

03/06/2020

Crown Certifier  
 Blackett Maguire + Goldsmith Pty Ltd  
 PO Box 167  
 BROADWAY NSW 2007

Dear Sir,

**Re: BOWRAL & DISTRICT HOSPITAL PROJECT INCLUDING MEDICAL GAS BOTTLE STORE RELOCATION**

**CERTIFICATE OF DESIGN – HYDRAULIC SERVICES, FIRE HYDRANTS & FIRE HOSE REELS**

**SUBJECT PREMISES: 97-103 BOWRAL STREET, BOWRAL**

Pursuant to the provisions of **Clause A2.2 of the Building Code of Australia**, I hereby certify that the above design is in accordance with normal engineering practice and meets the requirements of the Building Code of Australia (2016), fire safety engineering report (SHIF0105), the Environmental Planning and Assessment Regulation, relevant Australian Standards and conditions of the Planning Consent/ REF: SSD8980. The design is in accordance with the following:

- AS3500.1:2015 Water Service
- AS3500.2:2015 Sanitary Plumbing and Drainage
- AS3500.3:2015 Stormwater Drainage
- AS3500.4:2015 Heated Water Services
- AS5601-2004 Gas Installations
- AS2419.1-2005 Fire Hydrant Installations
- AS2441-2005 Installation of Fire Hose Reels
- Fire Engineering report SHIF0105 (FER-REV C)
- The relevant clauses of the BCA 2016 Section J, E1.3 and E1.4
- JV3- V3.1 FEBQ V5 19/03/2020

I am an appropriately qualified and competent person and as such can certify that the design and performance of the design systems comply with the above and which are detailed on the following drawings.

<b>Drawing Number</b>		<b>Revision</b>	<b>Date</b>
130443-AXS-HY-DWG-100	HYDRAULIC SERVICES IN GROUND	G	21/11/19
130443-AXS-HY-DWG-101	HYDRAULIC SERVICES GROUND FLOOR DRAINAGE	C	21/11/19
130443-AXS-HY-DWG-102	HYDRAULIC SERVICES LEVEL 1 DRAINAGE	07	21/11/19
130443-AXS-HY-DWG-103	HYDRAULIC SERVICES LEVEL 2 DRAINAGE	03	21/11/19
130443-AXS-HY-DWG-104	HYDRAULIC SERVICES LEVEL 3 DRAINAGE	B	09/03/20
130443-AXS-HY-DWG-200	HYDRAULIC SERVICES GROUND FLOOR WATER & GAS	D	05/02/20
130443-AXS-HY-DWG-201	HYDRAULIC SERVICES LEVEL 1 WATER & GAS	06	21/11/19
130443-AXS-HY-DWG-202	HYDRAULIC SERVICES LEVEL 2 WATER & GAS	B	05/02/20
130443-AXS-HY-DWG-203	HYDRAULIC SERVICES LEVEL 3 WATER & GAS	02	28/11/19
130443-AXS-HY-DWG-500	HYDRAULIC SERVICES DETAIL SHEET 1	-	

130443-AXS-HY-DWG-501	HYDRAULIC SERVICES DETAIL SHEET 2	-	
130443-AXS-HY-DWG-502	HYDRAULIC SERVICES DETAIL SHEET 3	-	
130443-AXS-HY-DWG-600	HYDRAULIC SERVICES SEWERAGE SCHEMATIC	-	
130443-AXS-HY-DWG-601	HYDRAULIC SERVICES COLD WATER	-	
130443-AXS-HY-DWG-602	HYDRAULIC SERVICES HOT WATER	-	
130443-AXS-HY-DWG-603	HYDRAULIC SERVICES GAS SCHEMATIC	-	
130443-AXS-HY-DWG-604	HYDRAULIC SERVICES FIRE HYDRANT SCHEMATIC	-	
130443-AXS-HY-DWG-700	HYDRAULIC SERVICES GROUND LEVEL PENETRATION	E	15/07/19
130443-AXS-HY-DWG-701	HYDRAULIC SERVICES LEVEL 1 PENETRATION	C	06/11/19
130443-AXS-HY-DWG-702	HYDRAULIC SERVICES LEVEL 2 PENETRATION	B	06/11/19
130443-AXS-HY-DWG-703	HYDRAULIC SERVICES LEVEL 3 PENETRATION	D	22/01/20
130443-AXS-HY-DWG-710	HYDRAULIC SERVICES GROUND LEVEL CAST IN PENETRATION	A	01/07/19
130443-AXS-HY-DWG-711	LEVEL 1 CAST IN PENETRATION	D	06/11/19
130443-AXS-HY-DWG-712	LEVEL 2 CAST IN PENETRATION		
130443-AXS-HY-DWG-713	LEVEL 3 CAST IN PENETRATION	-	

I possess Indemnity Insurance to the satisfaction of the building owner or my principal.

**Designer:** Grant McMurray  
**Qualifications:** Diploma of Hydraulic Services Design  
**Address :** L4, 48 Hunter St, Sydney, NSW, 2000  
**Daytime No.:** 0448 306 257  
**Email:** [grant.mcmurray@axiscs.com.au](mailto:grant.mcmurray@axiscs.com.au)  
**Employer:** AXIS Consulting Services

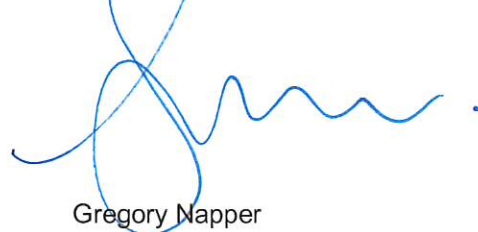
**Verifier:** Gregory Napper  
**Qualifications:** AMIE Aust CEngA NER Member No. 3436846  
**Address :** L4, 48 Hunter St, Sydney, NSW, 2000  
**Daytime No.:** 0418 616 652  
**Email:** [greg.napper@axiscs.com.au](mailto:greg.napper@axiscs.com.au)  
**Employer:** AXIS Consulting Services

Yours faithfully,



Grant McMurray  
 Lead Hydraulic Designer

Yours faithfully,



Gregory Napper  
 National Technical Principal