

Department of
State Development,
Manufacturing,
Infrastructure and Planning

Our reference: 1903-10220 SRA Your reference: D/17-2019

11 April 2019

The Chief Executive Officer Rockhampton Regional Council PO Box 1860 Rockhampton Qld 4700 enquiries@rrc.qld.gov.au

Attention: Brandon Diplock

Dear Sir/Madam

Referral agency response—with conditions

(Given under section 56 of the Planning Act 2016)

The development application described below was properly referred to the Department of State Development, Manufacturing, Infrastructure and Planning on 18 March 2019.

Applicant details

Applicant name: Watpac Construction Pty Ltd c/- PSA Consulting (Australia) Pty Ltd

Applicant contact details: PO Box 10824 Adelaide Street

Brisbane QLD 4000

nicole@psaconsult.com.au

Location details

Street address: 484 Lakes Creek Road, Lakes Creek; 484 Lakes Creek Road, Lakes

Creek

Real property description: 1CP888744; 1RP603369

Local government area: Rockhampton Regional Council

Application details

Development permit Material change of use for Extension to a High Impact Industry

(Abattoir) for an addition of a Research and Development Facility

Referral triggers

The development application was referred to the department under the following provisions of the Planning Regulation 2017:

• 10.9.4.2.4.1

State transport corridors and future State transport corridors

Conditions

Under section 56(1)(b)(i) of the *Planning Act 2016* (the Act), the conditions set out in Attachment 1 must be attached to any development approval.

Reasons for decision to impose conditions

The department must provide reasons for the decision to impose conditions. These reasons are set out in Attachment 2.

Approved plans and specifications

The department requires that the plans and specifications set out below and enclosed must be attached to any development approval.

Drawing/report title	Prepared by	Date	Reference no.	Version/issue	
Aspect of development: Material change of use					
'Site Plan' (as amended in red)	Studio Arkitecture	18/02/2019	DA-001	-	
'Elevations'	Studio Arkitecture	18/02/2019	DA-200	-	
Chapter 4.0 – Hydraulic Modelling and Chapter 5.0 - Conclusions of the 'Flood Study Report'	Storm Water Consulting Pty Ltd	8 March 2019	6670	1	

A copy of this response has been sent to the applicant for their information.

For further information please contact Carl Porter, Principal Planning Officer, on 07 4924 2918 or via email RockhamptonSARA@dsdmip.qld.gov.au who will be pleased to assist.

Yours sincerely

Anthony Walsh Manager Planning

cc Watpac Construction Pty Ltd c/- PSA Consulting (Australia) Pty Ltd, nicole@psaconsult.com.au

enc Attachment 1—Conditions to be imposed

Attachment 2—Reasons for decision to impose conditions

Approved plans and specifications

Attachment 1—Conditions to be imposed

No.	Conditions	Condition timing			
Mater	Material change of use				
State transport corridors—The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of the Department of Transport and Main Roads to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):					
1.	The minimum setback of the development from the railway corridor must be generally in accordance with the following plan: • Site Plan, prepared by Studio Arkitecture, dated 18/02/2019, drawing number DA-001, as amended in red to show minimum setback of building from railway.	Prior to the commencement of use and to be maintained at all times			
2.	 (a) The development must be carried out generally in accordance with: Chapter 4.0 – Hydraulic Modelling and Chapter 5.0 - Conclusions of the Flood Study Report, prepared by Storm Water Consulting Pty Ltd, dated 08/03/2019, reference number 6670 and version 1.0, in particular, the increase in flood levels on the railway corridor must not exceed 5mm; and Elevations, prepared by Studio Arkitecture, dated 18/02/2019, drawing number DA-200, in particular, the building must be on a suspended floor located above the Lakes Creek flow path. (b) RPEQ certification with supporting documentation must be provided to Program Delivery and Operations Unit, Central Queensland Region within the Department of Transport and Main Roads (Central.Queensland.IDAS@tmr.qld.gov.au) within the Department of Transport and Main Roads', confirming that the development has been constructed in accordance with part (a) of this condition. 	(a) At all times (b) Prior to the commencement of use			

Attachment 2—Reasons for decision to impose conditions

The reasons for this decision are:

- To ensure the development is carried out generally in accordance with the plans of development submitted with the application.
- To ensure that the impacts of stormwater events associated with development are minimised and managed to avoid creating any adverse impacts on the state-transport corridor.



