



AJ Whipps
Consulting
Group

Where ingenuity flows

State Significant Development Application Report



University of Wollongong

*Western Building – Social Sciences & Law
Humanities & Arts Building*

20170129

University of Wollongong

Western Building – Social Sciences & Law Humanities and Arts Building

Issue P1 - Preliminary
Date 25 September 2017
Job No 20170129

Architect **Hassell Studios**
Level 2, Pier 8/9
23 Hickson Road
Sydney NSW 2000
P: (02) 9273 2300

Project Manager **Donald Cant Watts Corke**
1/14 Martin Place
Sydney NSW 2000
P: (02) 9922 4500

Document History

Revision	Date	Amendments
P1	04/10/17	Preliminary Issue

INDEX

1	Introduction	4
1.1	Description of Project	4
1.2	Purpose of Report	4
1.3	Infrastructure Networks reviewed	4
2	Infrastructure Assessment	5
2.1	Natural Gas	5
2.2	Sanitary (Sewer) Drainage.....	6
2.3	Potable (Consumable) water supply network.....	7
2.4	Sprinkler Network	8
2.5	Fire Hydrant System.....	9
3	Summary.....	10

1 Introduction

1.1 Description of Project

The new Western Building will be a landmark development for the University of Wollongong (UoW) campus. It will be located adjacent the campus Ring Road at the western end of the campus. The proposed project will accommodate the diverse functions of The Arts English and Media (TAEM) School and the Health and Society (HAS) School and the School of Geography and Sustainable Communities (SGSC) into a collaborative and engaging hub that will support the ambitions of next generation research and learning. Functions accommodated include specialist teaching spaces, academic and professional staff workplace, informal collaboration spaces as well as other support spaces. The proposed building will be circa 11,000sqm gross floor area across four levels plus a plant level.

1.2 Purpose of Report

The purpose of this report is to identify supporting site infrastructure networks relative to the above mentioned project.

This report has been based on information that was made available to us at the the time of preparation.

This report relates solely to hydraulic services as nominated below.

1.3 Infrastructure Networks reviewed

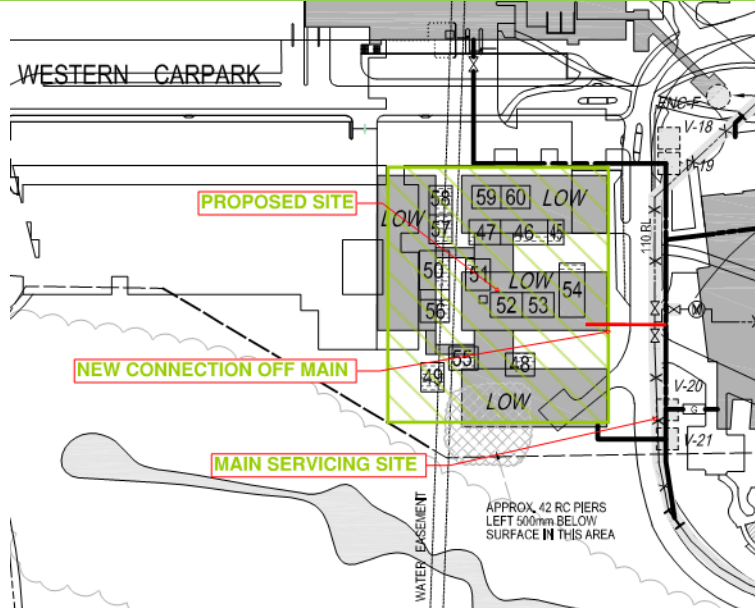
The following is a list of infrastructure networks addressed by this report:

- ◆ Natural Gas Service Network
- ◆ Sanitary Drainage Network
- ◆ Potable (Consumable) water supply network
- ◆ Site Fire Sprinkler Supply System
- ◆ Site Fire Hydrant System

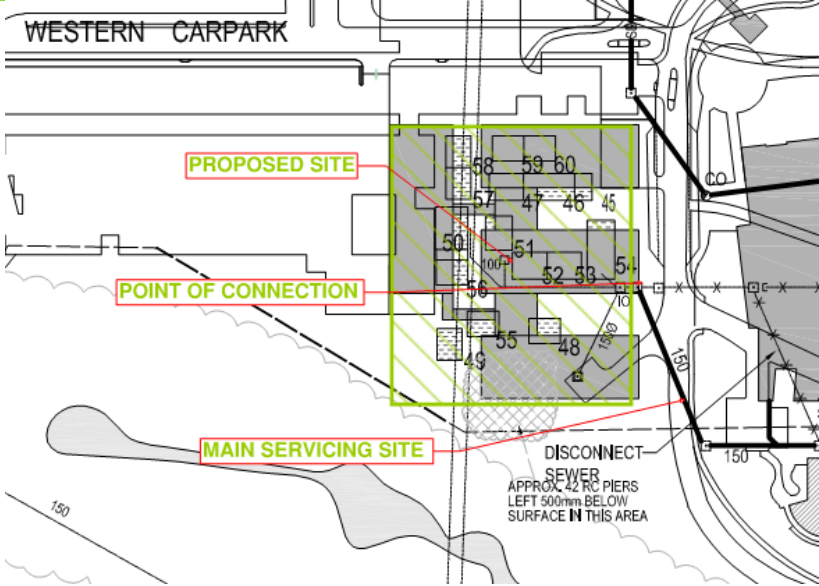


2 Infrastructure Assessment

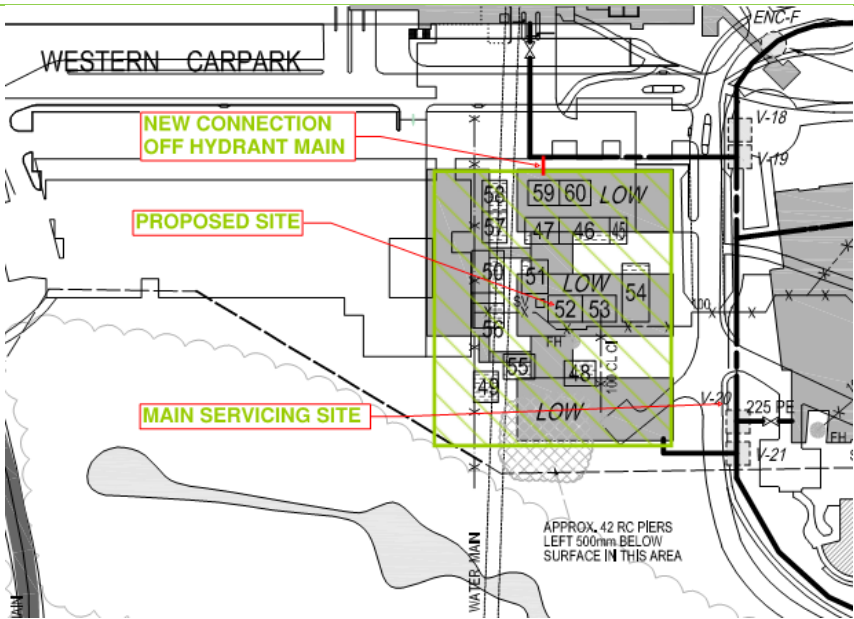
2.1 Natural Gas

Natural Gas	
Location	An internal University owned gas main is available for connection to the site which traverses the internal access road located to the east of the site
Proposed Connection	It is proposed to install a new site service with connection to the existing site main
Existing Capacity	It has been assumed the proposed development has been accounted for in the previous master planning exercise. Based on the above noted we have assumed that the existing site main has redundancy enough to service the proposed development
Site Assessment	Based on the above noted assumption, confirmation of site master planned capacities is required to provide assurance that site capacities limits are not exceeded
Infrastructure Map	 The map illustrates the gas infrastructure layout. A 'WESTERN CARPARK' is shown at the top left. A 'PROPOSED SITE' is highlighted with a red dashed line. A 'NEW CONNECTION OFF MAIN' is indicated by a red line. A 'MAIN SERVICING SITE' is marked with a red dot. The map also shows various numbered points (e.g., 59, 60, 47, 46, 45, 50, 51, 52, 53, 54, 55, 48, 49) and labels like 'LOW'. A note at the bottom right states: 'APPROX. 42 RC PIERS LEFT 500mm BELOW SURFACE IN THIS AREA'. A 'WATER EASEMENT' is also labeled.

2.2 Sanitary (Sewer) Drainage

Sanitary Drainage	
Location	The site is currently served by an existing 150mm main. The connection point for this main is located to the eastern side of the site. We understand the existing infrastructure is adequately sized to serve the proposed project.
Direction of Flow	From the eastern side of the sewerage drain is directed in a South Westerly direction before turning East connecting to the greater site system
Infrastructure Map	

2.4 Sprinkler Network

Sprinkler Network	
Location	An internal University owned hydrant main is available for connection to the site which traverses the internal access road located to the east of the site
Proposed Connection	It is proposed to install a new site service with connection to the existing site hydrant main
Sprinkler Booster Connection	It is proposed to install a new sprinkler booster valve on the North Western corner of the proposed building
Existing Capacity	We understand the existing fire hydrant service has flow and pressures suitable for the proposed development
	

3 Summary

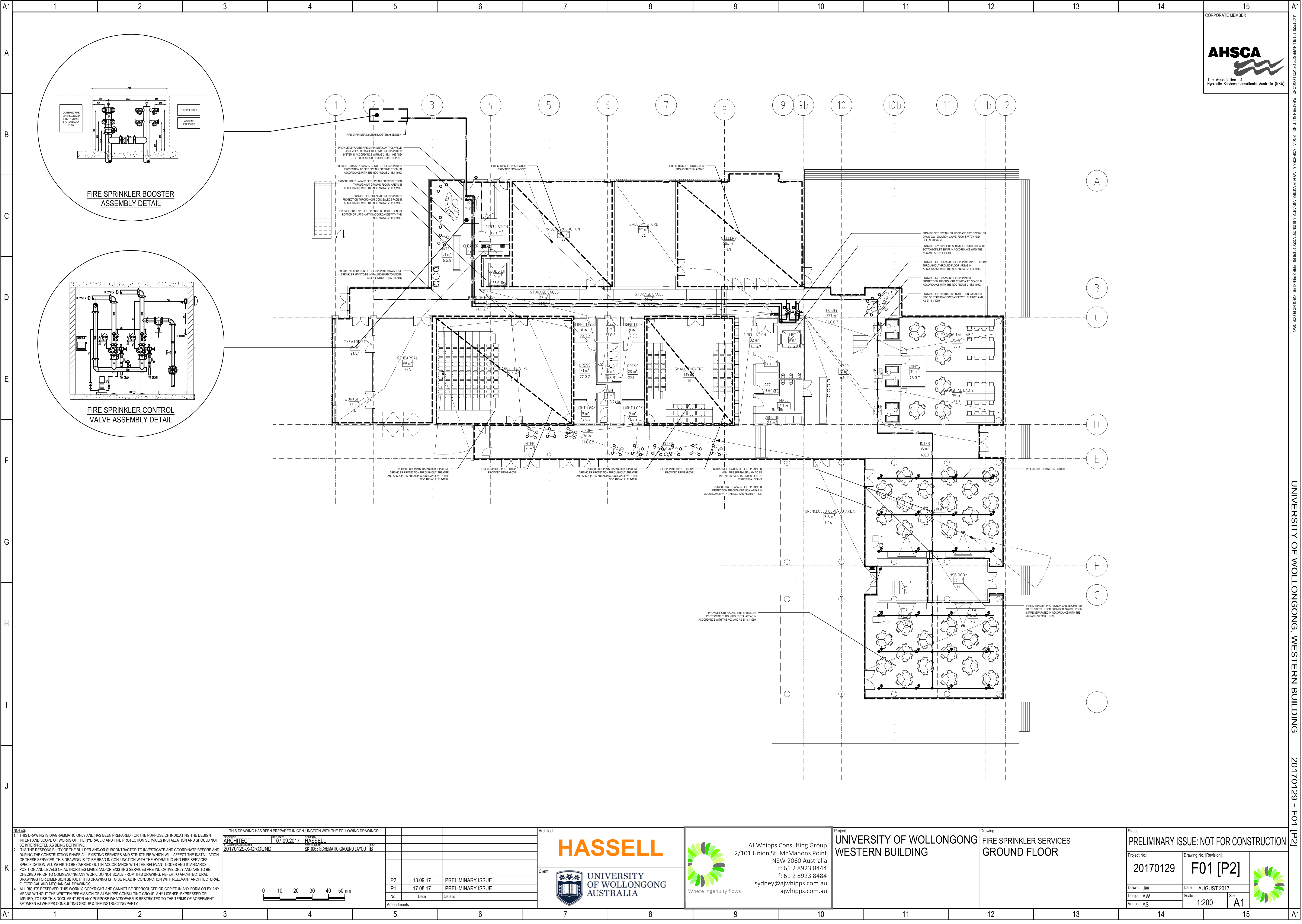
In Summary the site hydraulic infrastructure appears to be suitable to service the proposed project subject of the following items:

