

Re: Structural Design
Flood Water Statement
for Richmond
Agricultural Centre – REF
Submission

Level 10, 400 George St
Sydney NSW 2000
02 9241 4188
sydney@northrop.com.au
ABN 81 094 433 100

Hamish Hutton

Richard Crookes Constructions Pty. Ltd.

Level 14, 558 Pacific Highway

St Leonards NSW 2065

16 May 2025

Richmond Agricultural Centre

SY240854

Dear Hamish,

We, Northrop Consulting Engineers, being professional engineers, certify that structural drawings tabulated in Appendix A below were based on architectural drawings listed on drawing 'RAC-NBRS-ZZ-ZZ-DR-A-0001 [2]' dated 12 May 2025, and were prepared:

- Under the supervision of a professional structural engineer certified under NER; and
- In accordance with the relevant structural requirements of the Building Code of Australia; and
- In accordance with the relevant structural requirements of the Educations Facilities Standards and Guidelines (EFSG 1.0)

Furthermore, all structures as documented on Northrop's drawings have been designed to withstand forces associated with the Probable Maximum Flood (PMF). We note that there are numerous dominant openings around the perimeter of each building which consist of large expanses of glazing infill. The structural design considers these dominant openings, in regards to a PMF event, to be open with the flood passing through the building and not imposing associated loads onto the structure nor effecting each buildings structural integrity.

We note that this statement excludes the proprietary glasshouse structure as Northrop has not received sufficient information regarding the structure of this glasshouse as of REF submission. As such, we cannot make any assessment on whether this proprietary structure can withstand flood force.

This certificate shall not be construed as relieving any other party of their responsibility.

Yours sincerely,



Rory Dale

Senior Structural Engineer, Principal
BE Civil (Hons) MIEAust CPEng

On behalf of Northrop Consulting Engineers Pty.
Ltd.

Appendix A – Structural Drawings Current as of 16/5/2025

Drawing Number	Revision	Title
RAC-NRE-ZZ-DR-S-0000	A	COVER SHEET AND DRAWING LIST
RAC-NRE-ZZ-DR-S-0001	A	SPECIFICATION NOTES - SHEET 1
RAC-NRE-ZZ-DR-S-0002	A	SPECIFICATION NOTES - SHEET 2
RAC-NRE-ZZ-DR-S-0003	A	SPECIFICATION NOTES - SHEET 3
RAC-NRE-ZZ-DR-S-0004	A	SPECIFICATION NOTES - SHEET 4
RAC-NRE-ZZ-DR-S-0101	2	SITE LOCATION PLAN
RAC-NRE-GF-DR-S-0201	A	BLOCK A – GROUND FLOOR SLAB PLAN
RAC-NRE-GF-DR-S-0202	A	BLOCK B – GROUND FLOOR SLAB PLAN
RAC-NRE-GF-DR-S-0203	A	BLOCK C – GROUND FLOOR SLAB PLAN
RAC-NRE-GF-DR-S-0204	A	BLOCK D – GROUND FLOOR SLAB PLAN
RAC-NRE-GF-DR-S-0205	A	BLOCK E – GROUND FLOOR SLAB PLAN
RAC-NRE-GF-DR-S-0206	A	BLOCK F – GROUND FLOOR SLAB PLAN
RAC-NRE-GF-DR-S-0206	2	ABORIGINAL ENTERPRISE COLA PLANS AND ELEVATIONS
RAC-NRE-ZZ-DR-S-0301	A	BLOCK A – ROOF FRAMING PLAN
RAC-NRE-ZZ-DR-S-0302	A	BLOCK B – ROOF FRAMING PLAN
RAC-NRE-ZZ-DR-S-0303	A	BLOCK C – ROOF FRAMING PLAN
RAC-NRE-ZZ-DR-S-0304	A	BLOCK D – ROOF FRAMING PLAN
RAC-NRE-ZZ-DR-S-0305	A	BLOCK E – ROOF FRAMING PLAN
RAC-NRE-ZZ-DR-S-0306	A	BLOCK F – ROOF FRAMING PLAN
RAC-NRE-ZZ-DR-S-0307	A	BLOCK F WALKWAY AND COLA – ROOF FRAMING PLAN
RAC-NRE-RF-DR-S-0312	1	BLOCK B – ELEVATION WALL FRAMING SHEET 1
RAC-NRE-ZZ-DR-S-0316	3	BLOCK F – ELEVATION WALL FRAMING SHEET 1

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RAC-NRE-ZZ-DR-S-0411	1	BLOCK F – STEEL DETAILS – SHEET 1
RAC-NRE-ZZ-DR-S-0412	1	BLOCK F – STEEL DETAILS – SHEET 2
RAC-NRE-ZZ-DR-S-0421	1	TYPICAL BLOCK WALL DETAILS – SHEET 1

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