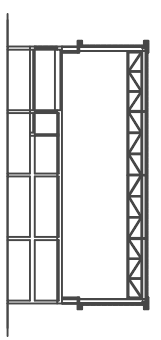
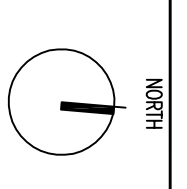


TOWN REFERENCE



REFERENCE MAP



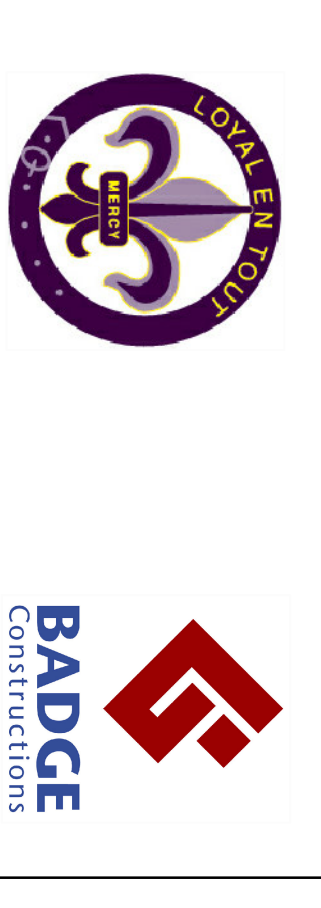
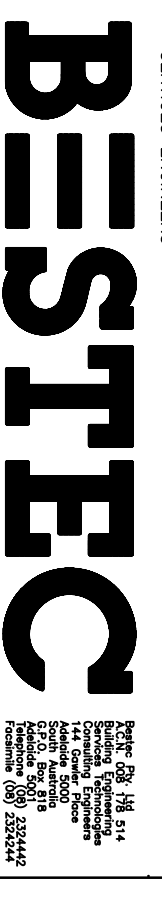
- NOTES
1. DO NOT SCALE DIMENSIONS, WRITE DIMENSIONS CORRECTLY.
 2. ALL DIMENSIONS SHALL BE REFERRED TO THE WORK AS SHOWN ON THE DRAWINGS.
 3. ALL DIMENSIONS SHALL BE REFERRED ON SITE BEFORE PROCEEDING WITH THE WORK. HASSELL SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES.
 4. CONTRACTS, SPECIFICATIONS, REPORTS AND DRAWINGS ARE THE PROPERTY OF HASSELL PTY LTD. THEY ARE TO BE KEPT IN STRICTLY CONFIDENTIALITY.
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ISSUE	TIME	DESCRIPTION	DATE
A	PH	ISSUE FOR PREPARATION OF CONSTRUCTION DRAWINGS	15.10.07

SERVICES ENGINEERS



CONSULTANT
HASSELL PTY. LTD. 40/40/07/11/05
70 WINDHAM SQUARE GLENIDE SA 5080 AUSTRALIA
TEL: 8320 2200 FAX: 8320 2000
WWW.HASSELLPTYLTD.COM

HASSELL

PROJECT
ST. ALOYSIUS COLLEGE
GYMNASIUM & CLASSROOMS
FITOUT

DRAWING TITLE
MECHANICAL SERVICES
SITE PLAN AND
DRAWING INDEX

DATE	BY	CHECKED	APPROVED
29 November 2007	PH	PH	AH

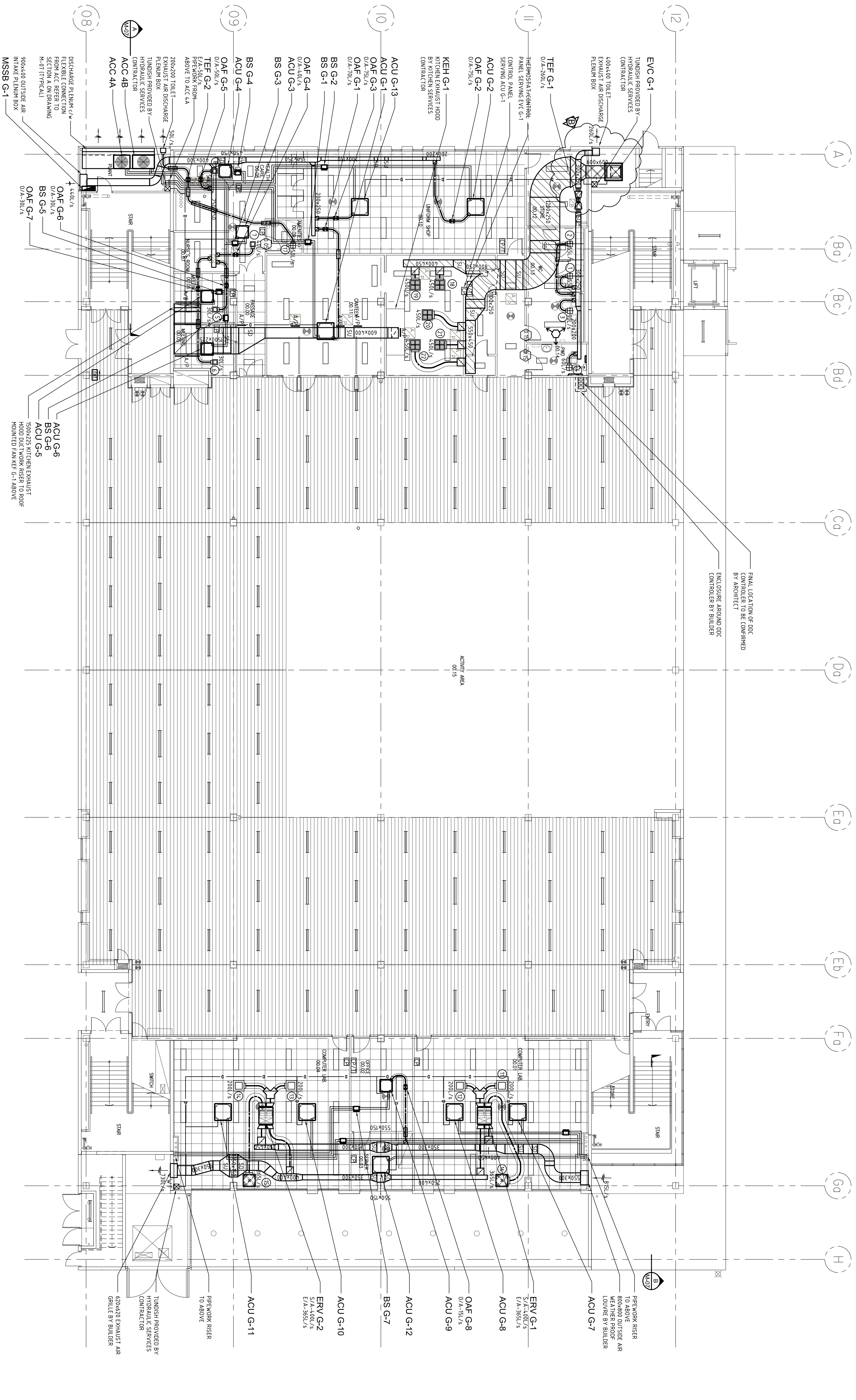
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DATE: 29 November 2007