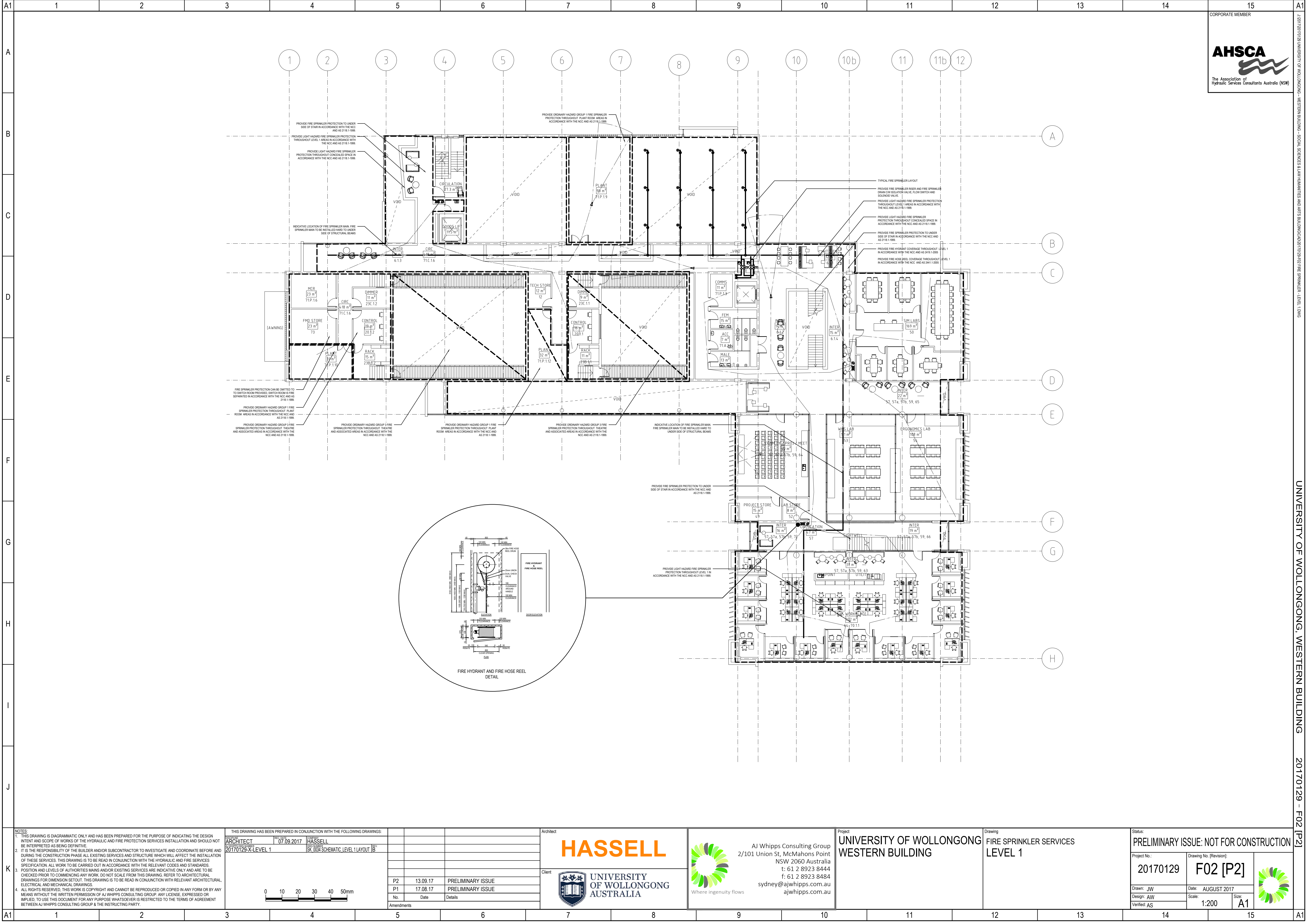
- ♦ Site wide gas service master planning load confirmation
- ♦ Fire Engineering advice regarding compliancy of fire hydrant booster location

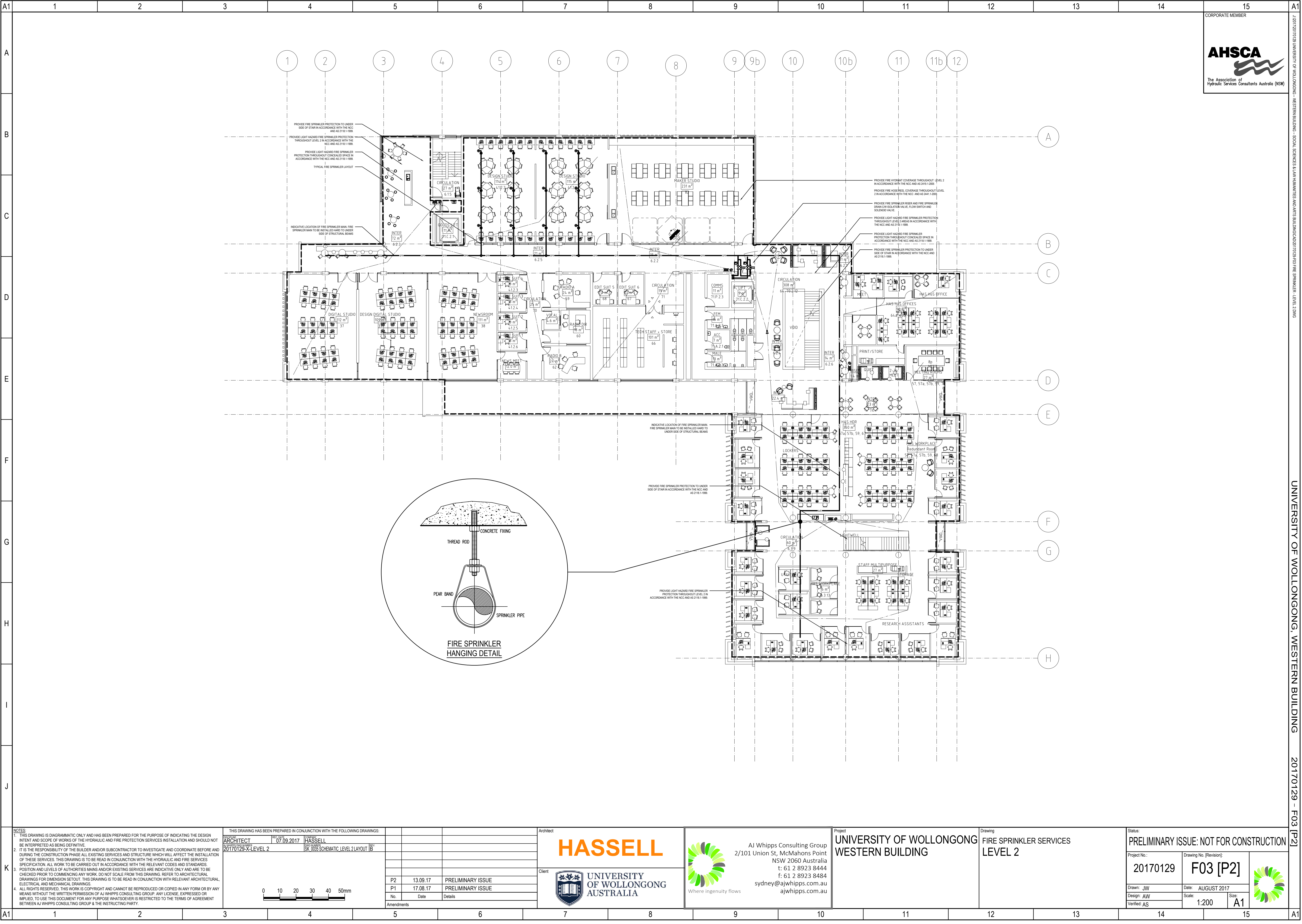
Prepared and Authorised by:
AJ Whipps Consulting Group

