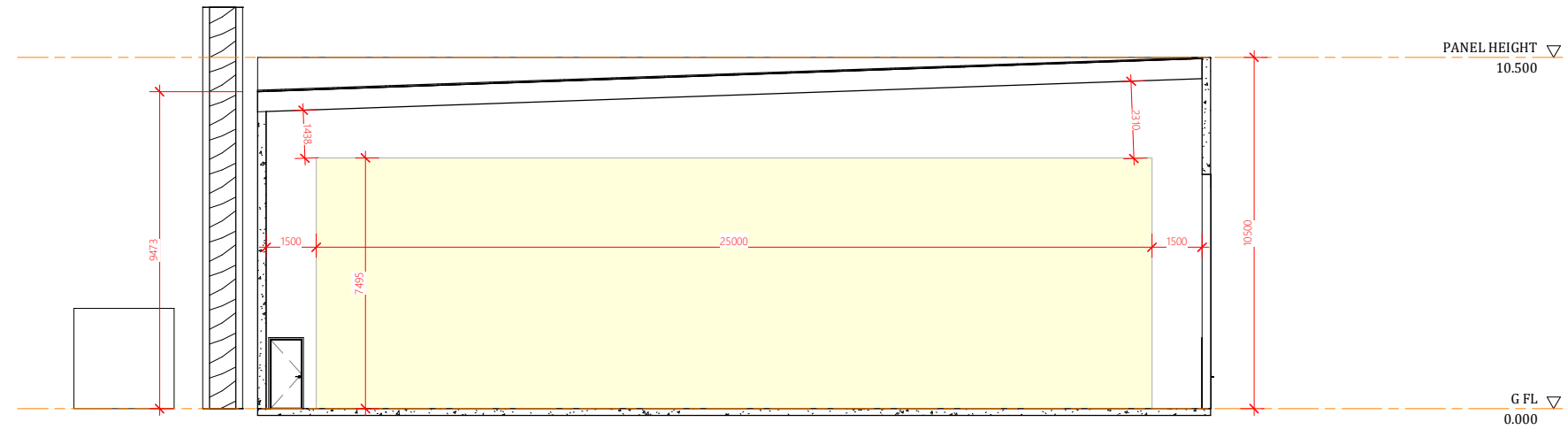
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QBCC No: 1247120 BDAQ No: 0001677

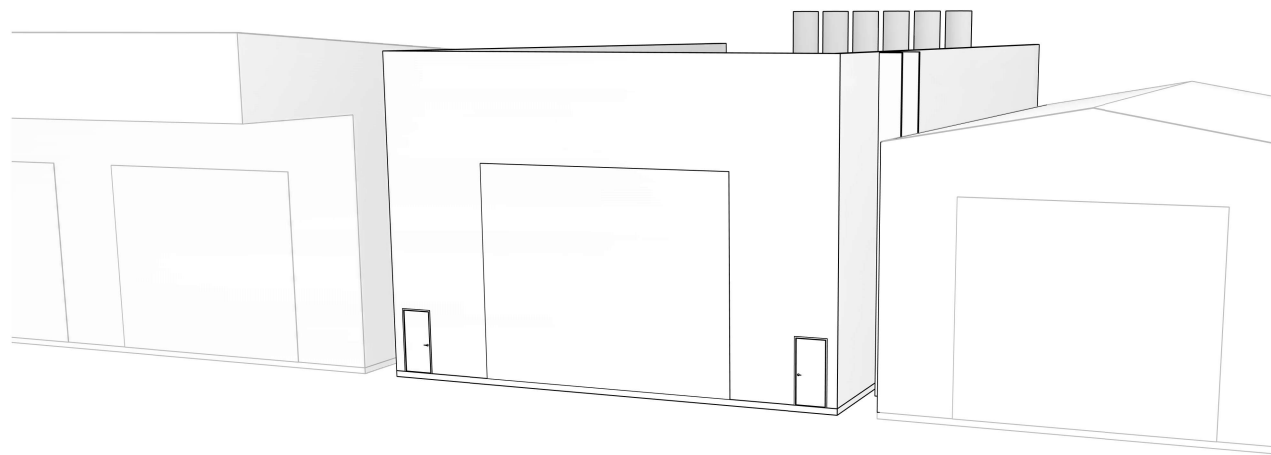
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Date: SEPT 2022	
Drawn: NJB	