ISSUE: M-01

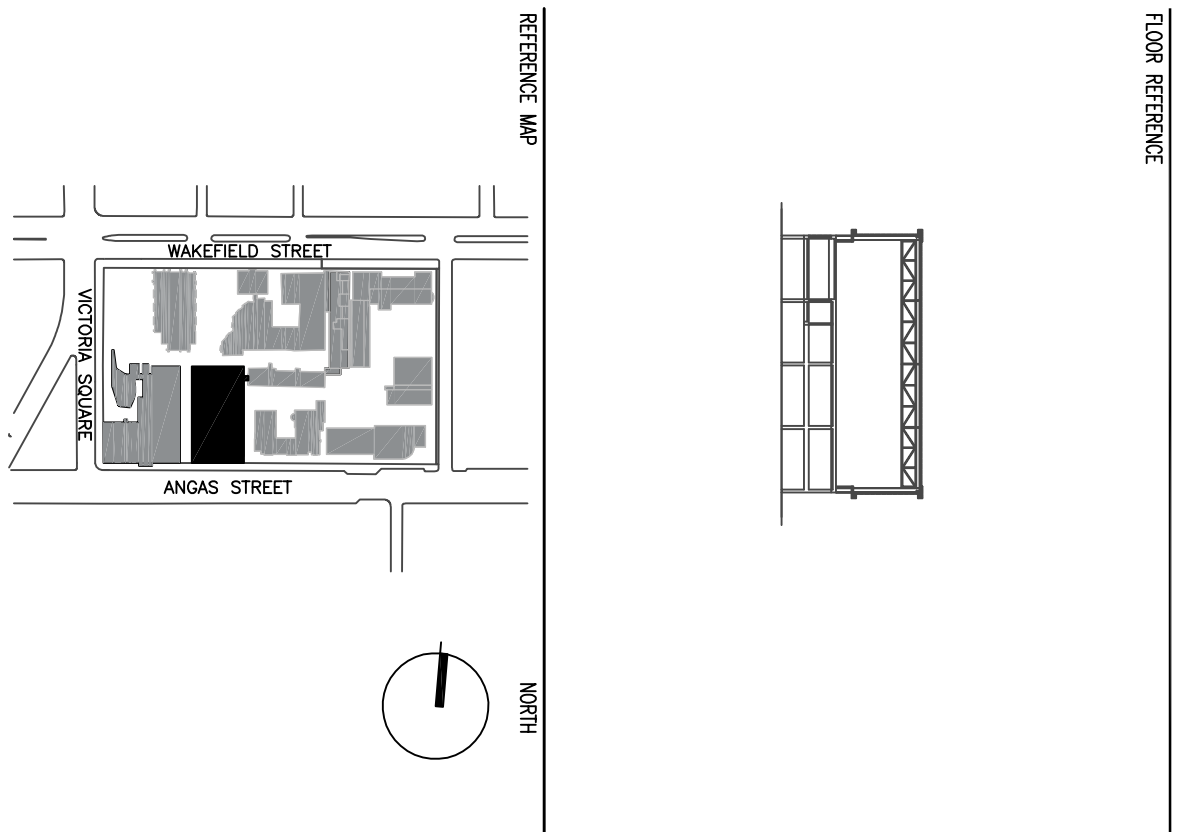
NO. OF SHEETS: 1

TOTAL SHEETS: 1



No	TYPE	FACE	SIZE	DAMPER
1-4	EAG	300x300	REGULATE	BUTTERFLY
5-8	SAD	300 / 315		BUTTERFLY
9-10	SAD	600 / 315		BUTTERFLY
11-14	SAD	600 / 315		BUTTERFLY
15-16	PAE	600x600	REGULATE	BUTTERFLY
17	EAG	300x300	REGULATE	BUTTERFLY
18-22	SAD	600 / 450 - 4 WAY BLOW		BUTTERFLY

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 2. ALL DIMENSIONS SHALL BE GIVEN IN METRES UNLESS OTHERWISE STATED.
 3. ALL DIMENSIONS SHALL BE GIVEN ON SITE BEFORE PROCEEDING WITH WORK.
 4. THE WORK SHALL BE NOTED IN WRITING OF ANY DISCREPANCIES WITH CONTRACT, SPECIFICATIONS, REPORTS AND DRAWINGS.
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ISSUE	NO.	DESCRIPTION	DATE
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B	PH	AMENDED DUCTWORK LAYOUT	29.11.07

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CONSULTANT
 HASSELL PTY LTD
 70 WILSONS CREEK ROAD, SUITE 2000, AUSTRALIA
 TEL: 08 8322 2222 FAX: 08 8322 2000

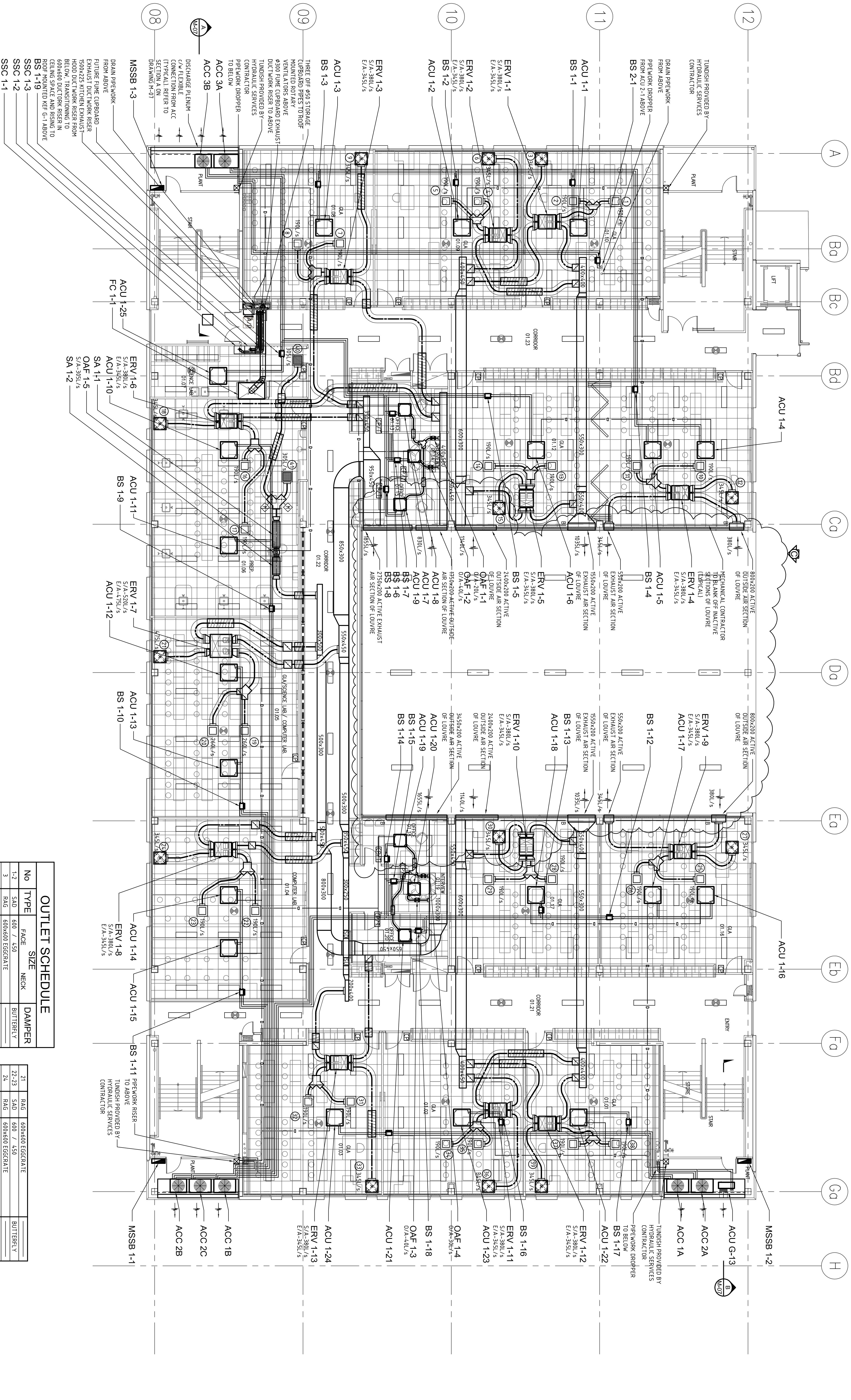
PROJECT
 ST. ALOYSIUS COLLEGE
 GYMNASIUM & CLASSROOMS
 FITOUT

FRAME TITLE
 MECHANICAL SERVICES
 GROUND FLOOR
 AIR CONDITIONING ARRANGEMENT

DATE: 29 November 2007

SCALE	BY	DATE	DATE	DATE	DATE
1:100	PH	PH	AH		

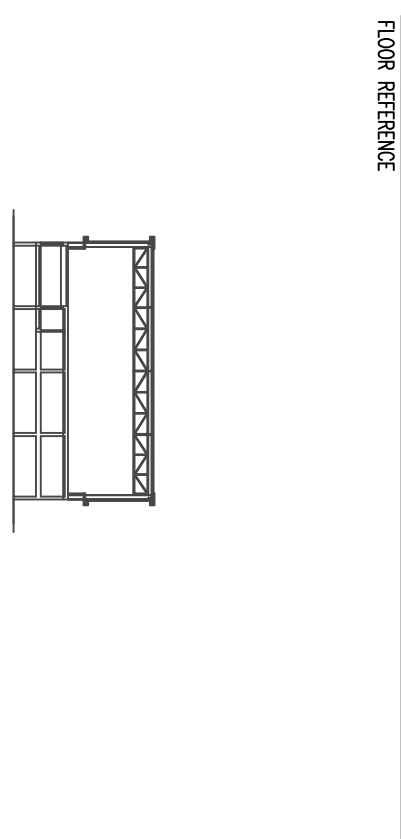
ISSUE NO: M-02



OUTLET SCHEDULE

No	Type	Face	Size	Neck	Damper
1-2	SAD	600	7	450	BUTTERFLY
3	RAG	600x600	EGGCRATE		BUTTERFLY
4-5	SAD	600	7	450	BUTTERFLY
7-8	SAD	600	7	450	BUTTERFLY
9	RAG	600x600	EGGCRATE		BUTTERFLY
10-11	SAD	600	7	450	BUTTERFLY
12	RAG	600x600	EGGCRATE		BUTTERFLY
13-14	SAD	600	7	450	BUTTERFLY
15	RAG	600x600	EGGCRATE		BUTTERFLY
16-17	SAD	600	7	450	BUTTERFLY
18	RAG	600x600	EGGCRATE		BUTTERFLY
19-20	SAD	600	7	450	BUTTERFLY
21	RAG	600x600	EGGCRATE		BUTTERFLY
22-23	SAD	600	7	450	BUTTERFLY
24	RAG	600x600	EGGCRATE		BUTTERFLY
25-26	SAD	600	7	450	BUTTERFLY
27-28	SAD	600	7	450	BUTTERFLY
29	RAG	600x600	EGGCRATE		BUTTERFLY
30	RAG	600x600	EGGCRATE		BUTTERFLY
31-32	SAD	600	7	450	BUTTERFLY
33	RAG	600x600	EGGCRATE		BUTTERFLY
34-35	SAD	600	7	450	BUTTERFLY
36	RAG	600x600	EGGCRATE		BUTTERFLY
37-38	SAD	600	7	450	BUTTERFLY
39	RAG	600x600	EGGCRATE		BUTTERFLY
40-41	SAD	600	7	450	BUTTERFLY