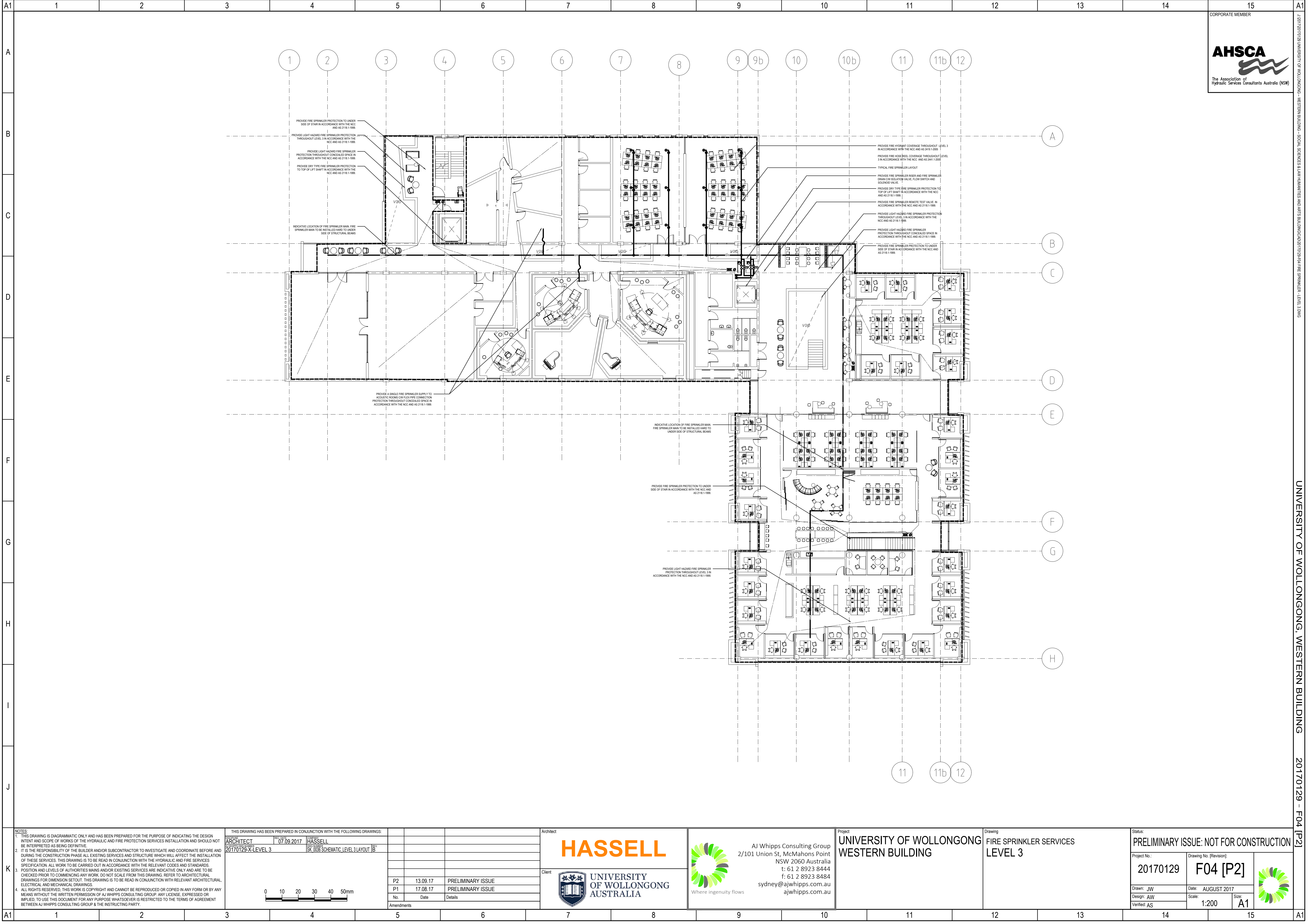


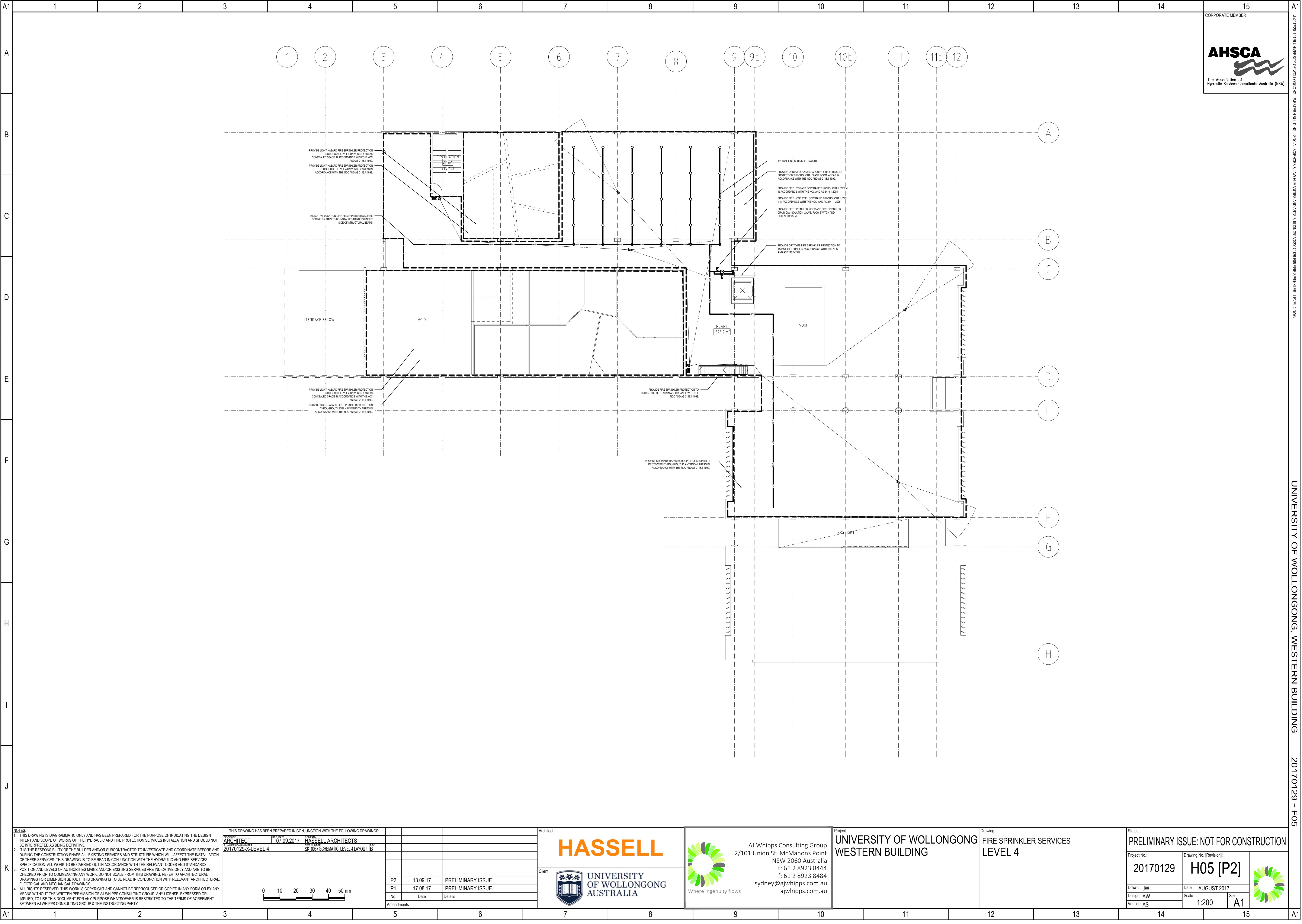
Burt de Keyzer
Associate











2/101 UNION ST, MCMAHONS POINT, WESTERN BUILDING - SOCIAL SCIENCES & ARTS BUILDING 20170129 - FIRE SPRINKLER - LEVEL 4.DWG

UNIVERSITY OF WOLLONGONG, WESTERN BUILDING 20170129 - F05

NOTES: 1. THIS DRAWING IS DIAGRAMMATIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF WORKS OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE. 2. IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE AND DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE SERVICES SPECIFICATION. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CODES AND STANDARDS. POSITION AND LEVELS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE CHECKED PRIOR TO COMMENCING ANY WORK. DO NOT SCALE FROM THIS DRAWING. REFERS TO ARCHITECTURAL DRAWINGS FOR DIMENSION SETOUT. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. 3. ALL RIGHTS RESERVED. THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF AJ WHIPPS CONSULTING GROUP. ANY LICENSE, EXPRESSED OR IMPLIED, TO USE THIS DOCUMENT FOR ANY PURPOSE WHATSOEVER IS RESTRICTED TO THE TERMS OF AGREEMENT BETWEEN AJ WHIPPS CONSULTING GROUP & THE INSTRUCTING PARTY.	THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS: ARCHITECT: 07.09.2017 DESIGNER: 07.09.2017 CHECKED: 07.09.2017 DRAWN: 07.09.2017 PROJECT: 20170129-X-LEVEL 4 CLIENT: HASSELL ARCHITECTS PROJECT: SK 0037 SCHEMATIC LEVEL 4 LAYOUT IB	Architect HASSELL Client UNIVERSITY OF WOLLONGONG AUSTRALIA	Project UNIVERSITY OF WOLLONGONG WESTERN BUILDING	Drawing FIRE SPRINKLER SERVICES LEVEL 4	Status: PRELIMINARY ISSUE: NOT FOR CONSTRUCTION
0 10 20 30 40 50mm	P2 13.09.17 PRELIMINARY ISSUE P1 17.08.17 PRELIMINARY ISSUE No Date Details	Amendments	Project No.: 20170129 Drawing No. [Revision]: H05 [P2] Design: JW Verified: AS	Date: AUGUST 2017 Scale: 1:200 Size: A1	

Where ingenuity flows

NOT TO SCALE

NOTES:

THIS DRAWING IS DIAGRAMMATIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF THE WORK OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE.

THE CONSULTANT HAS BEEN REQUESTED BY THE OWNER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE PROTECTION SPECIFICATIONS. THERE WILL BE NO WORK BEYOND THE SPECIFICATIONS.

THE POSITION AND LEVELS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE USED FOR CONSIDERING THE PROPOSED INSTALLATION OF THE NEW SERVICES. THE EXISTING SERVICES DRAWINGS FOR DIMENSION SETTING. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.

THIS DRAWING IS PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF THE WORK. IT DOES NOT MEANS WITHOUT THE WRITTEN PERMISSION OF AJ WHIPPS CONSULTING GROUP. ANY LICENSE, EXPRESSED OR IMPLIED, TO USE THIS DOCUMENT FOR ANY PURPOSE WHATSOEVER IS RESTRICTED TO THE TERMS OF AGREEMENT BETWEEN THE CLIENT AND AJ WHIPPS CONSULTING GROUP.