Project No: 22_221	Drawing No: S-01
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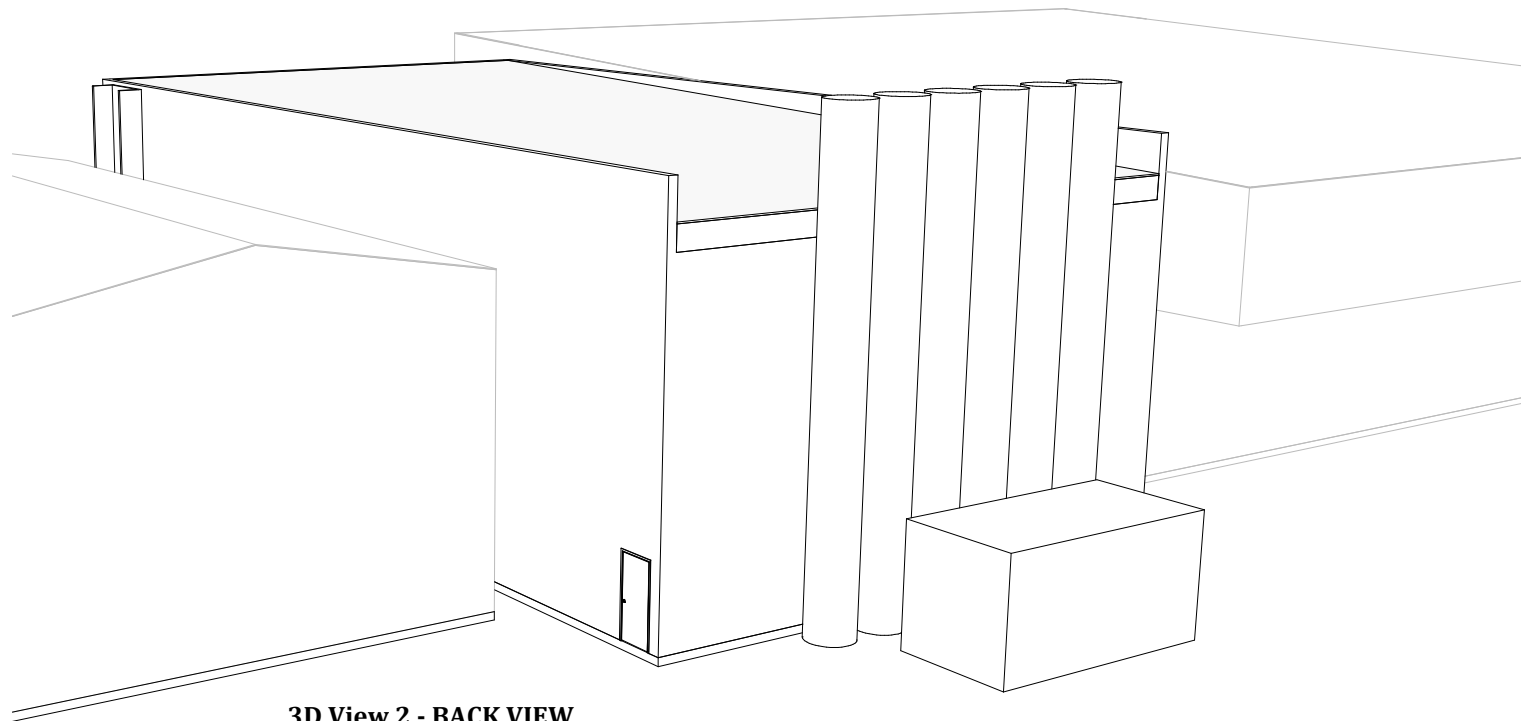
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**Section A**  
1:100