BESTEC
 DOCUMENT ISSUE
 Date: 29 November 2007
 BESTEC Pty Ltd
 400 Victoria Road
 Building Engineering
 Services Technologists
 Consulting Engineers



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B	PHH	ISSUE FOR PREPARATION OF CONTRACT DOCUMENTS	15.10.07
C	PHH	ABENDUM 1	06.09.07

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 400 VICTORIA ROAD
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BADGE
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HASSELL
 CONSULTANT
 HASSELL PTY LTD
 170 WILSONS CREEK ROAD, SUITE 3000, WESTLAWN
 TEL: 08 9387 2222 FAX: 08 9387 2000

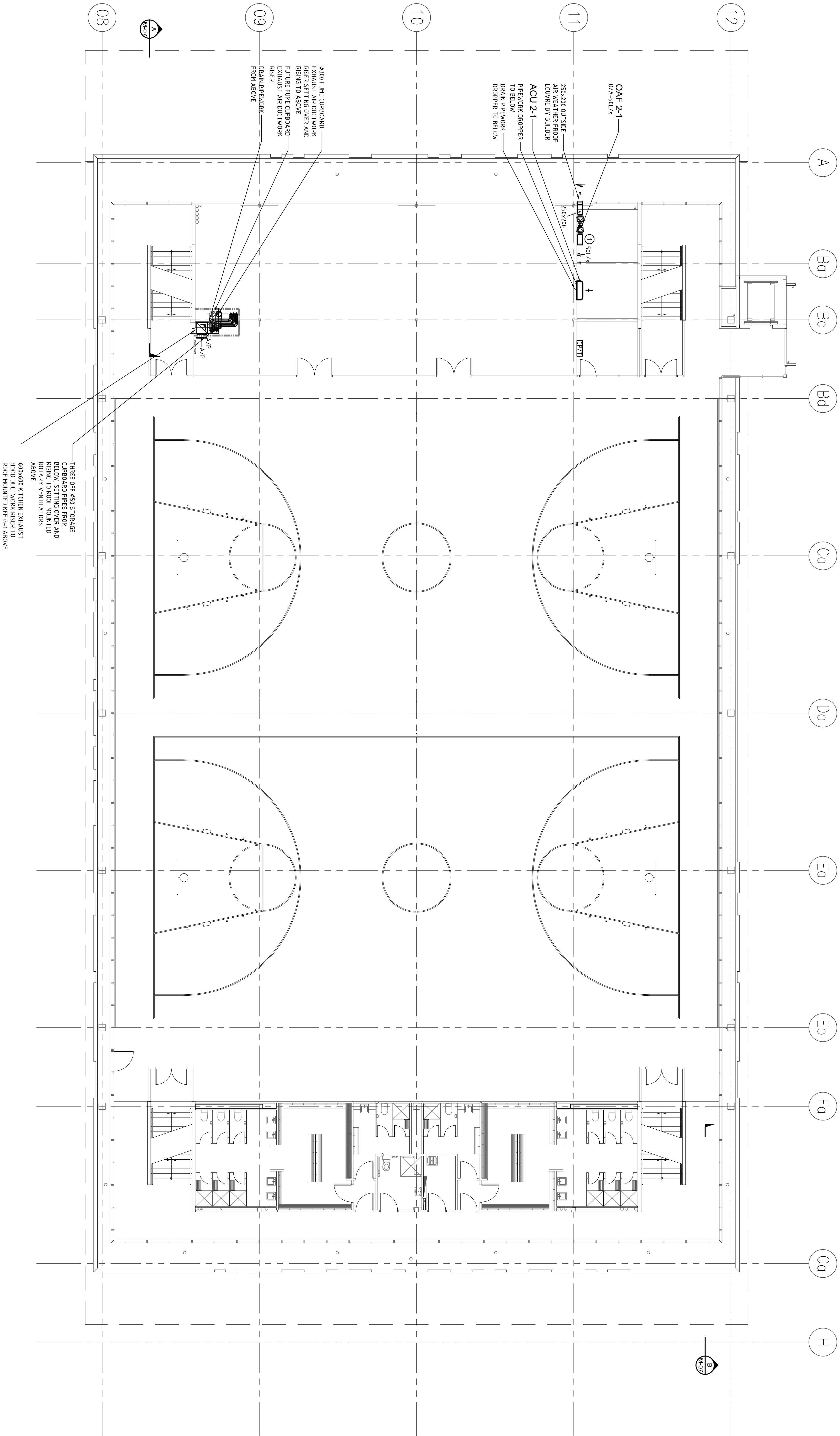
PROJECT
 ST. ALOYSIUS COLLEGE
 GYMNASIUM & CLASSROOMS
 FITOUT

MECHANICAL SERVICES
 FIRST FLOOR
 AIR CONDITIONING ARRANGEMENT

CONSTRUCTION ISSUE

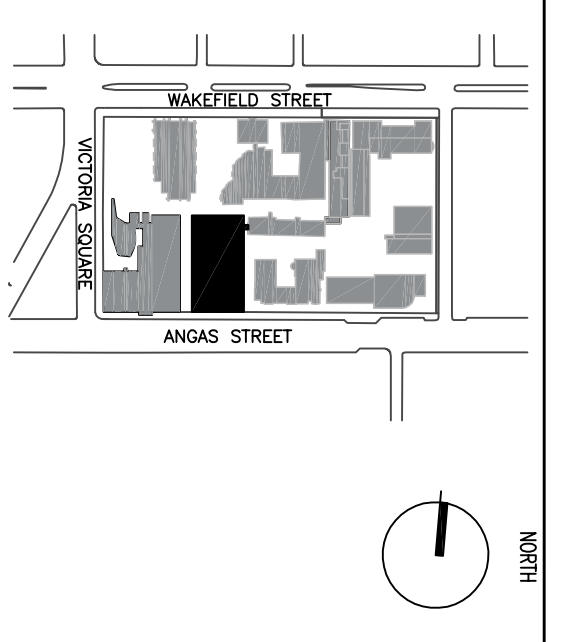
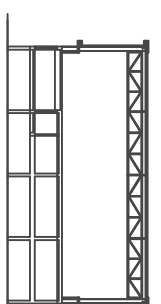
DATE	ISSUED BY	CHECKED BY	APPROVED BY
1-100	PHH	PHH	AH

ISSUE NO. **M-03** ISSUE DATE **C**



OUTLET SCHEDULE			
No	TYPE	FACE SIZE	DAMPER
1	SAG	250 x 200	EGGCRATE

BESTEC
 DOCUMENT ISSUE
 Date 29 November 2007
 BESTEC Pty Ltd
 45/51-53/514
 BUILDING ENGINEERING
 SERVICES TECHNOLOGIES
 CONSULTING ENGINEERS