Department of
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Department of State Development, Manufacturing, Infrastructure and Planning Statement of reasons for application 1903-10220 SRA

(Given under section 56 of the Planning Act 2016)

Departmental role: Referral agency

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Assessment matters

Aspect of development requiring code assessment	State Development Assessment Provisions, version 2.4 Applicable codes	
Material change of use	 State code 1: Development in a state-controlled road environment State code 2: Development in a railway environment 	

Reasons for the department's response

The reasons for the response are the proposed development:

- involves construction of a building
- can be conditioned to mitigate any flood impacts to Lakes Creek road and the railway
- can be conditioned to provide safe setback of the development to the railway
- complies with State codes 1 & 2.

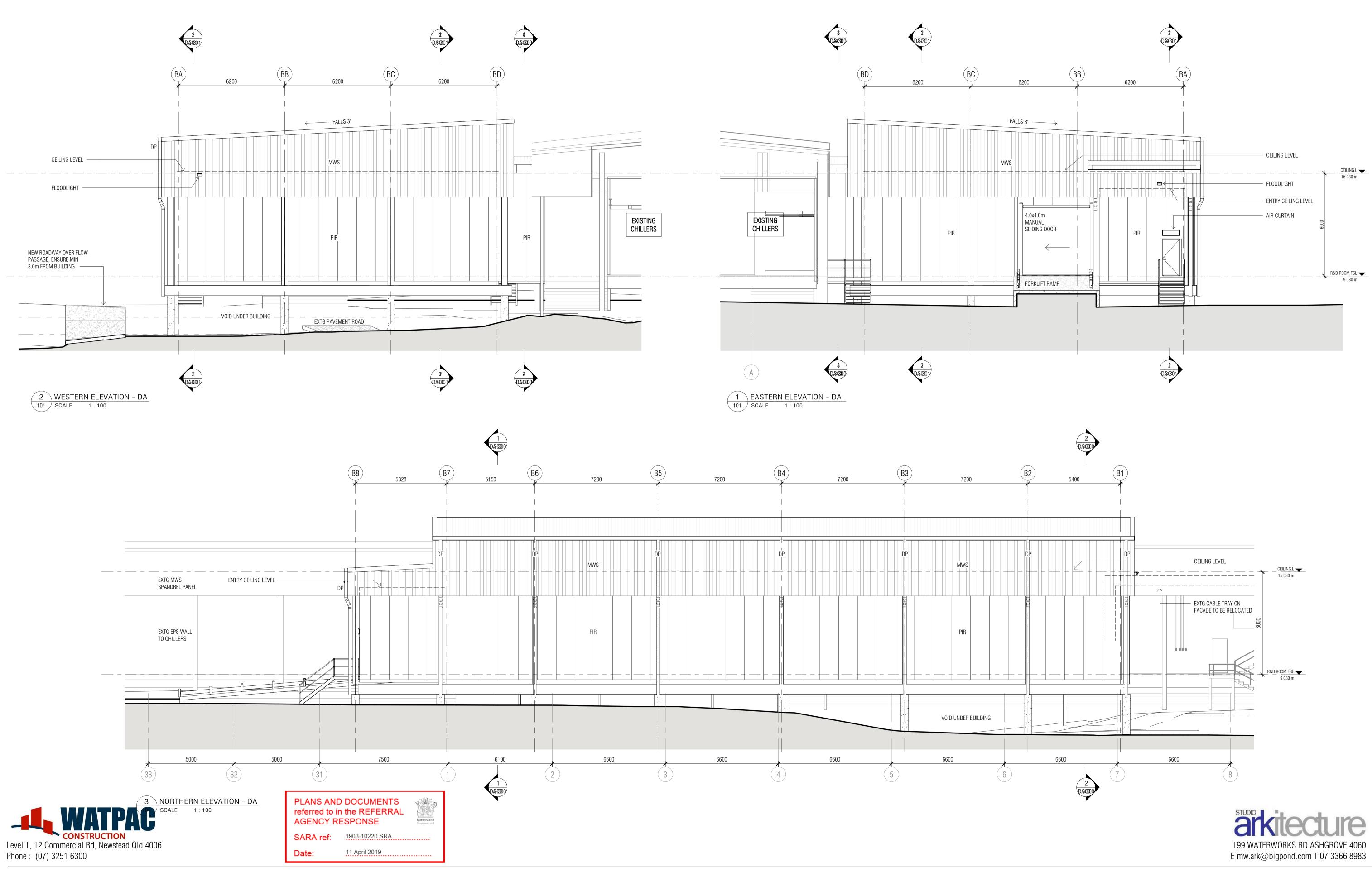
Response:

Nature of approvalResponse detailsDate of responseDevelopment approvalSubject to conditions11 April 2019

Relevant material:

- development application material
- Planning Act 2016
- Planning Regulation 2017
- State Development Assessment Provisions, version 2.4
- Development Assessment Rules, version 1.1
- SARA Development Assessment Mapping.





