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PROJECT NO:	DRAWING NO:	REV:
1787	M001	P3

DATE:	DESIGNED:	CHECKED:	SCALE:
31.10.08	MK	DJS	1:20@A1

DRAWING TITLE:

KITCHEN EXTRACT VENTILATION
PROPOSED

PROJECT:

MORTHING
50 - 55 BRIGHTON ROAD.

CLIENT:

HENRY ADAMS PLANNING LTD

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CONSULTING
LOW CARBON CONSULTANTS

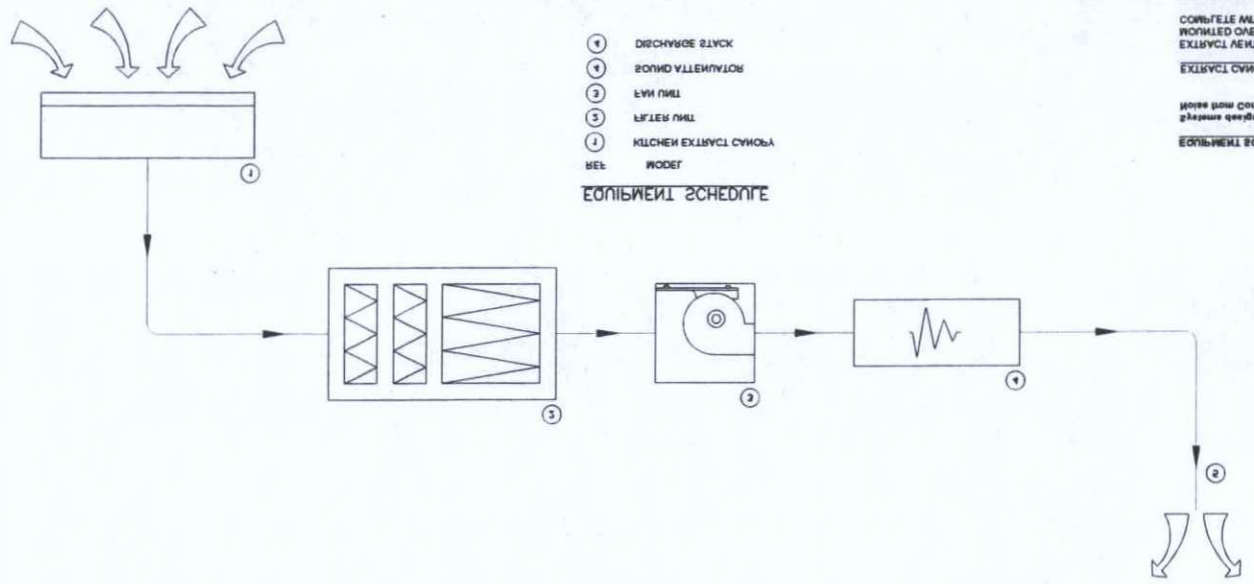
PLANNING
ISSUE

No	DESCRIPTION	CHK	DATE
	VERSION		

EXTRACT VENTILATION PLANT SCHEMATIC

EQUIPMENT SCHEDULE

REF:	MODEL
①	KITCHEN EXTRACT CANOPY
②	FAN UNIT
③	FILTER UNIT
④	SOUND ATTENUATOR
⑤	DISCHARGE STACK



EQUIPMENT SCHEDULE

Above plan commercial kitchen Extract System, and HAVC UNITS
Extract Ventilation to the kitchen shall be as a canopy

EXTRACT CANOPY

COMPLETE WITH MECHANICAL GREASE FILTERS.
MOUNTED OVER THE COOKING APPLIANCE. THE CANOPY SHALL BE
EXTRACT VENTILATION TO THE KITCHEN SHALL BE AS A CANOPY

EXTRACT RATE: 1.5m³/s

ASSUMED GREASE FILTER RESISTANCE 125Pa

ACCESSORIES: START REMOVABLE GREASE FILTERS

DIMENSIONS: TBC

USED FOR BASIS OF THE SYSTEM DESIGN
THEREFORE AN EXTRACT VENTILATION RATE OF 1.5M³/S HAS BEEN
EQUIPMENT INSTALLED WHICH IS NOT KNOWN AT THIS TIME.
THE SIZE OF THE CANOPY IS DEPENDANT UPON THE COOKING

HOUSING:
ON THE FLAT ROOF ABOVE THE KITCHEN IN A WEATHERPROOF
1ST AND 2ND STAGE PRE-FILTERS. THE FILTER UNIT BE PROVIDED
AN ACTIVATED CARBON FILTER UNIT BE PROVIDED WITH INTEGRAL