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A	PH	ADDENDUM 1	06.09.07

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 BUILDING ENGINEERING
 SERVICES TECHNOLOGIES
 CONSULTING ENGINEERS

CONSULTANT
 HASSELL PTY LTD
 70 WINDHAM SQUARE ROAD, SUITE 5000 AUSTRALIA
 TEL: 08 9222 8777
 FAX: 08 9222 8778

HASSELL

PROJECT
 ST. ALOYSIUS COLLEGE
 GYMNASIUM & CLASSROOMS
 FITOUT

ISSUE TITLE
 MECHANICAL SERVICES
 SECOND FLOOR
 AIR CONDITIONING ARRANGEMENT

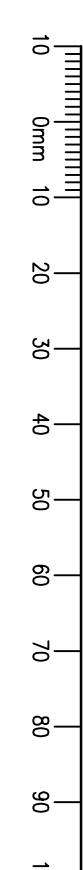
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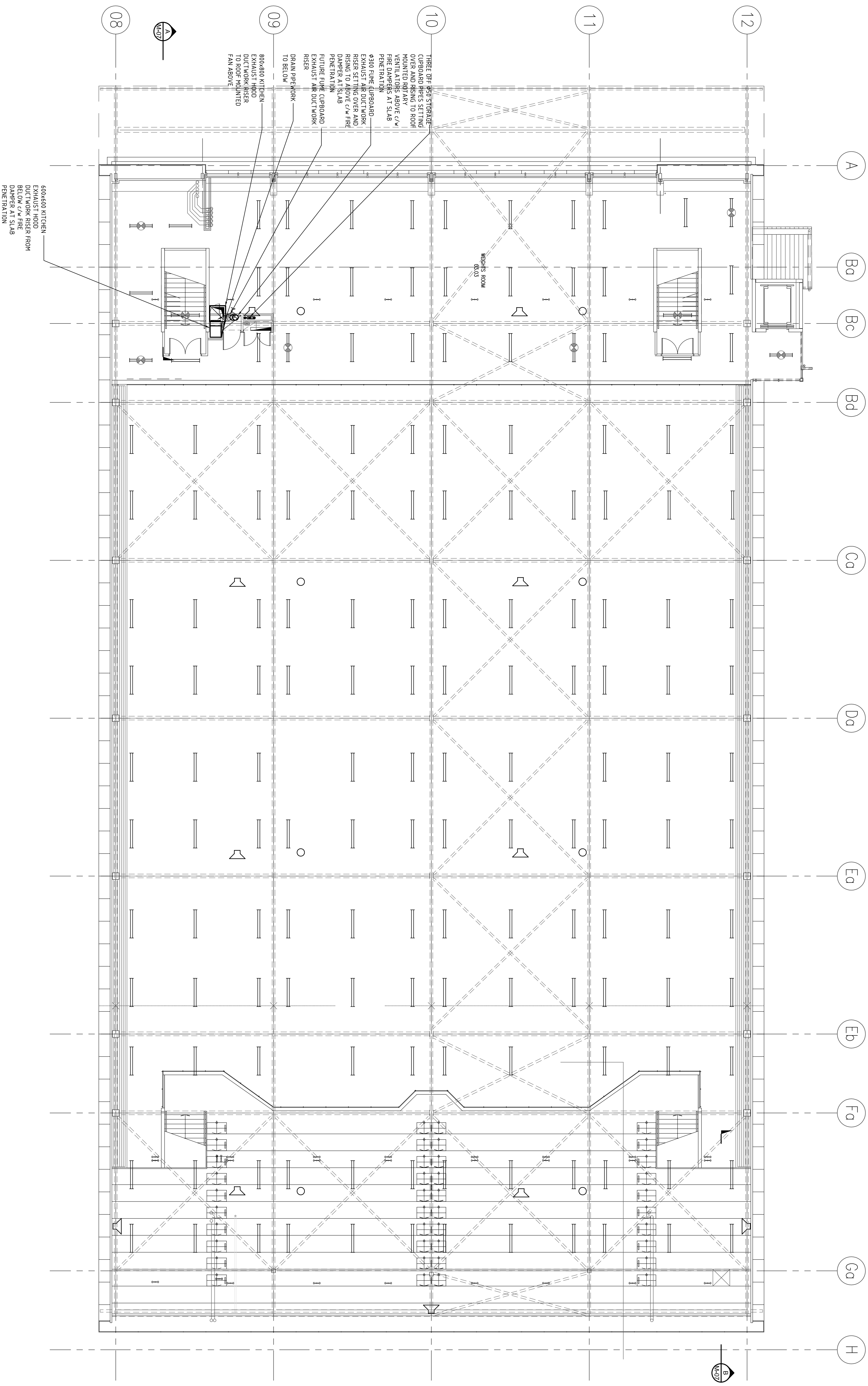
CONSTRUCTION ISSUE	DATE
1	29 November 2007

SCALE

SCALE	BY	DATE	DATE	DATE
1:100	PH	PH	AH	PH

ISSUE NO. M-04 **ISSUE** B





- NOTES
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 7/14 WINDHURST SQUARE (BEHIND S&A) 5000 AUSTRALIA
 TEL: 08 8222 7711 FAX: 08 8222 7710

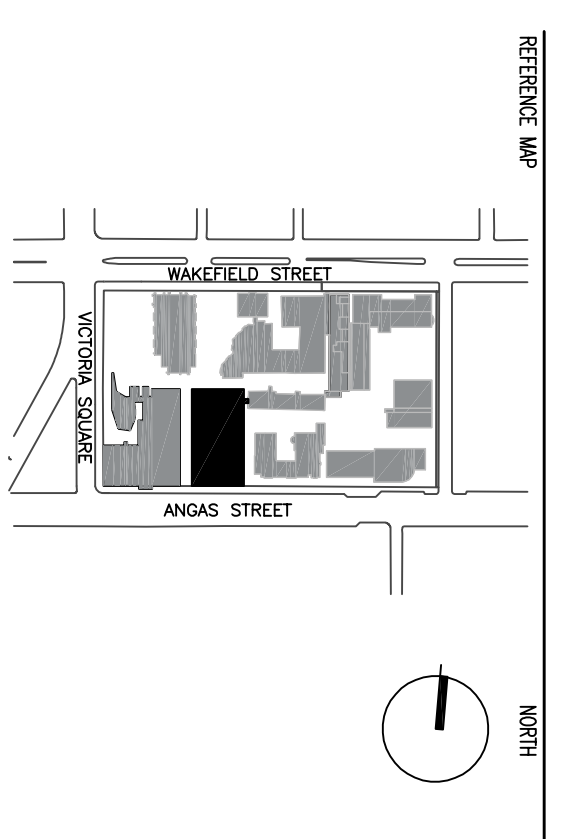
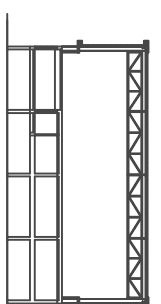
BADGE
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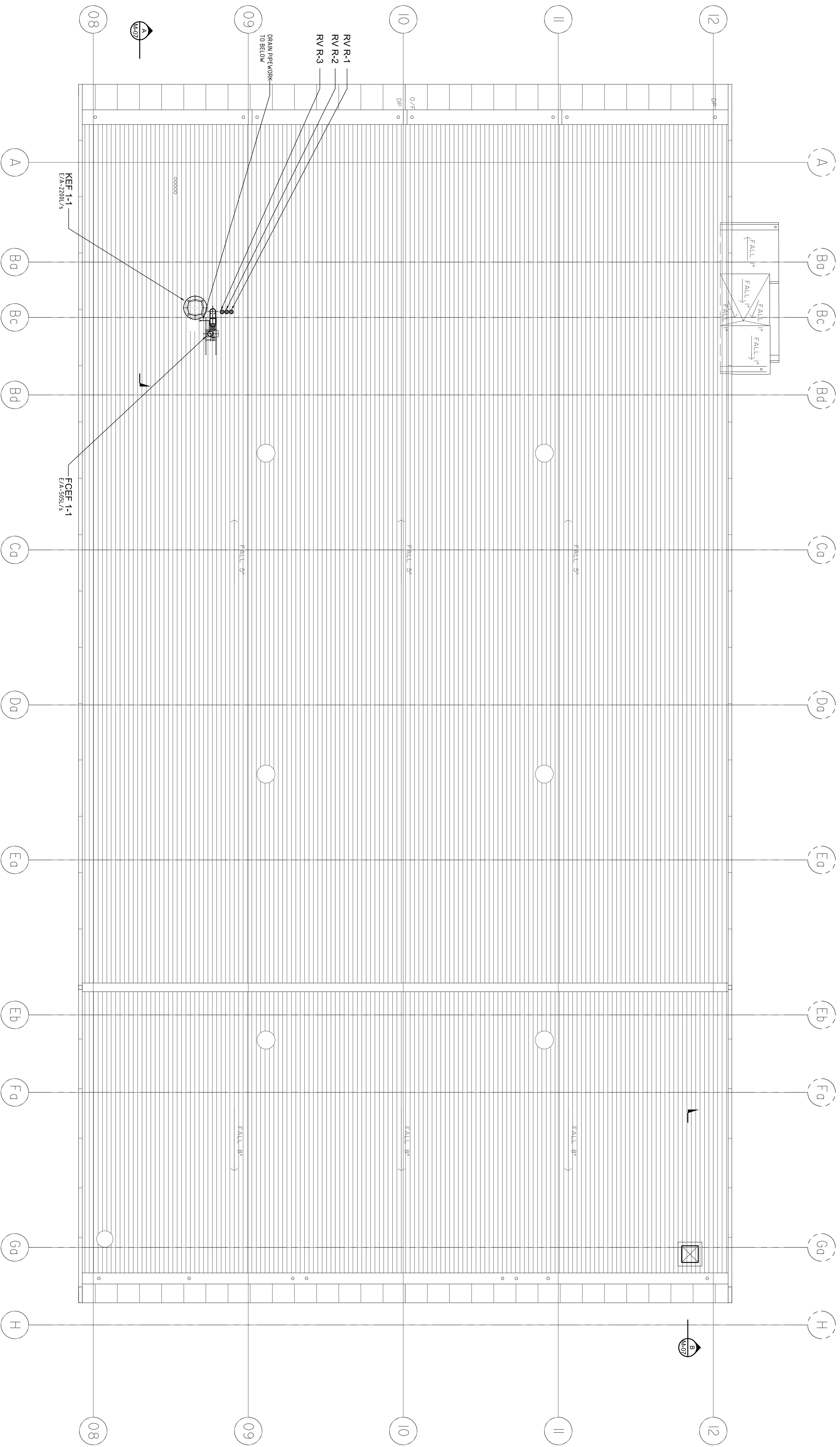
HASSSELL
 PROJECT
 ST. ALOYSIUS COLLEGE
 GYMNASIUM & CLASSROOMS
 FITOUT

ISSUE TITLE
 MECHANICAL SERVICES
 THIRD FLOOR
 AIR CONDITIONING ARRANGEMENT

BESTTEC	
DOCUMENT ISSUE	Date
	29 November 2007
SERVICES ENGINEERS	
BESTTEC PVT LTD	
45/51 WINDHURST SQUARE	
514	
BUILDING ENGINEERING	
SERVICES TECHNOLOGIES	
CONSULTING ENGINEERS	

