AES Ref: 25-213

1st November 2025

STRUCTURAL STABILITY AND STORMWATER MANAGEMENT STATEMENT

Project: Alterations and Additions to an Existing Residential & Commercial Townhouse

Address: 130 Swan Street, Morpeth, 2321

Prepared for: Sharon King

Dear Sharon,

This statement has been prepared in support of the Development Application for the replacement of the existing sandstone retaining wall located along the northern boundary of the property at 130 Swan Street, Morpeth NSW, adjacent to the Hunter River.

Structural Stability of Riverbank Retaining Wall

The existing structure is a dry-stacked sandstone mass gravity wall, approximately 1.5m – 3m high, forming the upper riverbank edge of the property. The proposed works involve a 'like-for-like' replacement of the existing wall using sandstone logs of similar configuration, generally five courses high, reinstated on the same footprint and alignment.

Due to the age and poor condition of the existing wall, and to improve the stability of the ground above the wall, the proposed wall will be approximately 5 courses high (2.5m) of consistent height across the width of the property, though no change is proposed for the general geometry or surcharge loading. Consideration will be given to the interface of the new wall with the adjacent property.

Based on my inspection of the site and review of the proposed works, I am satisfied that:

- The replacement wall will maintain or improve the existing level of structural stability;
- The works will not adversely affect the stability of the adjoining land or the riverbank; and
- The proposed wall, when constructed in accordance with engineering principles and AS 4678 – Earth-Retaining Structures, will provide a durable and stable retaining system.

It is recommended that construction is to be carried out by a suitably qualified retaining wall contractor; foundation bearing and footing design, drainage design, and erosion control will be documented by AES.

Stormwater Management

A site inspection was undertaken to assess existing surface drainage and potential overland flow paths. No significant stormwater or overland flow issues were identified that would affect the proposed works or adjoining properties.

All stormwater runoff from the site will be managed and controlled in accordance with:

• AS/NZS 3500.3 – Plumbing and Drainage: Stormwater Drainage, and

• Maitland City Council's Stormwater Drainage Design Code and relevant development controls.

A stormwater management plan will be prepared as part of the detailed design documentation to ensure all flows are conveyed to lawful points of discharge and that there is no adverse impact on neighbouring properties or the public drainage system.

Based on the site conditions and proposed scope, I am satisfied that stormwater from the development can be adequately managed in accordance with relevant Australian Standards and Council requirements.

Engineer's Declaration

We hereby certify that:

• The proposed like-for-like replacement of the existing sandstone retaining wall is structurally acceptable and will maintain site stability; and

• The proposed development will not adversely affect local stormwater conditions or overland flow paths, with stormwater to be controlled in accordance with the relevant standards and council requirements.

For and on behalf of **Architectural Engineering Solutions Pty Ltd,**

Warm regards,

CHRIS COPPARD
MIEAust CPEng NER
SENIOR STRUCTURAL ENGINEER | DIRECTOR
NEWCASTLE – CENTRAL COAST – NORTHERN BEACHES