**3D View 1 - FRONT VIEW**



**3D View 2 - BACK VIEW**

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**SPRAY BOOTH**

**HASTINGS DEERING,  
ROCKHAMPTON**

Drawing Title:

**PROPOSED**



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QBCC No: 1247120

BDAQ No: 0001677

Scale: 1:100	Rev:
Date: SEPT 2022	
Drawn: NJB	
Project No: 22_221	Drawing No: S-02

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## FLOOD HAZARD ASSESSMENT

<b>Patcol Reference:</b>	<b>22-603</b>
<b>Project Address:</b>	150 Port Curtis Road, Port Curtis
<b>Client:</b>	Hastings Deering Australia Limited
<b>Client Contact:</b>	Brenton Wade

Issue Date	Version	Description	Approved
13.02.23	0	Original Issue	Scott Thomas

### **ROCKHAMPTON REGIONAL COUNCIL**

#### **APPROVED PLANS**

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**Dated: 2 June 2023**

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## 1.0 INTRODUCTION

The scope of this document is to address the relevant provisions of the Rockhampton Region Planning Scheme 2015 with regards to the Fitzroy River Flood Overlay for 150 Port Curtis Road, Port Curtis.

The property, as shown in Figure 1 below, is a combination of many workshop style structures and the owners wish to install an additional paint booth due to its location, it triggers the need for a flood hazard assessment.

The intended structure is shown in Figure 1 below and described as:

1. 12m by 25m paint booth. Refer to Figures 2 & 3 for typical sectional profiles and elevation.

The engineering plans for both structures are shown in Appendix A. Neither of the structures will be habitable and will be utilised for the storage of painting equipment associated with the nature of the site. The finished floor level of the adjacent shed will be maintained and as such the impact from any potential flood is extremely low. During a flood event the doors would remain open to ensure flows are not inhibited. Being generally open in nature, it will not obstruct the flow of flood waters in and around the structure without causing nuisance, turbulence or redirecting flows outside of the site.

