EMP | CONSULTING

ENGINEERING | DESIGN | MANAGEMENT

Reference: EMPC-2953-L1

26th May 2025

Attention: To Whom It May Concern,

RE: McDONALD'S NATIONAL STANDARD BIO MOD 380 RESTAURANTS – LOT 2, 3, 4, 31 & 41 MURRAY STREET, PINJARRA – KITCHEN EXHAUST SYSTEM DESIGN COMPLIANCE CERTIFICATE

We hereby certify that the kitchen exhaust systems documented for the standalone McDonald's restaurant in Pinjarra (WA) comply with the Deemed-to-Satisfy requirements of the NCC2022, and the relevant referenced Australian Standards, including AS1668.2-2012 (Amdt 1&2) requirements for the exhaust air discharges.

The following is the list of the relevant mechanical services Standard Template drawings and Specification document which will be adopted for this restaurant.

Mechanical Services Drawings (Refer attached):

Drawing No.	Title	Revision
M000	COVER SHEET	G
M001	LEGEND & GENERAL NOTES	A
M002	EQUIPMENT SCHEDULES	B
M100	MECHANICAL LAYOUT	G
M101	MECHANICAL LAYOUT OPTIONS	G
M200	MECHANICAL ROOF PLAN	E
M201	MECHANICAL ROOF PLAN OPTIONS	E
M300	SECTION SHEET 1	D
M301	SECTION SHEET 2	D
M302	SECTION SHEET 3	D
M303	SECTION SHEET 4	D
M400	MECHANICAL DETAILS – SHEET 1	C

Mechanical Services Specification Document:

Document No.	Title	Revision
380.1	Mechanical Services Specification	F

AS1668.2 requires the points of discharge of the kitchen exhaust fans for this building to be at least 6m away from any outside air intake (natural ventilation openings or mechanical ventilation intakes), property boundaries and the boundary to a public street.
AS1668.2 also requires the extracted air from the kitchen hoods for this building to be discharged vertically and at minimum 5 m/s velocity.

The kitchen exhaust systems documented for this building will be based on the attached McDonald's Standard Template drawings and Specifications (as listed above) and will comply with the above requirements of AS1668.2-12.

The kitchen exhaust discharge points in this site are located;

- approximately 31m away from the site boundary with lot 32 located on the south west side of the proposed McDonald's building,
- approximately 8.6m away from the site boundary on George Street,
- approximately 24m away from the site boundary on Pinjarra Road,
- approximately 138m away from the site boundary on Murray Street, and
- approximately 106m away from the proposed ALDI building on the same lot.

The above complies with the minimum 6m separation requirement of AS1668.2, with three of the above distances being significantly over the minimum requirements. This will provide more than adequate distance for dilution of the odours discharged through the kitchen exhaust fans and will ensure no nuisance caused to the neighbouring properties.
Approximate location of the kitchen exhaust discharge points are marked on the attached site plan.

Furthermore, it is to be noted that the three main cooking appliances (two deep fat fryers and one clam-shell grill) are each provided with an exhaust hood which extracts cooking fumes through sealed sheetmetal ducts to the roof mounted vertical discharge kitchen exhaust fans. Each hood is fitted with washable baffle type grease filters which will be regularly cleaned. In addition, hoods may also be fitted with disposable filters (Shepherd Filters) with a filter media able to capture up to 98% of airborne grease before it enters the extraction system (Refer attached).

Any general waste produced by the restaurant will be placed in garbage bags, sealed, and deposited in an 1100L bin for general rubbish until pick up, as required. The bin store area itself is naturally ventilated to reduce the build-up of odours.

Please do not hesitate to contact the undersigned if you require further information.

Kind Regards,

Shirin Haghighi

Senior Mechanical Engineer (B.Eng. MIEAust MAIRAH)
P: (08) 9201 1919
E: shirin@empconsulting.com.au

PINJARRA ROAD

3 BIKE RACKS FOR 6 BIKES.

LANDSCAPING AND VERGE IMPROVEMENT WORKS SUBJECT TO SHIRE AND/OR MAIN ROADS WA APPROVAL.

PROPOSED 2000mm WIDE PAVED FOOTPATH WITH 2000mm LANDSCAPE BUFFER TO SIDE OF EXISTING MASONIC HALL.

PROPOSED 6.2m WIDE LEFT - IN / LEFT - OUT CROSSOVER.

1280 SETBACK

2500 SETBACK

EXISTING MASONIC HALL
FFL = 9.11

PROPOSED RE-USE OF EXISTING HERITAGE BUILDING AND INDICATIVE FUTURE DEVELOPMENT NOT INCLUDED IN THIS DEVELOPMENT APPLICATION.

ENTRY

TROLLEY BAY.

PROPOSED 1500mm WIDE CONCRETE FOOTPATH WITH 500mm LANDSCAPE BUFFER TO REAR OF EXISTING MASONIC HALL.

PED. CROSSING

NEW CONCRETE FOOTPATH CONNECTION FROM BUILDING EXIT. RAMP LENGTH AND HANDRAILS TO BE DETERMINED DURING DETAILED DESIGN PHASE.

PROPOSED ALDI STORE
GLA = 1,543 m²
NLA = 1,503 m²
FFL = 9.60

EXISTING FOOTPATH TO REMAIN.

MURRAY STREET

PROPOSED ALDI CARPARK
103 CAR BAYS
138114.58 mm

5400 TYP.

2700 TYP.

LOADING BAY -CONCRETE

SCREENED BIN ENCLOSURE.

NO ENTRY

BOL.

PORTION OF FULLY MOUNTABLE ROLLOVER CONCRETE KERBING.

EXISTING CROSSOVER TO BE MODIFIED TO 6.5m WIDE FULL MOVEMENT CROSSOVER. INCREASED ENTRY RADIUS TO SUIT ALDI TRUCK DELIVERY PATH.

3.3m HIGH WALL/FENCING IN ACCORDANCE WITH ACOUSTIC REPORT.

PROPOSED PUMPS AND TANKS FOR FIRE FIGHTING SERVICE. SIZE AND FINAL DESIGN CONFIRMED DURING DETAILED DESIGN STAGE.

tank

pump

INTERNAL ROAD #1
-RECIPROCAL ACCESSWAY

600mm HIGH BLOCKWORK RETAINING WALL AND 1.8m HIGH COLORBOND FENCE IN ACCORDANCE WITH ACOUSTIC REPORT.

101.9

LOT 39

INTERNAL ROAD #2
-RECIPROCAL ACCESSWAY

7 RECIPROCAL CAR PARKING BAYS.

KITCHEN EXHAUST FANS

4 PARK BICYCLE PARKING AREA.

DRIVE-THRU WAITING BAYS.

CURVED FEATURE STONE LOW HEIGHT PLANTER WALLS.

49.7

DRIVE THRU BAY

CONTRASTING CONCRETE PEDESTRIAN CROSSING.

NO ENTRY

PROPOSED McDONALD'S CARPARK 15 CAR BAYS

-CONCRETE

SERVERY

ENTRY #1

PLAY PLACE

ENTRY #2

24290.35 mm

PROPOSED McDONALD'S RESTAURANT
8619.46 mm
GLA = 375m²
NLA = 275m²
FFL = 9.60

9402.72 mm

CASHIER

BIN STORE

LOADING BAY -CONCRETE

400A tx pad

NO ENTRY

ORDER CANOPIES AND MENUBOARDS. REFER TO DRAWING DA10.

PAVED FOOTPATH TO REMAIN.

PROPOSED BOLLARD PROTECTION. 1500 CTS.

PROPOSED STEPS AND HANDRAIL ENTRY.

PAVED FOOTPATH TO REMAIN. MAKE GOOD CONCRETE KERBING FOLLOWING CROSSOVER REMOVAL.

GEORGE STREET

600mm HIGH BLOCKWORK RETAINING WALL.

PROPOSED McDONALD'S TRANSFORMER. SUBJECT TO WESTERN POWER DESIGN.

PORTION OF FULLY MOUNTABLE ROLLOVER CONCRETE KERBING WITH BRICK PAVED STENCILLING.

EXISTING CROSSOVER TO BE MODIFIED TO 6.5m WIDE FULL MOVEMENT CROSSOVER.

LOT 32

LEGEND:

- NEW EXPOSED AGGREGATE CONCRETE FOOTPATH. COLOUR 1.
- NEW EXPOSED AGGREGATE CONCRETE FOOTPATH. COLOUR 2.
- NEW GREY CONCRETE FOOTPATH.
- NEW SOFT LANDSCAPING BEDS.

N

REV	DATE	DESCRIPTION

Hindley and Associates Pty Ltd
Building Designers
Unit 4/166 Stirling Highway
Nedlands WA 6009
PO Box 199 Nedlands
WA 6909
08 9386 6699
www.hindley.com.au

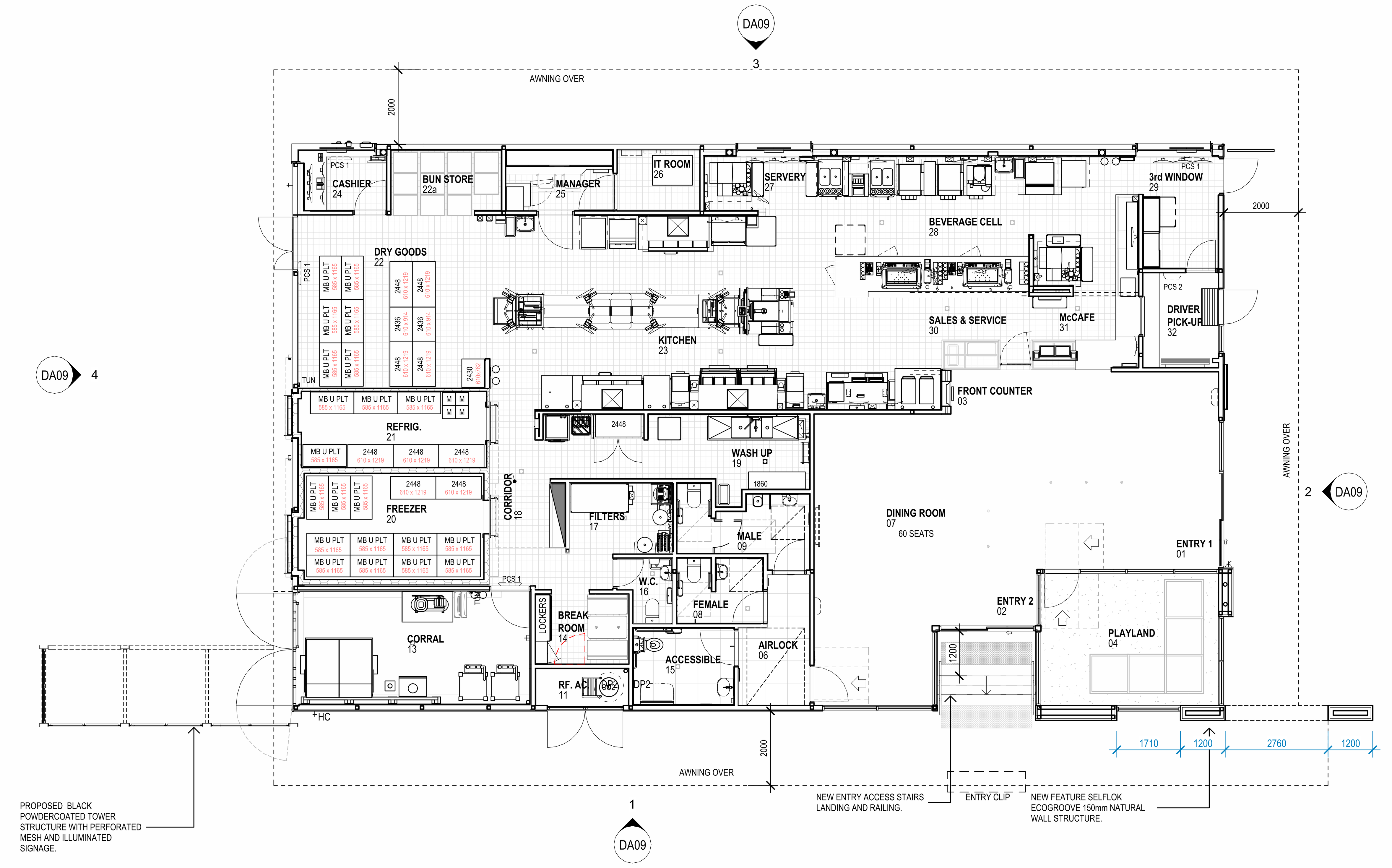
architecture
ARCHITECTS INTERIOR DESIGNERS
Suite 101, Level 1, 518 Little Bourke Street
Melbourne Victoria 3000
t: +61 3 9614 1645 f: +61 3 9614 1945
e: info@architecturehq.com w: www.architecturehq.com

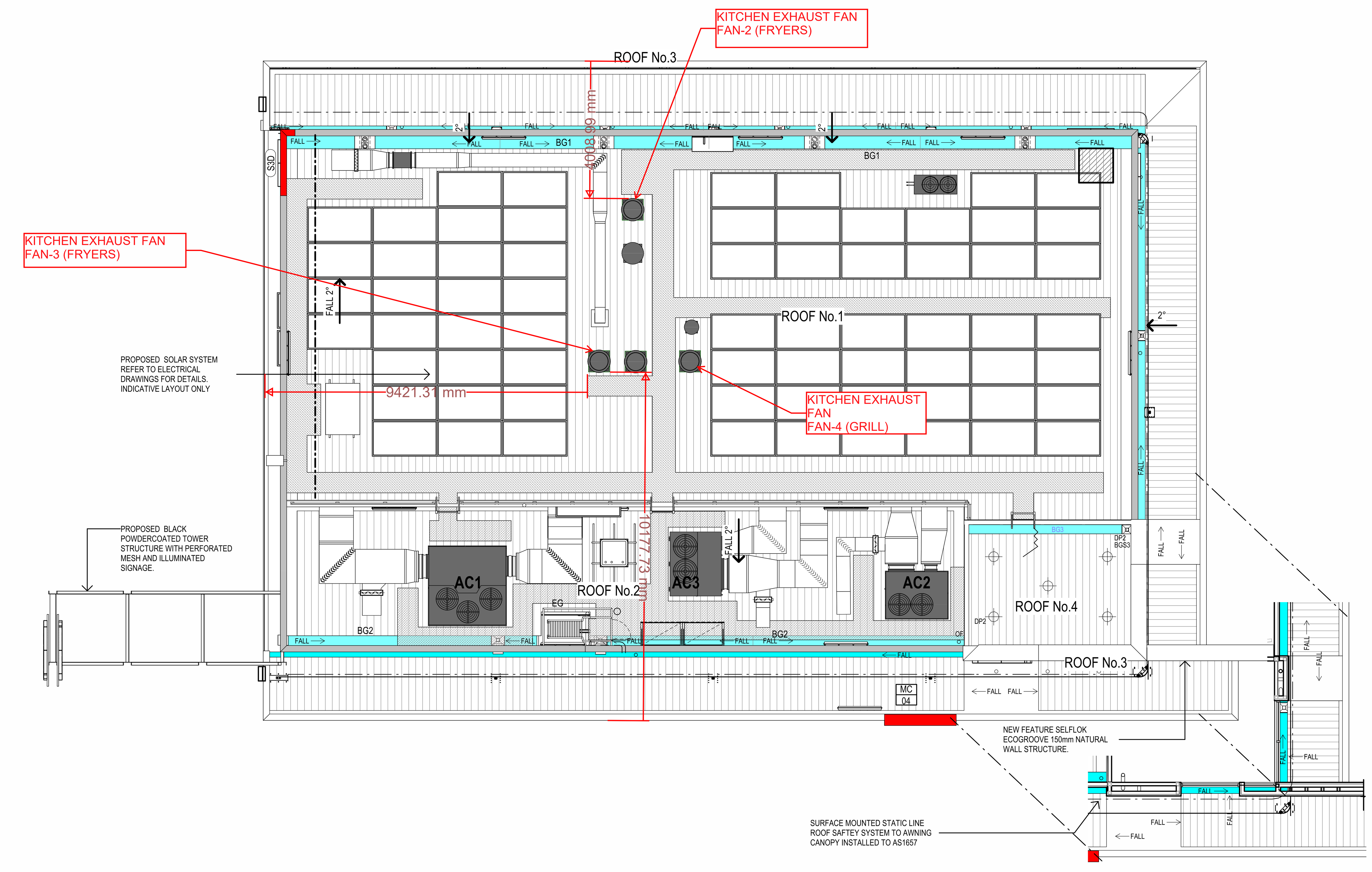
Project PROPOSED ALDI STORE & McDONALD'S
LOT 2, 3, 4, 31 & 41 MURRAY ST. PINJARRA

