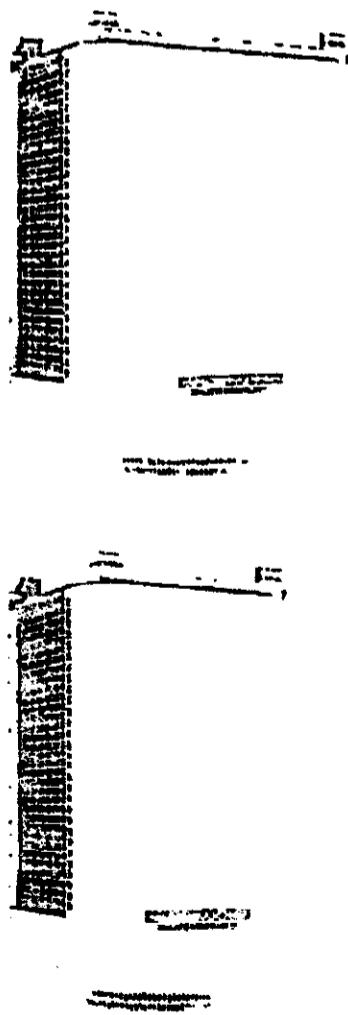




THE PHENE, 9 PHENE STREET, LONDON, CHELSEA, SW3

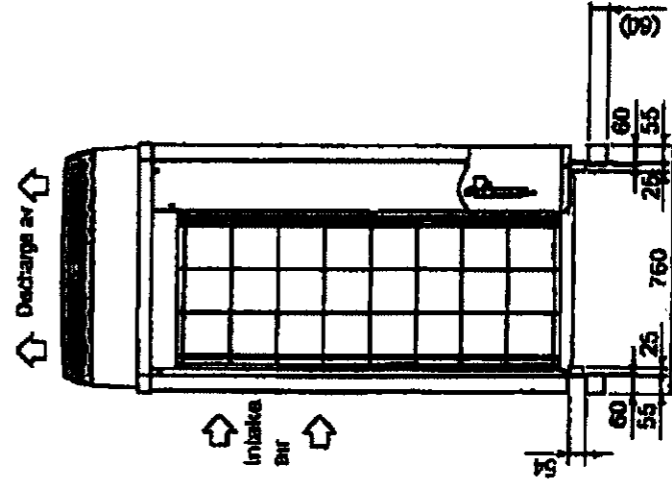
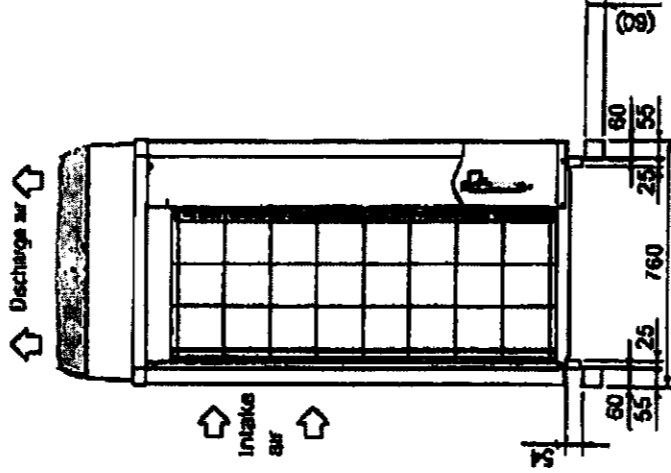
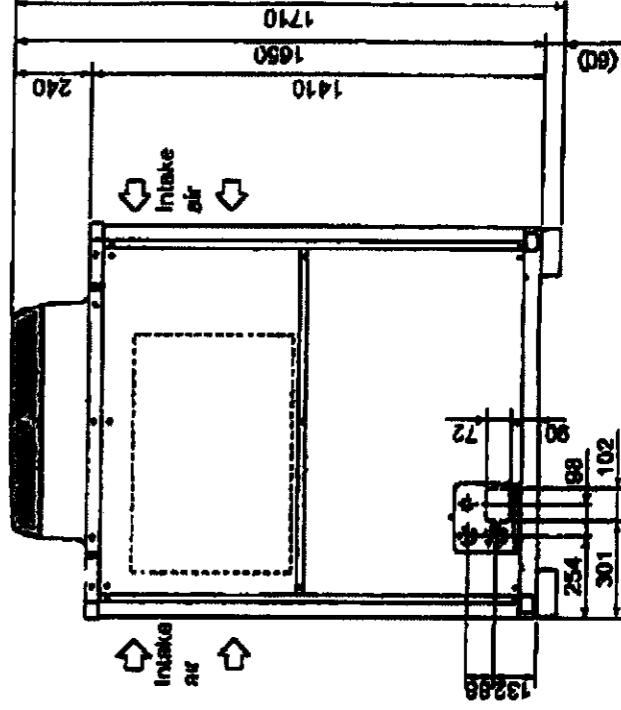
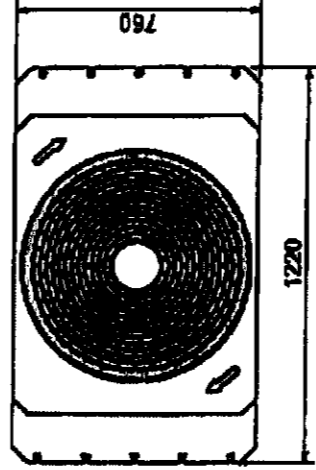
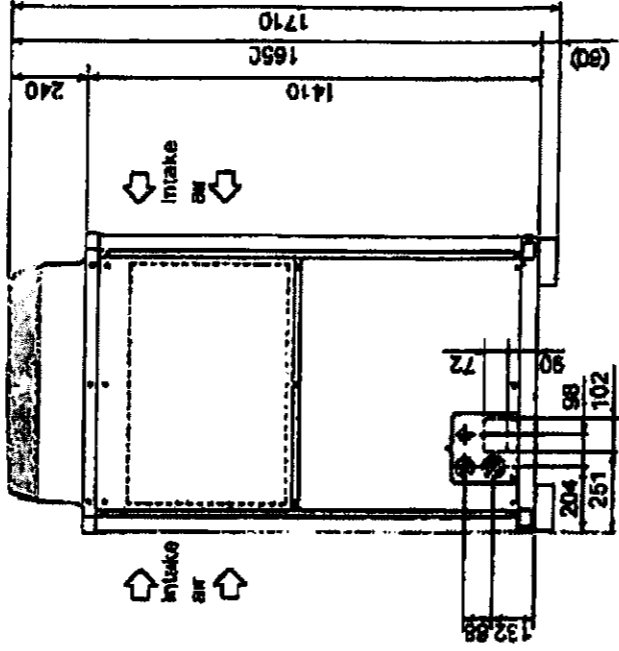
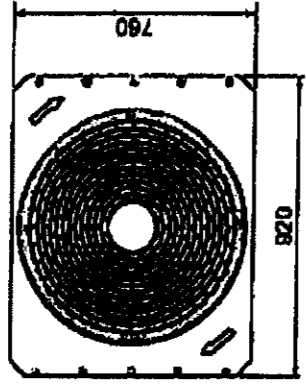
APPENDIX C
HEAT PUMP INFORMATION FOR PROPERTY