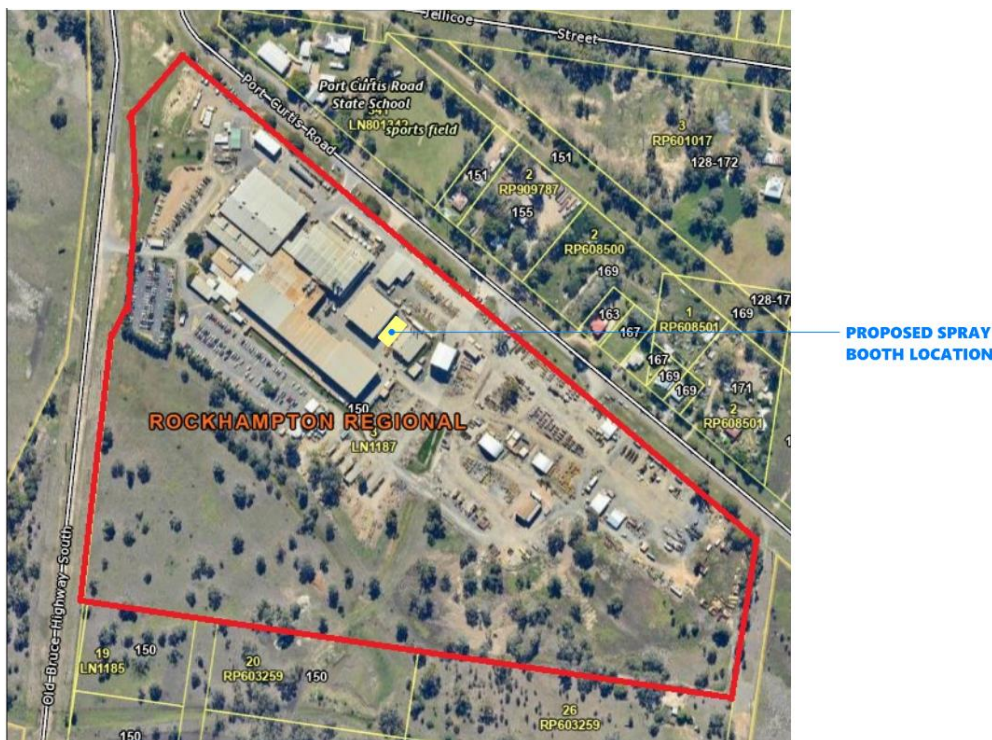


Figure 1 - Site Location

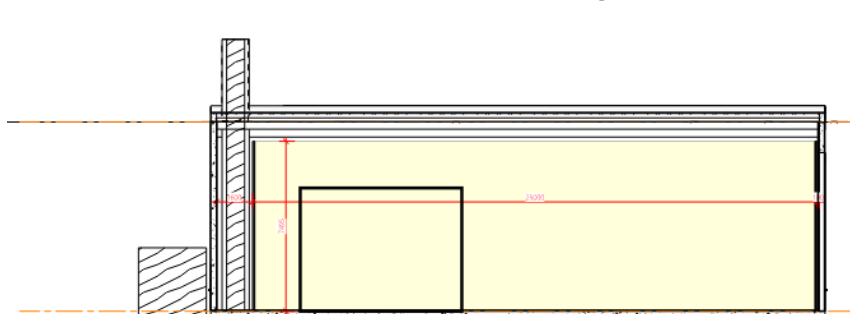


Figure 2: Paintbooth – Typical Section

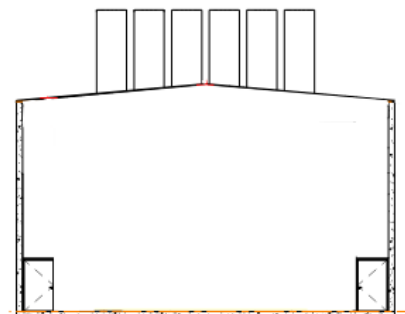


Figure 3: Paintbooth Elevation

## 2.0 FLOOD HAZARD ASSESSMENT

The proposed shed will have a concrete floor with the intention that the finished floor level of the shed is no more than 100mm higher than the adjacent natural ground. The nature of both structures is such that they are generally open in nature and will not obstruct the flow of flood waters. Additional to this the aim of the project is to construct this new facility from robust and flood-resistant material, therefore minimising the risk and damage to property during a flood event. This means that in a flood event water will be free to flow in and around the structures without causing nuisance turbulence or damaging any infrastructure which may result in adding hazards to other neighbouring properties.

The site is situated in the Fitzroy River Floodplain and the flood hazard zone as defined by the Rockhampton Region Planning Scheme 2011 hazard overlays. As can be seen in Figure 4, the flood overlay map shows the site being within the H3 (high). The site is situated in the Fitzroy River Floodplain. Rockhampton City Council's Designated Flood Event (DFE) is a flood with a once-in-a-hundred-year probability or 1% Annual Exceedance Probability (AEP) which inundates this property.