Drawing PROPOSED SITE PLAN

TOWN PLANNING

Job No 251677	Drawing No. DA-02
Scale 1:250 @ A1	
Date MAY 2025	
Drawn AJJ	Revision 0

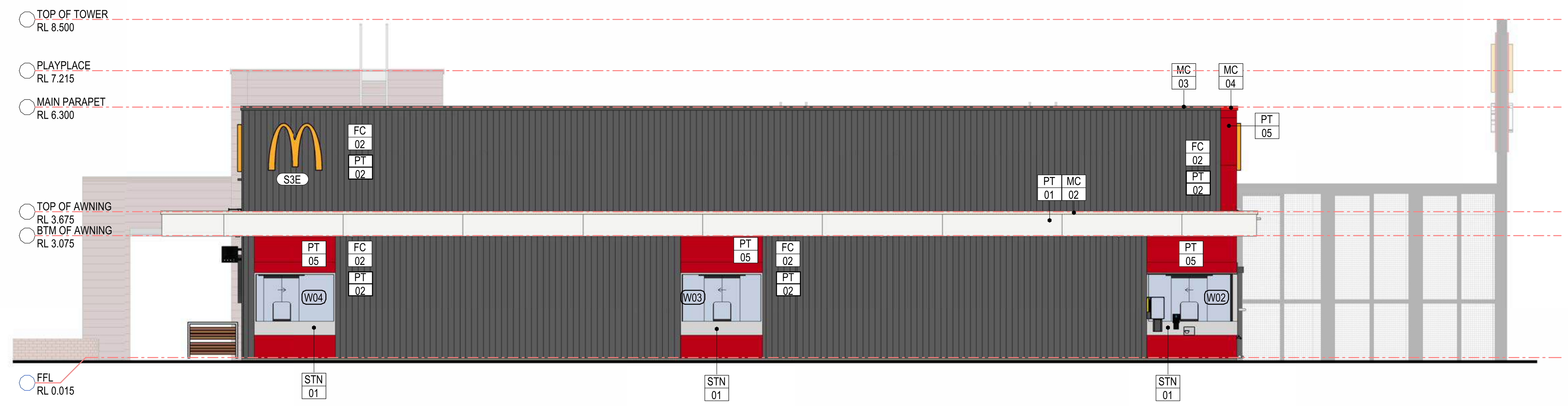




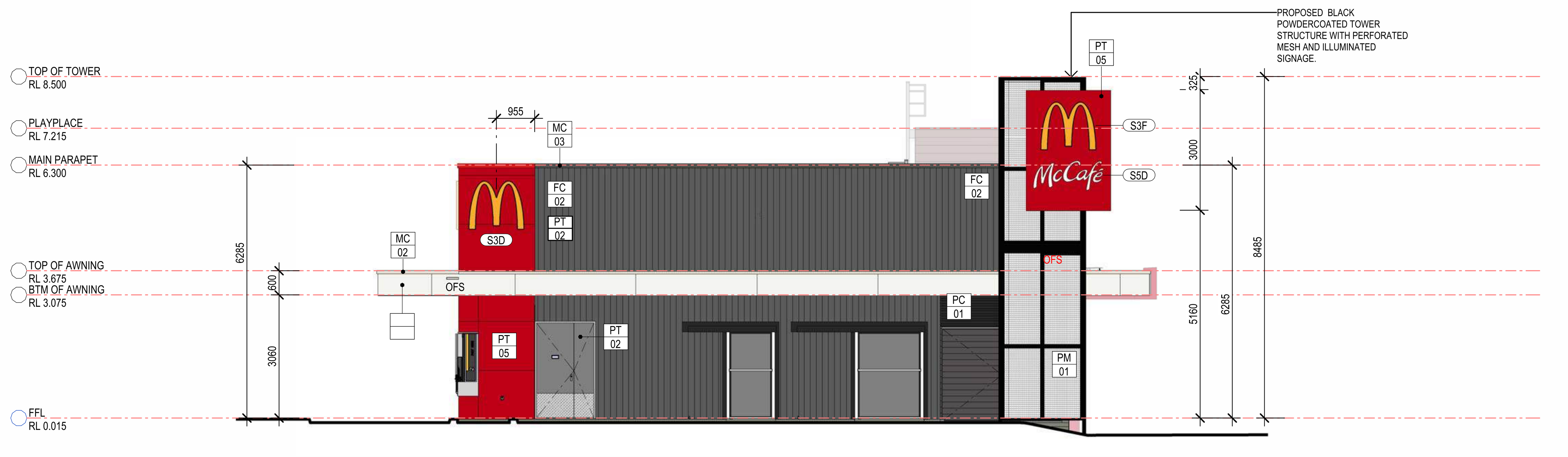
LOWER ROOF PLAN

SIDE ELEVATION
1 : 100

FRONT ELEVATION
1 : 100



DRIVETHRU ELEVATION
1 : 100



REAR ELEVATION
1 : 100

Contractor to verify all dimensions on site prior to commencing work or ordering any materials. Do not scale drawings, use figured dimensions only. Inform architect of any conflict between site conditions and documents.Architectural documents are to be read in conjunction with all relevant consultants drawings. Technical drawings are to be read in conjunction with appropriate sections of technical specification. Copyright of designs shown herein is retained by this office, written authority is required for any reproduction.

REV	DATE	DESCRIPTION
0	JAN 2025	AMENDED DA AS CLOUDED

Hindley and Associates Pty Ltd Building Designers

architecture hq — ARCHITECTS INTERIOR DESIGNERS

Suite 101, Level 1, 518 Little Bourke Street
Melbourne Victoria 3000
t: +61 3 9614 1645 f: +61 3 9614 1945
e: info@architecturehq.com w: www.architecturehq.com

Project: PROPOSED ALDI STORE & McDONALD'S
LOT 2, 3, 4, 31 & 41 MURRAY ST.PINJARRA

Drawing: McDONALD'S FLOORPLANS AND BUILDING ELEVATIONS

TOWN PLANNING

Job No	251677	Drawing No.	DA09
Scale	1 : 100 @ A1		
Date	MAY 2025		
Drawn	NR	Revision	0

McDONALDS STANDARD DOCUMENTS
BIO MOD 380

MECHANICAL SERVICES

DRAWING LIST		
NO.	DRAWING TITLE	Current Revision
M000	COVER SHEET	G
M001	LEGEND & GENERAL NOTES	A
M002	EQUIPMENT SCHEDULES	B
M100	MECHANICAL LAYOUT	G
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M302	SECTION SHEET 3	D
M303	SECTION SHEET 4	D
M400	MECHANICAL DETAILS - SHEET 1	C

NOTES FOR USERS OF THIS REVIT MODEL -

The following design variations have been modelled within different worksets and view templates, allowing users to choose the required option by turning these on/off per view and sheet.
Once design options/variations are determined, remove the redundant options and these notes from the model.

1. AC-3 Location options :
   In the roof well adjacent other Package units or over the Beverage Cell area.

2. AC-1 Variations :
   With Economy Cycle or Without Economy Cycle.

3. Makeup Air System to Hoods :
   With an In-Line Fan (FAN-7) or With an Indirect Evaporative Cooler Unit (IEC-1)

Revisions

Issue	Description	Date	Chk	Int
G	REVISED AS CLOUDED	14.03.2024		
F	REVISED AS CLOUDED	30.11.2023		
E	REVISED AS CLOUDED, BACKGROUND UPDATED	04.09.2023		
D	REVISED AS CLOUDED	01.05.2023		
C	REVISED AS CLOUDED	15.02.2023		
B	REVISED AS CLOUDED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

General Notes

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Drawing Notes

THESE DRAWINGS ARE STANDARD TEMPLATE DESIGN DRAWINGS, PRODUCED BASED ON SPECIFIC OUTDOOR DESIGN CONDITIONS AND BUILDING ORIENTATION. CONSULTING ENGINEERS ARE REQUIRED TO CARRY OUT SYSTEMS' DETAIL DESIGN FOR ANY INDIVIDUAL RESTAURANT AND MODIFY THESE DRAWINGS TO SUIT SITE SPECIFIC PARAMETERS.

North

Client

McDonald's Australia Limited
ABN: 43 008 496 928
☎ 02 9875 6666

NATIONAL DEVELOPMENT GROUP

Architect

Consultant

EMP | CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
ENTER ADDRESS
VIA PROJECT INFORMATION

PRELIMINARY
NOT TO BE USED DURING CONSTRUCTION

Scale	Series
@A3	BIO MOD 380

Drawing
COVER SHEET

Project Number	Drawing Number	Issue
2488	M000	G

LEGEND

- SIDE BLOW AIR TERMINAL
- 4-WAY SUPPLY DIFFUSER
- 3 WAY SUPPLY DIFFUSER
- JET DIFFUSER
- LINEAR SLOT DIFFUSER/LINEAR BAR GRILLE
- RETURN/EXHAUST/TRANSFER GRILLE
- SPIGOT
- FILTER
- MANUAL VOLUME CONTROL DAMPER
- CEILING ACCESS PANEL (BY BUILDER) (A / P)

- BARE SHEET METAL DUCT
- EXTERNALLY INSULATED SHEET METAL DUCT (R-VALUES TO THE NCC2019)
- INTERNALLY INSULATED SHEET METAL DUCT. (R-VALUES TO THE NCC2019)
- INSULATED ACOUSTIC FLEXIBLE DUCT
- UNINSULATED FLEXIBLE DUCT (EXHAUST DUCTS)
- TURNING VANES
- MAIN SWITCH BOARD
- CONTROL PANEL
- WS — VALVED COLD WATER SUPPLY (BY HSC)
- C — ACTRON AIR GROUP CONTROLLER
- T — TEMPERATURE SENSOR IN DUCT
- T — TEMPERATURE SENSOR IN ROOM
- TH — THERMOSTAT
- UC — DOOR UNDERCUT (BY BUILDER)
- SD / SU — DUCT SET DOWN / SET UP
- TD — TUNDISH (HSC)

ABBREVIATIONS

E	EXHAUST
E/A	EXHAUST AIR
MSB	MAIN SWITCH BOARD
O/A	OUTSIDE AIR
R/A	RETURN AIR
S/A	SUPPLY AIR
S	SUPPLY
ESC	ELECTRICAL SUB-CONTRACTOR
MSC	MECHANICAL SUB-CONTRACTOR
KES	KITCHEN EQUIPMENT SUPPLIER
HSC	HYDRAULIC SUB-CONTRACTOR
GSS	GALVANISED STEEL SHEET

TAGS

- AC.X — EQUIPMENT TAG
- XX / Flow — GRILLE TAG

GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION DOCUMENT, ARCHITECTURAL AND OTHER SERVICES DRAWINGS.
2. ALL DIMENSIONS ARE IN MM, UNLESS OTHERWISE NOTED.
3. ALL DUCTWORK SIZES INDICATE CLEAR AIRWAY DIMENSIONS.
4. FINAL LOCATION OF ALL WALL MOUNTED CONTROLLERS, DEVICES, AND INSTRUMENTS TO BE COORDINATED WITH THE EQUIPMENT & FURNTURE LAYOUT, AND BE APPROVED BY THE SUPERINTENDENT.
5. PROVIDE MANUAL VOLUME CONTROL DAMPERS FOR AIR BALANCING AS REQUIRED, WHETHER SHOWN ON THE DRAWING OR NOT.
6. MECHANICAL SUB-CONTRACTOR TO COORDINATE WITH THE STRUCTURAL DETAILER TO MODIFY TRUSS WEBS TO SUIT DUCTWORK LAYOUT.
7. PIPE CONDENSATE DRAIN FROM AIR CONDITIONING UNITS TO THE TUNDISH PROVIDED BY THE H.S.C. COORDINATE WITH THE HYDRAULIC SUB-CONTRACTOR ON THE EXACT LOCATION OF THE TUNDISH.
8. PIPE THE DRAIN FROM EACH KITCHEN EXHAUST FAN TO THE TUNDISH PROVIDED BY THE H.S.C.
9. PROVIDE MAGNEHELIC GAUGE ACROSS ALL FILTER BOXES.
10. HEAVY DUTY FLEXIBLE CONNECTIONS TO BE FITTED WHERE RIGID DUCTS CONNECT TO THE EQUIPMENT.
11. PROVDE GSS SUN SHIELD OVER THE FLEXIBLE CONNECTIONS EXPOSED TO THE SUN.
12. PROVIDE HINGED, GASKETTED AND INSULATED ACCESS PANEL FOR EACH FILTER BANK.
13. ALL AIR CONDITIONING SUPPLY, RETURN, AND TRANSFER GRILLES TO BE PROVIDED WITH INTERNALLY INSULATED CUSHION HEADS. R-VALUES OF SUPPLY AND RETURN AIR CUSHION BOXES TO BE EQUAL TO THE CONNECTING DUCT. CUSHION HEADS OVER TRANSFER GRILLES TO BE INTERNALLY LINED WITH 25mm ACOUSTIC INSULATION.
14. ALL DIFFUSER AND GRILLE CUSHION BOXES TO BE SUPPORTED FROM BUILDING STRUCTURE VIA FOUR(4) THREADED DROP RODS ATTACHED TO CORNERS OF THE PLENUM. HANGING VIA DROP RODS INSERTED INTO THE CUSHION BOXES IS NOT ACCEPTABLE, EXCEPT FOR THE EXHAUST AND TRANSFER AIR GRILLES PLENUMS.
15. FANS TO BE ISOLATED FROM THEIR UPSTAND WITH VIBRATION ISOLATION PADS.
16. EXHAUST DUCTS BETWEEN CANOPY HOODS AND FANS TO BE RUN VERTICALLY WITH NO BENDS. WHERE THIS IS NOT POSSIBLE DUE TO CLASH WITH BUILDING STRUCTURE, PROVIDE AN OFFSET IN THE DUCT ROUTE WITH THE USE OF RADIUS BENDS. PROVIDE AN ACCESS PANEL ON THE DUCT BETWEEN THE TWO BENDS TO AS4254.2. COORDINATE WITH BUILDER FOR THE LOCATION OF THE REQUIRED ACCESS PANELS ON THE CEILING.
17. ALL AIR CONDITIONING UNITS TO BE MOUNTED ON GALVANISED STEEL SUPPORTING STRUCTURE VIA VIBRATION ISOLATION MOUNTS.
18. IN-LINE FANS TO BE MOUNTED ON GALVANISED STEEL SUPPORTING STRUCTURE VIA VIBRATION ISOLATION MOUNTS.