4.0 HYDRAULIC MODELLING

A TUFLOW 2D hydrodynamic model was prepared to model the extent of inundation across the site and to determine the impacts of the proposed development. The model setup and parameters are discussed in Section 4.1 below.

4.1 Existing Model

The TUFLOW model was based on a 1m grid size with elevation data assigned from the ALS survey data sourced from the Department of Natural Resources and Mines and level and detail site survey. The peak discharges presented in Section 3.0 were used for their respective AEP events. The location of the boundary condition is presented in Figure 5, Appendix A. A global Manning's value of n=0.10 was used throughout the model. The culverts located under Lakes Creek road were input into the model as a 1-D element. The buildings and bridges spanning over the flow path through the site were modelled using the 2-D bridge flow constriction (2d_lfcsh) method so that the support columns could be modelled. The existing scenario 2% AEP inundation plan is presented in Figure 5, Appendix A. Existing flood contour plots, depth plots and velocity plots for each AEP event are presented in Figures 9 to 23, Appendix A.

4.2 Developed Model

The existing model was modified by removing the old bridge crossing (upstream of the new building) and inputting a new 2-D bridge flow construction layer which represents the proposed building. Developed flood contour plots, depth plots and velocity plots for each AEP event are presented in Figures 24 to 41, Appendix A. Flood depth and velocity impact plots for each AEP event are presented in Figures 42 to 53.

Results from the impact plots show that the proposed development would reduce the flood levels on neighbouring properties for all events except the 39% AEP event. The reduction in flood levels provides a benefit to the upstream railway line and Lakes Creek Road. The 39% AEP event shows a 5mm increase in flood levels on the upstream neighbouring property (under the suspended railway line). The flood level on the upstream neighbouring property is below the level of the railway tracks and is located within the flow path. The small increase does not create an adverse impact to the neighbouring land and it is anticipated that the reduced flood levels for all other AEP events is far more beneficial than the small 5mm increase in flood levels for the minor AEP event.

4.3 Finished Floor Levels

The proposed floor level for the new building is RL8.93m AHD. Rockhampton City Council's Planning Scheme Policy requires the floor level of the new building to be set 0.5m above the 1% AEP flood level on site. The 1% AEP flood level (at the location of the new building) from Lakes Creek is RL7.9m AHD. The 1% AEP flood level from the Fitzroy River is RL7.29m AHD. The proposed finished floor level therefore provides the required flood immunity.

PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE



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5.0 CONCLUSIONS

This report has been prepared to demonstrate that the proposed new building would not create an adverse impact to neighbouring properties. Minimum finished floor levels for the new building are also presented in this report.

It is proposed to construct a new building on the north eastern side of the site. The building will be constructed on a suspended floor and will be located over the top of the Lakes Creek flow path. The location of the new building is shown in Figure 3, Appendix A. The old bridge crossing will be demolished as part of the development.

A TUFLOW 2D hydrodynamic model was prepared to model the extent of inundation across the site and to determine the impacts of the proposed development. Results from the TUFLOW analysis show that the proposed development would reduce the flood levels on neighbouring properties for all events except the 39% AEP event. The 39% AEP event shows a 5mm increase in flood levels on the upstream neighbouring property (under the suspended railway line). The flood level on the upstream neighbouring property is below the level of the railway tracks and is located within the flow path. The small increase does not create an adverse impact to the neighbouring land and it is anticipated that that the reduced flood levels for all other AEP events is far more beneficial than the small 5mm increase in flood levels for the minor AEP event.

Footing and foundations should be designed to withstand the hydrostatic, hydrodynamic and debris impact loads associated with the flow velocities and depths affecting the new building.

Darren Rogers

BE Civil (Hons), MIE Aust, RPEQ 5016

Director

PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE



5

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8 March 2019