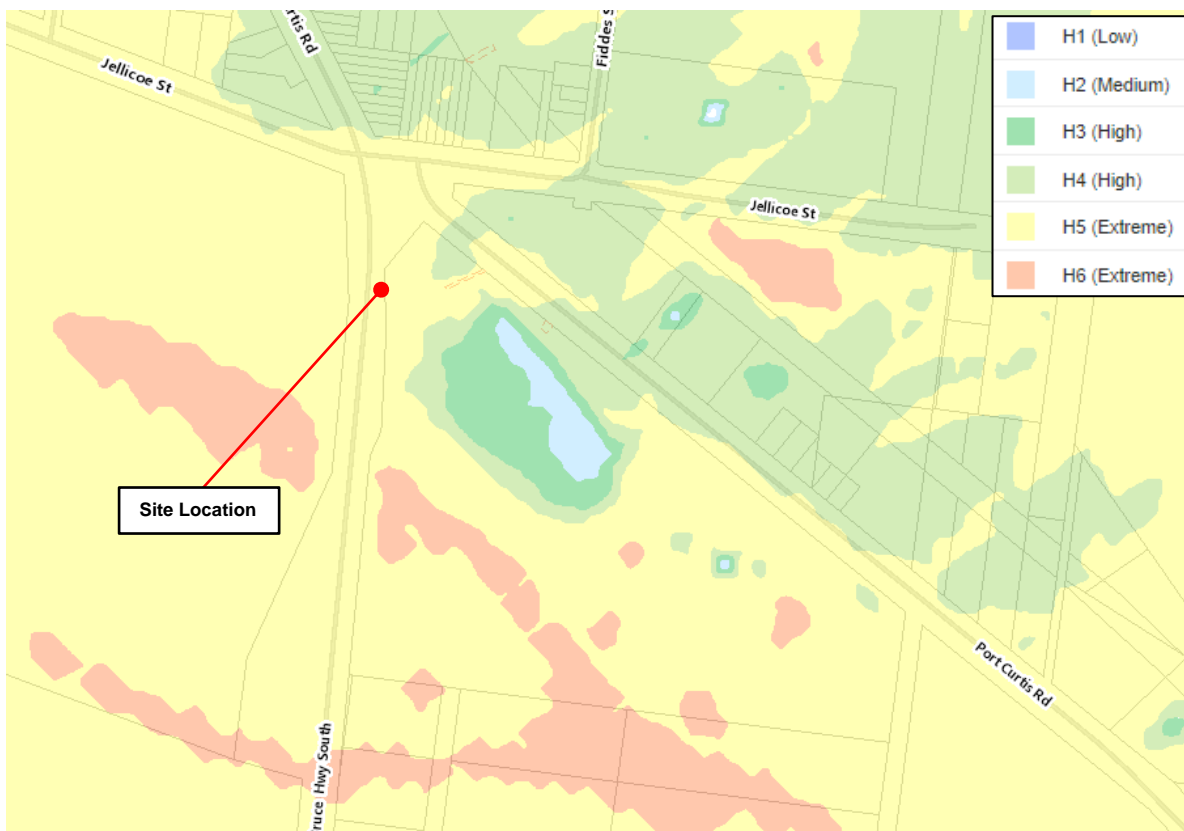


Figure 4 – RRC Flood Hazard Zones

It has been seen during previous flood events that the site can be effectively managed with regards to achieving the acceptable outcomes set out in Appendix A. Simple measures such as those nominated below prior to the event mitigates any potential impact. Further, insignificant increase in flood storage area is seen to have resulted from the additional structures, hence the post-development case for the site will show very minimal impact on the peak discharge and stormwater quality.

## 3.0 CONCLUSION


It is seen that the proposal is acceptable based on the following:

1. The ground level at the site is approximately 7.62m AHD. The DFE for the site is 8.26m AHD resulting in inundation to the property. The structures are not habitable, and the amount of displaced floodwater is negligible.
2. Resilience to the existing flood event affects will be provided in accordance with the RRC Planning Scheme outcomes towards a defined flood event. This is achievable as the proposed structures will be constructed using structural steel, reinforced concrete and designed accordingly.
3. Local and global (Riverine Flooding) flood heights will not increase because of the development. This is because there will be no material change to existing hydraulic parameters and no loss of storage.
4. As there will be no change to depth or velocity, there will be no increase to the sites Flood Hazard Category and therefore no risk to persons, infrastructure, or property.
5. There are no proposed earthworks aside from minor levelling of ground within the footprint of the proposed works.
6. Sufficient notice period of two weeks has been the case for previous Riverine Flooding events, and we know this would not change in the future. Given the affected areas of this structure are not habitable or commercial the management required after a flood's oncoming notice include:
  - a) Monitoring flood warnings to allow for preparation
  - b) Removal of loose material and potential debris.
  - c) Relocation of all equipment off site.
  - d) Remove all animals from the site.
7. The finished floor level of the shed will be a maximum of 100mm above the surrounding natural ground levels.