PRELIMINARY
NOT TO BE USED DURING CONSTRUCTION

Revisions

Issue	Description	Date	Chk	Int
A	FIRST RELEASE	17/08/2022		

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Architect

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PO BOX 83 MOUNT HAWTHORN 6915
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Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
ENTER ADDRESS
VIA PROJECT INFORMATION

Scale	Series
@A3	BIO MOD 380

Drawing
LEGEND & GENERAL NOTES

Project Number	Drawing Number	Issue
2488	M001	A

AIR GRILLES SCHEDULE

RH	DESCRIPTION	NOMINAL SIZE	NECK SIZE (mm)	MODEL NUMBER	FINISH
	<varies>			<varies>	<varies>
A1	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	250x250	LFD41	STD WHITE
A2	4 WAY BLOW LOUVRED FACE DIFFUSER	300x300	150x150	LFD41	STD WHITE
A3	4 WAY BLOW LOUVRED FACE DIFFUSER	300x300	150x150	LFD41	STD WHITE
A4	4 WAY BLOW LOUVRED FACE DIFFUSER	400x400	200x200	LFD41	STD WHITE
A5	2 WAY BLOW LOUVRED FACE DIFFUSER	450x450	300x300	LFD25	STD WHITE
A6	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	350x350	LFD41	STD WHITE
A7	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	400x400	LFD41	STD WHITE
A8	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	400x400	LFD41	STD WHITE
A9	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	350x350	LFD41	STD WHITE
A10	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	400x400	LFD41	STD WHITE
A11	3 WAY BLOW LOUVRED FACE DIFFUSER	600x600	400x400	LFD31	STD WHITE
A12	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	400x400	LFD41	STD WHITE
A13	4 WAY BLOW LOUVRED FACE DIFFUSER	300x300	150x150	LFD41	STD WHITE
A14	4 WAY BLOW LOUVRED FACE DIFFUSER	300x300	150x150	LFD41	STD WHITE
A15	4 WAY BLOW LOUVRED FACE DIFFUSER	300x300	150x150	LFD41	STD WHITE
A16	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	350x350	LFD41	STD WHITE
A17	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	450x450	LFD41	STD WHITE
A18	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	450x450	LFD41	STD WHITE
A19	4 WAY BLOW LOUVRED FACE DIFFUSER	600x600	450x450	LFD41	STD WHITE
A20	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	300x300	LFD41	STD WHITE
A21	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	250x250	LFD41	BLACK
A22	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	250x250	LFD41	BLACK
A23	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	250x250	LFD41	BLACK
A24	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	250x250	LFD41	BLACK
A25	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	200x200	LFD41	BLACK
A26	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	200x200	LFD41	BLACK
A27	4 WAY BLOW LOUVRED FACE DIFFUSER	450x450	250x250	LFD41	BLACK
A28					
C1	HALF CHEVRON GRILLE	900x600		RC3AR45	STD WHITE
C2	HALF CHEVRON GRILLE	900x600		RC3AR45	STD WHITE
C3	HALF CHEVRON GRILLE	900x600		RC3AR45	STD WHITE
C4	HALF CHEVRON GRILLE	350x300		RC3AR45	STD WHITE
C5	HALF CHEVRON GRILLE	350x300		RC3AR45	STD WHITE
C6	HALF CHEVRON GRILLE	600x350		RC3AR45	STD WHITE
C7	HALF CHEVRON GRILLE	600x350		RC3AR45	STD WHITE
C8	HALF CHEVRON GRILLE	850x600		RC3AR45	BLACK
C9	HALF CHEVRON GRILLE	850x600		RC3AR45	BLACK
C10	HALF CHEVRON GRILLE	850x600		RC3AR45	STD WHITE
C11	HALF CHEVRON GRILLE	850x600		RC3AR45	STD WHITE
C12	HALF CHEVRON GRILLE	700x700		RC3AR45	BLACK
C13	HALF CHEVRON GRILLE	600x750		RC3AR45	BLACK
C14	HALF CHEVRON GRILLE	250x250		RC3AR45	BLACK
C15	HALF CHEVRON GRILLE	200x200		RC3AR45	BLACK
C16	HALF CHEVRON GRILLE	200x200		RC3AR45	BLACK
C17	HALF CHEVRON GRILLE	200x200		RC3AR45	BLACK
C18	HALF CHEVRON GRILLE	200x200		RC3AR45	BLACK
C19	HALF CHEVRON GRILLE	500x300		RC3AR45	BLACK
C20	HALF CHEVRON GRILLE	500x300		RC3AR45	BLACK
C21	HALF CHEVRON GRILLE	350x350		RC3AR45	STD WHITE
C22	HALF CHEVRON GRILLE	400x400		RC3AR45	STD WHITE
G1	LINEAR SLOT DIFFUSER - 25mm	900Lx3 slot		RCLS325	BLACK
G2	LINEAR SLOT DIFFUSER - 25mm	900Lx3 slot		RCLS325	BLACK
G3	LINEAR SLOT DIFFUSER - 25mm	900Lx3 slot		RCLS325	BLACK
G4	LINEAR SLOT DIFFUSER - 25mm	350/900Lx3 slot		RCLS325	BLACK
S1	JET DIFFUSER	350 dia		HOLYOAKE JD350	BLACK
S2	JET DIFFUSER	350 dia		HOLYOAKE JD350	BLACK

NOTE: COLOUR OF GRILLES IN TOILETS TO MATCH CEILING COLOUR.

NOTE:
1. INDICATED STATIC PRESSURES ARE ESTIMATED FOR CLEAN FILTERS
2. IT ROOM EXHAUST FAN TO COME COMPLETE WITH A THERMOSTAT FAN CONTROLLER EQUAL TO "FANTECH TFC6".
3. DE-SUPERHEATER & PUMP TO BE FITTED TO LEAD COMPRESSOR BY ACTRON AIR.
4. JET DIFFUSERS (S1 & S2) TO BE SET TO DIFFUSE MODE.
5. KITCHEN CANOPY HOODS TO BE SUPPLIED AND INSTALLED BY K.E.S. CANOPY HOODS EXHAUST AIR FLOW RATES ARE AS ADVISED BY THE K.E.S.
6. ALL DIFFUSERS & GRILLES TO BE PROVIDED WITH SIDE ENTRY CUSHION BOXES WITH THE SPIGOT SIZE MATCHING FLEXIBLE DUCT SIZE IN ACCORDANCE WITH THE FLEXIBLE DUCTS SCHEDULE. TOP ENTRY PLENUMS ARE ONLY APPROVED IN THE BACK OF HOUSE WHERE SPACE IS LIMITED. PROVDE BUTTERFLY DAMPER AT EACH SPIGOT FOR AIR BALANCING.
7. ALL DIFFUSERS & GRILLES TO BE OF REMOVABLE CORE TYPE.
8. ALL EXHAUST FANS, EXCLUDING FAN-2, FAN-3 AND FAN-4, TO BE PROVIDED WITH BACKDRAFT SHUTTERS.
9. ALL FANS WITH SINGLE PHASE MOTORS TO BE PROVIDED WITH SPEED CONTROLLERS.
10. COORDINATE THE COLOUR OF ALL THE DIFFUSERS & GRILLES WITH THE ARCHITECT PRIOR TO PROCUREMENT.

FAN SCHEDULE - AC1 WITHOUT ECONOMY CYCLE

UNIT No.	APPLICATION	FLOW RATE (L/s)	ESTIMATED E.S.P (Pa)	Model	POWER (kW)	FLA (A)	NUMBER OF PHASES	WEIGHT (kG)
FAN-1	TOILET EXHAUST	200	* 170.0	CE314V / TCE314 (FOR WA STORES)	0.120	0.62	1	8
FAN-2	FRY EXHAUST	430	270.0	CGD354M-MM	0.550	1.63	3	85
FAN-3	FILLET EXHAUST	430	270.0	CGD354M-MM	0.550	1.63	3	85
FAN-4	GRILL EXHAUST	550	270.0	CGD404M-MM	0.550	1.63	3	90
FAN-5	WASH-UP EXHAUST	150	120.0	CEEC25D	0.160	1.39	1	6
FAN-6	IT ROOM	200	100.0	CE356V	0.070	0.32	1	20
FAN-7	MAKEUP AIR TO CANOPY HOODS	520	175.0	PUE354ER	0.370	1.85	1	24

* INCLUDES 35Pa PRESSURE DROP ACROSS THE NON-RETURN DAMPER.

FAN SCHEDULE - AC1 WITH ECONOMY CYCLE

UNIT No.	APPLICATION	FLOW RATE (L/s)	ESTIMATED E.S.P (Pa)	Model	POWER (kW)	FLA (A)	NUMBER OF PHASES	WEIGHT (kG)
FAN-1	TOILET EXHAUST	200	* 170.0	CE314V / TCE314 (FOR WA STORES)	0.120	0.62	1	8
FAN-2	FRY EXHAUST	430	270.0	CGD354M-MM	0.550	1.63	3	85
FAN-3	FILLET EXHAUST	430	270.0	CGD354M-MM	0.550	1.63	3	85
FAN-4	GRILL EXHAUST	550	270.0	CGD404M-MM	0.550	1.63	3	90
FAN-5	WASH-UP EXHAUST	150	120.0	CEEC25D	0.160	1.39	1	6
FAN-6	IT ROOM	200	100.0	CE356V	0.070	0.32	1	20
FAN-7	MAKEUP AIR TO CANOPY HOODS	520	175.0	PUE354ER	0.370	1.85	1	24
FAN-8	RELIEF AIR FAN	2320	70.0	AP0636AP10/24	0.410	1.21	3	45

* INCLUDES 35Pa PRESSURE DROP ACROSS THE NON-RETURN DAMPER.

INDIRECT EVAPORATIVE COOLER SCHEDULE (USE WHERE APPLICABLE)

UNIT No.	SUPPLY AIR (L/s)	AMBIENT (°CDB/°CWB	ESTIMATED E.S.P (Pa)	Model	POWER (kW)	FLA (A)	NUMBER OF PHASES	WATER SUPPLY	WEIGHT (kG)	DRAIN FLOW RATE (L/min)
IEC-1	600	36.6/23.2	170	SEELEY INTERNATIONAL CW-H10	1.5	4.9	3	20L/min@100kPa-800kPa	350	15

NOTES:
1. THIS SCHEDULE HAS BEEN PROVIDED ONLY AS A SAMPLE AND GUIDE. CONSULTING ENGINEER TO MODIFY OR REMOVE TO SUIT THE REQUIREMENTS OF EACH SITE. REFER THE SPECIFICATION DOCUMENT FOR FURTHER DETAIL ON THIS UNIT.
2. SUPPLY AIR FLOW RATE NOMINATED AT 600L/s ASSUMING O/A FLOW RATE TO AC1 IS REDUCED TO 400L/s. CONSULTING ENGINEER TO REVISE THIS AIRFLOW RATE AS AND IF REQUIRED. ENSURING AIR BALANCE IN THE KITCHEN & BUILDING IS MAINTAINED AS PER THE GENERAL DESIGN INTENT.

FLEXIBLE DUCT SCHEDULE (U.O.N.)

AIR VOLUME (L/S)	DUCT DIAMETER (mm)
<20 L/S	Ø150
20-45 L/S	Ø150
46-80 L/S	Ø200
81-150 L/S	Ø250
151-220 L/S	Ø300
221-330 L/S	Ø350
331-460 L/S	Ø400
461-600 L/S	Ø450
601-800 L/S	Ø500
801-1100 L/S	Ø550

AC UNIT SCHEDULE

UNIT No.	AREA SERVING	SUPPLY AIR (L/s)	OUTSIDE AIR (L/s)	TOTAL COOLING / SENSIBLE COOLING	AIR ON COIL (°CDB)	AIR ON COIL (°CWB)	AMBIENT (°CDB/°CWB)	ESTIMATED EXTERNAL STATIC PRESSURE (Pa)	ACTRON AIR MODEL	WEIGHT	NUMBER OF PHASES	FULL LOAD AMPS
AC 1	KITCHEN	2800	480	45kW / 40kW	25.5 °C	17.3 °C	34.5/20.5	250	PKY620-LSST (SEE NOTE 3)	980	3	53.9
AC 2	DINING & PLAYLAND	1500	430	24kW / 22.3kW	27.0 °C	18.0 °C	34.5/20.5	220	PKV290T-L	420	3	25
AC 3	BEVERAGE CELL	1700	350	28kW / 26kW	26.0 °C	17.0 °C	34.5/20.5	240	PCG340-R	520	3	36.1

PRELIMINARY
NOT TO BE USED DURING CONSTRUCTION

Revisions

Issue	Description	Date	Chk	Int
B	REVISED AS CLOUDED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

General Notes

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Drawing Notes

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North

Client

McDonald's Australia Limited
ABN. 43 008 496 928
☎ 02 9875 6666

Architect

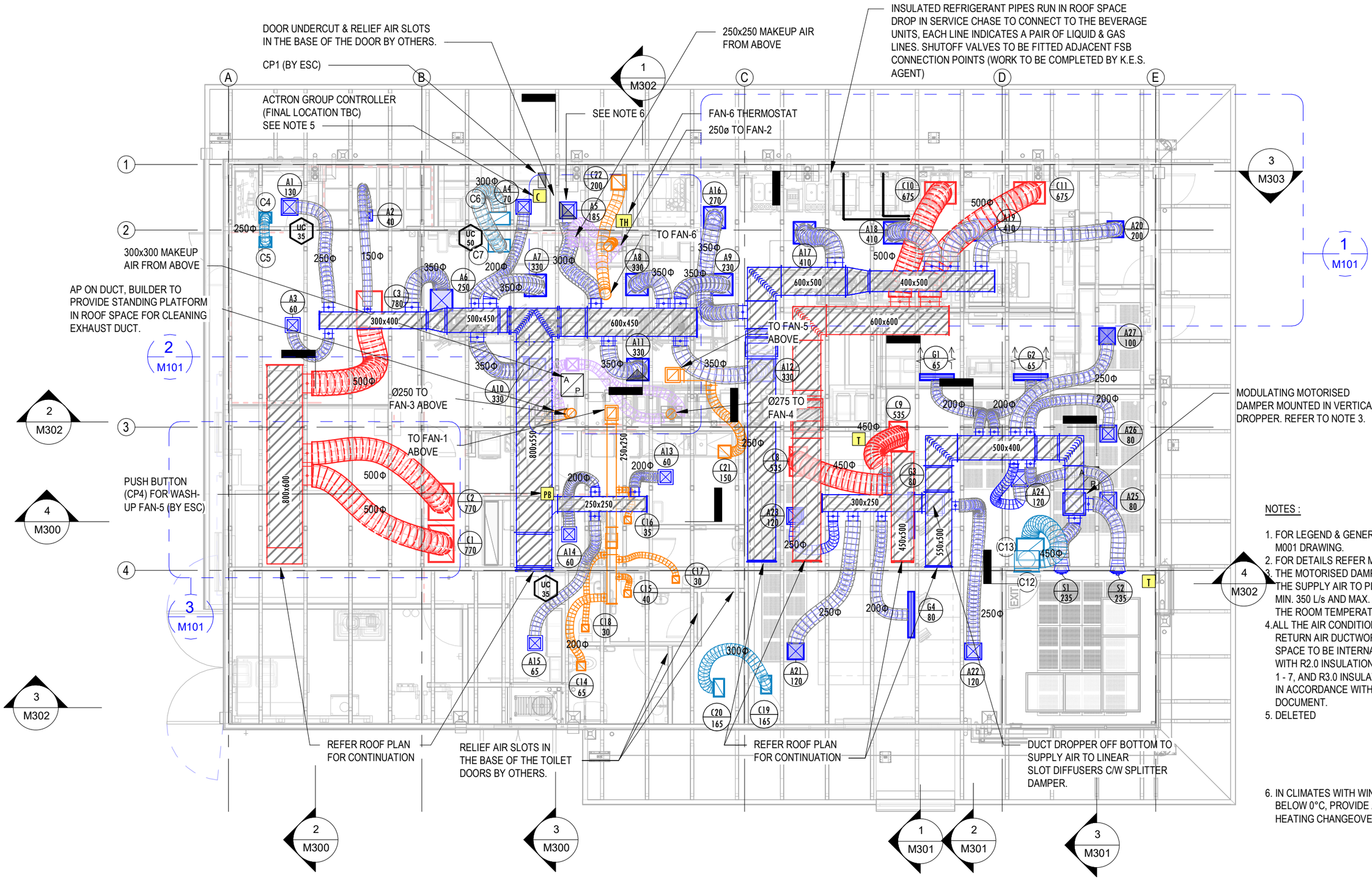
Consultant

EMP CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
ENTER ADDRESS
VIA PROJECT INFORMATION

Scale: @A3
Series: BIO MOD 380
Drawing: EQUIPMENT SCHEDULES
Project Number: 2488
Drawing Number: M002
Issue: B



NOTES :

1. FOR LEGEND & GENERAL NOTES REFER M001 DRAWING.
2. FOR DETAILS REFER M400.
3. THE MOTORISED DAMPER TO MODULATE THE SUPPLY AIR TO PLAYLAND BETWEEN MIN. 350 L/s AND MAX. 500 L/s TO MAINTAIN THE ROOM TEMPERATURE.
4. ALL THE AIR CONDITIONING SUPPLY AND RETURN AIR DUCTWORK IN THE ROOF SPACE TO BE INTERNALLY INSULATED WITH R2.0 INSULATION FOR CLIMATE ZONES 1 - 7, AND R3.0 INSULATION FOR CLIMATE ZONE 8 IN ACCORDANCE WITH THE SPECIFICATION DOCUMENT.
5. DELETED
6. IN CLIMATES WITH WINTER DESIGN TEMPERATURE BELOW 0°C, PROVIDE A VAV DIFFUSER WITH COOLING/ HEATING CHANGEOVER CONTROLS.