CAPACITY (kW)		Heating (nominal)		Cooling (nominal)		28.0		27.5		45.0		50.0		56.0	
POWER INPUT (kW)	Heating (nominal)	28.7	33.0	39.6	44.0	49.0	50.0	48.7	46.0	15.38	13.47	13.23	14.00	16.28	14.00
	Cooling (nominal)	26.6	31.5	37.6	42.3	46.0	46.0	45.0	15.38	13.47	13.23	14.00	16.28	14.00	11.80
COMPER (nominal)	Heating (kW)	4.79	9.11	11.73	12.87	13.79	13.79	13.79	13.79	3.64 / 3.62	3.72 / 3.69	3.77 / 3.67	3.71 / 3.40	3.64 / 3.07	3.64 / 3.07
	Cooling (kW)	2.1	2.6	3.0	3.4	3.9	3.9	3.9	3.9	3.64 / 3.62	3.72 / 3.69	3.77 / 3.67	3.71 / 3.40	3.64 / 3.07	3.64 / 3.07
MAX NO. OF CONNECTABLE INDOOR UNITS	High	185	185	225	225	225	225	225	225	21	26	30	34	39	39
	Low	185	185	225	225	225	225	225	225	21	26	30	34	39	39
NOISE (dBA)	High	57	59	60	61	62	62	62	62	57	59	60	61	62	62
	Low	200	215	245	245	245	245	245	245	200	215	245	245	245	245
WEIGHT (kg)	Width (mm)	920	920	1220	1220	1220	1220	1220	1220	920	920	1220	1220	1220	1220
	Depth (mm)	760	760	760	760	760	760	760	760	760	760	760	760	760	760
ELECTRICAL SUPPLY	Height (mm)	1710	1710	1710	1710	1710	1710	1710	1710	380-415V, 50Hz	380-415V, 50Hz	380-415V, 50Hz	380-415V, 50Hz	380-415V, 50Hz	380-415V, 50Hz
	Phase	3	3	3	3	3	3	3	3	3	3	3	3	3	3
STARTING CURRENT (A)	Heating	12.1	14.5	18.6	20.8	23.7	23.7	23.7	23.7	12.1	14.5	18.6	20.8	23.7	23.7
	Cooling	11.9	14.8	17.3	20.4	25.1	25.1	25.1	25.1	11.9	14.8	17.3	20.4	25.1	25.1
RUNNING CURRENT (A)	Heating	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Cooling	8	8	8	8	8	8	8	8	8	8	8	8	8	8
FUSE RATING (FICB class BS EN 60947-2) - (A)	Heating	20	25	32	32	40	40	40	40	20	25	32	32	40	40
	Cooling	20	25	32	32	40	40	40	40	20	25	32	32	40	40
TOTAL PIPING LENGTH	4 + earth	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max	1000m max
	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max	1.65m max
FURTHEST PIPING LENGTH AFTER 1st BRANCH	4 + earth	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max
	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max
BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT	4 + earth	50m max (when max of outdoor installed below)	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max	50m max
	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT	4 + earth	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max
	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max	15m max