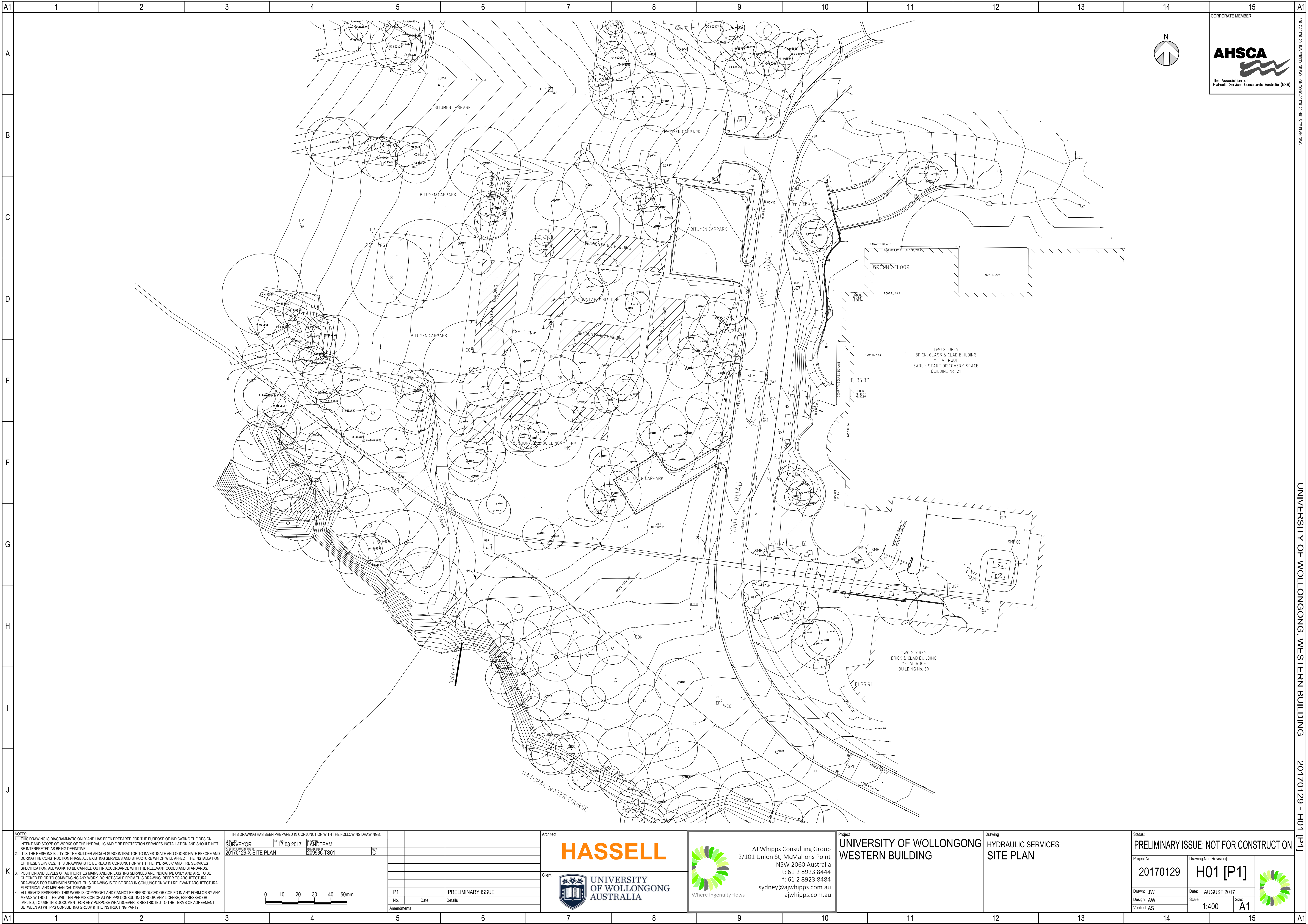
0 10 20 30 40 50mm

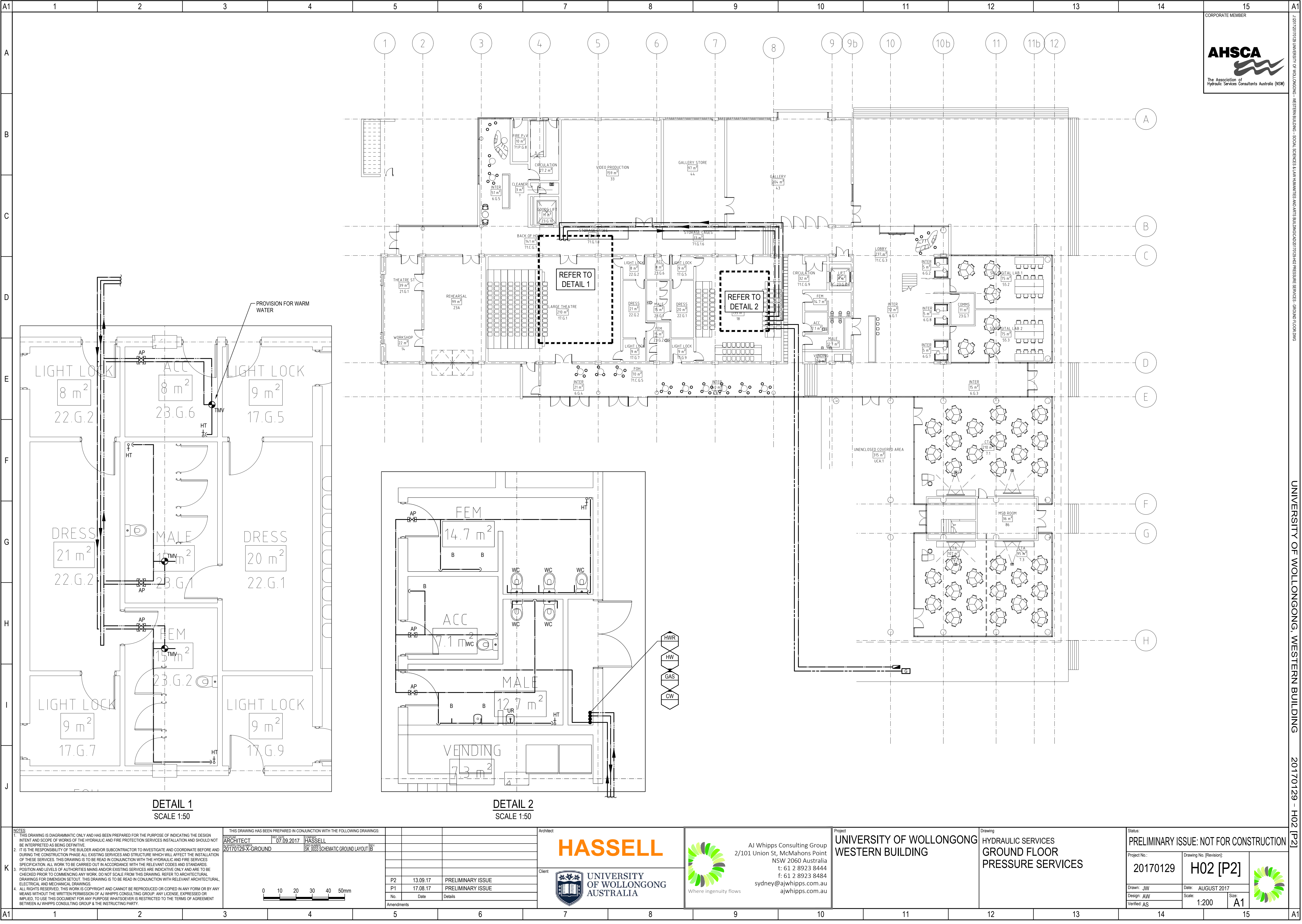
P1	17.08.17	PRELIMINARY ISSUE
No.	Date	Details
Amendments		

HASSELL

 UNIVERSITY
OF WOLLONGONG
AUSTRALIA







NOTES:

1. THIS DRAWING IS DIAGNOSTIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF WORKS OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE.

2. IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE AND DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE SERVICES SPECIFICATION. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CODES AND STANDARDS.

3. POSITION AND LEVELS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE CHECKED PRIOR TO COMMENCING ANY WORK. DO NOT SCALE FROM THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION SETOUT. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.

4. ALL RIGHTS RESERVED. THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF AJ WHIPPS CONSULTING GROUP. ANY LICENSE, EXPRESSED OR IMPLIED, TO USE THIS DOCUMENT FOR ANY PURPOSE WHATSOEVER IS RESTRICTED TO THE TERMS OF AGREEMENT BETWEEN AJ WHIPPS CONSULTING GROUP & THE INSTRUCTING PARTY.

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

ARCHITECT

DATE

DRAWN BY

20170129-X-GROUND

07.09.2017

HASSELL

SK 0033 SCHEMATIC GROUND LAYOUT [B]

010000

0

10

20

30

40

50mm

P2

13.09.17

PRELIMINARY ISSUE

P1

17.08.17

PRELIMINARY ISSUE

No

Date

Details

Amendments

Architect

HASSELL

Client

UNIVERSITY OF WOLLONGONG AUSTRALIA

Where ingenuity flows

Project

AJ Whipps Consulting Group

2/101 Union St, McMahons Group

NSW 2060 Australia

t: 61 2 8923 8444

f: 61 2 8923 8484

sydney@ajwhipps.com.au

ajwhipps.com.au

UNIVERSITY OF WOLLONGONG WESTERN BUILDING

Drawing

HYDRAULIC SERVICES

GROUND FLOOR

PRESSURE SERVICES

Status:

PRELIMINARY ISSUE: NOT FOR CONSTRUCTION

Project No.:

20170129

Drawing No. (Revision):

H02 [P2]