ACTIVATED CARBON FILTER

ACTIVATED CARBON FILTER DEEP BED FILTER
MANUFACTURER & TYPE: ACC ENVIRONMENTAL LTD. SWEETPACK

1st FILTER: WASHABLE MESH GREASE FILTER

2nd FILTER: BAG FILTER TO GRADE F7

3rd FILTER: ACTIVATED CARBON FILTER

DWELL TIME: 0.5 s

DIMENSIONS: 1625mm(L) x 625mm(W) x 625mm(H)

RESISTANCE: 520Pa

ACCESSORIES: BIRD WIRE GUARD

TO EXPEL THE EXTRACTED AIR AT HIGH EFFLUX VELOCITY
A COWL UNIT BE PROVIDED AT THE END OF THE DUCTWORK SYSTEM
EXHAUST TERMINATION

DIMENSIONS: 1500mm(L) x 500mm(D)

THE FAN UNIT TO MINIMISE THE NOISE TRANSMISSION FROM THE FAN
AN INLINE CLEANABLE SOUND ATTENUATOR UNIT BE FITTED AFTER

SOUND ATTENUATOR

COLOUR: TBC

DIMENSIONS: 1000mm(D) x 600mm(L)

ELECTRICAL: 415V, 3PH 20kW

OCTAVE BAND	63	125	250	500	1K	2K	4K	8K
dB(dB)	80	81	90	91	92	91	92	83
NOISE	132	120	200	1K	2K	4K	8K	

IN DUCT dB:

NOISE BREAKOUT LEVEL WITH ENGINE - 30dB(A) AT 3 METRES

COLOUR:
THE UNIT WILL BE POWDER COATED TO A SUITABLE NEUTRAL

CONNECTIONS:
INCLUSIVE VAV'S, MOUNTING FEET AND FLEXIBLE DUCTWORK WITH
SHEET STEEL. THE FAN WILL BE BELT A VIBRATION ISOLATED WITH
BOTAINED BARRIER LAYER. RETAINED BY PERFORATED GALVANISED
DOUBLE SKINNED WITH ACOUSTIC LINING AND INTERMEDIATE
SHROUD TO MINIMISE NOISE BREAKOUT. THE ENGINEERS MAY BE
THE FAN WILL BE ACOUSTICALLY TREATED BY AN ACOUSTIC

WITH THE FAN MOTOR OUTSIDE OF THE AIR STREAM
A WEATHERPROOF VERTICAL AXIAL FLOW PROPELLER FAN

EXTRACT FAN UNIT

ESTIMATED KITCHEN VOLUME - 21m³

KITCHEN

DIMENSIONS: 2000mm(DIA)

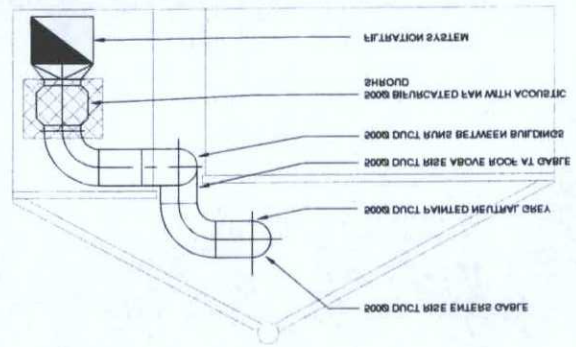
LOW PRESSURE
TYPE: GALVANISED MILD STEEL TO HAVY DAVY