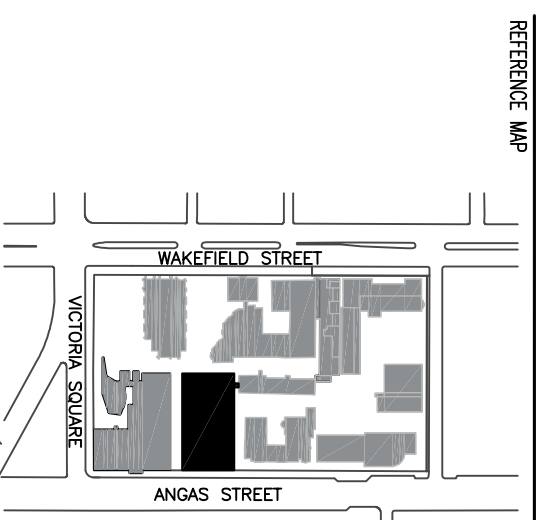
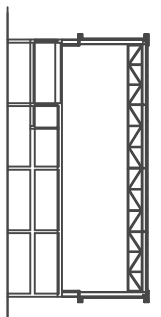
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ISSUE NO.	ISSUE NUMBER	ISSUE		
52894A	M-05	A		





BESTEC
 DOCUMENT ISSUE
 Date 29 November 2007
 BESTEC CONSULTING LTD
 450 STURGEON ROAD SUITE 514
 BUILDING ENGINEERING
 SERVICES TECHNOLOGIES
 CONSULTING ENGINEERS

TOWN REFERENCE



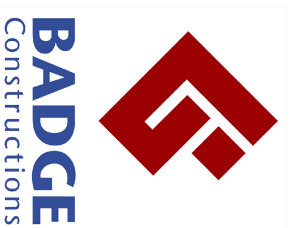
- NOTES**
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 4. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, SPECIFICATIONS, REPORTS AND DRAWINGS AND FOR THE DESIGN, STRUCTURAL AND OTHER CONSULTANT INFORMATION IS SHOWN DISCREPANTLY FROM THE SITE TO OBTAIN CONSULTANT INFORMATION.
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CONSULTANT
 HASSELL PTY. LTD.
 70 WILKINSON SQUARE SUITE 3000 AUSTRALIA
 TEL: 08 9220 2277 FAX: 08 9220 2208

HASSELL

PROJECT
 ST. ALOYSIUS COLLEGE
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 FITOUT

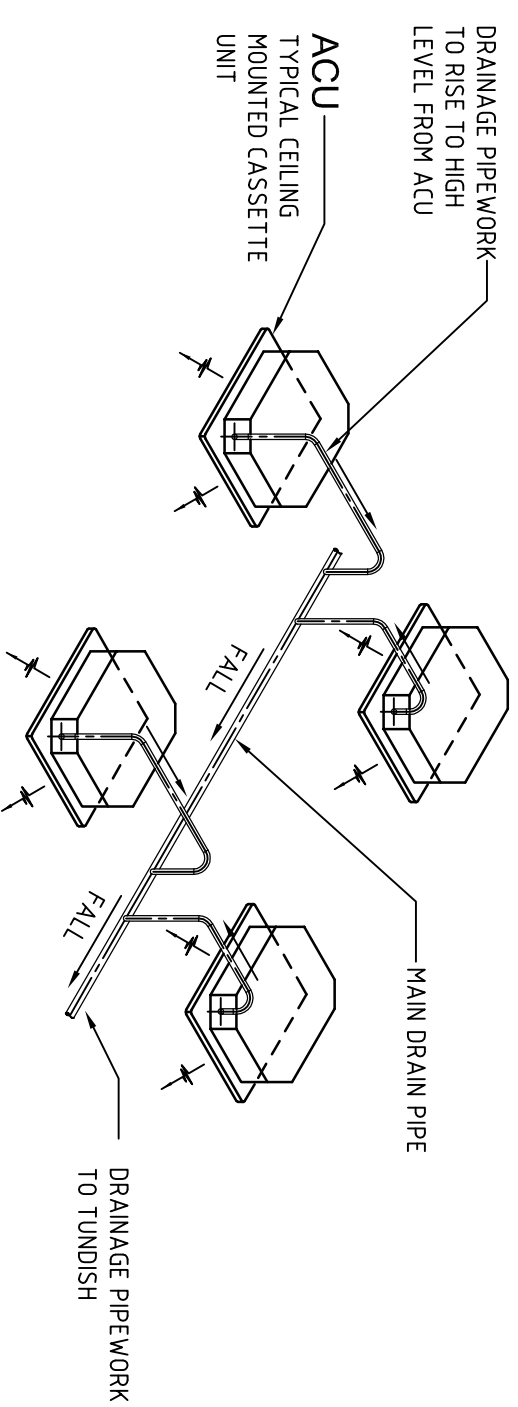
TRADING TITLE
 MECHANICAL SERVICES
 ROOF PLAN
 AIR CONDITIONING ARRANGEMENT

DATE: 29 November 2007

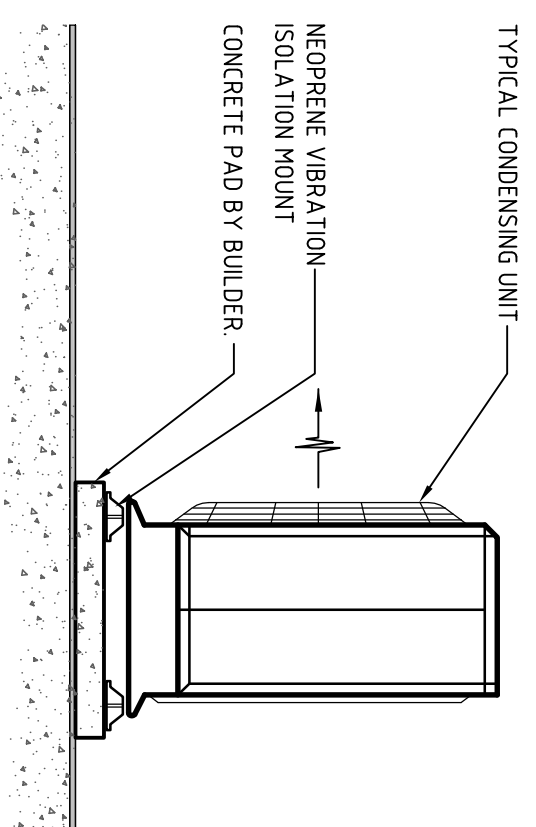
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1:100	PH	PH	AH		

ISSUE NO. M-06 ISSUE A

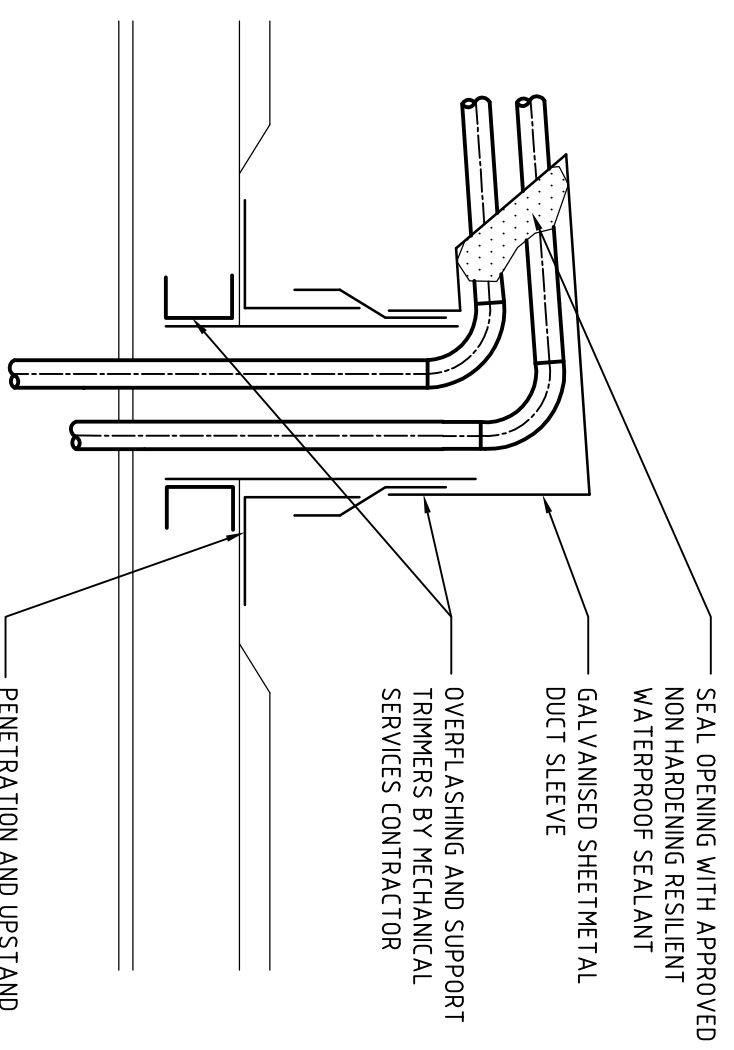
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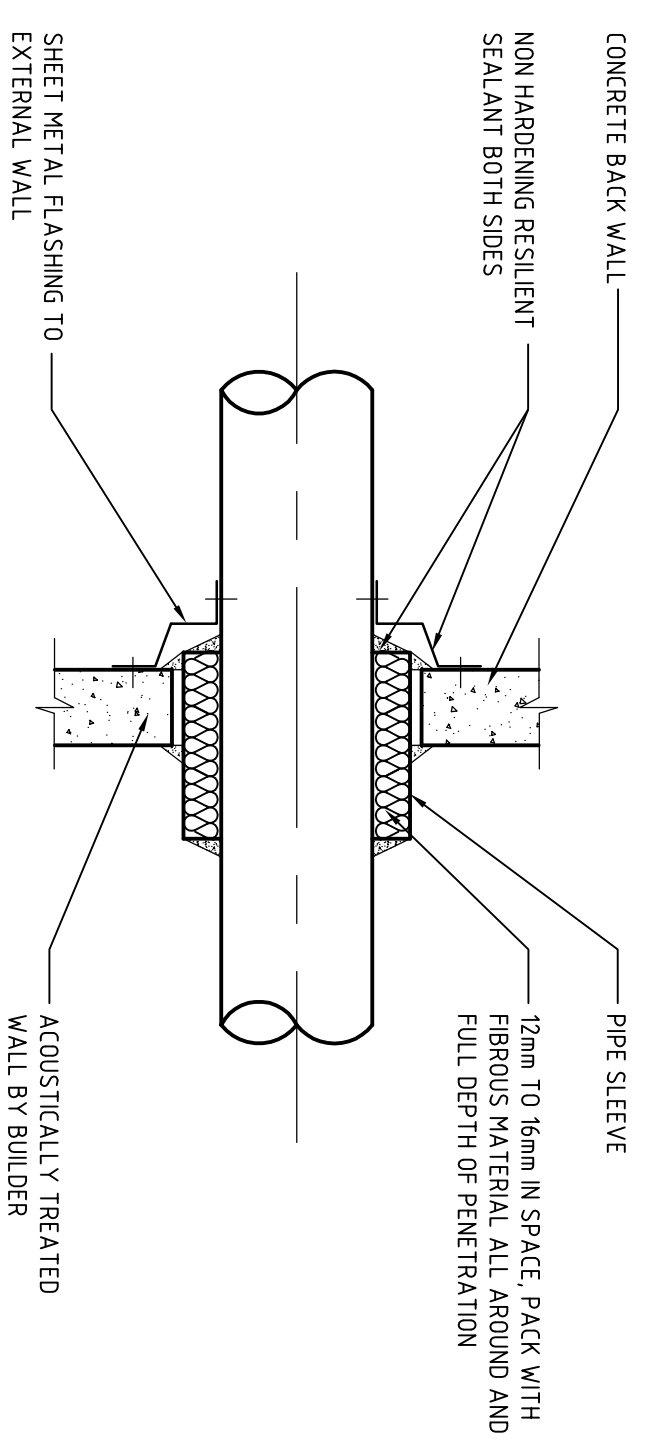
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NOT TO SCALE