Drawn: JW

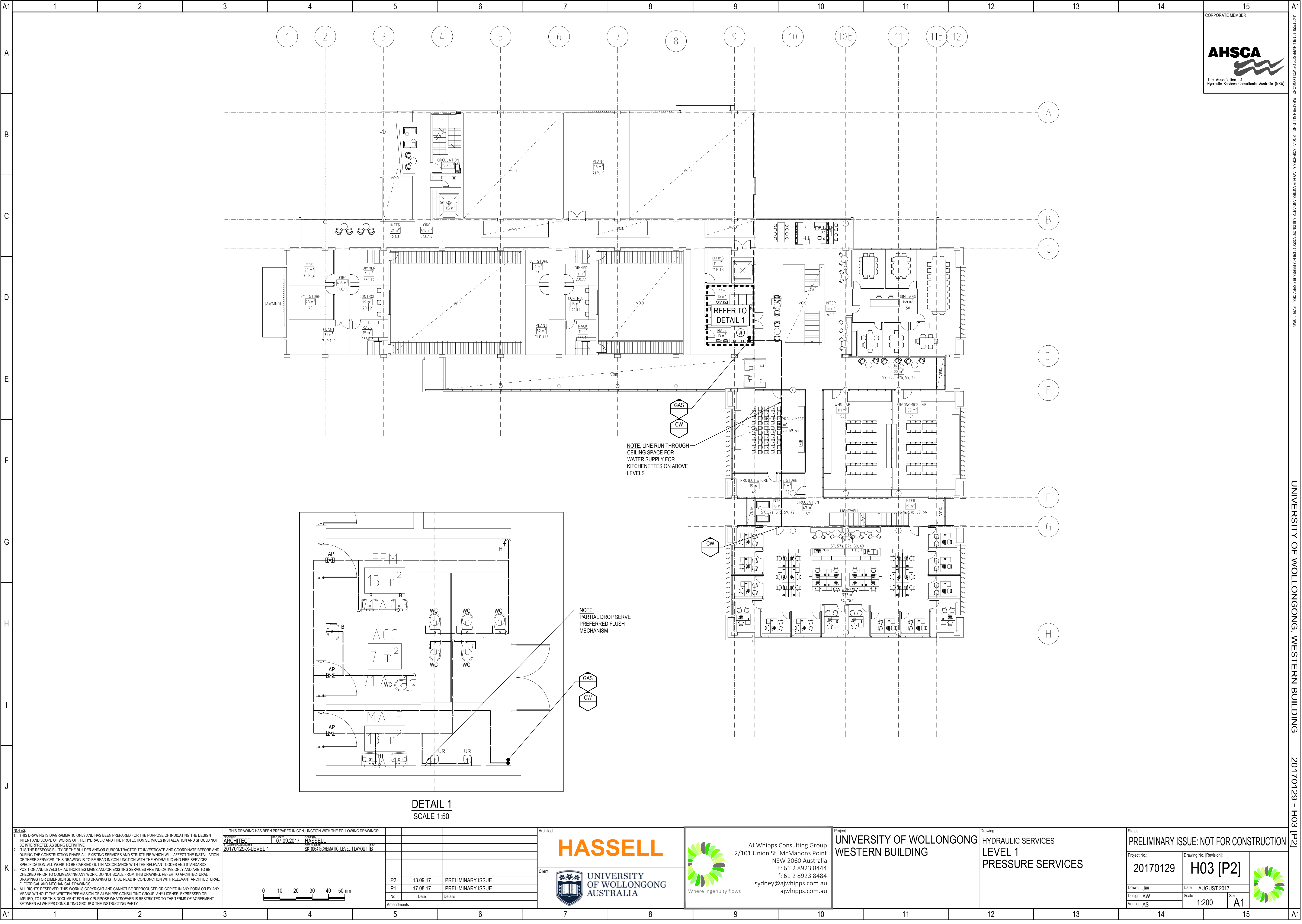
Design: AW

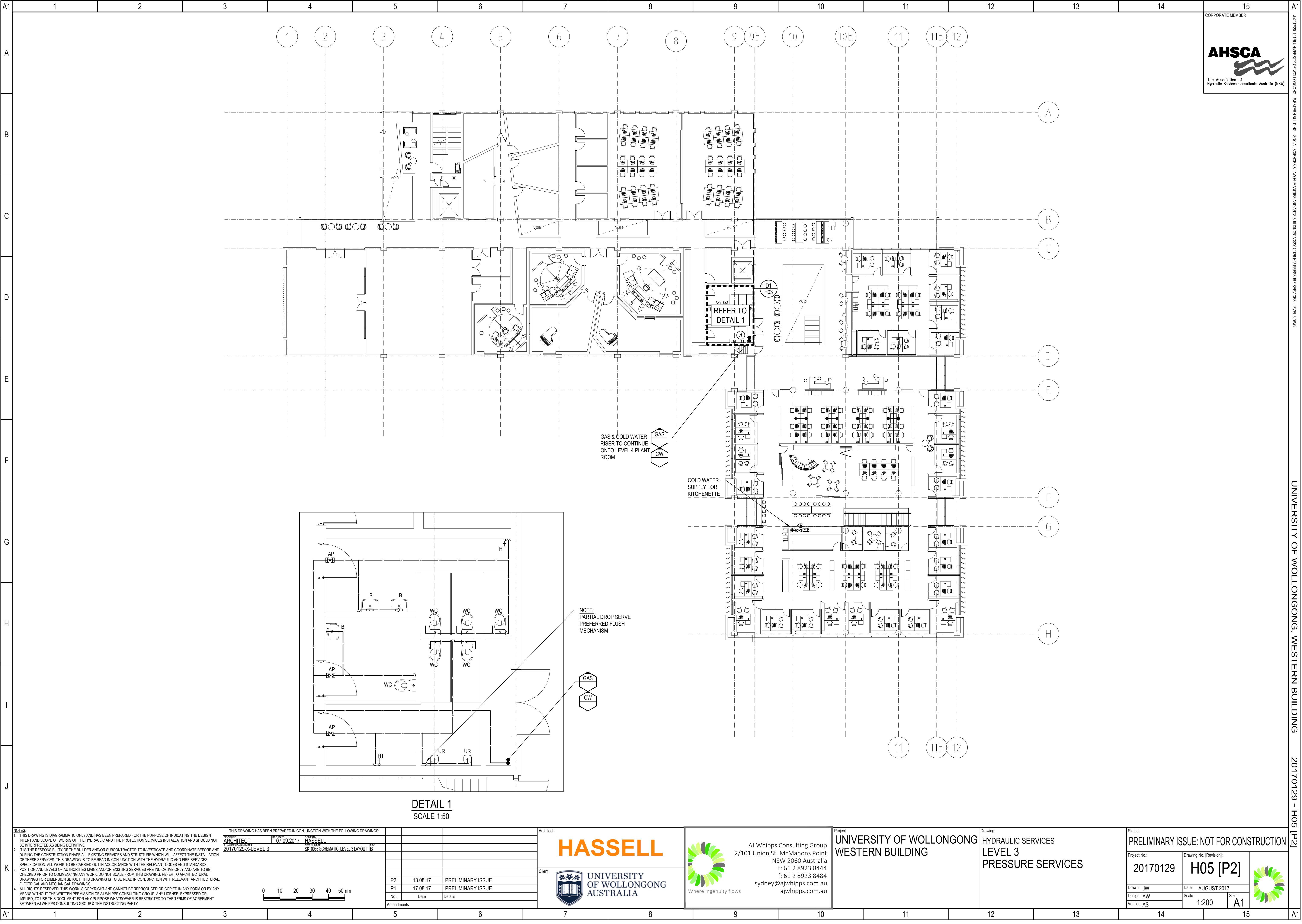
Verified: AS

Date: AUGUST 2017

Scale: 1:200

Size: A1



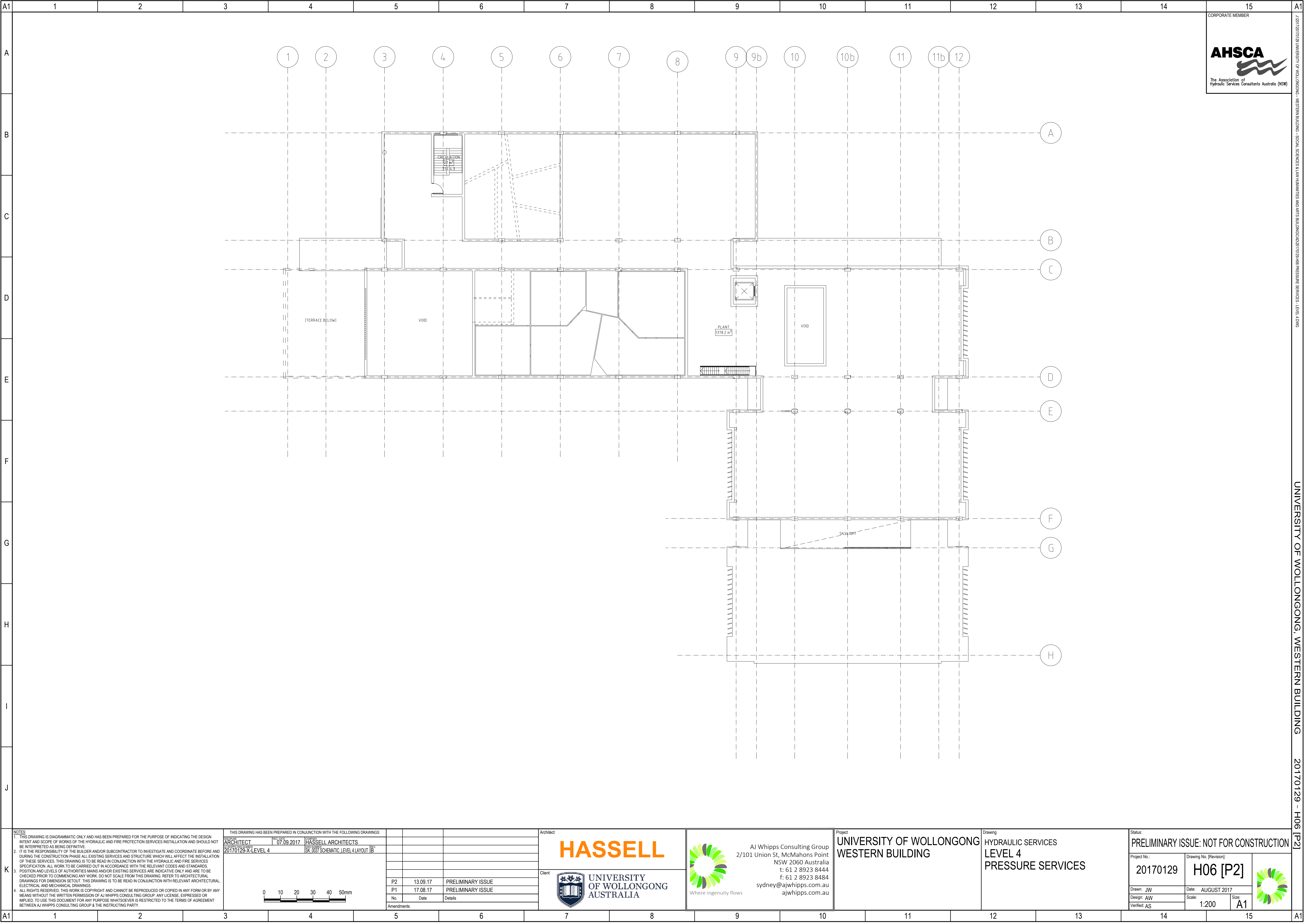


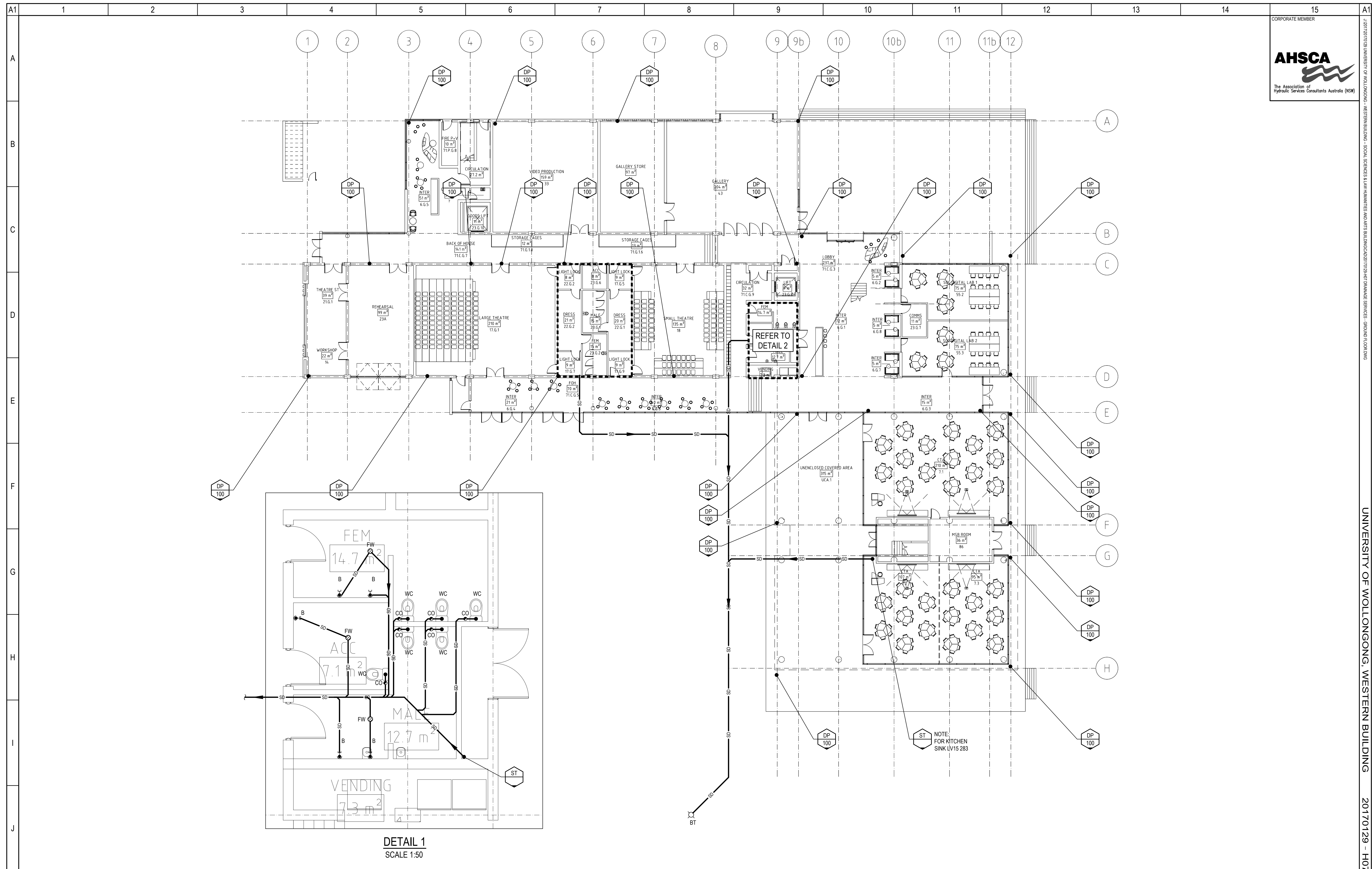
UNIVERSITY OF WOLLONGONG - WESTERN BUILDING - SOCIAL SERVICES & LEARNER HALLWAYS AND ARTS BUILDING/20170129-H05 [P2]