Revisions

Issue	Description	Date	Chk	Int
G	BACKGROUND UPDATED	14.03.2024		
F	BACKGROUND UPDATED & REVISED AS CLOUDED	30.11.2023		
E	REVISED AS CLOUDED, BACKGROUND UPDATED	04.09.2023		
D	BACKGROUND UPDATED	01.05.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		

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2. THE AIR DIFFUSION LAYOUT INDICATED ON THIS DRAWING FOR FRONT OF HOUSE IS BASED ON A SPECIFIC INTERIOR DESIGN AND IS INDICATIVE OF DESIGN PURPOSE. CONSULTING ENGINEERS ARE REQUIRED TO MAKE NECESSARY ADJUSTMENTS AND/OR REDESIGN TO SUIT THE INTERIOR DESIGN PACKAGE OF EACH RESTAURANT.

North

Client
McDonald's Australia Limited
ABN. 43 008 496 928
☎ 02 9875 6666
NATIONAL REINVESTMENT GROUP

Architect

Consultant
EMP | CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
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VIA PROJECT INFORMATION

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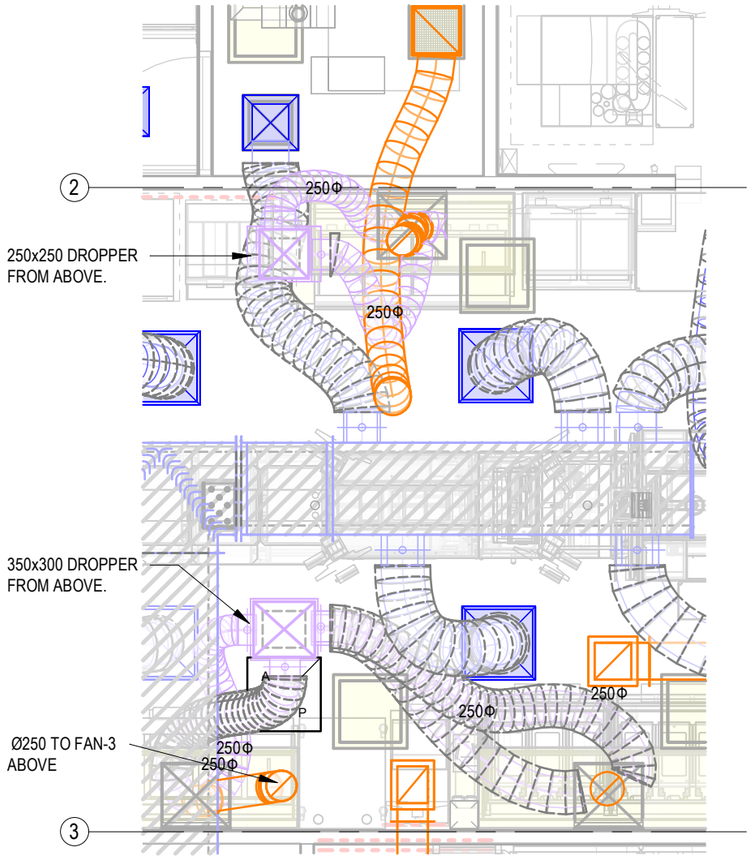
Scale	Series
1:100@A3	BIO MOD 380

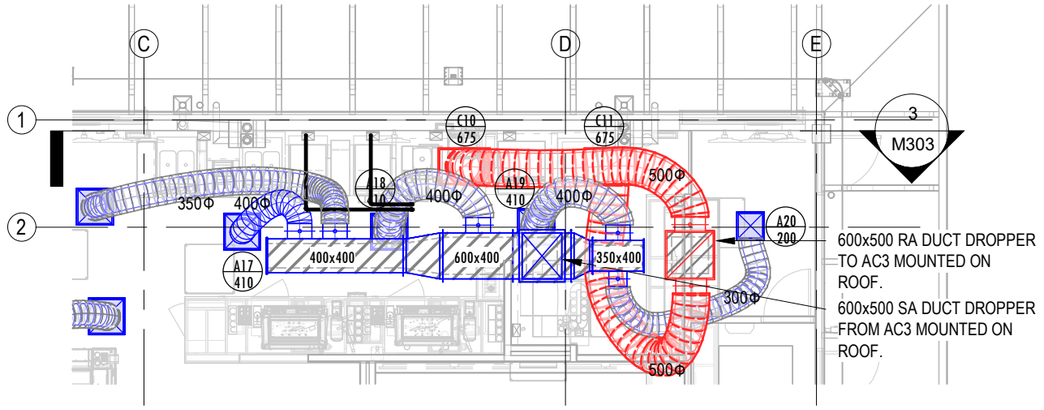
Drawing
MECHANICAL LAYOUT

Project Number	Drawing Number	Issue
2488	M100	G



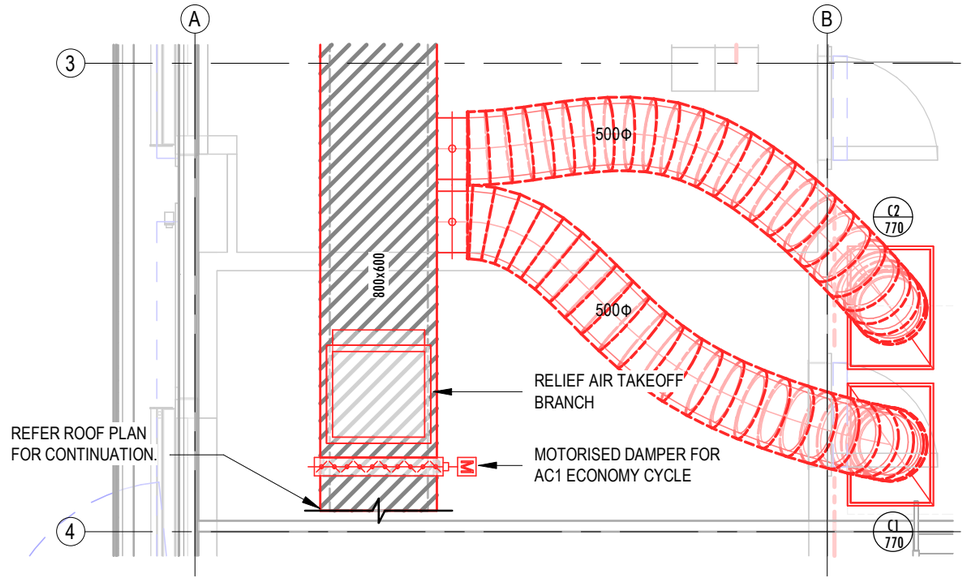
2 OPTION - INDIRECT EVAP COOLER LAYOUT

1 : 50



1 OPTION - AC3 OVER BEV CELL LAYOUT

1 : 100



3 OPTION - AC1 WITH ECONOMY LAYOUT

1 : 50

Revisions

Issue	Description	Date	Chk	Int
G	BACKGROUND UPDATED	14.03.2024		
F	BACKGROUND UPDATED & REVISED AS CLOUDED	30.11.2023		
E	REVISED AS CLOUDED, BACKGROUND UPDATED	04.09.2023		
D	BACKGROUND UPDATED	01.05.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		

General Notes

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2. THE AIR DIFFUSION LAYOUT INDICATED ON THIS DRAWING FOR FRONT OF HOUSE IS BASED ON A SPECIFIC INTERIOR DESIGN AND IS INDICATIVE OF DESIGN PURPOSE. CONSULTING ENGINEERS ARE REQUIRED TO MAKE NECESSARY ADJUSTMENTS AND/OR REDESIGN TO SUIT THE INTERIOR DESIGN PACKAGE OF EACH RESTAURANT.

Client

McDonald's Australia Limited
ABN. 43 008 496 928
☎ 02 9875 6666

NATIONAL DEVELOPMENT GROUP

Architect

Consultant

EMP | CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
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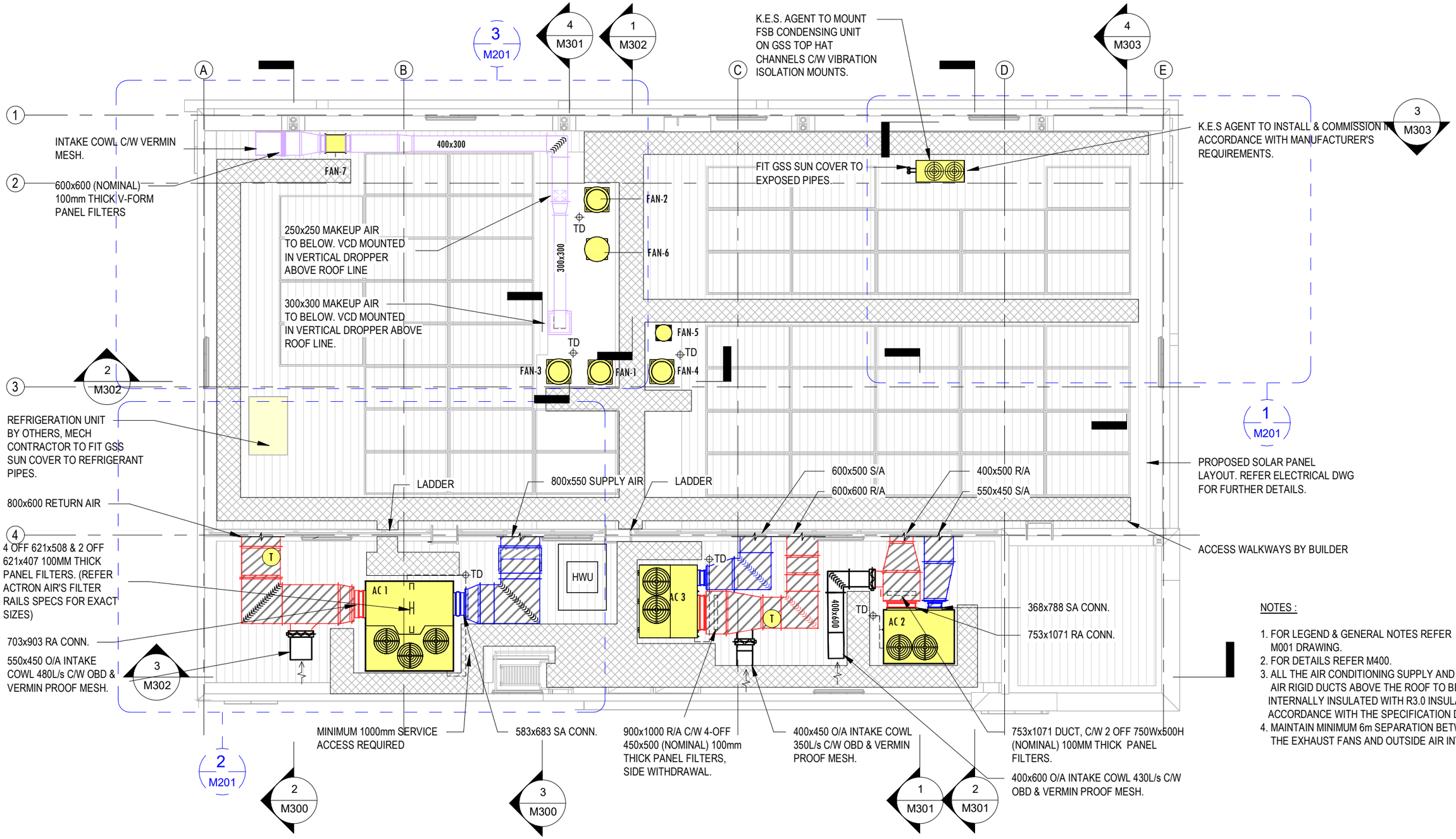
Scale	Series
1:100@A3	BIO MOD 380

Drawing
MECHANICAL LAYOUT OPTIONS

Project Number	Drawing Number	Issue
2488	M101	G



NOTES :

1. FOR LEGEND & GENERAL NOTES REFER M001 DRAWING.
2. FOR DETAILS REFER M400.
3. ALL THE AIR CONDITIONING SUPPLY AND RETURN AIR RIGID DUCTS ABOVE THE ROOF TO BE INTERNALLY INSULATED WITH R3.0 INSULATION IN ACCORDANCE WITH THE SPECIFICATION DOCUMENT.
4. MAINTAIN MINIMUM 6m SEPARATION BETWEEN ALL THE EXHAUST FANS AND OUTSIDE AIR INTAKES.

Revisions

Issue	Description	Date	Chk	Int
E	BACKGROUND UPDATED	04.09.2023		
D	BACKGROUND UPDATED	01.05.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		
B	ARCHITECTURAL BACKGROUND UPDATED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

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North

Client

McDonald's Australia Limited
ABN: 43 008 496 928
☎ 02 9875 6666

Architect

Consultant

EMP | CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

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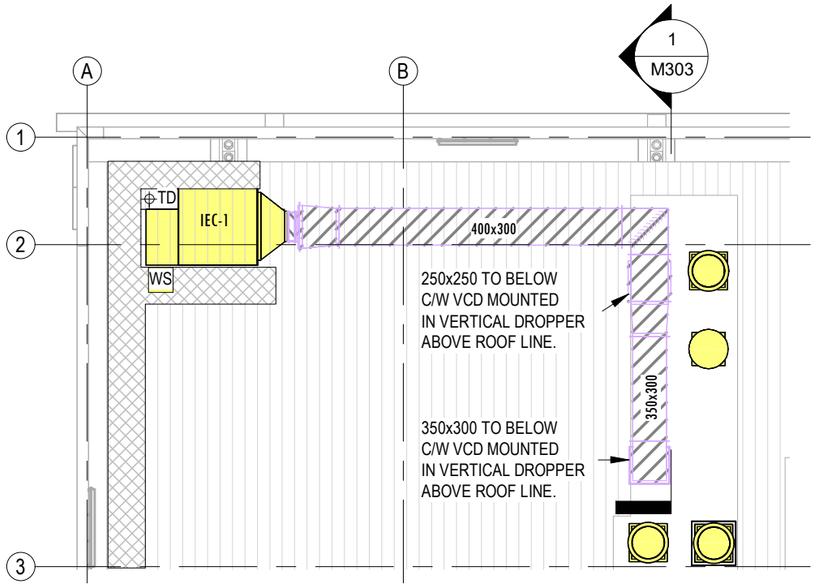
Scale	Series
1:100@A3	BIO MOD 380

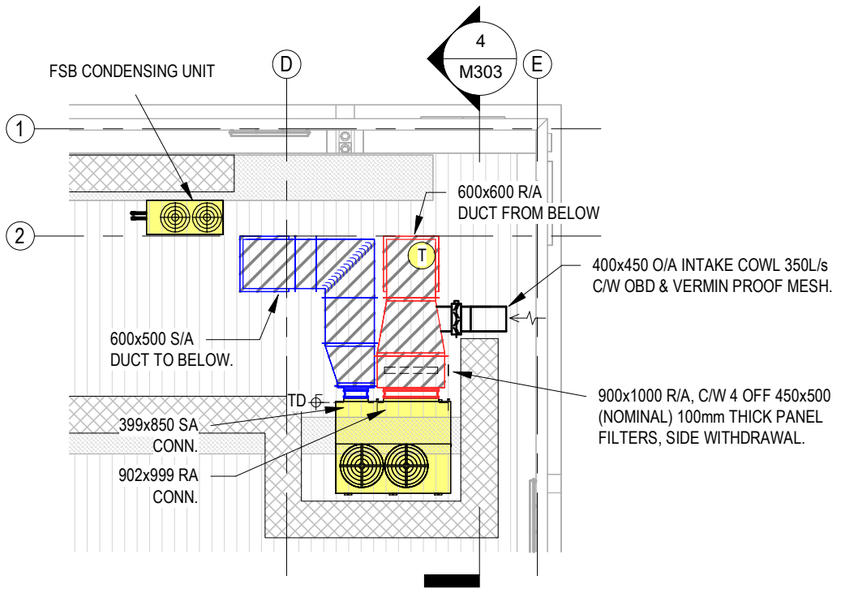
Drawing
MECHANICAL ROOF PLAN

Project Number	Drawing Number	Issue
2488	M200	E



3 OPTION - INDIRECT EVAP COOLER (IEC)

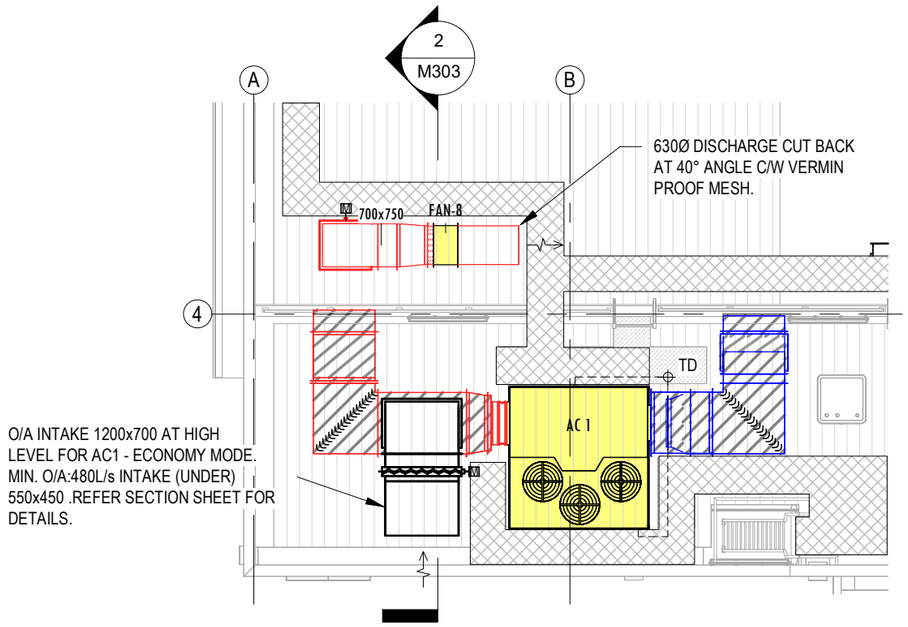
1 : 100



1 OPTION - AC3 OVER BEV CELL

1 : 100

NOTE: THIS OPTION ONLY TO BE USED UPON GAINING APPROVAL FROM THE ARCHITECT ENSURING THE UNIT IS ADEQUATELY SCREENED FROM THE VIEW. THIS MAY NOT BE USED ON SITES THAT ARE LOWER THEN THE SUROUNDING LANDSCAPE.