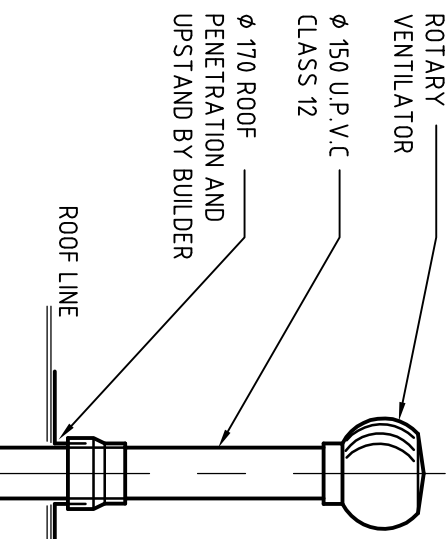
TYPICAL CONDENSING UNIT MOUNTING DETAIL
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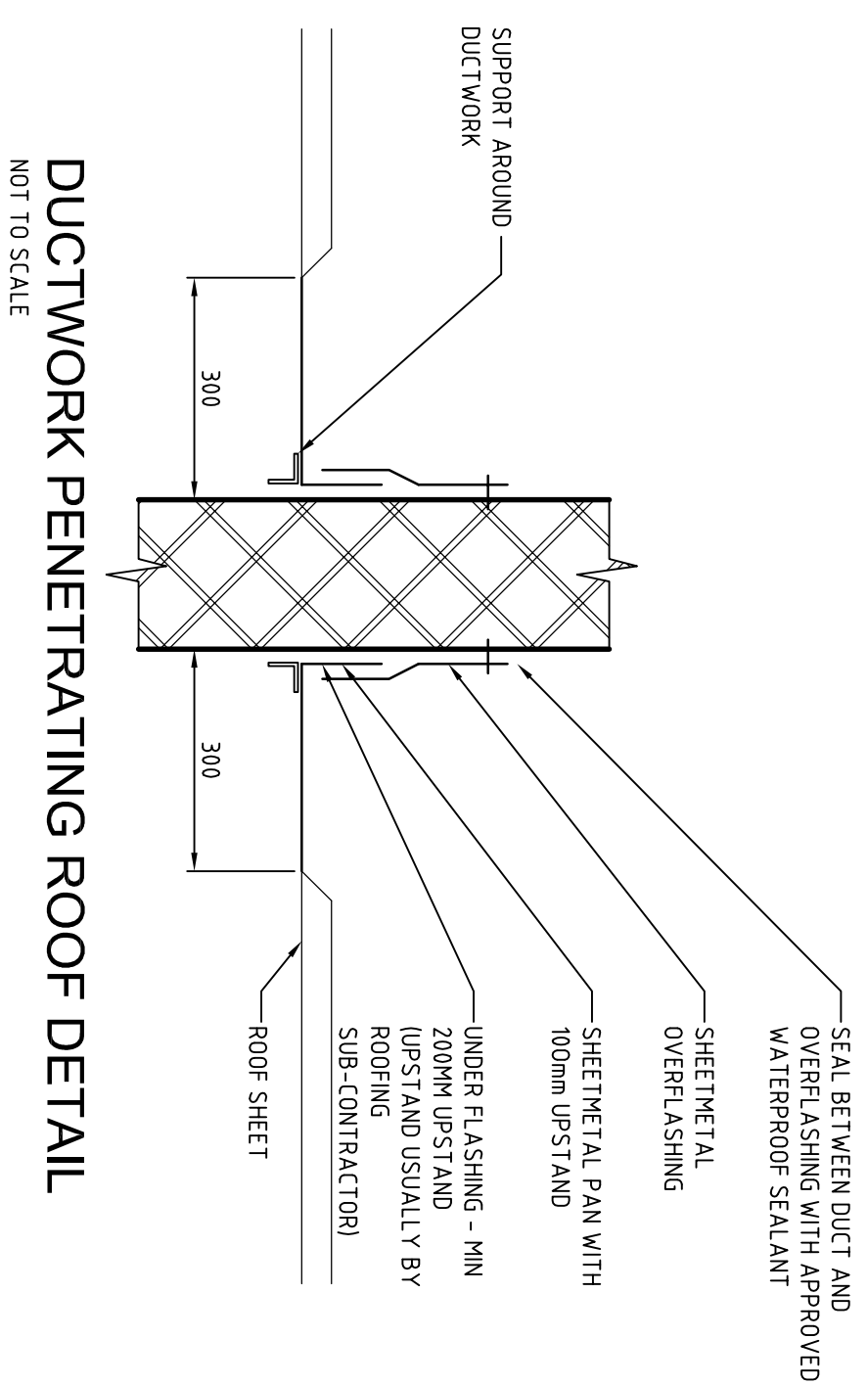
ROOF PIPEWORK PENETRATION DETAIL
NOT TO SCALE



