

Our Reference: 1814

25 February 2020

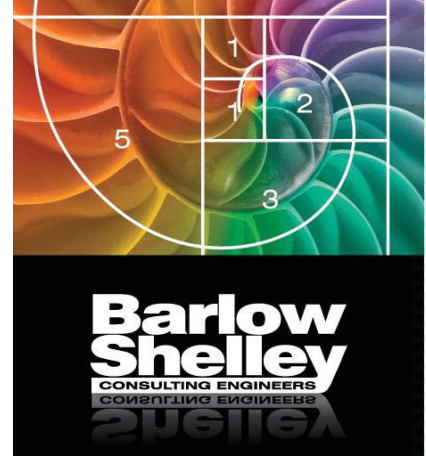
Habitat Development Group Pty Ltd  
Mark Aldridge  
Level 4, 33 Remora Rd  
Hamilton, QLD 4007  
mark@habdev.com

Attention: Mark Aldridge

**PLANS AND DOCUMENTS  
referred to in the PDA  
DEVELOPMENT APPROVAL**

**Approval no:** DEV2019/1010

**Date:** 17 March 2020



p: 07 5443 8285  
e: office@barlowshelley.com.au  
a: PO Box 899,  
Maroochydore QLD 4558  
w: www.barlowshelley.com.au  
abn: 89 215 591 077

**PROPOSED MIXED USE DEVELOPMENT  
AT MUNDOO BOULEVARD, MAROOCHYDORE  
FOR HABITAT DEVELOPMENT GROUP PTY LTD  
BASEMENT WATERPROOFING BELOW DEFINED FLOOD LEVEL**

Dear Mark,

In relation to the above proposed development at Lot 130 on SP305312, there are two basements proposed by the design.

These basements are currently situated below the Defined Flood Event levels as defined in the Sunshine Coast Regional Council flood certificate Cer18/10956.

It is noted that the basements are effectively bunded by design, but some measures will need to be instigated during construction to prevent water ingress during extended periods of inundation.

The attached waterproofing details provided by the structural engineer (Projex Partners – Jeffrey Roulston) are deemed adequate and suitable to maintain a waterproof basement.

The Queensland Development Code Mandatory Part 3.5 – Construction of Buildings in Flood Hazard Areas requires that building Utilities are located above the Defined Flood Level to be considered as an acceptable solution.

The fire pump room is considered a utility and essential service and is proposed to be located in the basement under the Eastern side of the site; and as such is below the Defined Flood Level. This is not an acceptable solution from the QDC. However as the basements are intended to be constructed as fully watertight and the basement entrances to the fire pump room are constructed to a minimum finished floor level of 3.9m AHD (equivalent to the minimum habitable floor level) then the basement is considered to achieve appropriate flood immunity to satisfy the intent of the QDC which is to ensure operational capacity during the defined flood event.

If you wish to discuss this matter further, please contact Daniel Kenna on (07) 5443 8285.