UNIVERSITY OF WOLLONGONG - WESTERN BUILDING

20170129 - H05 [P2]

NOTES: 1. THIS DRAWING IS DIAGRAMMATIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF WORKS OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE. 2. IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE AND DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE SERVICES SPECIFICATION. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CODES AND STANDARDS. POSITION AND LEVELS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE CHECKED PRIOR TO COMMENCING ANY WORK. DO NOT SCALE FROM THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION SETOUT. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. 3. ALL RIGHTS RESERVED. THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF AJ WHIPPS CONSULTING GROUP. ANY LICENSE, EXPRESSED OR IMPLIED, TO USE THIS DOCUMENT FOR ANY PURPOSE WHATSOEVER IS RESTRICTED TO THE TERMS OF AGREEMENT BETWEEN AJ WHIPPS CONSULTING GROUP & THE INSTRUCTING PARTY.	THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS: <table><tr><td>ARCHITECT</td><td>DATE</td><td>DESIGNER</td></tr><tr><td>20170129-X-LEVEL 3</td><td>07.09.2017</td><td>HASSELL</td></tr><tr><td></td><td></td><td>SK 0036 SCHEMATIC LEVEL 3 LAYOUT [B]</td></tr></table>			ARCHITECT	DATE	DESIGNER	20170129-X-LEVEL 3	07.09.2017	HASSELL			SK 0036 SCHEMATIC LEVEL 3 LAYOUT [B]	Architect HASSELL AJ Whipps Consulting Group 2/101 Union St, McMahon's Point NSW 2060 Australia t: 61 2 8923 8444 f: 61 2 8923 8484 sydney@ajwhipps.com.au ajwhipps.com.au			Project UNIVERSITY OF WOLLONGONG WESTERN BUILDING			Drawing HYDRAULIC SERVICES LEVEL 3 PRESSURE SERVICES			Status: PRELIMINARY ISSUE: NOT FOR CONSTRUCTION		
	ARCHITECT	DATE	DESIGNER																					
	20170129-X-LEVEL 3	07.09.2017	HASSELL																					
			SK 0036 SCHEMATIC LEVEL 3 LAYOUT [B]																					
	<table><tr><td>P2</td><td>13.08.17</td><td>PRELIMINARY ISSUE</td></tr><tr><td>P1</td><td>17.08.17</td><td>PRELIMINARY ISSUE</td></tr><tr><td>No</td><td>Date</td><td>Details</td></tr></table>			P2	13.08.17	PRELIMINARY ISSUE	P1	17.08.17	PRELIMINARY ISSUE	No	Date	Details	Client  UNIVERSITY OF WOLLONGONG AUSTRALIA Where ingenuity flows			UNIVERSITY OF WOLLONGONG AUSTRALIA			Project No.: 20170129 Drawing No. [Revision]: H05 [P2]					
P2	13.08.17	PRELIMINARY ISSUE																						
P1	17.08.17	PRELIMINARY ISSUE																						
No	Date	Details																						
						Drawn: JW Date: AUGUST 2017			Design: AW Scale: 1:200															
						Verified: AS Size: A1																		
Amendments																								





CORPORATE MEMBER

AHSCA

The Association of
Hydraulic Services Consultants Australia (NSW)

J:0201720170129 UNIVERSITY OF WOLLONGONG

NOTES:

THIS DRAWING IS DIAGNOSTIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF NOTICING THE DESIGN INTENT AND SCOPE OF WORKS OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE.

THE CONSULTANT HAS BEEN ADVISED BY THE OWNER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE AND DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE SERVICES SPECIFICATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON THE INFORMATION PROVIDED BY THE OWNER AND THE POSITION AND LEVELS OF AUTHORITIES MANS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE USED AS A GUIDE ONLY. THE CONSULTANT HAS CONDUCTED VISUAL GENERAL VERIFICATION OF THE EXISTING SERVICES FOR DIMENSION SETTING. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.

THIS DRAWING IS THE PROPERTY OF JWHPS CONSULTING GROUP AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF JWHPS CONSULTING GROUP. ANY LICENSE, EXPRESS OR IMPLIED, OR DOCUMENTED OR UNDOCUMENTED, IS HEREBY RESTRICTED TO THE TERMS AGREED BETWEEN JWHPS CONSULTING GROUP AND THE INSTRICTING PARTY.

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:		
DRAWN BY ARCHITECT APPROVED BY 20170129-X-GROUND	REC. DATE 07.09.2017	COMPANY HASSELL SK 0033 SCHEMATIC GROUND LAYOUT B

0 10 20 30 40 50mm

P2	17.09.17	PRELIMINARY ISSUE	
P1	13.08.17	PRELIMINARY ISSUE	
No.	Date	Details	
Amendments			

Architect	HASSELL
Client	 UNIVERSITY OF WOLLONGONG AUSTRALIA



AJ Whippis Consulting Group
 2/101 Union St, McMahons Point
 NSW 2060 Australia
 t: 61 2 8923 8444
 f: 61 2 8923 8484
 sydney@ajwhippis.com.au
 ajwhippis.com.au