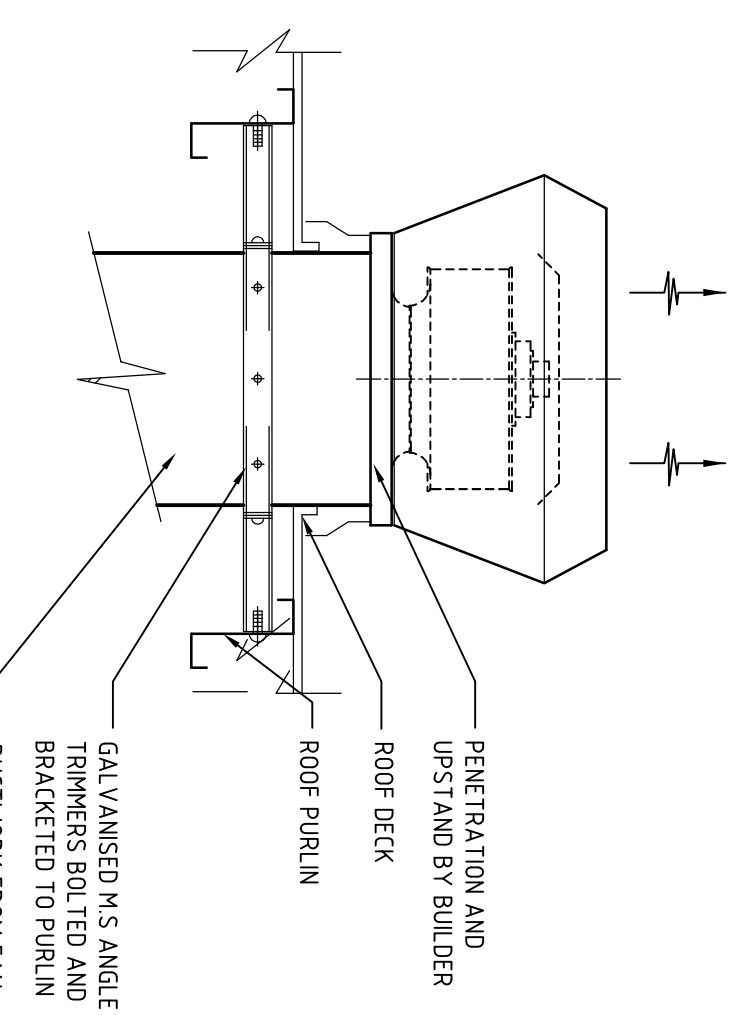
EXTERNAL WALL PIPE PENETRATION DETAIL
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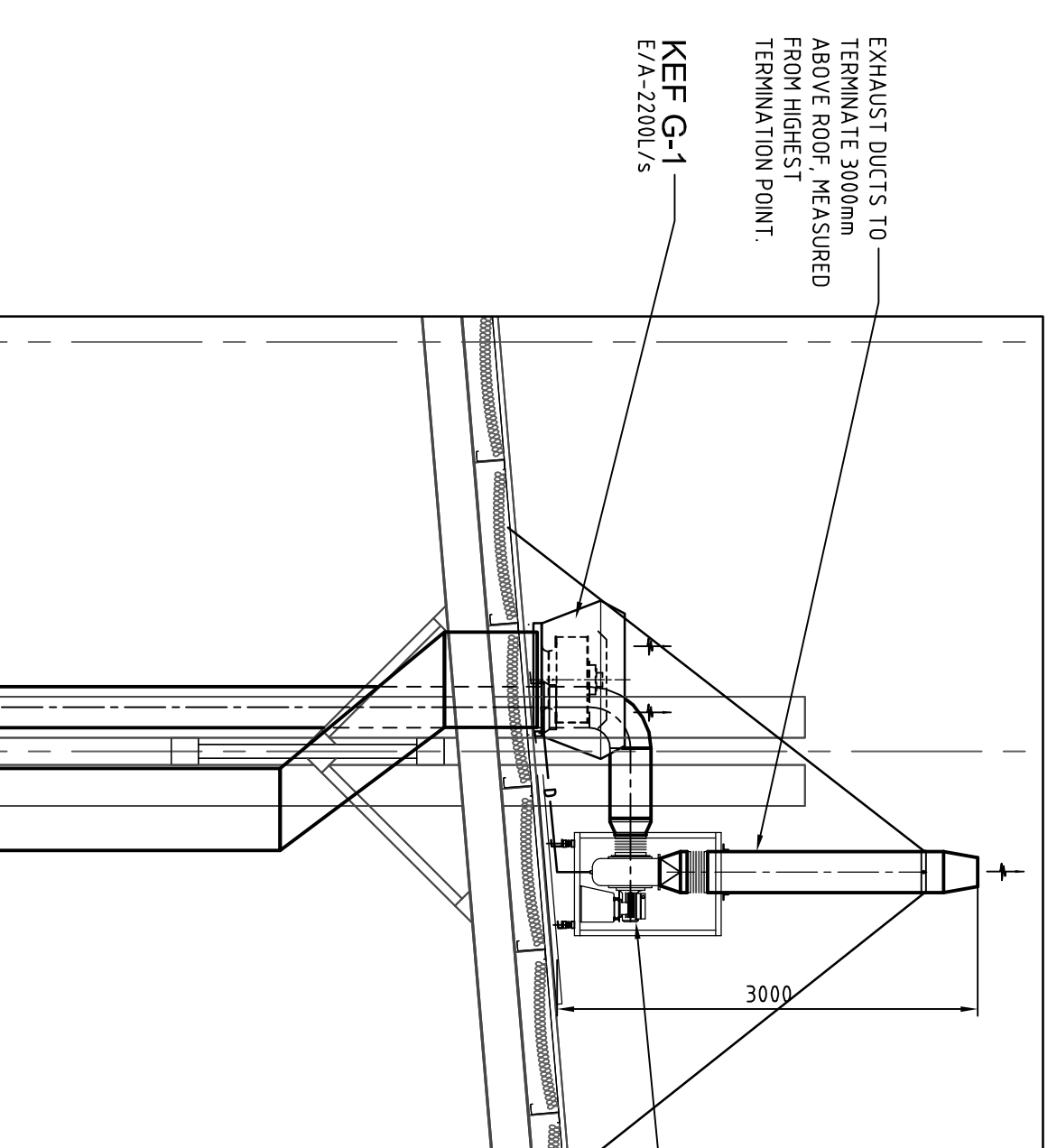
CHEMICAL CUPBOARD ROTARY VENTILATOR DETAIL
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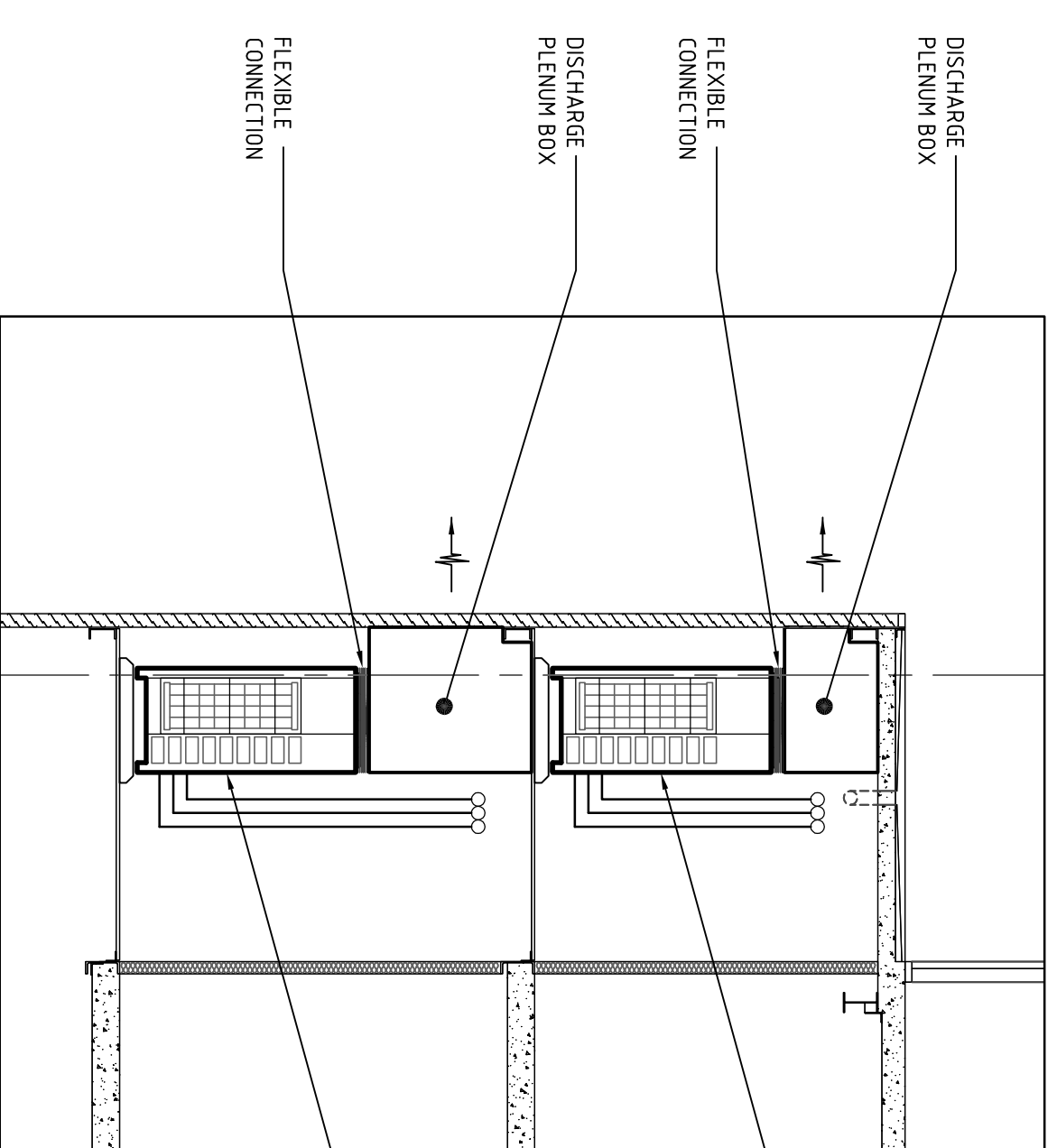
DUCTWORK PENETRATING ROOF DETAIL
NOT TO SCALE