MTSUBISHI PUHY-P250

mitsubishi puhy-p250





THE PHENE, 9 PHENE STREET, LONDON, CHELSEA, SW3

APPENDIX D

HEAT PUMP INFORMATION FOR SWIMMING POOL

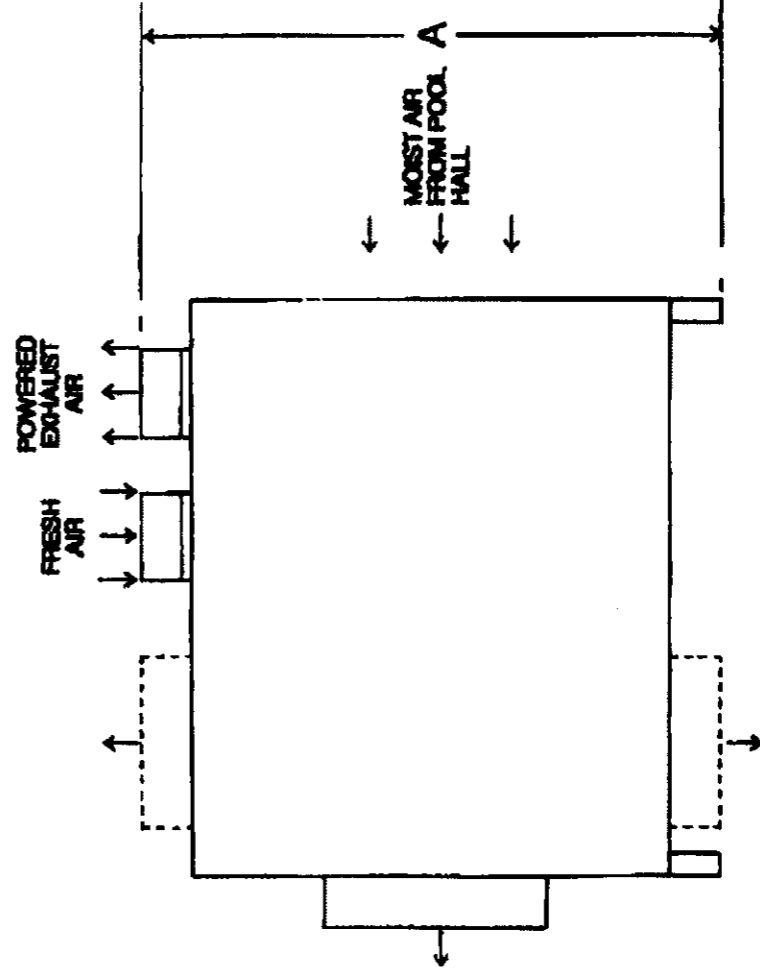
SWIMMING POOL HEAT PUMP

Calorex DELTA Specifications

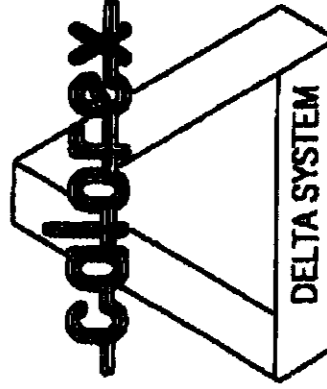
MODEL	1	2	4	6	8	10	12
POOL AIR RECIRCULATION FAN AIR FLOW M ³ /HR:-	2500	2600	3000	4000	5000	6000	7000
EXHAUST / FRESH AIR FAN AIR FLOW M ³ /HR (STEPPED CONTROL):-	120-1200	130-1300	150-1500	200-2000	250-2500	300-3000	350-3500
DEHUMIDIFICATION DUTY LITRES/HR @ 28deg C 60% RH TOTAL DUTY BY HEAT PUMP & FRESH AIR DILUTION:-	9.5	10.7	12.1	16.1	20.1	24.2	28.2
HEAT TO AIR KW							
VIA HEAT PUMP (MODE "A"):-	1.3	1.5	1.4	1.5	1.6	2	2.5
VIA HEAT PUMP (MODE "B"):-	3.85	4.9	5.1	6.6	8	10	12.1
VIA LPHW @ 80 deg C:-	20	22	25	30	35	38	42
MAX AVAILABLE (Mode B + LPHW):-	23.85	26.9	30.1	36.6	43	48	54.3
HEAT TO POOL WATER KW							
VIA HEAT PUMP (MODE "A"):-	4	5.5	5.8	8	10	12.5	15
VIA HEAT PUMP (MODE "B"):-	17	2.2	2.3	3	3.7	4.6	5.5
VIA LPHW @ 80 deg C:-	10	10	10	15	15	19	19
MAX AVAILABLE (Mode A + LPHW):-	14	15.5	15.8	23	25	31.5	34
COOLING DUTY (sensible) KW:-	-2*	-2.5*	-2.94	-3.85	-4.7	-5.9	-7.1
COOLING DUTY (TOTAL) KW:-	-3*	-4*	-4.2	-5.5	-6.7	-8.4	-10.1
* = Summer cooling in mode "A"							
RECOMMENDED BOILER CAPACITY KW:-	30	32	35	45	50	60	70
TOTAL POWER CONSUMED (nominal) KWH:-	3.18	3.84	3.94	5.12	6.25	7.8	9.35
RECOMMENDED POOL SIZE M ² :-							
DOMESTIC USE (light):-	50	65	70	90	110	130	160
HOTEL/CLUB USE (medium):-	45	55	60	80	100	120	140
MUNICIPAL USE (heavy):-	40	50	55	70	90	110	130

FOR ACCURATE APPLICATION SIZING CONSULT THE PG GROUP HEAT PUMPS DIVISION

Supply Air Options



MODELS	1 & 2	4, 6 & 8	10 & 12
A	1735	1910	1855
B	1530	1620	1620
C	655	705	855



Optional Equipment

- Return Air Duct Spigot
- Return Air/Fresh Air Filter Kit
- Models 1-6 Single or Three Phase
- Models 8-12 Three Phase Only
- Supply Fan Outlet Options On Request

A British product marketed by:

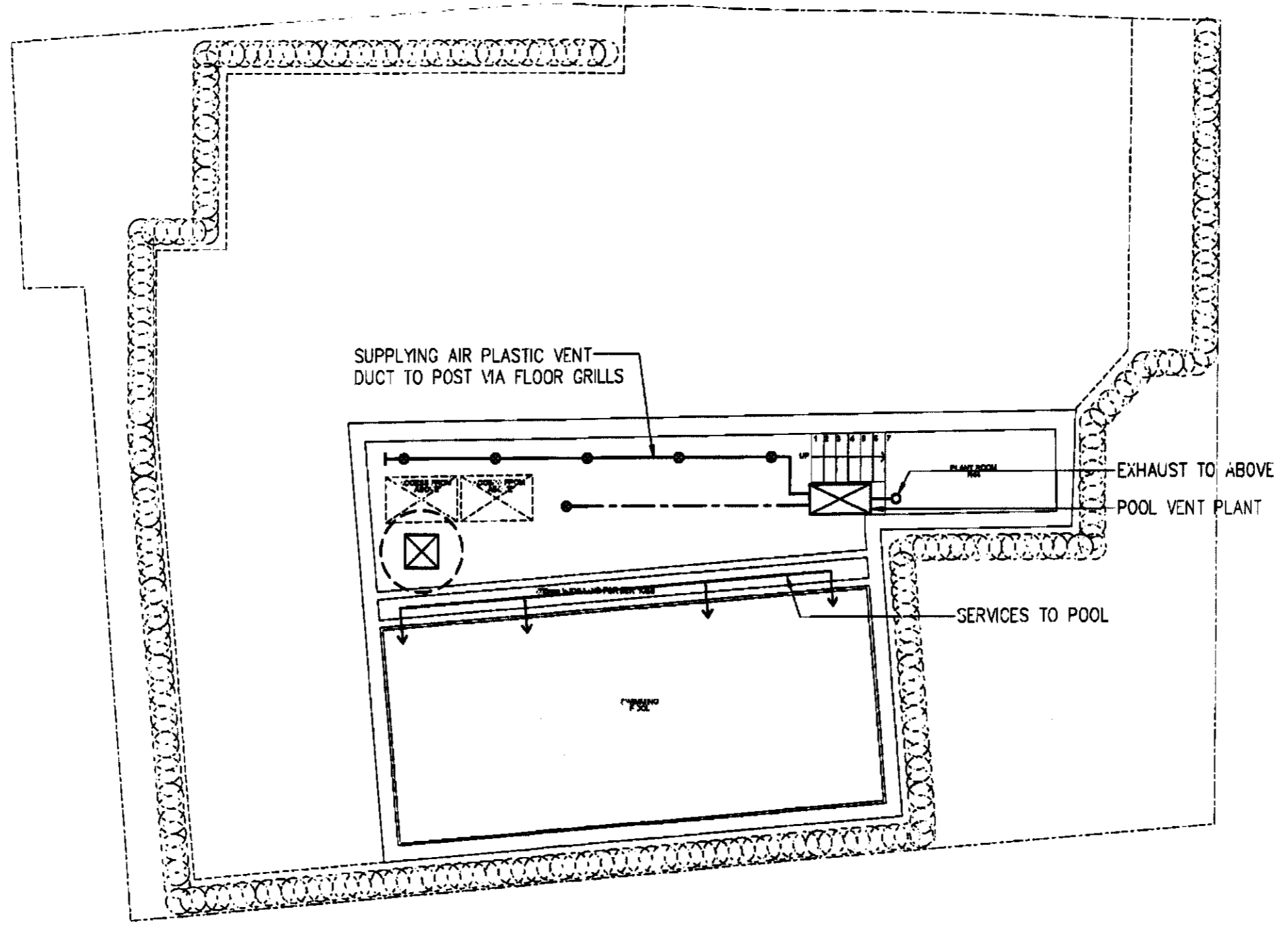
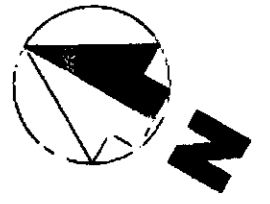
POOL GBAR

Unit 2 Wilton Park, Station Lane Ind. Est.,
Witney, Oxon OX8 6FH

THE PHENE, 9 PHENE STREET, LONDON, CHELSEA, SW3

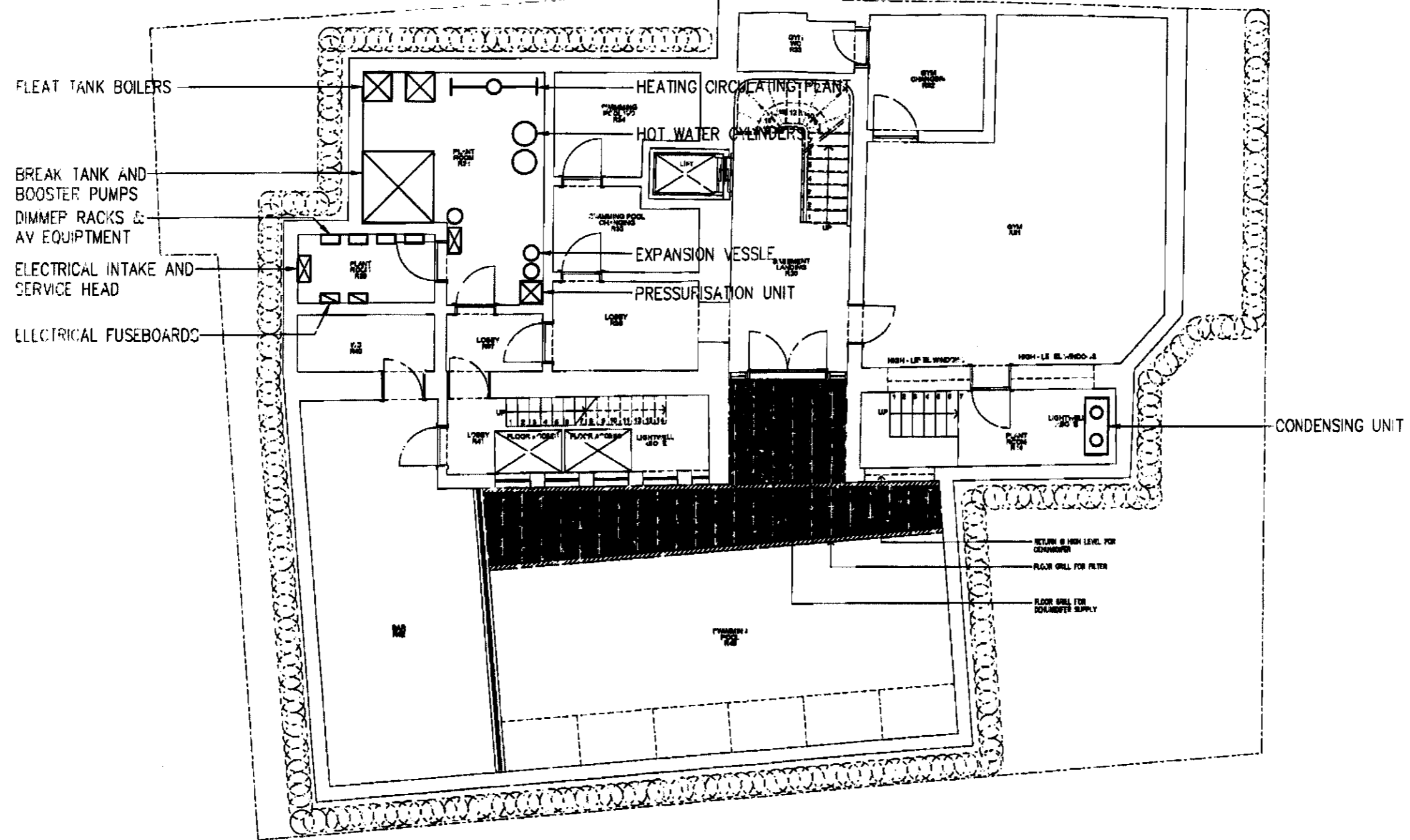
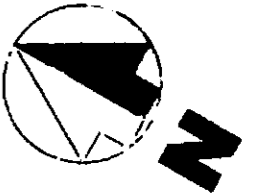
APPENDIX E