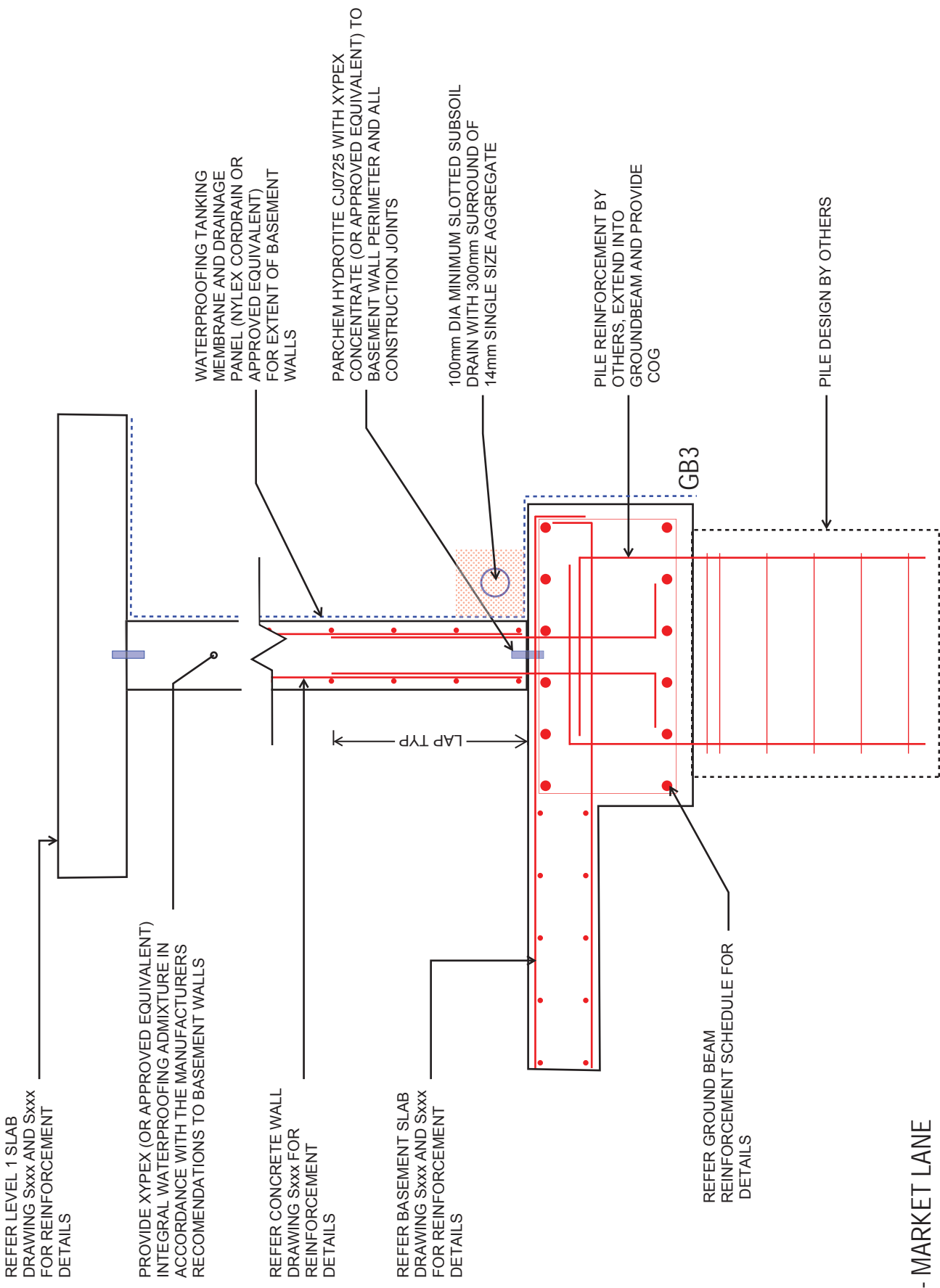
Yours sincerely,

**DANIEL KENNA – Senior Engineer**

BEng, CPEng, MIEAust, NER, RPEQ (15522)

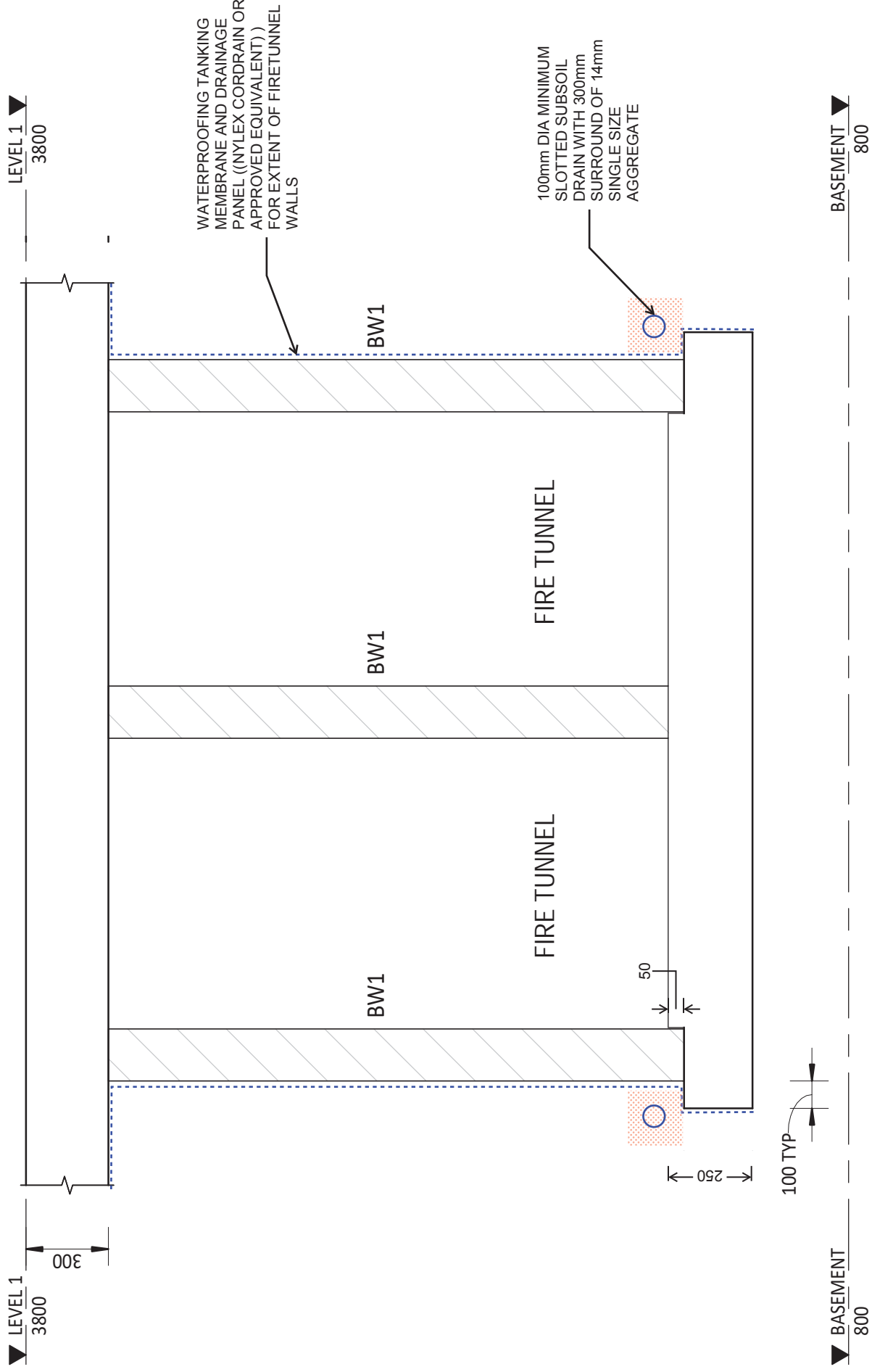
For and behalf of;

**BARLOW SHELLEY CONSULTING ENGINEERS (AUST) PTY LTD**



419-001 - MARKET LANE  
25-02-2020

BASEMENT WALL SECTION - WATERPROOFING APPROACH



419-001 - MARKET LANE  
25-02-2020  
FIRE TUNNEL SECTION - WATERPROOFING APPROACH