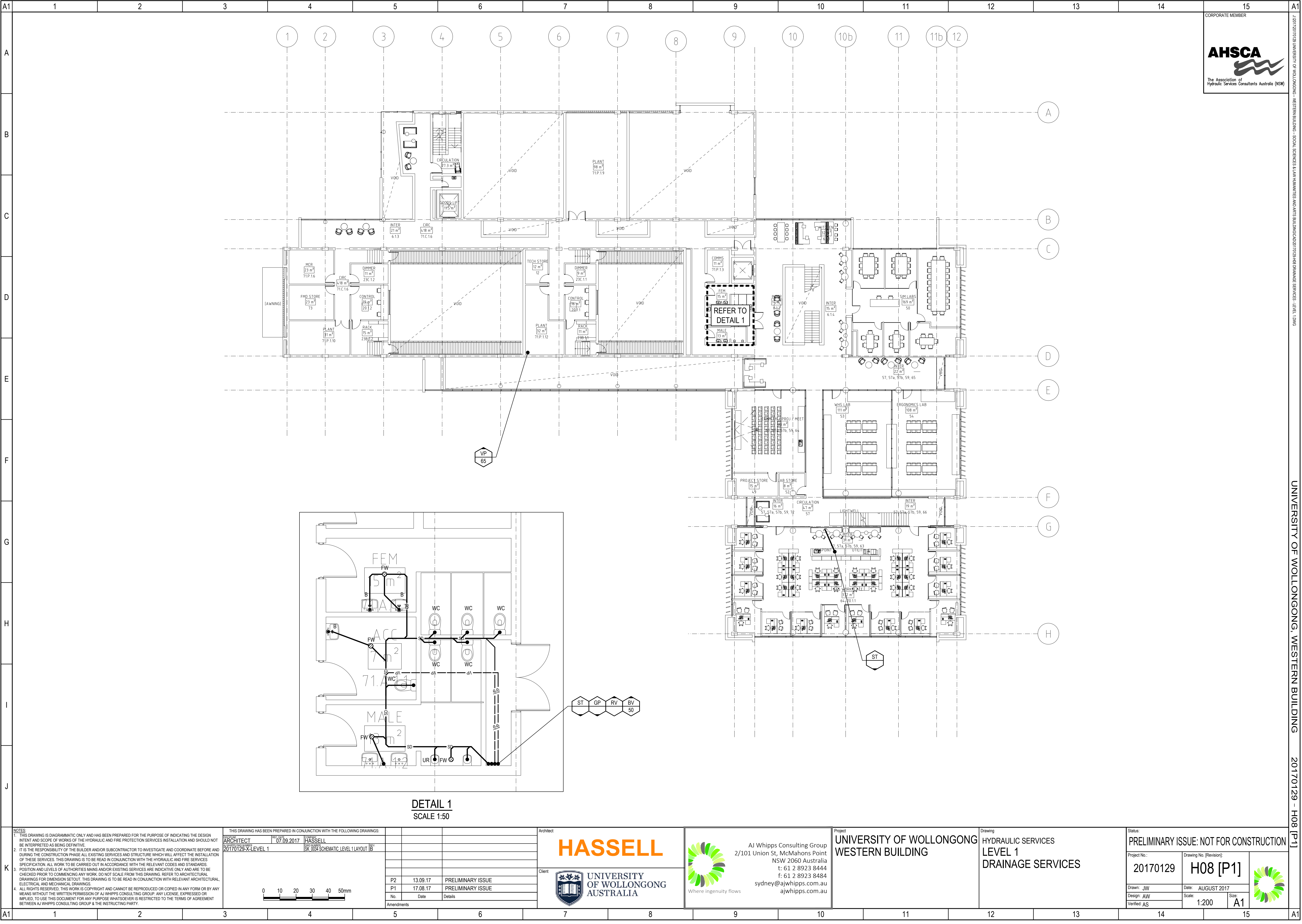
Where ingenuity flows

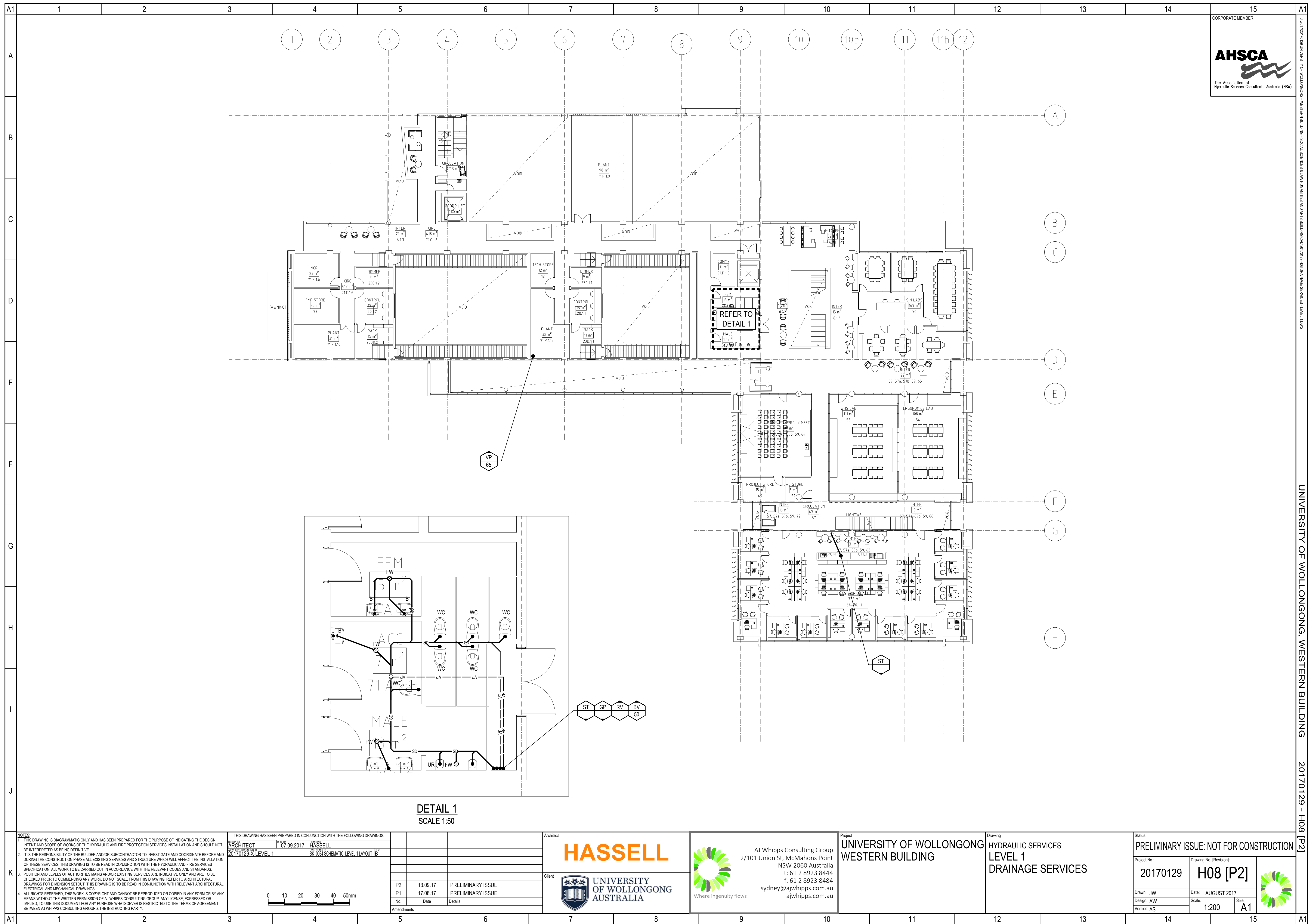
Project
UNIVERSITY OF WOLLONGONG
WESTERN BUILDING

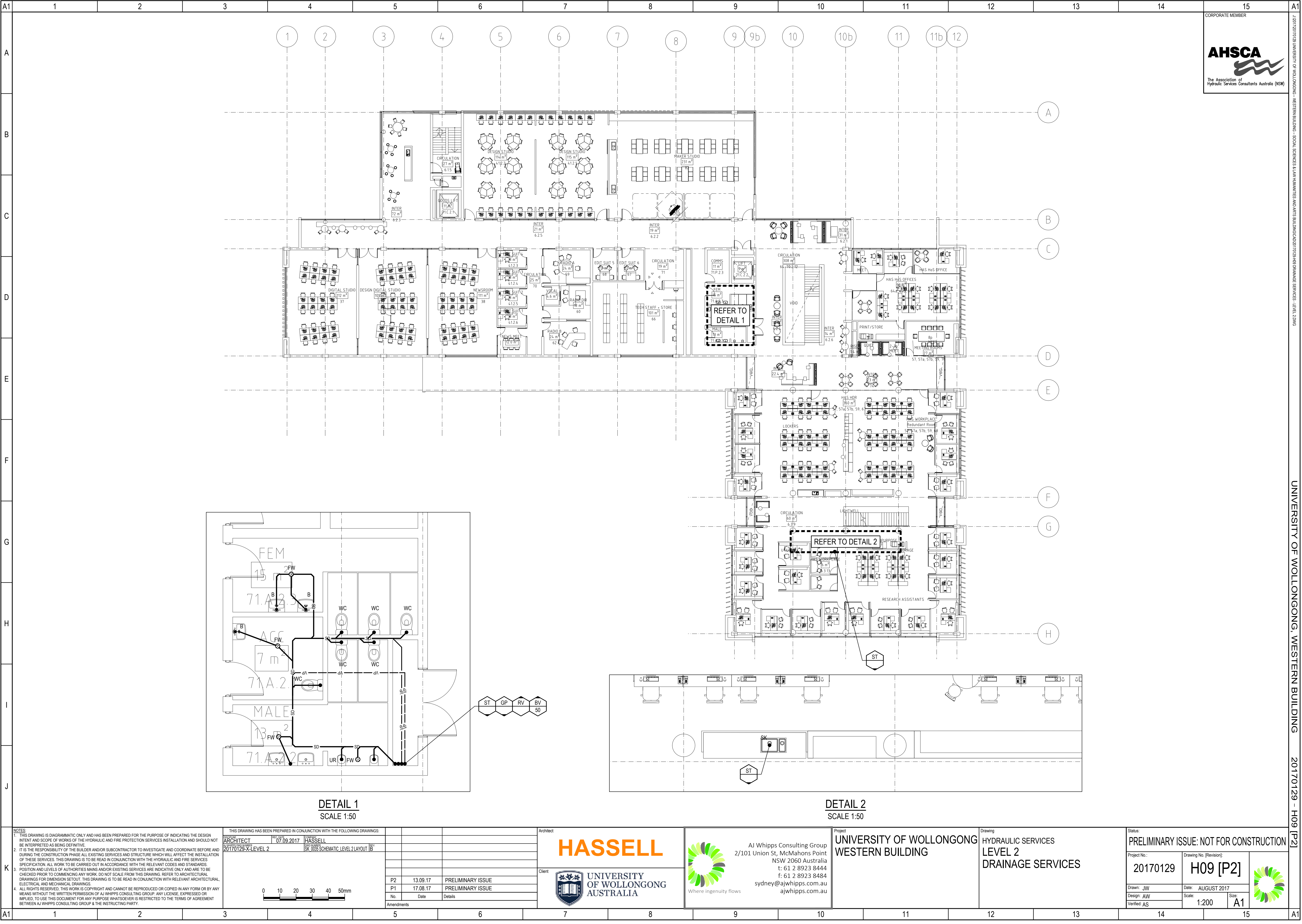
Drawing

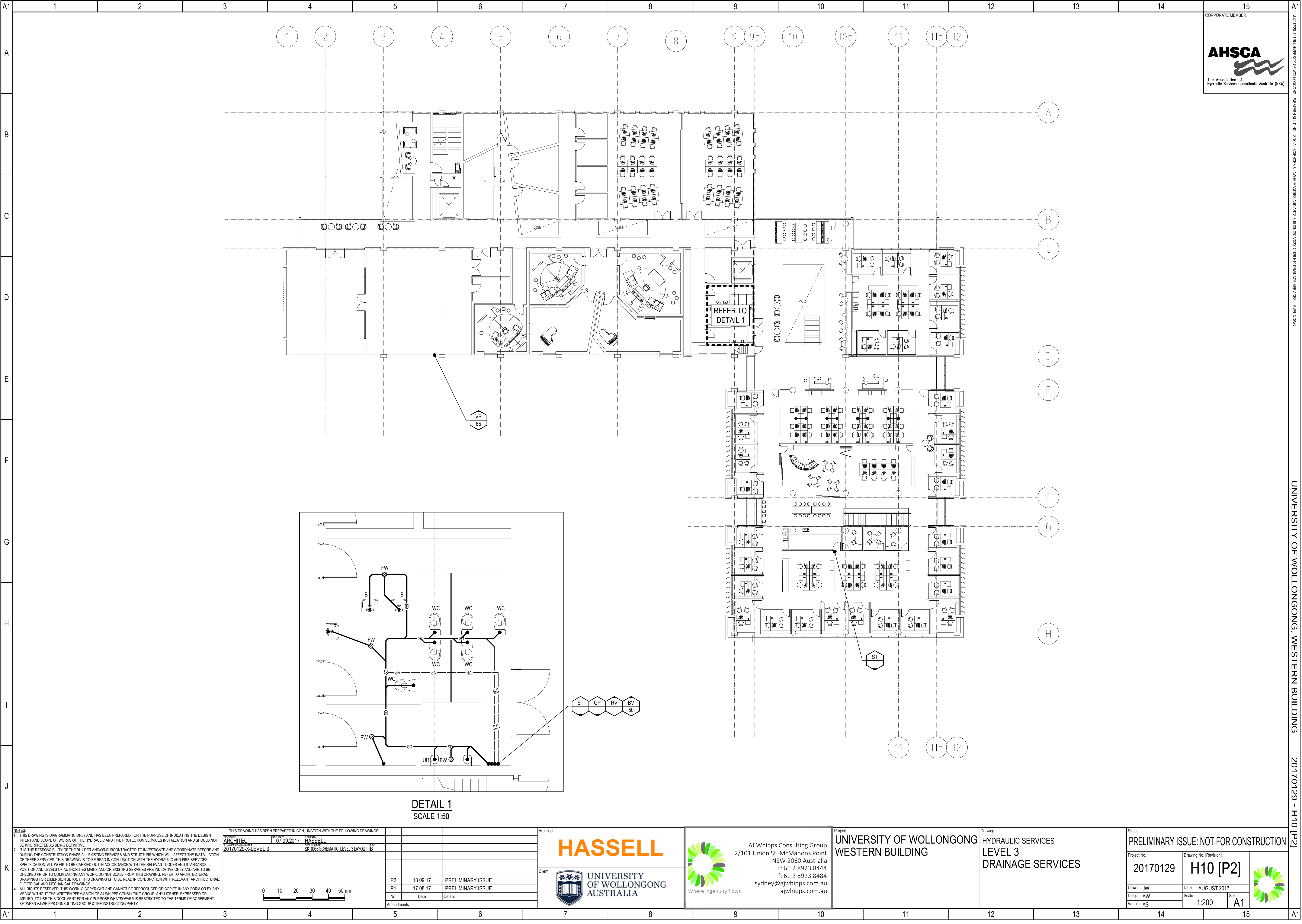
HYDRAULIC SERVICES
GROUND FLOOR
DRAINAGE SERVICES