2 OPTION - AC1 WITH ECONOMY MODE

1 : 100

Revisions

Issue	Description	Date	Chk	Int
E	BACKGROUND UPDATED	04.09.2023		
D	BACKGROUND UPDATED	01.05.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		
B	ARCHITECTURAL BACKGROUND UPDATED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

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North

Client

McDonald's Australia Limited
ABN. 43 008 496 928
☎ 02 9875 6666

Architect

Consultant

EMP CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project
McDONALD'S STANDARD DOCUMENTS
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Location
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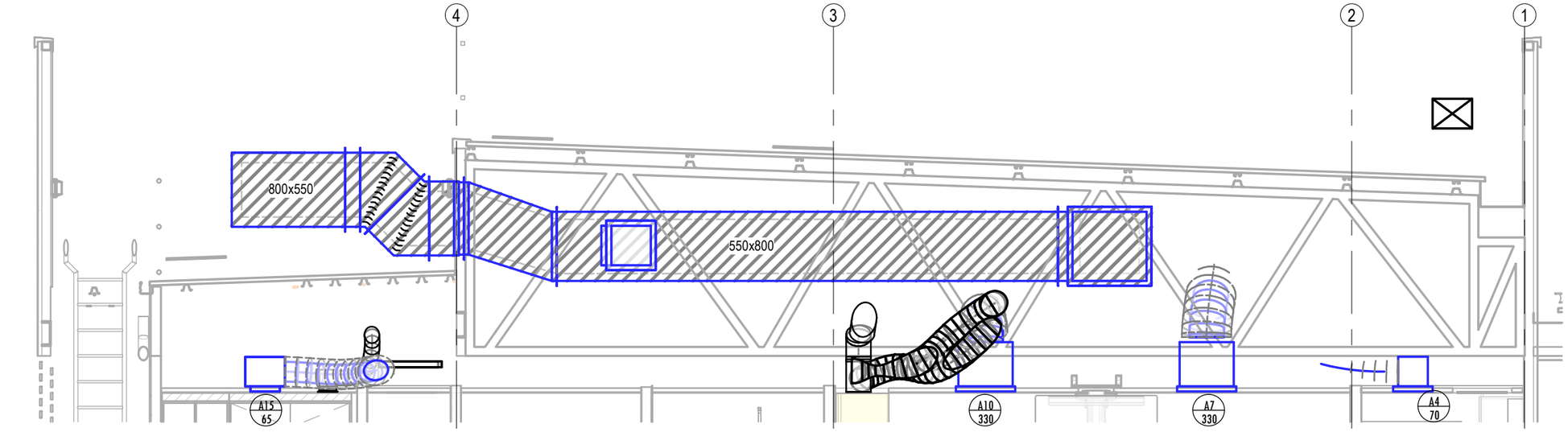
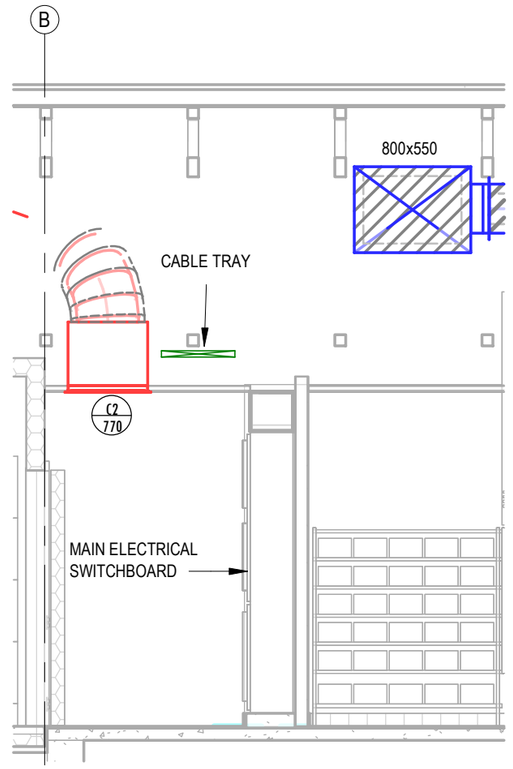
Scale: @A3
Series: BIO MOD 380
Drawing: ROOF LAYOUT OPTIONS
Project Number: 2488
Drawing Number: M201
Issue: E



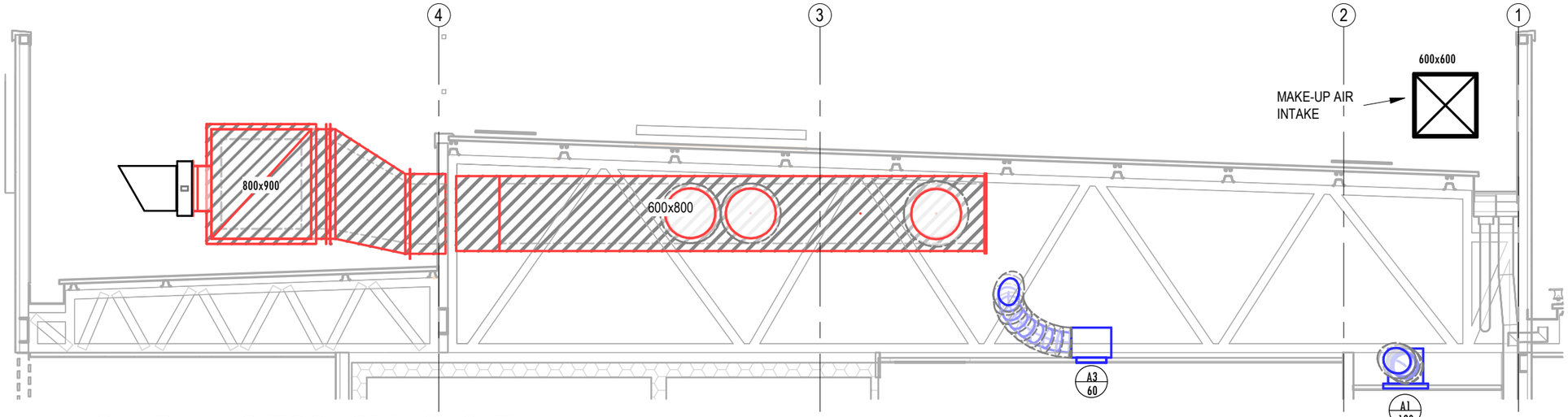
3 AC1 - SA

1 : 50



4 MSB SECTION

1 : 50



2 AC1 - RA (NO ECONOMY CYCLE)

1 : 50

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NOT TO BE USED DURING CONSTRUCTION

Revisions

Issue	Description	Date	Chk	Int
D	BACKGROUND UPDATED	04.09.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		
B	ARCHITECTURAL BACKGROUND UPDATED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

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North

Client

McDonald's Australia Limited
ABN. 43 008 496 928
☎ 02 9875 6666

NATIONAL DEVELOPMENT GROUP

Architect

Consultant

EMP | CONSULTING
PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
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VIA PROJECT INFORMATION

Scale
@A3

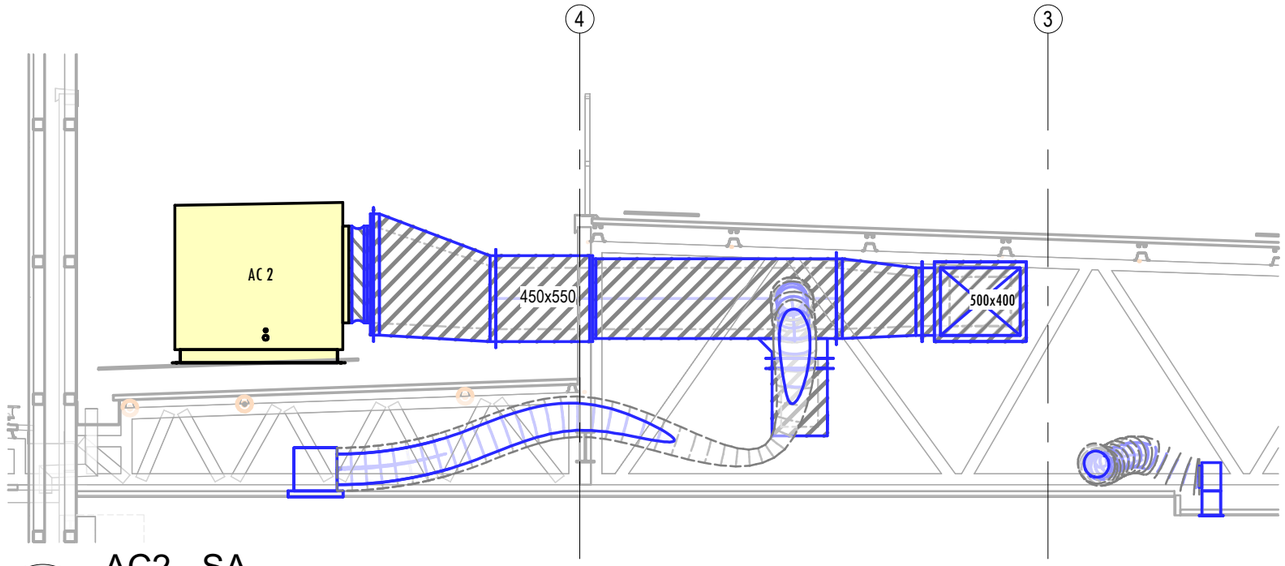
Series
BIO MOD 380

Drawing
SECTION SHEET 1

Project Number
2488

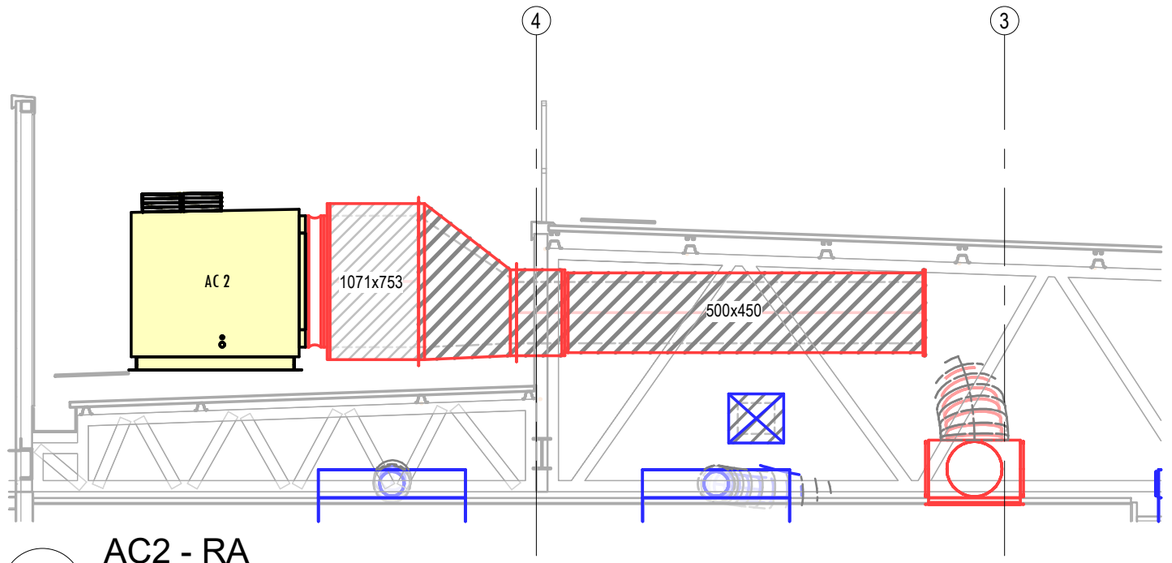
Drawing Number
M300

Issue
D



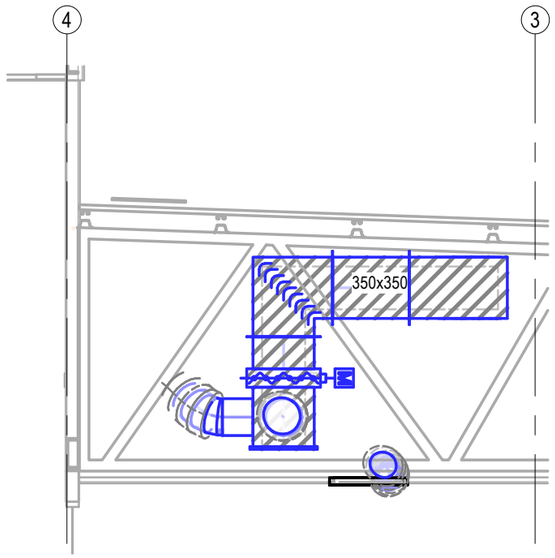
2 AC2 - SA

1 : 50



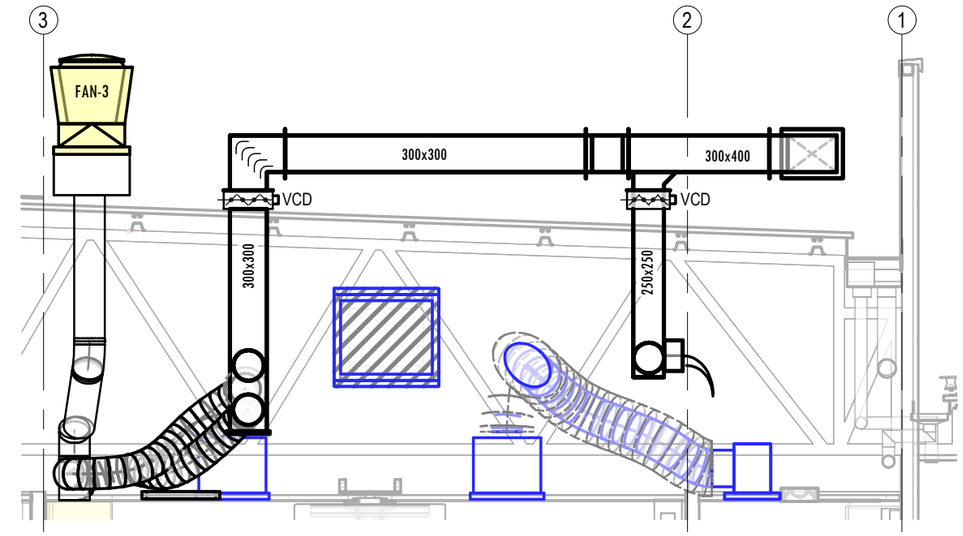
1 AC2 - RA

1 : 50



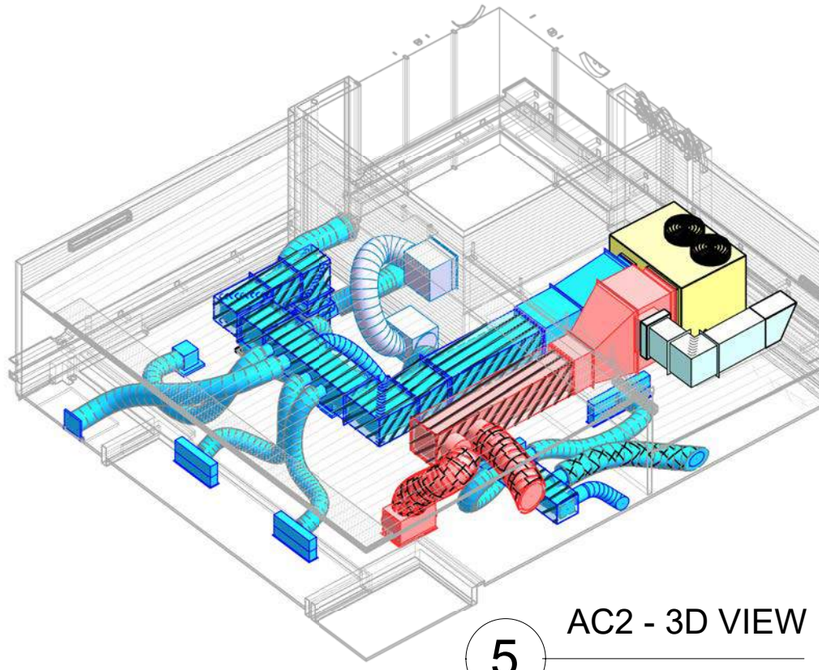
3 PLAYLAND DROPPER

1 : 50



4 SECTION - MAKE-UP AIR SYSTEM

1 : 50



5 AC2 - 3D VIEW

Revisions				
Issue	Description	Date	Chk	Int
D	BACKGROUND UPDATED	04.09.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		
B	ARCHITECTURAL BACKGROUND UPDATED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