There appear to be no great engineering infrastructure difficulties with the proposed changes to the property. It is seen that the proposal will not affect flooding, either on the property or upstream/downstream in any way and conforms to the acceptable outcomes as set out by the RRC planning scheme. Summarising, the structures covered under this report would not create any actionable nuisance to themselves, or any surrounding properties.

Based on the above assessment, I, Scott Thomas, of Patcol Group (Consulting Engineers) being duly authorised in this behalf, believe the proposed works at 150 Port Curtis Road, Port Curtis will not result in a material increase in flood level or flood hazard to the immediate surrounding properties. Hence the proposed works are considered to comply with A02.2 of the Flood Overlay Hazard Code. I have based this certification on the data available from Rockhampton City Council website and as such this report's accuracy is reliant on the accuracy of this information.

Please see following commentary for Development outcomes for such works.



Scott Thomas  
Manager – B. Eng. (Civil/Structural) RPEQ 16203  
[scott@patcol.com.au](mailto:scott@patcol.com.au)

Refer to the following Appendixes:

*Appendix A: Engineering Plans of Proposed Structures*

*Appendix B: RRC Development Assessment*

Appendix A: ENGINEERING DRAWINGS

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Appendix B: RRC DEVELOPMENT ASSESSMENT

**Fitzroy River – H1 or H2 or North Rockhampton flood management area or Creek catchment planning area 2**

*Table 8.2.8.3.1 Development outcomes for assessable development and requirements for accepted development (part)*

Performance outcomes	Acceptable outcomes
<b>Development in Fitzroy River flood areas – H1 (low hazard area) or H2 (medium hazard area) or North Rockhampton flood management area or Creek catchment flood - planning area 2</b> Editor's note—Refer to overlay maps <a href="#">OM-8A</a> and <a href="#">OM-8C</a>	
<b>PO1</b> Development (including extensions) for non-residential purposes is able to provide a safe refuge for people and for the storage of goods during times of flood inundation.	<b>AO1.1</b> For non-residential development, at least thirty (30) per cent of the <u>gross floor area</u> of all new buildings and structures is located a minimum of 500 millimetres above the defined flood level.  Editor's note—Areas less than those nominated above may be supported where accompanied by a flood impact report in accordance with <a href="#">SC6.10—Flood hazard planning scheme policy</a> .  <b>AND</b>  <b>AO1.2</b> A report from a registered professional engineer of Queensland certifies that the development in the flood area will not result in a material increase in flood level or flood hazard on upstream, downstream or adjacent properties.
<b>PO2</b> Development is located to minimise susceptibility to and potential impacts of flooding.	<b>AO2.1</b> For residential uses the finished floor levels of all habitable rooms shall be constructed a minimum of 500 millimetres above the defined flood level.  <b>AND</b>  <b>AO2.2</b> A report from a registered professional engineer of Queensland certifies that the development in the flood area will not result in a material increase in flood level or flood hazard on upstream, downstream or adjacent properties. Editor's note—Report to be prepared in accordance with <a href="#">SC6.10—Flood hazard planning scheme policy</a> .
<b>PO3</b> Development avoids the release of hazardous materials into floodwaters.	<b>AO3.1</b> All hazardous materials and hazardous manufacturing equipment and hazardous containers are located and stored a minimum of 500 millimetres above the defined flood level.  Editor's note—Refer to the <a href="#">Work Health and Safety Act 2011</a> and associated regulation, the <a href="#">Environmental Protection Act 1994</a> and the relevant building assessment provisions under the <a href="#">Building Act 1975</a> for requirements related to the manufacture and storage of hazardous substances.