ROOF MOUNTED KITCHEN EXHAUST FAN DETAIL
NOT TO SCALE



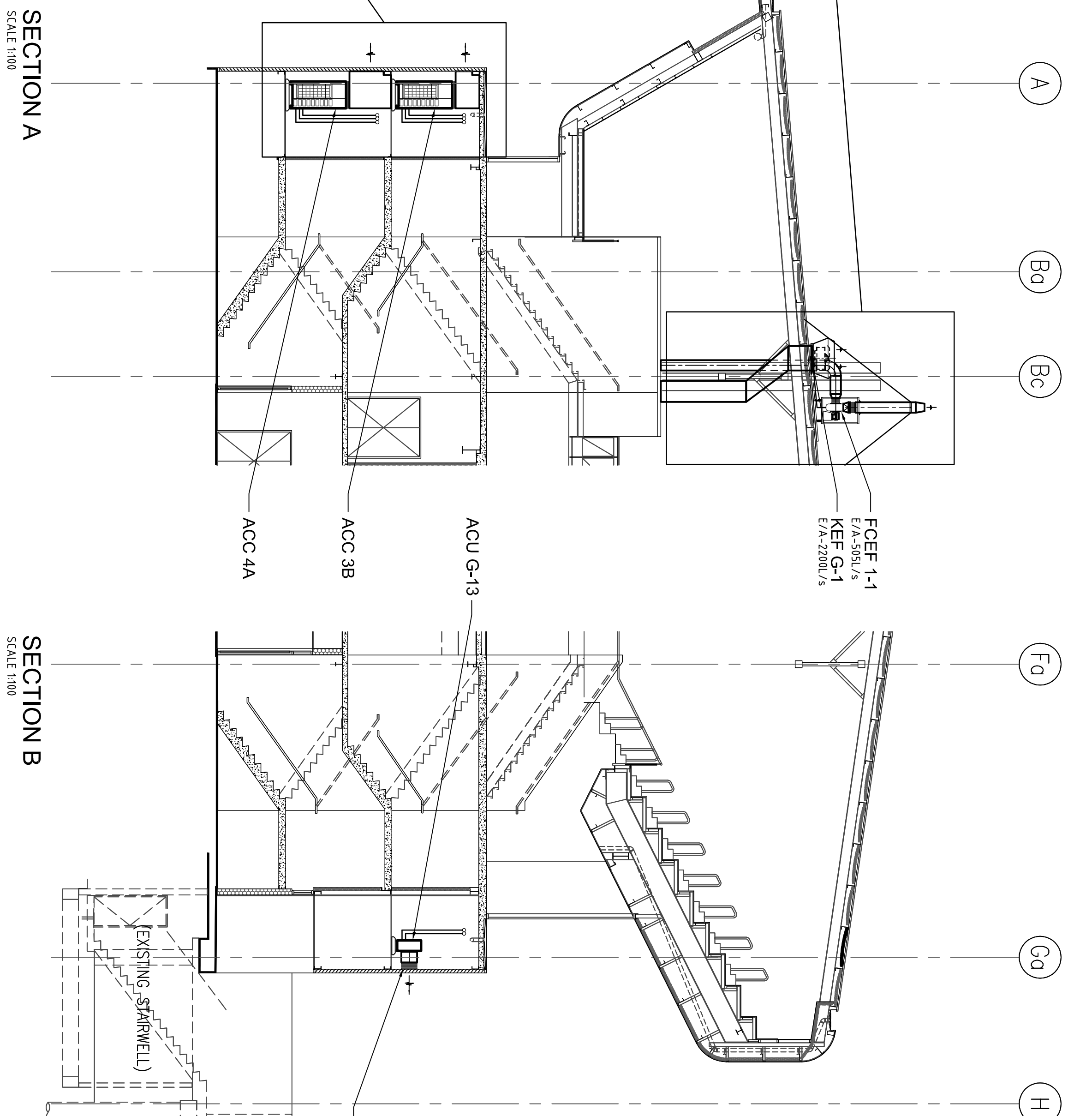
KITCHEN AND FUME CUPBOARD EXHAUST FAN DETAIL
SCALE 1:50



AIR COOLED CONDENSER DETAIL
SCALE 1:50

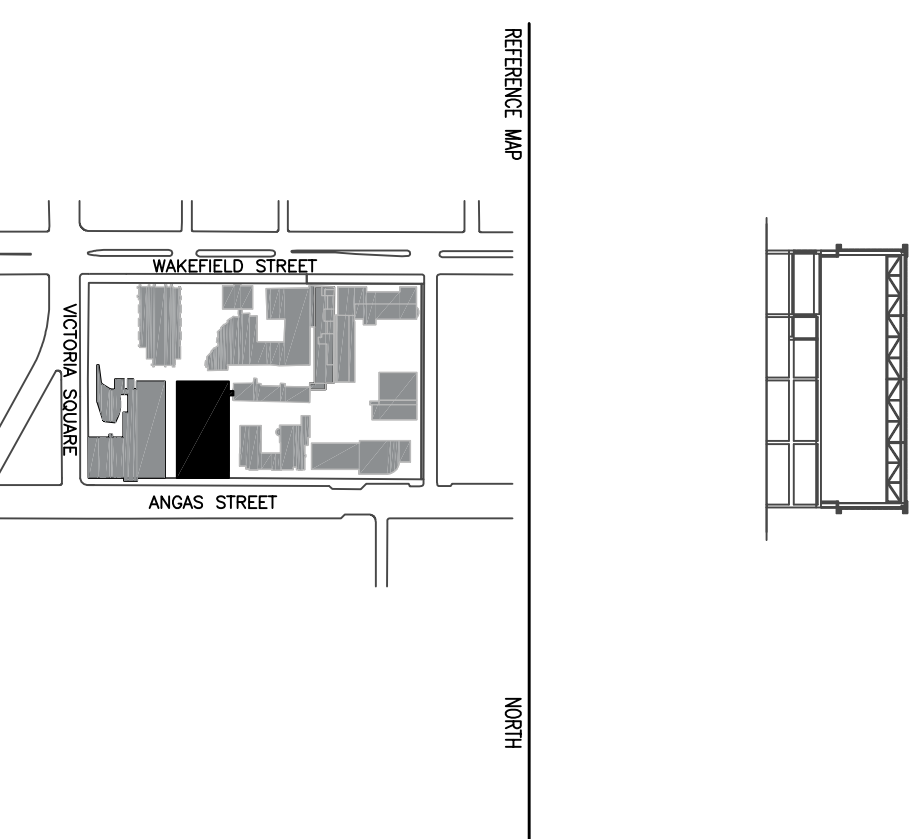
LEGEND OF SYMBOLS

ENC	EVAPORATIVE COOLING UNIT	0-25 L/S 200 DA
ACC	AIR CONDITIONING UNIT	95-150 L/S 250 DA
ACU	AIR COOLED CONDENSER	151-210 L/S 300 DA
ERV	ENERGY RECOVERY VENTILATOR	211-290 L/S 350 DA
BS	BRANCH SPLITTER BOX	291-380 L/S 400 DA
GF	FANS - GENERAL EXHAUST FAN	381-480 L/S 450 DA
TF	TOILET EXHAUST FAN	
	PREWORK NEW	
	PIPE JUNCTION	
	NON-CONNECTED PIPE CROSSING	
	PIPE DOWN	
	PIPE UP	
	CONDENSATE DRAIN PREWORK	
	GALVANISED SHEET METAL DUCT	
	DUCT AIR WAY DIMENSIONS IN mm, FIRST DIMENSION IS SIDE VIEWED SECOND DIMENSION IS NOT SIDE VIEWED	
	DOUBLE THICKNESS TURNING VANES	
	FLEXIBLE CONNECTION	
	DIRECTION OF AIR FLOW	
	FIRE RATED DUCTWORK	
	ACOUSTIC INSULATION INTERNAL 50 THICK	
	THERMAL INSULATION EXTERNAL 25 THICK	
	FLEXIBLE DUCTWORK - SIZES AS SHOWN	
	BUTTERFLY DAMPER TAKE OFF	
	SPLITTER WITH QUADRANT LOCK	
	CEILING SUPPLY DIFFUSER, FACE/NECK DIMENSIONS (SD) AS SHOWN IN SCHEDULE	
	EXHAUST AIR GRILLE LENGTH x WIDTH AS SHOWN IN SCHEDULE	
	MULTI-DIRECTIONAL OUTLET (MDO), DIMENSIONS AS SHOWN IN SCHEDULE	
	RETURN AIR GRILLE 7/4 25mm ACOUSTIC LINED CUSHION HEAD BOX LENGTH x WIDTH AS SHOWN IN SCHEDULE	
	AR DIFFUSION - SUPPLY AIR DIFFUSER, RETURN AIR GRILLE PROPRIETARY CONTROL & THERMOSTAT PANEL CONTROL PANEL	
	DIRECT DIGITAL CONTROLLER	
	AR TRANSFER DOOR GRILLE MINIMUM FREE AREA AS INDICATED IN SCHEDULE	
	AR TRANSFER 25mm DOOR UNDERCUT	
	FIRE RATED WALL	
	ACOUSTIC WALL	
	TUNISH BY HYDRAULIC SERVICES CONTRACTOR	
	CEILING ACCESS PANEL BY CEILING CONTRACTOR	
	BRANCH SPLITTER BOX	



SECTION A
SCALE 1:100

SECTION B
SCALE 1:100



1. DO NOT SCALE DIMENSIONS, WRITE DIMENSIONS CLEARLY.
 2. ALL DIMENSIONS SHALL BE CHECKED ON SITE BEFORE PROCEEDING WITH THE WORK. CHECKS SHALL BE NOTED IN WRITING OF ANY DISCREPANCIES.
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DATE: 15.10.07

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BESTEC PTY LTD
151-210 WATFORD STREET
WATFORD VIC 3078
TEL: 03 9472 2222
FAX: 03 9472 2223

BADGE
CONSTRUCTIONS

HASSELL

PROJECT: ST. ALOYSIUS COLLEGE GYMNASIUM & CLASSROOMS FITOUT

MECHANICAL SERVICES SECTIONS, DETAILS AND LEGEND OF SYMBOLS

DATE: 29 November 2007

DATE: 29 November 2007

DATE: 29 November 2007

DATE: 29 November 2007	DATE: 29 November 2007	DATE: 29 November 2007
DATE: 29 November 2007	DATE: 29 November 2007	DATE: 29 November 2007
DATE: 29 November 2007	DATE: 29 November 2007	DATE: 29 November 2007