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North

Client

McDonald's Australia Limited
ABN. 43 008 496 928
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NATIONAL DEVELOPMENT GROUP

Architect

Consultant

EMP | CONSULTING

PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project

McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location

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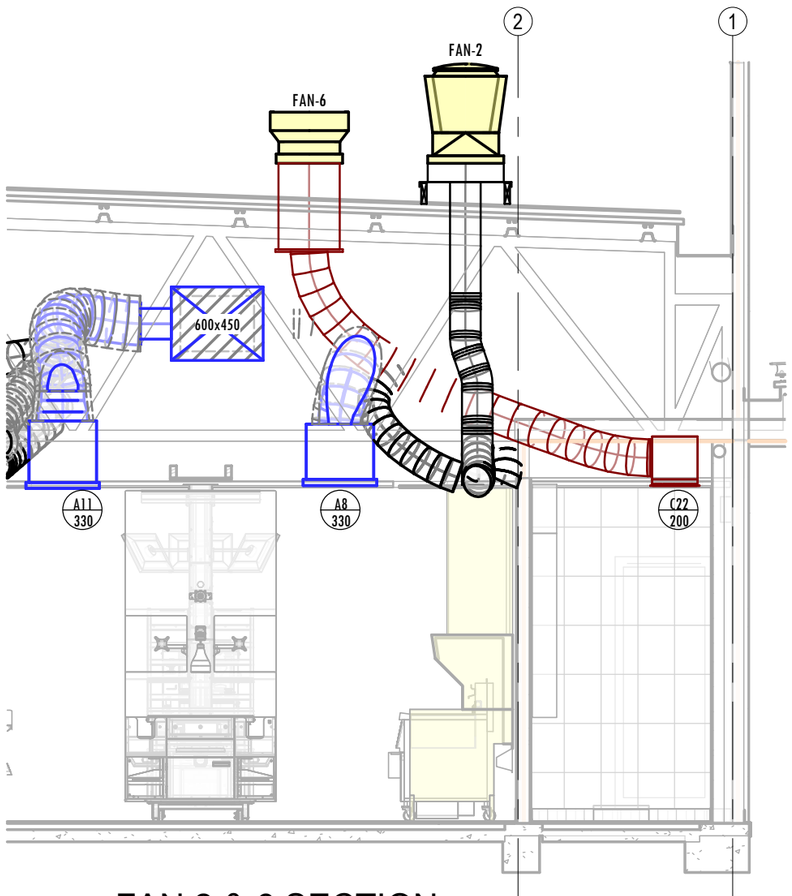
Scale	Series
@A3	BIO MOD 380

Drawing

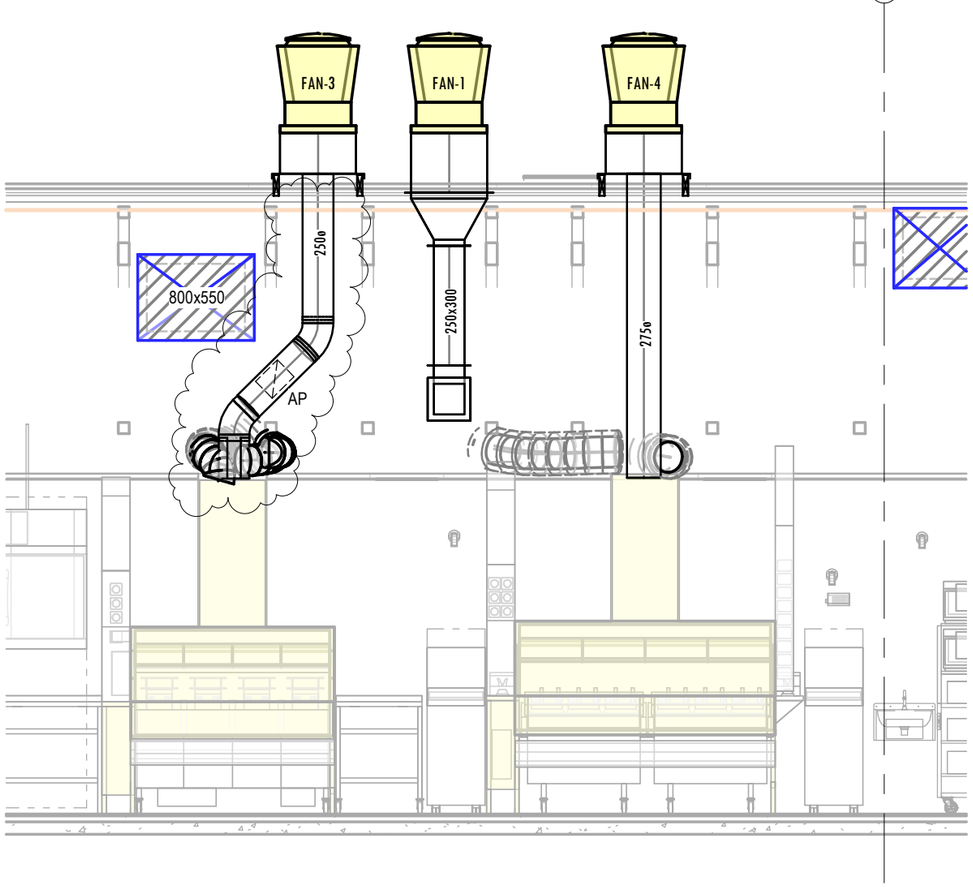
SECTION SHEET 2

Project Number	Drawing Number	Issue
2488	M301	D



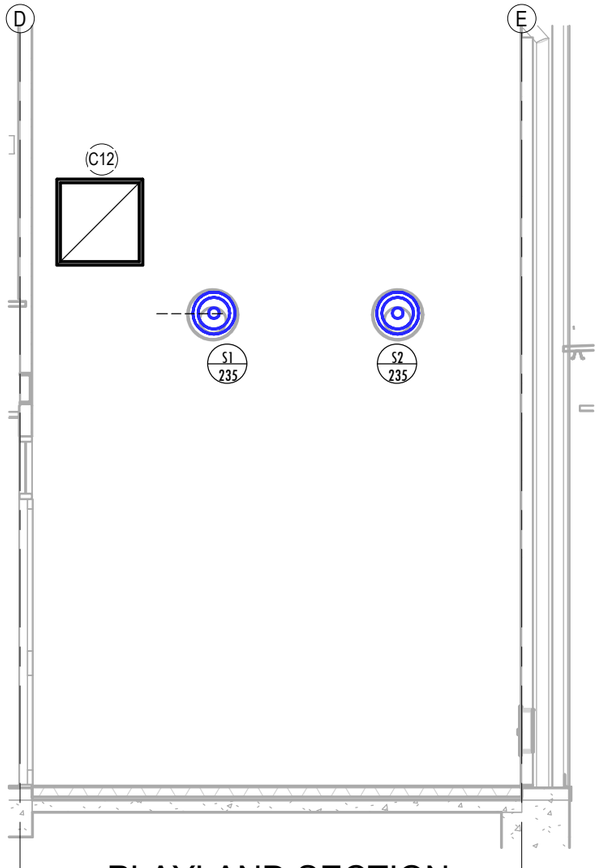
1 FAN 2 & 6 SECTION

1 : 50



2 FANS 1,3 & 4 SECTION

1 : 50



4 PLAYLAND SECTION

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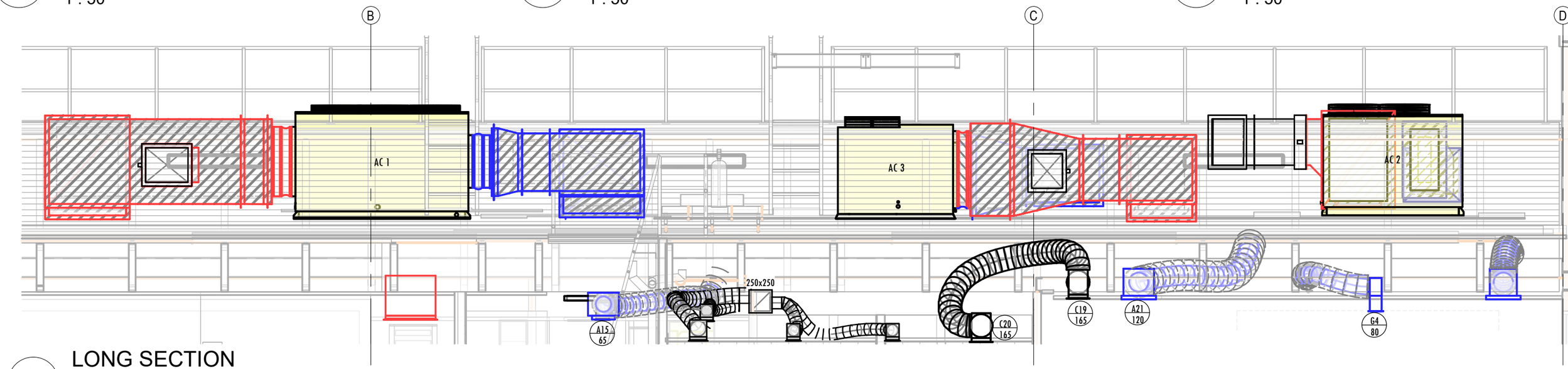

3 LONG SECTION

1 : 50

Revisions

Issue	Description	Date	Chk	Int
D	REVISED AS CLOUDED, BACKGROUND UPDATED	04.09.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		
B	ARCHITECTURAL BACKGROUND UPDATED	02/02/2023		
A	FIRST RELEASE	17/08/2022		

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North

Client

McDonald's Australia Limited
ABN. 43 008 496 928
☎ 02 9875 6666

NATIONAL DEVELOPMENT GROUP

Architect

Consultant

EMP | CONSULTING

PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project

McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location

ENTER ADDRESS
VIA PROJECT INFORMATION

PRELIMINARY
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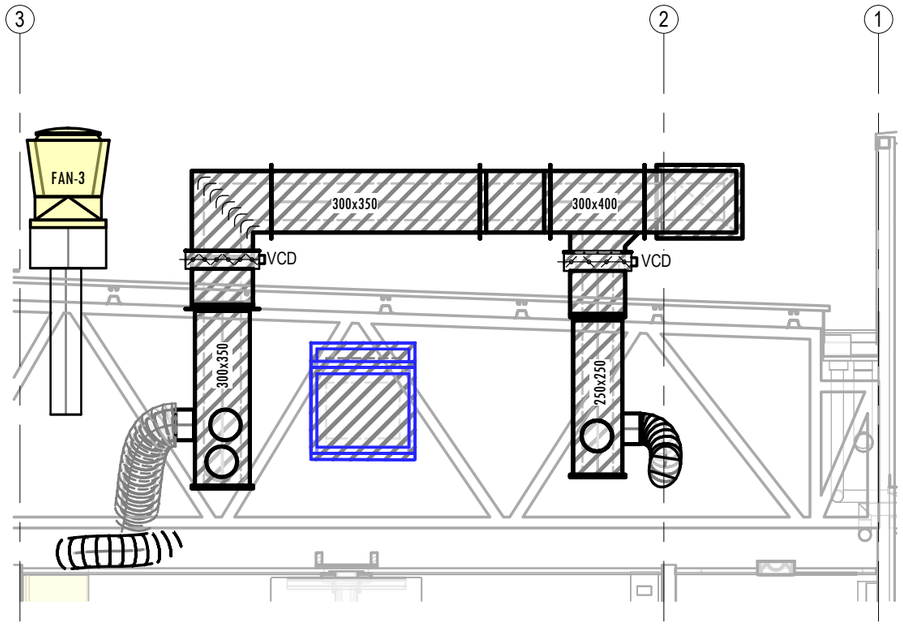
Scale	Series
@A3	BIO MOD 380