Drawing No's :
5819/M/1P
5819/M/2P
5819/M/3P
5819/M/4P
5819/M/5P
5819/M/6P
5819/M/7P



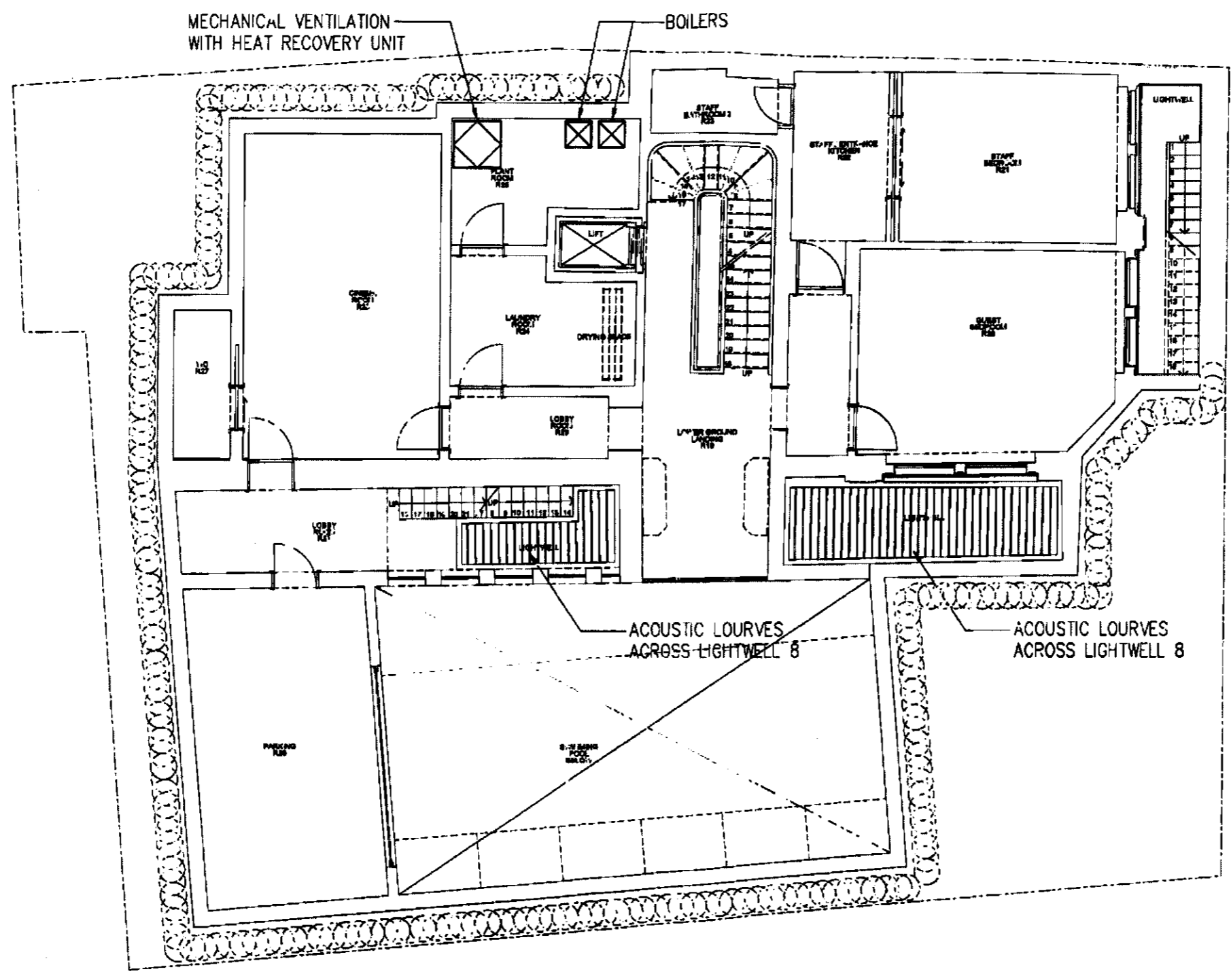
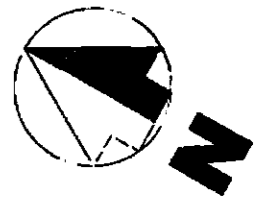
The Kut Partnership
 tel: +44(0)20 8348 5171
 fax: +44(0)20 8340 8926
 email: tkp@kut.co.uk
 web: www.kut.co.uk

Description			PLANNING - SUB BASEMENT PLAN				ref. date	REVISIONS		
							P	PLANNING ISSUE		
Scale	A3@1:100	Drawn	PJ	Project			Project No.	Services	Dwg No.	Rev.
Date	July 2011	checked		THE PHENE, 9 PHENE STREET, LONDON, SW3			5819	M	1	P