## Fitzroy River – H3-H4 or H5-H6 or Creek catchment flood planning area 1

Table 8.2.8.3.1 Development outcomes for assessable development and requirements for accepted development (part)

Performance outcomes	Acceptable outcomes
<b>Development in Fitzroy River flood areas – H3-H4 (high hazard areas) or H5-H6 (extreme hazard areas) or Creek catchment flood - planning area 1</b> Editor's note—Refer to overlay maps <a href="#">OM-8A</a> and <a href="#">OM-8C</a>	
<b>PO4</b> Development does not involve the further intensification of land uses and does not increase the risk to people and property.  Editor's Note—Flood hazard risk assessment can be undertaken in accordance with <a href="#">SC6.10 — Flood hazard planning scheme policy</a> .	<b>AO4.1</b> <b>AO4.1.1</b> Development does not involve new buildings or structures.  OR <b>AO4.1.2</b> Where involving the replacement or alteration to an existing non-residential building or structure: <ol style="list-style-type: none"> <li>there is no increase in the existing or previous buildings' <u>gross floor area</u>; and</li> <li>the finished floor level of any replacement or alteration to an existing building is constructed a minimum of 500 millimetres above the defined flood level.</li> </ol> OR <b>AO4.1.3</b> Where involving the replacement or alteration to an existing caretaker's accommodation, <u>dwelling house</u> or <u>dwelling unit</u> : <ol style="list-style-type: none"> <li>there is no increase in the number of dwellings;</li> <li>there is no increase in the existing or previous buildings' <u>gross floor area</u>; and</li> <li>the finished floor level of all habitable rooms shall be constructed a minimum of 500 millimetres above the defined flood level.</li> </ol> AND <b>AO4.1.4</b> Where located in the rural zone, the <u>total floor area</u> of class 10a buildings and structures on the <u>site</u> do not exceed a total of fifty (50) square metres, and are set back a minimum of twenty (20) metres from all <u>site</u> boundaries.
<b>PO5</b> Development avoids the release of hazardous materials into floodwaters.	<b>AO5.1</b> Materials manufactured, used or stored on <u>site</u> are not hazardous in nature.  <b>No hazardous materials to be manufactured, used or stored on site.</b>