Drawing

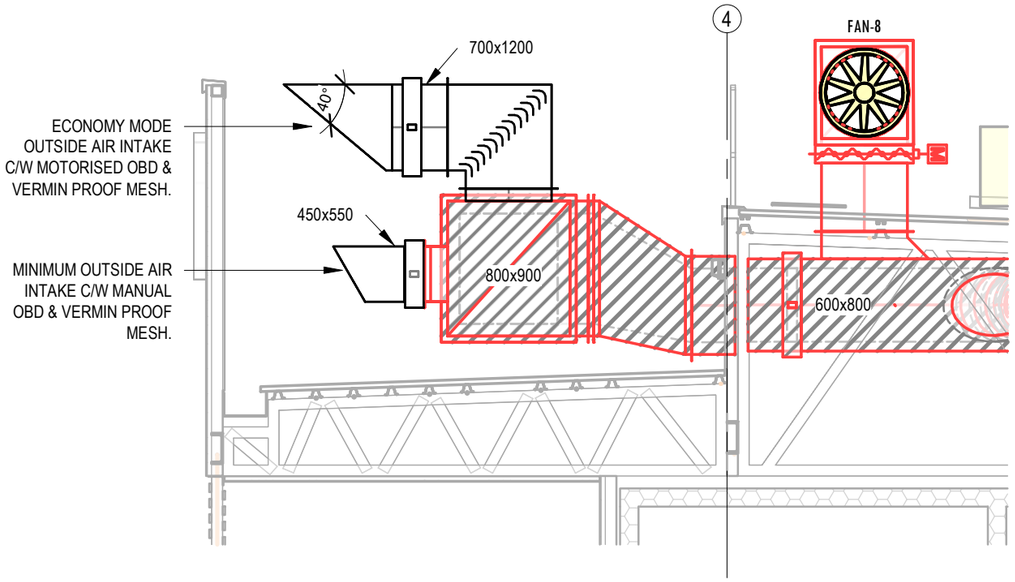
SECTION SHEET 3

Project Number	Drawing Number	Issue
2488	M302	D



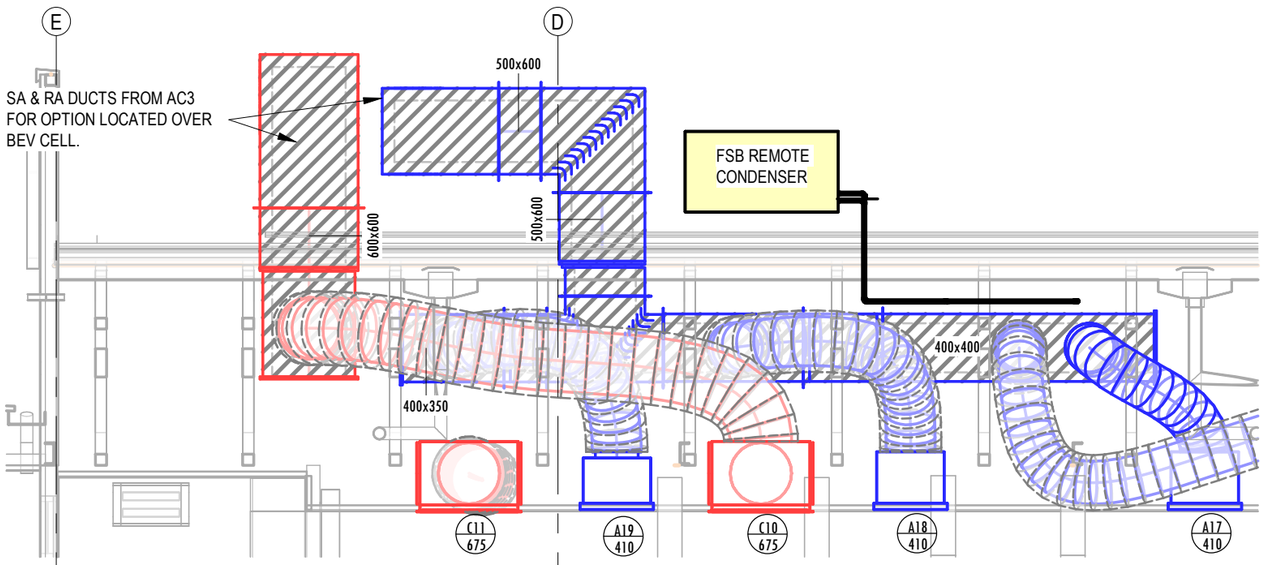
1 SECTION - IEC OPTION

1 : 50



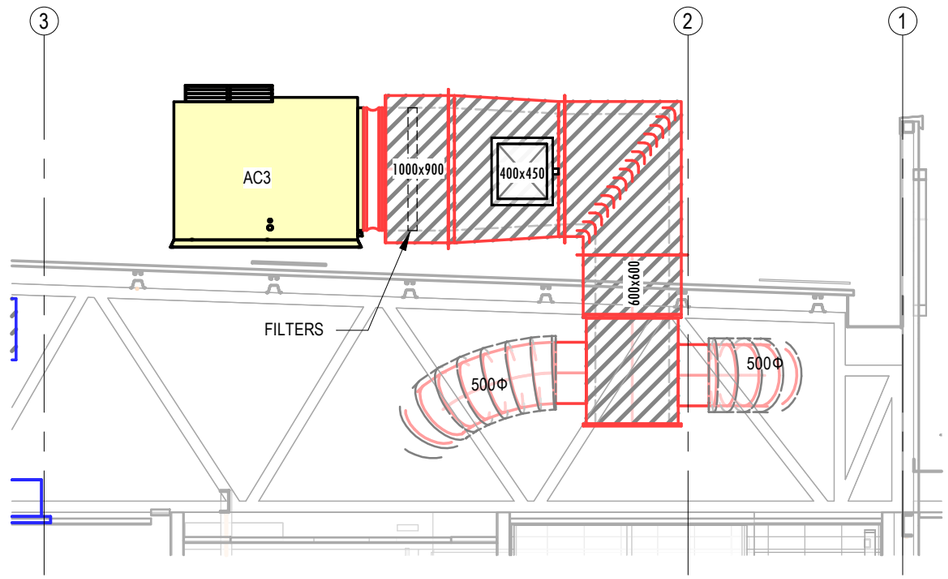
2 SECTION - AC1 WITH ECONOMY MODE

1 : 50



3 SECTION - AC3 OVER BEV CELL

1 : 50



4 AC3 - RA (UNIT OVER BEV CELL)

1 : 50

Revisions				
D	BACKGROUND UPDATED	04.09.2023		
C	ARCHITECTURAL BACKGROUND UPDATED	15.02.2023		
B	ARCHITECTURAL BACKGROUND UPDATED	02/02/2023		
A	FIRST RELEASE	17/08/2022		
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EMP | CONSULTING

PO BOX 83 MOUNT HAWTHORN 6915
PH 9201 1919 www.empconsulting.com.au

Project

McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location

ENTER ADDRESS
VIA PROJECT INFORMATION

PRELIMINARY
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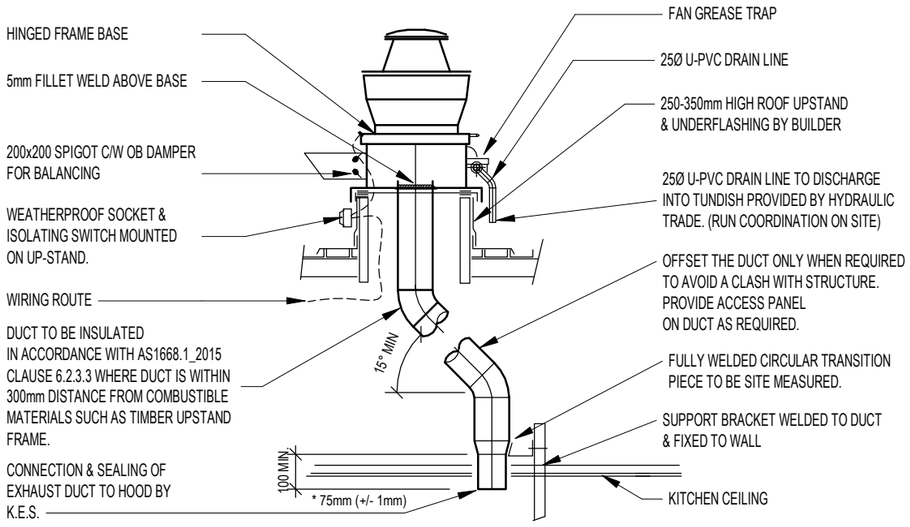
Scale	Series
@A3	BIO MOD 380

Drawing

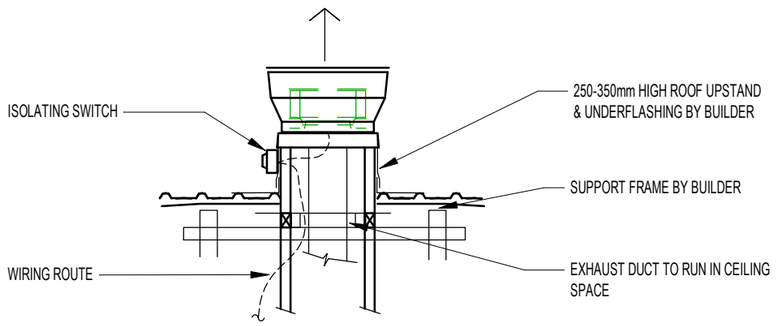
SECTION SHEET 4

Project Number	Drawing Number	Issue
2488	M303	D



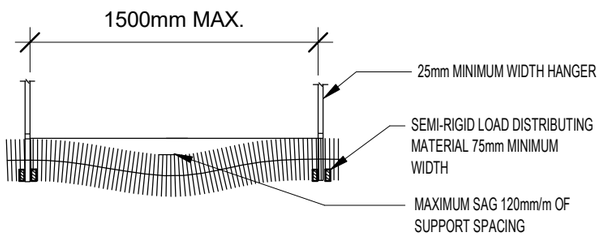
1 KITCHEN EXAUST FAN DETAIL

(SHOWN FOR CGD SERIES)



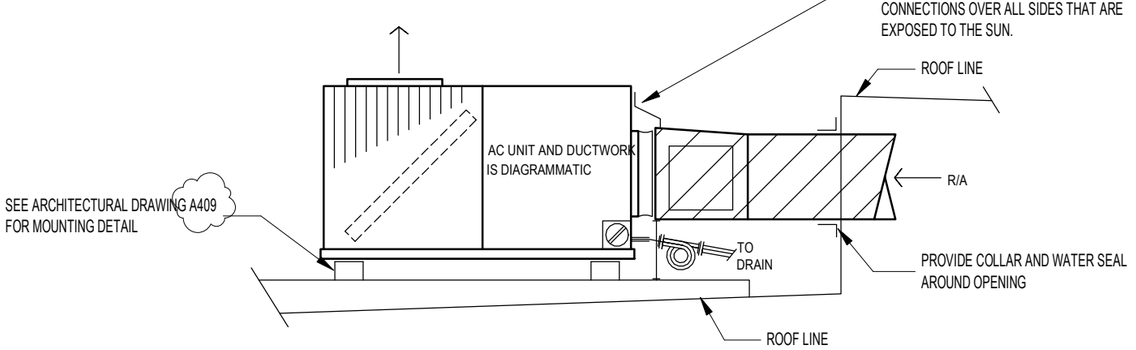
3 TYPICAL ROOF MOUNTED FANS

NTS EXCLUDING KITCHEN EXHAUST FANS



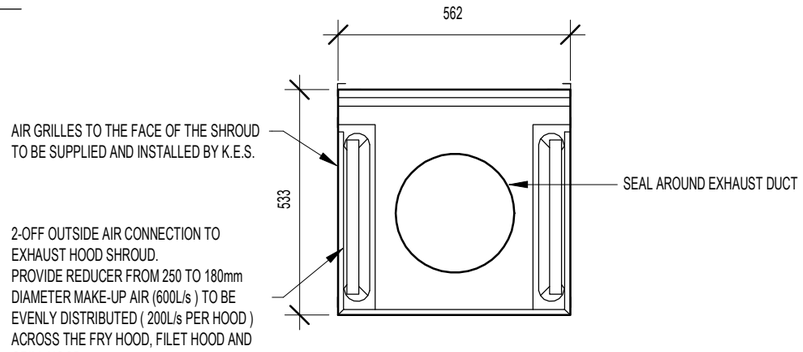
6 FLEXIBLE DUCT MOUNTING DETAIL

NTS



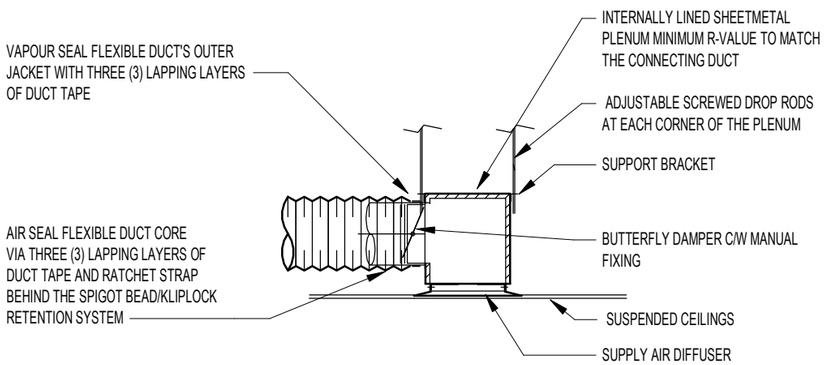
2 ROOF TOP PACKAGE UNITS

NTS



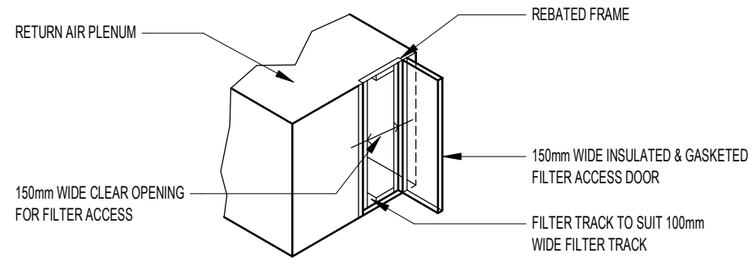
4 OUTSIDE AIR CONNECTION TO KITCHEN EXHAUST SHROUD

NTS (FOR FRY HOOD, FILET HOOD & GRILL HOOD)



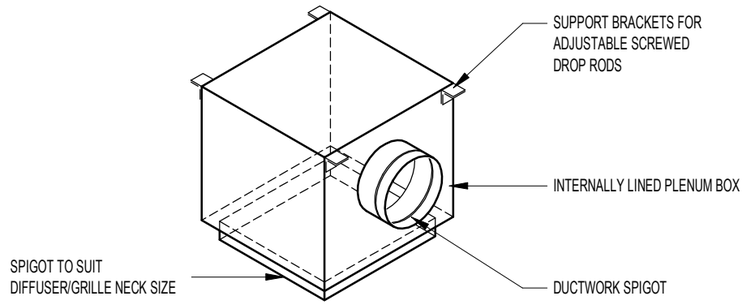
7 SUPPLY AIR DIFFUSER

NTS



5 RETURN AIR FILTER DETAIL

NTS (WHERE INSTALLED IN DUCTWORK)



8 SUPPLY & RETURN AIR GRILLE PLENUM BOX

NTS

PRELIMINARY
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Revisions

Issue	Description	Date	Chk	Int
C	REVISED AS CLOUDED, BACKGROUND UPDATED	04.09.2023		
B	REVISED AS CLOUDED	01.05.2023		
A	FIRST RELEASE	17/08/2022		

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Project
McDONALD'S STANDARD DOCUMENTS
BIO MOD 380

Location
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VIA PROJECT INFORMATION

Scale: @A3
Series: BIO MOD 380
Drawing: MECHANICAL DETAILS - SHEET 1
Project Number: 2488
Drawing Number: M400
Issue: C

SHEPHERD FILTERS
"PROTECTING YOUR HOOD"
WWW.SHEPHERDFILTERS.COM

KITCHEN EXHAUST GREASE SOLUTION

SHEPHERD FILTERS is pleased to submit a general information proposal for its **disposable kitchen grease filters**, which help those in the foodservice industry better manage grease within kitchen exhaust systems. We will consider the shortcomings and risks of the current system and thereafter, provide the appropriate solution and benefits that Shepherd Filters offer.

Shepherd Filters are helping small, medium and large restaurant operations, hotels & resorts and fast food chains all over the world to save money and reduce their fire risk with an easy-to-use system.

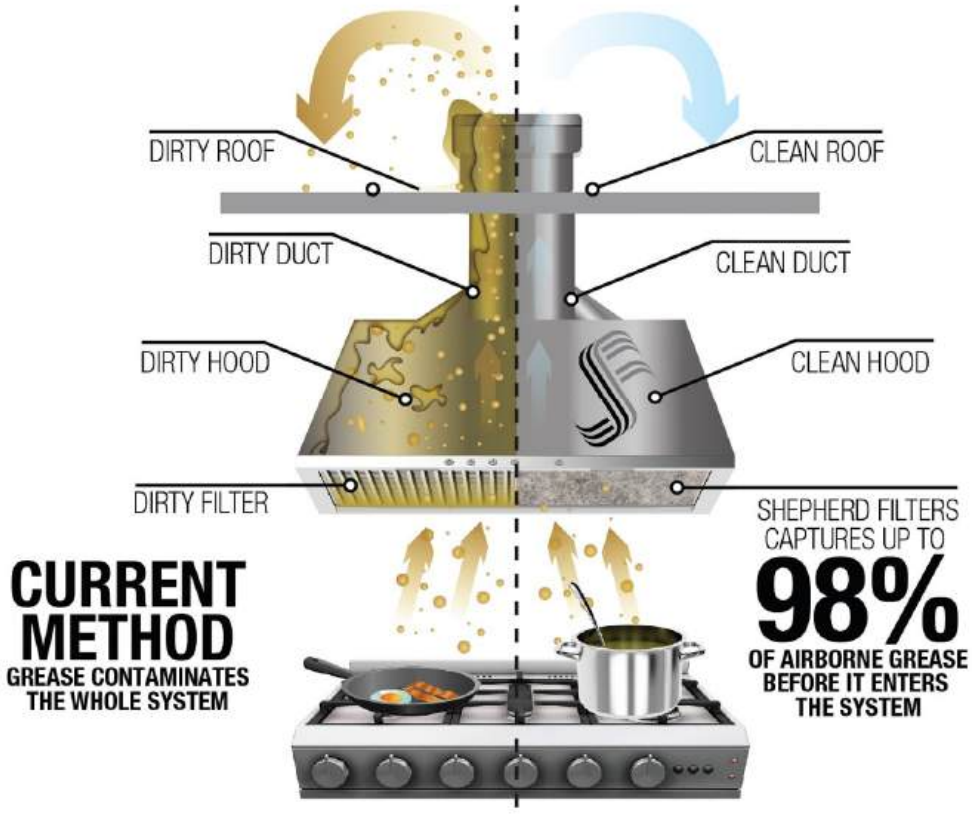
ASK YOURSELF THESE IMPORTANT QUESTIONS

Would you like to make sure you aren't wasting money on kitchen grease filter cleaning and exhaust cleaning if there is a better way?

Does filter cleaning happen enough or too frequently (we know some filters need more cleaning than others, so why do them all at the same rate)?

How clean is your kitchen exhaust, has the duct been cleaned according to standards?

Are you covered by insurance in the event of a fire?