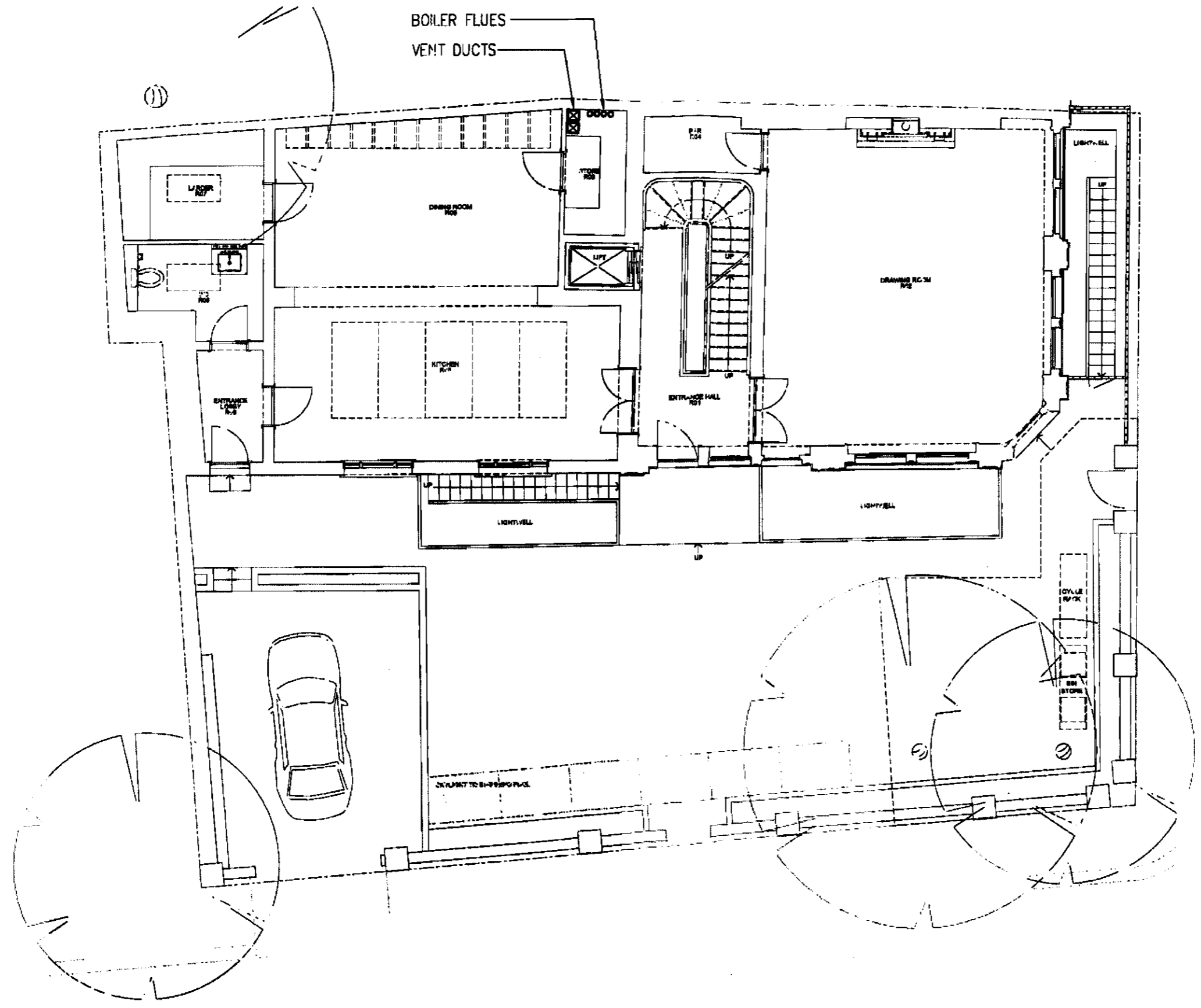
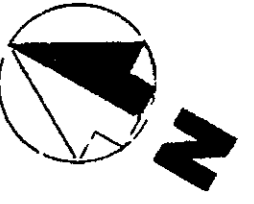
The Kut Partnership
 tel: +44(0)20 8348 5171
 fax: +44(0)20 8340 8928
 email: tkp@kut.co.uk
 web: www.kut.co.uk

Description			PLANNING - BASEMENT PLAN			ref. date	REVISIONS		
						P	PLANNING ISSUE		
Scale	A3@1:100	Drawn	PJ	Project		Project No.	Services	Org. No.	Rev.
Date	July 2011	Checked		THE PHENE, 9 PHENE STREET, LONDON, SW3		5819	M	2	P



The Kut Partnership
 Tel: +44(0)20 8348 5171
 Fax: +44(0)20 8340 8926
 email: tkp@kut.co.uk
 web: www.kut.co.uk

Description				PLANNING - LOWER GROUND PLAN				ref. date		REVISIONS	
Scale A3@1:100				Drawn PJ		Project		P 06.07.11		PLANNING ISSUE	
Date July 2011				Checked		THE PHENE, 9 PHENE STREET, LONDON, SW3		Project No. 5819		Services M	
								Dwg No. 3		Rev. P	