**Fitzroy River – all hazard areas, North Rockhampton flood management area or Creek catchment  
– all planning areas**

Table 8.2.8.3.2 Development outcomes for assessable development

Performance outcomes	Acceptable outcomes
<b>Development in Fitzroy River flood area – all hazard areas, North Rockhampton flood management area or Creek catchment flood – all planning areas</b> Editor's note—Refer to overlay maps <a href="#">OM-8A</a> and <a href="#">OM-8C</a>	
<b>PO8</b> Development is located to minimise susceptibility to and potential impacts of flooding.	No acceptable outcome is nominated.  <b>The financial investment in this facility would deem it inappropriate to suggest another location given the number of local workforce etc.</b>
<b>PO9</b> Underground car parks are designed to prevent the intrusion of floodwaters.	<b>AO9.1</b> Development with underground car parking is designed to prevent the intrusion of floodwaters by the incorporation of a bund or similar barrier a minimum of 500 millimetres above the defined flood level.  <b>No underground car parks.</b>
<b>PO10</b> Development: <ol style="list-style-type: none"> <li>does not result in any reduction of onsite flood storage capacity; or</li> <li>does not result in any change to depth, duration or velocity of floodwaters within the premises; and</li> <li>does not change flood characteristics outside the premises, including but not limited to causing:               <ol style="list-style-type: none"> <li>loss of flood storage; or</li> <li>loss of or changes to flow paths; or</li> <li>acceleration or retardation of flows; or</li> <li>any reduction in flood warning times elsewhere on the <u>floodplain</u>.</li> </ol> </li> </ol> Editor's note— <u>Council</u> may require the applicant to submit a <u>site</u> -based flood study that investigates the impact of the development on the <u>floodplain</u> and demonstrates compliance with the relevant performance outcome.	No acceptable outcome is nominated.  <ol style="list-style-type: none"> <li>Development does not result in a reduction of onsite flood storage;</li> <li>Development does not result in a change to depth, duration or velocity of floodwater within the premises, and;</li> <li>Does not change flood characteristics outside the premises, including but not limited to causing:               <ol style="list-style-type: none"> <li>Loss of flood storage,</li> <li>Loss of or changes to flow paths,</li> <li>Acceleration or retardation of flows, and;</li> <li>Any reduction of flood warning times.</li> </ol> </li> </ol>
<b>PO11</b> Essential community infrastructure and community facilities are protected from, and able to function effectively during and immediately after, a defined flood event.	<b>AO11.1</b> A use for a purpose listed in <a href="#">Table 8.2.8.3.3</a> : <ol style="list-style-type: none"> <li>is not located within the flood hazard area; and has at least one (1) flood free access road.</li> </ol> <b>Development is not essential community infrastructure, community facilities or public asset.</b>
<b>PO12</b> Development provides safe and trafficable access to the local evacuation centres and evacuation services and have regard to: <ol style="list-style-type: none"> <li>evacuation time;</li> <li>number of persons affected;</li> <li>types of vehicles necessary for evacuation purposes;</li> <li>the distance to flood free land; and the evacuation route.</li> </ol>	<b>AO12.1</b> Trafficable access to and from the development complies with the Capricorn Municipal Guidelines.  <b>Trafficable access will be provided with regards to the requirements of the Capricorn Municipal Development Guidelines. AND</b> <b>AO12.2</b> Trafficable access to and from the development within the creek catchment planning areas are in accordance with the Queensland

	<p>Urban Drainage Manual.</p> <p>Trafficable access will be provided with regards to the requirements of the Queensland Urban Drainage Manual..</p> <p>Note—Trafficable access for <u>emergency services</u> or community related uses is obtained from at least one (1) route (minor collector or higher) for <u>emergency services</u> purposes. The development is to ensure that safe access, to the road network between the development <u>site</u> and the closest centre zone, is provided.</p> <p>Editor's note—Trafficable access requirements for creek catchment planning areas has not been identified and reference has been made to the provisions under the Queensland Urban Drainage Manual. This is due to the short period that property may be isolated.</p>
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### Fitzroy River – H3-H4 or H5-H6, North Rockhampton flood management area or Creek catchment – planning area 1

Table 8.2.8.3.2 Development outcomes for assessable development

Performance outcomes	Acceptable outcomes
<b>Development in Fitzroy River flood areas – H3-H4 (high hazard areas) or H5-H6 (extreme hazard areas), North Rockhampton flood management area or Creek catchment flood – planning area 1</b> Editor's note—Refer to overlay maps <a href="#">OM-8A</a> and <a href="#">OM-8C</a>	
<b>PO13</b> Development that involves temporary or moveable residential structures (for example caravan parks and camping grounds) are not located with the Fitzroy River high and extreme hazard areas, North Rockhampton flood management area and Creek catchment planning area 1.	No acceptable outcome is nominated.  <p>The development is not temporary or moveable.</p>

### Operational work

Table 8.2.8.3.2 Development outcomes for assessable development (part)

Performance outcomes	Acceptable outcomes
<b>Operational work</b>	
<b>PO17</b> Development does not materially impede the flow of floodwaters through the <u>site</u> or worsen flood flows external to the <u>site</u> .	<b>AO17.1</b> Development does not involve: <ul style="list-style-type: none"> <li>a) filling with a height greater than 100 millimetres; or</li> <li>b) block or solid walls or fences; or</li> <li>c) garden beds or other structures with a height more than 100 millimetres; or</li> <li>d) the planting of dense shrub hedges.</li> </ul> <p>Development does not impede the flow of floodwaters through the site or worsen flood flows external to the site as described in this report.</p>