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PROBLEMS IDENTIFIED WITH CURRENT KITCHEN GREASE EXHAUST MAINTENANCE

1.0 KITCHEN GREASE FILTER PURPOSE & PROBLEMS

The kitchen grease filter is the first line of defense to protect the kitchen exhaust system in preventing grease accumulation and the subsequent risk of fire. New standards now often require UL1046 approved frames to act as a flame barrier and current honeycomb/mesh filters do not comply. Countries like the USA and UK have banned their use.

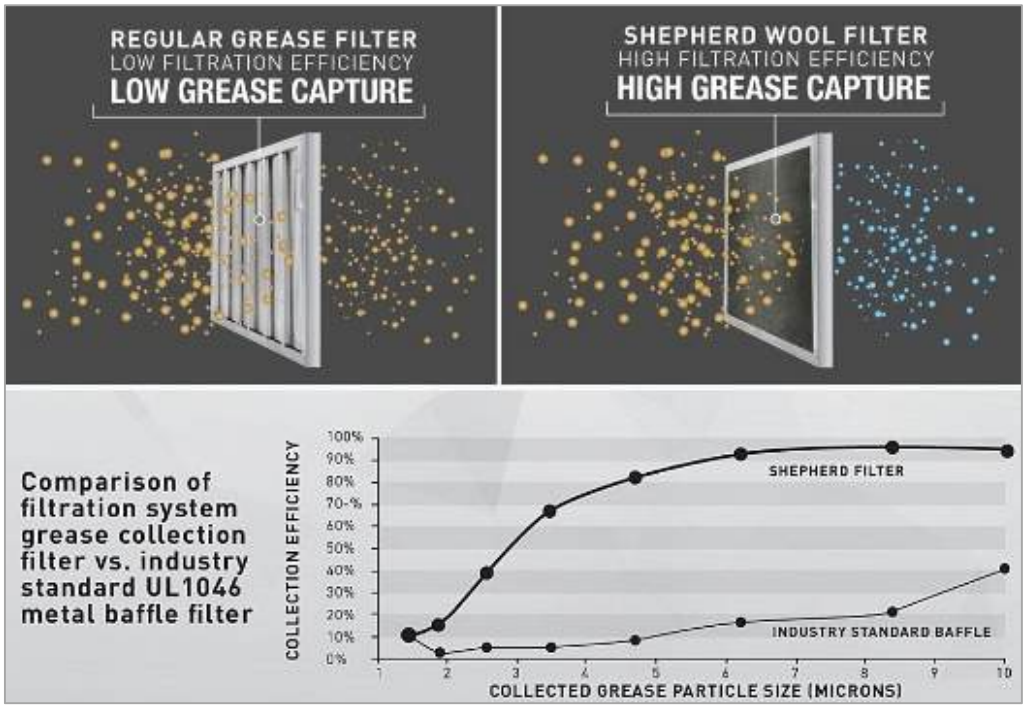
Moreover, current metal kitchen filters only stop between 20-40% of the airborne grease, allowing the rest to pass through into the hood/canopy, duct and fan. This results in ongoing frequent costly cleans.

1.0 A DISPOSABLE KITCHEN GREASE FILTER SOLUTION

Shepherd Filters wool filter media provides the best solution by capturing up to an impressive 98% of airborne grease before it enters your kitchen exhaust system, equating to a cleaner system, year-round. These disposable filters significantly reduce the need to clean filter frames. The amount of grease entering your kitchen exhaust system is also greatly reduced.

Our special stainless steel Shepherd Filter frames are easy to use and come with the peace of mind that they are:

- ✓ UL1046 flame barrier tested
- ✓ Airflow tested & certified; and
- ✓ HACCP approved



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2.0 PROBLEMS WITH CLEANING KITCHEN GREASE FILTERS

A frequent and ongoing problem that can be costly, disruptive and cumbersome. Food Safety and Australian Standard 1851 states these must be cleaned regularly.

Cleaning filters using a filter exchange company:

- Some filters are exchanged too frequently when they don't need to be, whereas others are not exchanged often enough
- Filter exchange companies often arrive during service times, which can be disruptive
- In addition to this exchange service, in-house staff sometimes even need to wash filters in between exchanges

Cleaning filters in-house:

- Time consuming and costly in terms of labour
- A waste of water and unnecessary exposure to unpleasant chemicals
- Environmentally unfriendly
- Can lead to frequent dishwasher breakdowns
- Not done well

2.0 OUR EFFICIENT, FASTER DISPOSABLE FILTER SOLUTION

Shepherd Filters offer a time and money-saving solution in comparison. Our filters are easy for staff to change and are disposed in the regular waste bin within minutes.

- 100% naturally fire-retardant wool
- 100% disposable and biodegradable and therefore environmentally friendly
- Only change the filters that need changing
- Change our filters before you turn equipment on or at end of day clean down, and you will never be disrupted again

Filters only take seconds to change, minutes a week.

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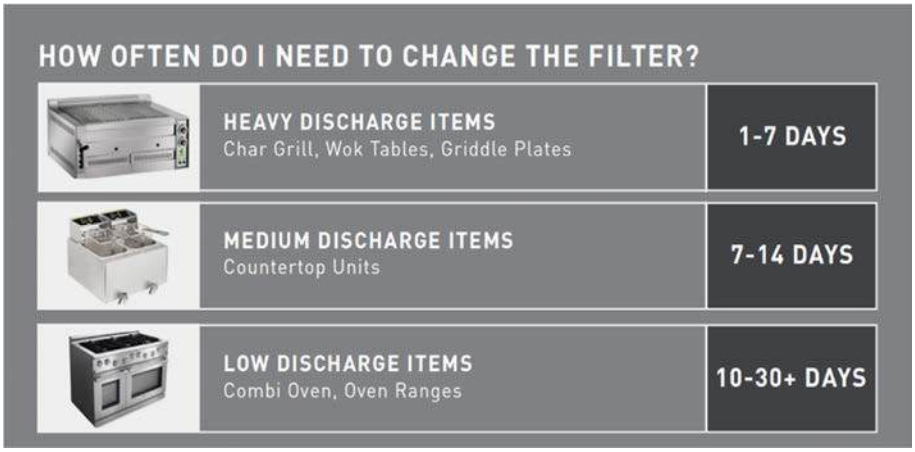
HOW OFTEN DO WE NEED TO CHANGE THE FILTERS?

Frequency may vary based on hours of operation (i.e. breakfast, lunch and dinner or just lunch and dinner), types of cooking and the equipment being used (i.e. grill, fryer, combi).



The images below offer a more precise guide based on your circumstances. We provide this filter change guide to all new installs, which is placed on the kitchen wall for your reference:

BELOW IS AN EXAMPLE OF FILTERS ABOVE GRILLS/HOTPLATES ON THE LEFT:

NOTICE THE DIFFERENCE COMPARED TO THE FRYERS AND OVENS ON THE RIGHT.

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3.0 CANOPY, HOOD AND DUCT CLEANING PROBLEMS

Australian Standards 1851 states that hood and canopy cleaning is to be checked for excessive grease accumulation monthly (at a minimum) and six to twelve months for the duct and fan, depending on your insurance policy requirements. It's messy, disruptive and some kitchen exhaust systems are dirty again just one month after a clean when using traditional filters. Any excess build-up will put a store at risk for a fire and can quickly build up in between cleans.

Many find this costly and it is important to check the work is done/cleaned properly as the responsibility can still be on the restaurant. Certificates issued by cleaning contractors with clauses or fine print can make the certificate worthless in the event of a fire and insurance companies may void the claim. Shepherd Filters frequently inspects kitchen exhausts after scheduled cleans and finds either:

- A sub-standard clean has occurred; or
- Not all areas of the system were cleaned by service companies due to poor access.

Here are true examples when inspecting systems just days after a clean:

3.0 CANOPY, HOOD AND DUCT SOLUTION

Shepherd Filters stop you having to guess when your system is dirty. A clean system protected by the Shepherd Filters Solution means you can greatly reduce the extensive hood, canopy and duct cleaning required, which will see you save for years. A simple mini spot inspection and clean only when required is all you will need to do. The images below show the inside of a hood that remains very clean and any grease accumulation has been drastically reduced:

SHEPHERD FILTERS CUSTOMER AFTER 4 MONTHS

SHEPHERD FILTERS CUSTOMER AFTER 2 YEARS

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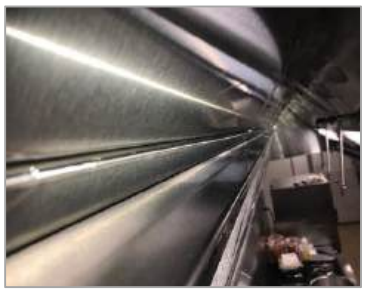
4.0 FILTER TRACK GREASE PROBLEMS

Another ongoing and messy task that is often overlooked or not fulfilled by filter exchange companies or staff. AS1851 states that tracks/gutters are to be checked monthly. Left untouched, it also poses a fire risk.

4.0 REDUCED GREASE FILTER TRACKS SOLUTION

Shepherd Filters hold the grease within the wool sheet, reducing the amount of grease draining into the tracks and in turn, reduces labour costs. Below are true examples:

WITHOUT SHEPHERD FILTERS



WITH SHEPHERD FILTERS

5.0 FAN/ROOF GREASE PROBLEMS

Grease accumulation on a fan can build up very quickly and go unnoticed, causing unbalanced fans and excessive loading and affect airflow. This also can result in a fan's premature failure.

Shepherd filters recently had a client that found out his kitchen exhaust system had never been cleaned properly, resulting in failure. After the fan was replaced, proper cleaning of the entire system was carried out and the loss of income due to his restaurant shutdown cost him over $30,000 which was not covered by insurance.

5.0 CLEAN FAN/ROOF GREASE SOLUTION

Due to Shepherd Filters greatly reducing grease by up to 98% grease from entering your kitchen exhaust system, the fan will not only stay cleaner, it will also extend its lifespan and improve the balance of airflow throughout your entire system. Rooftop and equipment i.e. HVAC coils, return air units etc. will not require the same frequency of cleaning and maintenance due to grease.

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6.0 FIRE RISK PROBLEM

Insurance is for when a fire occurs, it can surely be agreed that preventing a fire is the overall objective for anyone. Sometimes there is a potential fire risk even weeks after a duct clean due to grease accumulation in between cleans or sub-standard cleans in general. Kitchen exhaust fires due to grease build-up leads to insurance companies rejecting claims to rebuild or never covering the loss of income.

We have seen many fires affect restaurants, many of which never recover due to the amount of time and energy spent on fixing the damage caused, letting go of staff and lost income.

6.0 FIRE RISK REDUCTION SOLUTION

Shepherd Filters reduce the risk of grease build-up between cleans. This keeps your chance of fire spreading down and any fire suppression systems can function and perform properly. Sleep well knowing that grease build-up is not an issue you have to deal with.

STAY COMPLIANT AND CLEANING COSTS REDUCED AND INSURANCE IS VALID

A flawed system involves guessing whether a system really does require cleaning and when it doesn't. What is too much and what is not enough? Moreover, one shouldn't have to check the cleaner's work was thorough and to standard! Cheaper also isn't always the best but don't waste your money either.

SHEPHERD FILTERS APPROVALS

Shepherd Filters certifications/approvals include:

- Australian Standards AS1668.0E6 Kitchen Exhaust Hoods incorporating Grease Removal Devices
- NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
- UL Standard 1046 for Grease Filters for Exhaust Ducts
- HACCP Approval; and
- Members of the International Kitchen Exhaust Cleaning Association (IKECA)

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OUR HAPPY CUSTOMERS

"Thank you for our Shepherd Filters system. It was really easy for me to change the filter sheets and your installation support has been wonderful. I was concerned about the state of our ducting, so now having a clean system is very important to me as a business owner, and the grease being captured shows the filters are doing their job."

Owner Café 389 Scarborough

"We have found Shepherd Filters to be stopping grease from entering our kitchen exhaust system. As an engineer of a large hotel I value the importance of peace of mind, knowing our system is protected. We recommend Shepherd Filters as a preventative maintenance solution for kitchen exhaust systems. Our staff have found the filters quick and easy to change without disruptions to service times."

Director of Engineering, Marriott Hotel

"We have installed Shepherd Filters to many of our Kitchens in the Convention Centre and have been thrilled with the performance and the ease of changing them out. The exhaust ducts remain almost grease free and we have cut right down on the frequency of our duct cleaning. The Staff at Shepherd Filters were easy to deal with and the training provided to our F&B chefs and stewards was very clear, precise and helpful."

Building Services Manager, Brisbane Convention & Exhibition Centre

"The Copthorne Hotel in Wellington was having issues with kitchen duct cleaning and was taken aback with the costs involved in keeping the hood, ducting and fan clean. We knew there had to be a better way. Using Shepherd Filters kitchen grease filters, we found the three-monthly kitchen duct cleans could be extended to half-yearly and the half-yearly could be extended to an annual clean. Over time, the duct cleans have been dramatically reduced, which is saving the hotel an immense amount of money. The restaurant does an average 300 to 400 meals a day for breakfast, lunch and dinner. The other benefits the head chef has noticed is in the noise level reduction within the kitchen, which the dining public were previously exposed to. As this is in the back kitchen, the noise levels have dropped quite dramatically. In the past, duct cleaners have set off the fire alarms in the middle of night, which created a huge headache for the hotel as it resulted in the evacuation of guests. With the requirement for duct cleans reduced, false alarms are a thing of the past. Very happy!"

Exec. Chef/F&B Manager, Copthorne Hotel, Wellington, NZ

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SHEPHERD FILTERS SUMMARY OF BENEFITS

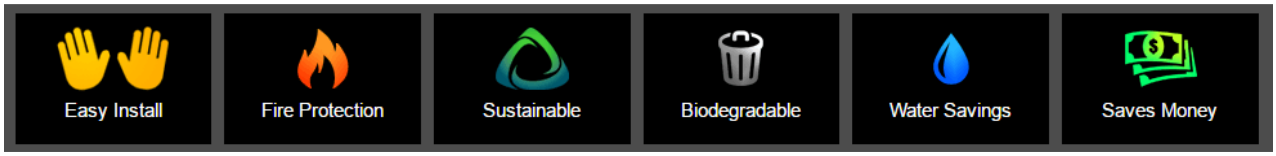
The Shepherd Filters solution would dramatically reduce the amount of grease entering your kitchen exhaust systems. You will have a cleaner, better operating and safer kitchen exhaust system, daily.

- SAVE ON COSTLY FILTER & DUCT CLEANING!
- A cleaner kitchen exhaust system 365 days a year greatly reduces your risk of fire
- Fast and easy to install in minutes, replace sheets as needed saving staff time
- Stopping up to 98% of grease entering the kitchen exhaust system, compared to 20-40% of normal metal kitchen filters
- Meet the new Australian Standards
- HACCP approved
- Won *"Best New Hospitality Product"* at Fine Foods Australia 2017
- Made from 100% Australian Wool, supporting Australian farmers and disabled workers
- Help the environment
- Quick and easy to change, your staff will appreciate the improvement in their daily routines.

We provide full support in getting the product installed and train your staff accordingly as to how and when to change a wool filter media via an easy to understand schedule guide, featured on the kitchen wall.

EMAIL US TODAY

hello@shepherdfilters.com.au



SHEPHERD FILTERS

Specification Sheet

FRAME SIZE (H X W) (mm)	FRAME SIZE (H X W) (INCH)	SF FILTER FITS
254 X 395 X 50	10 X 16 X 2	SF 350 X 550
254 X 495 X 50	10 X 20 X 2	SF 350 X 550
295 X 495 X 50	12 X 20 X 2	SF 350 X 550
330 X 495 X 50	13 X 20 X 2	SF 350 X 550
380 X 455 X 50	15 X 18 X 2	SF 450 X 550
395 X 395 X 50	16 X 16 X 2	SF 450 X 450
395 X 495 X 50	16 X 20 X 2	SF 450 X 550
395 X 622 X 50	16 X 25 X 2	SF 450 X 650
495 X 495 X 50	20 X 20 X 2	SF 550 X 550
495 X 595 X 50	20 X 23 X 2	SF 550 X 650
495 X 622 X 50	20 X 25 X 2	SF 550 X 650
595 X 595 X 50	23 X 23 X 2	SF 650 X 650

Stainless Steel Frame #403 100% Wool Biodegradable and Environmentally Friendly

FILTER FRAME WITH WOOL

495 X 495mm

AIRFLOW

%	50%	100%	150%
M/S	0.7	1.5	2.25
M3/S	0.17	0.36	0.55
CFM	360	780	1170

STATIC PRESSURE

PA (PASCALS)	42	55	67