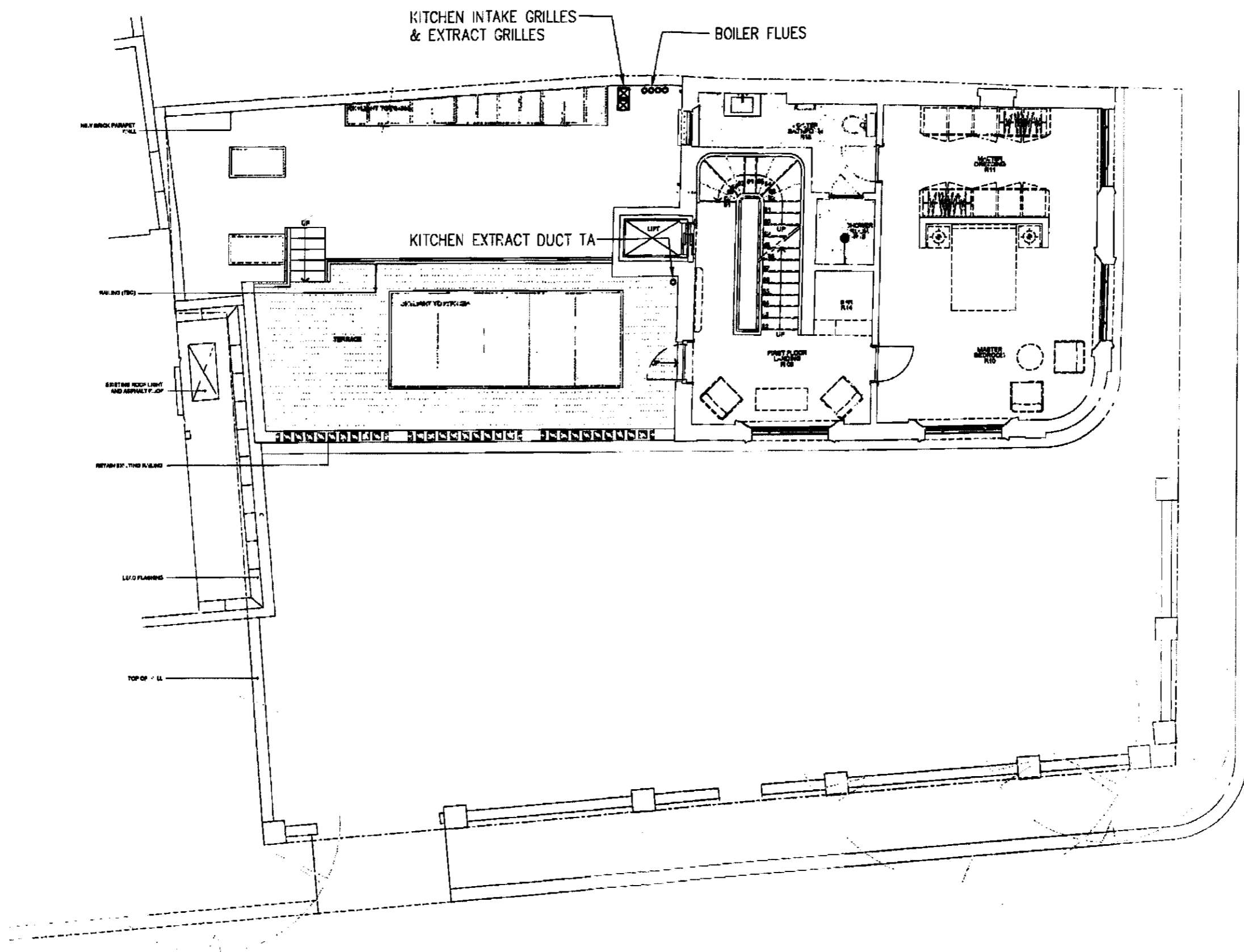
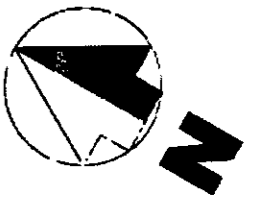
PLANNING - GROUND FLOOR PLAN

THE PHENE, 9 PHENE STREET, LONDON, SW3

KUT
 The Kut Partnership
 Tel: +44(0)20 8348 5171
 Fax: +44(0)20 8340 8926
 Email: tkp@kut.co.uk
 Web: www.kut.co.uk

Description		Project	
Scale	Drawn	Project	
A3@1:100	PJ		
Date	Checked		
July 2011			

ref. date	REVISIONS		
P 06.07.11	PLANNING ISSUE		
Project No.	Services	Dwg No.	Rev.
5819	M	4	P



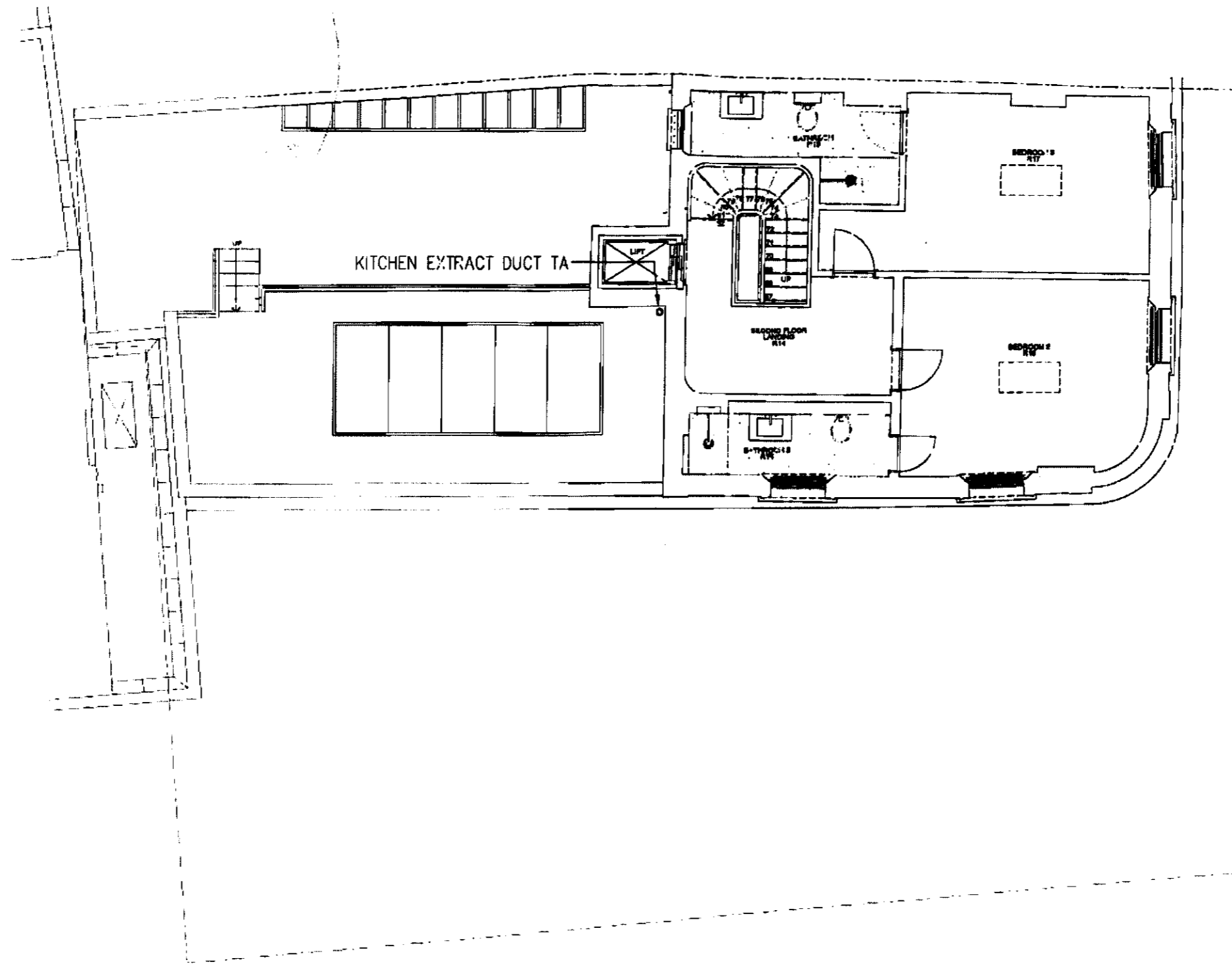
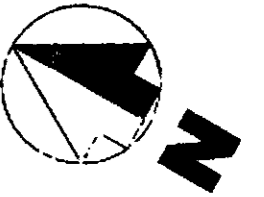
PLANNING - FIRST FLOOR PLAN