THE DUCTWORK MUST BE PROVIDED WITH WEATHER PROTECTION

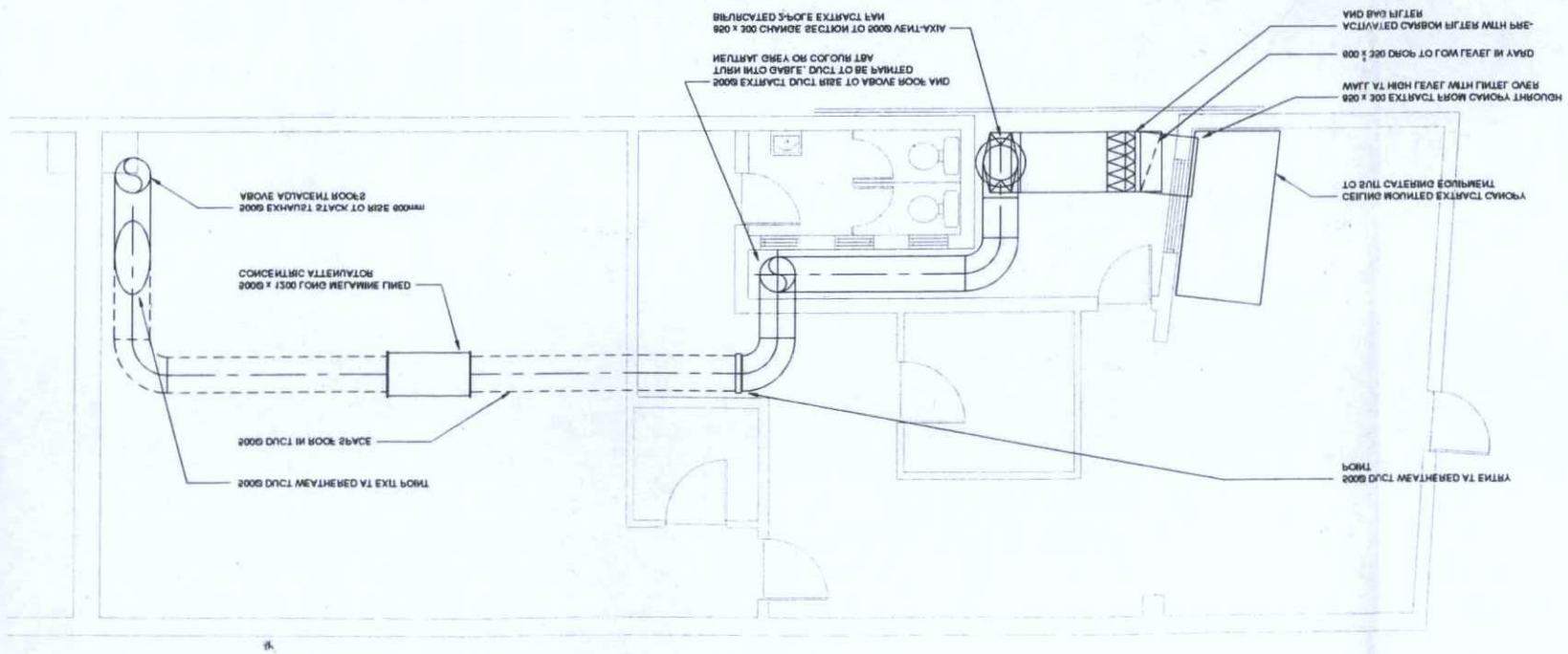
ACROSS THE FLAT ROOF AND SUPPORTED ANY A LIGHTWEIGHT FRAME
CARRY THE EXTRACT AIR. THE DUCTWORK MAY BE EXTENDED
GALVANISED STEEL DUCT WORK DUCTWORK MUST BE USED TO

DUCTWORK

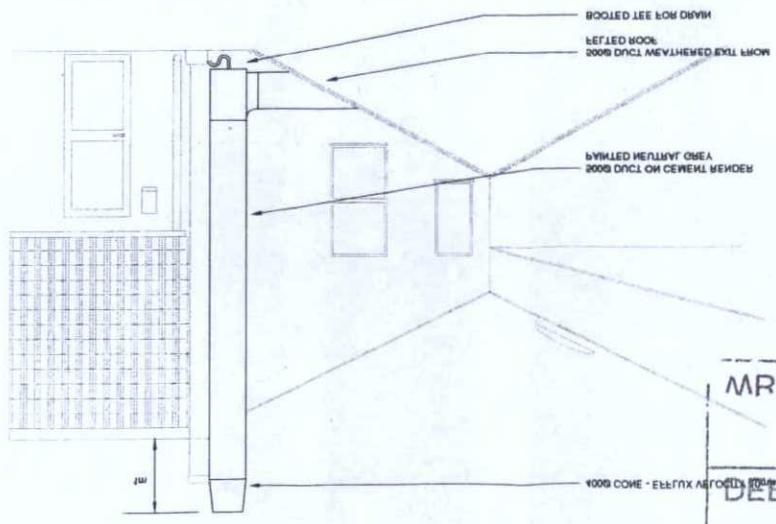
KITCHEN EXHAUST DUCT SOUTH ELEVATION
TO GABLE (1:20)



EXTRACT VENTILATION PLANT PLAN
(1:20)



KITCHEN EXHAUST DUCT SOUTH ELEVATION
TO FLATS IN BRIGHTON ROAD (1:20)



MR1 Odi Operation

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BOROUGH OF WORTHING

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