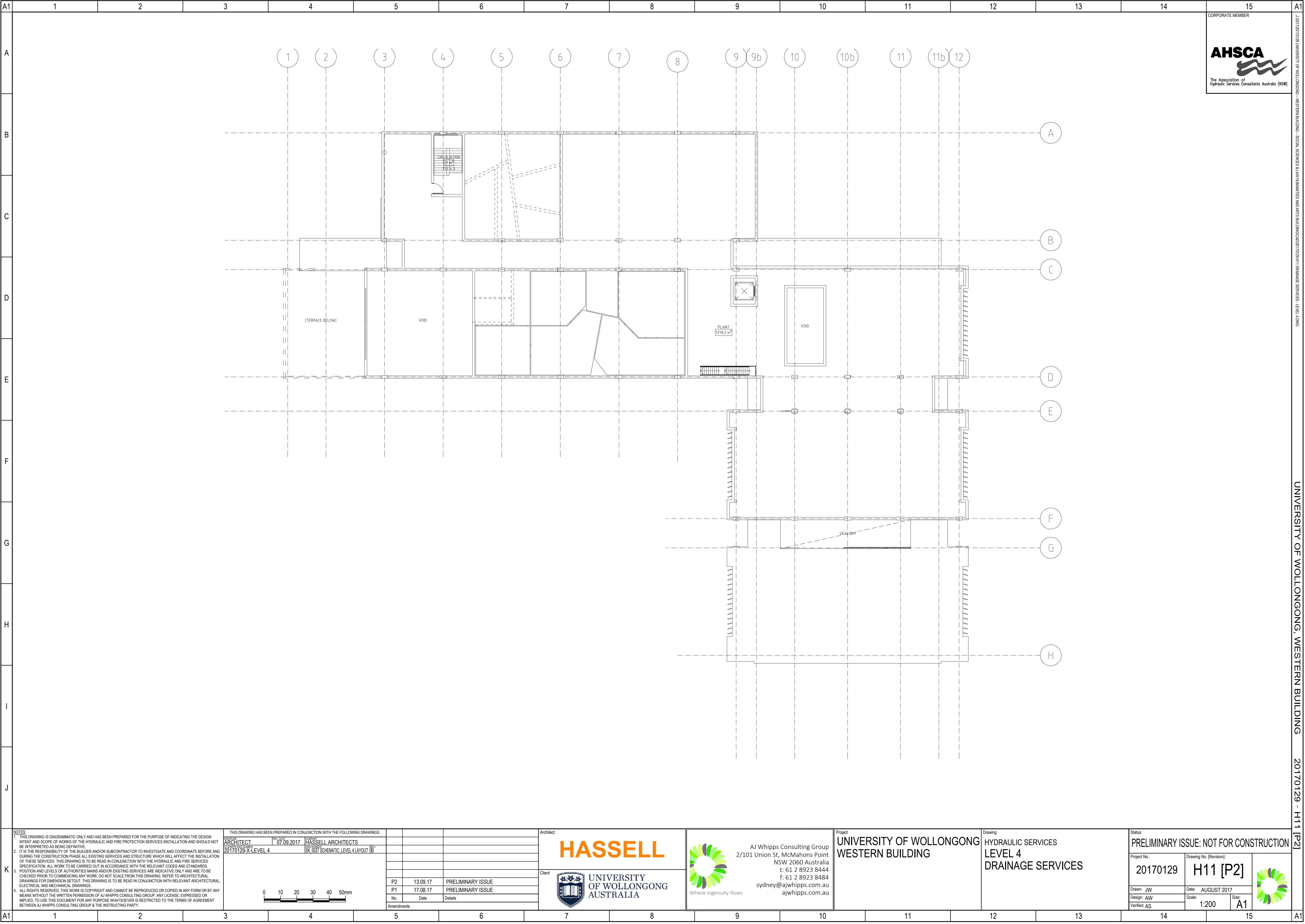
Status:				[P2]
PRELIMINARY ISSUE: NOT FOR CONSTRUCTION				
Project No.:		Drawing No. [Revision]:		
20170129		H07 [P2]		
Drawn: JW Design: AW Verified: AS		Date: AUGUST 2017 Scale: 1:200 Size: A1		
				











NOTES:

1. THIS DRAWING IS DIAGRAMMATIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF WORKS OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE.

2. IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE AND DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE SERVICES SPECIFICATION. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CODES AND STANDARDS.

3. POSITION AND LEVELS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE CHECKED PRIOR TO COMMENCING ANY WORK. DO NOT SCALE FROM THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION SETOUT. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.

4. ALL RIGHTS RESERVED. THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF AJ WHIPPS CONSULTING GROUP. ANY LICENSE, EXPRESSED OR IMPLIED, TO USE THIS DOCUMENT FOR ANY PURPOSE WHATSOEVER IS RESTRICTED TO THE TERMS OF AGREEMENT BETWEEN AJ WHIPPS CONSULTING GROUP & THE INSTRUCTING PARTY.

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

DESIGNED BY ARCHITECT	REVISED BY 07.09.2017	CHECKED BY HASSELL ARCHITECTS
PROJECT NO. 20170129-X-LEVEL 4		
DRAWING NO. SK 0037 SCHEMATIC LEVEL 4 LAYOUT 1B		

0 10 20 30 40 50mm

Architect

HASSELL

Client

UNIVERSITY OF WOLLONGONG AUSTRALIA

P2	13.09.17	PRELIMINARY ISSUE
P1	17.08.17	PRELIMINARY ISSUE
No	Date	Details
Amendments		

Project

UNIVERSITY OF WOLLONGONG WESTERN BUILDING

Client

UNIVERSITY OF WOLLONGONG AUSTRALIA

Where ingenuity flows

Project

UNIVERSITY OF WOLLONGONG WESTERN BUILDING

Client

UNIVERSITY OF WOLLONGONG AUSTRALIA

Where ingenuity flows

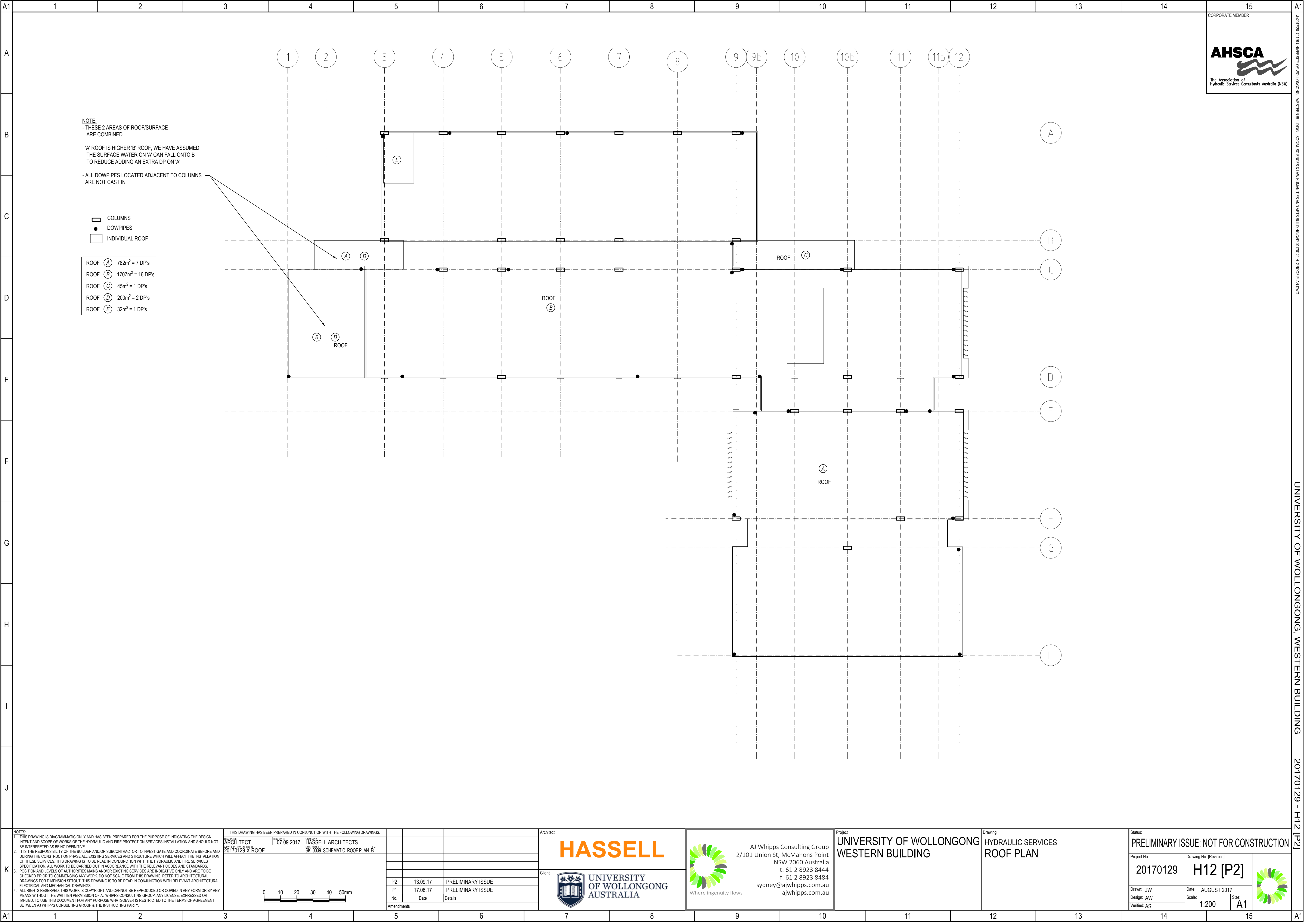
Drawing

HYDRAULIC SERVICES LEVEL 4 DRAINAGE SERVICES

Status

PRELIMINARY ISSUE: NOT FOR CONSTRUCTION

Project No.	20170129	Drawing No. [Revision]	H11 [P2]
Design: JW	Date: AUGUST 2017	Scale: 1:200	Size: A1
Verified: AS			



UNIVERSITY OF WOLLONGONG - WESTERN BUILDING - SOCIAL SCIENCES & LAW HALLWAYS AND ARTS BUILDING 20170129 - H12 [P2]

UNIVERSITY OF WOLLONGONG, WESTERN BUILDING

20170129 - H12 [P2]

NOTES:

1. THIS DRAWING IS DIAGRAMMATIC ONLY AND HAS BEEN PREPARED FOR THE PURPOSE OF INDICATING THE DESIGN INTENT AND SCOPE OF WORKS OF THE HYDRAULIC AND FIRE PROTECTION SERVICES INSTALLATION AND SHOULD NOT BE INTERPRETED AS BEING DEFINITIVE.

2. IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR SUBCONTRACTOR TO INVESTIGATE AND COORDINATE BEFORE AND DURING THE CONSTRUCTION PHASE ALL EXISTING SERVICES AND STRUCTURE WHICH WILL AFFECT THE INSTALLATION OF THESE SERVICES. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE HYDRAULIC AND FIRE SERVICES SPECIFICATION. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CODES AND STANDARDS.

3. POSITION AND LEVELS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE INDICATIVE ONLY AND ARE TO BE CHECKED PRIOR TO COMMENCING ANY WORK. DO NOT SCALE FROM THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION SETOUT. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.

4. ALL RIGHTS RESERVED. THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF AJ WHIPPS CONSULTING GROUP. ANY LICENSE, EXPRESSED OR IMPLIED, TO USE THIS DOCUMENT FOR ANY PURPOSE WHATSOEVER IS RESTRICTED TO THE TERMS OF AGREEMENT BETWEEN AJ WHIPPS CONSULTING GROUP & THE INSTRUCTING PARTY.

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

REFERENCE	DATE	DESCRIPTION
ARCHITECT	07.09.2017	HASSELL ARCHITECTS
20170129-X-ROOF		SK 0039 SCHEMATIC ROOF PLAN [B]

Architect

HASSELL

Client

UNIVERSITY OF WOLLONGONG AUSTRALIA

Project

UNIVERSITY OF WOLLONGONG WESTERN BUILDING

Drawing

HYDRAULIC SERVICES ROOF PLAN

Status:

PRELIMINARY ISSUE: NOT FOR CONSTRUCTION

Project No.:	Drawing No. [Revision]:
20170129	H12 [P2]

Drawn: JW	Date: AUGUST 2017
Design: AJW	Scale: 1:200
Verified: AS	Size: A1