THE PHENE, 9 PHENE STREET, LONDON, SW3



The Joint Partnership
 Tel: +44(0)20 8348 5171
 Fax: +44(0)20 8340 8926
 Email: tkp@kut.co.uk
 Web: www.kut.co.uk

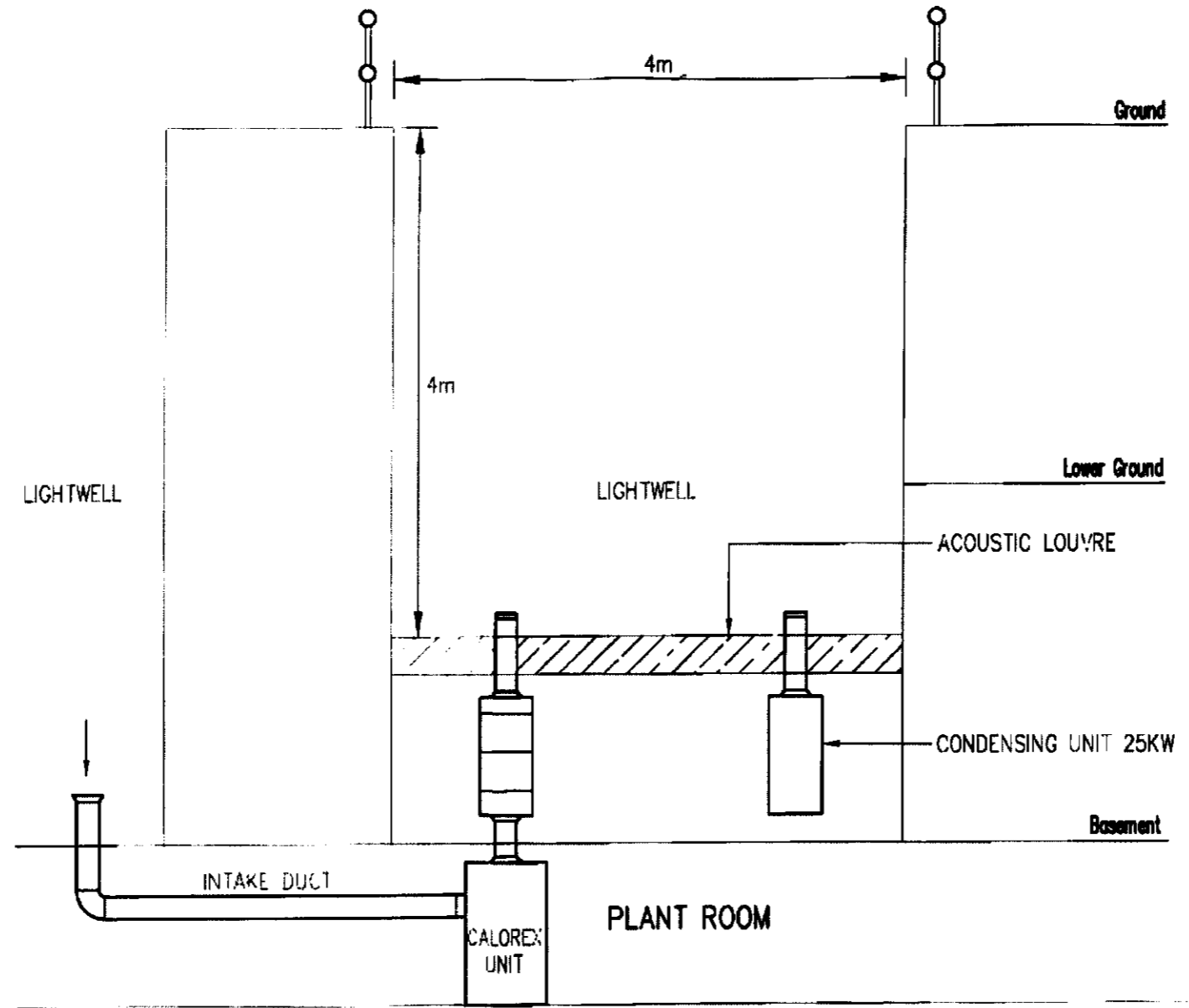
Description		ref./date		REVISIONS	
		P 06.07.11		PLANNING ISSUE	
Scale	Drawn	Project No.	Services	Dwg No.	Rev.
A3@1:100	PJ	5819	M	5	P
Date	Checked				
July 2011					



The Kut Partnership
 Tel: +44(0)20 8348 5171
 Fax: +44(0)20 8340 8928
 Email: tkp@kut.co.uk
 Web: www.kut.co.uk

Description				PLANNING - SECOND FLOOR PLAN			
Scale	A3@1:100	Drawn	PJ	Project			
Date	July 2011	Checked		THE PHENE, 9 PHENE STREET, LONDON, SW3			

ref. date	REVISION		
P 06.07.11	PLANNING ISSUE		
Project No.	Services	Draw No.	Rev.
5819	M	6	P



KUT

The Kut Partnership
 Tel: +44(0)20 8348 5171
 Fax: +44(0)20 8340 8828
 Email: tkp@kut.co.uk
 Website: www.kut.co.uk

Description			PLANT ROOM SECTION			
Scale: A3@1:50	Drawn: PJ	Project:	THE PHENE, 9 PHENE STREET, LONDON, SW3			
Date: July 2011	Checked:					

ref./date	REVISIONS			
P 06.07.11	PLANNING ISSUE			
Project No.	Services	Dwg No.	Rev.	
5819	M	7	P	