



**KEY - FOUL ABOVE-GROUND DRAINAGE**

- SVP/X SOIL VENT PIPE REFERENCE X
- SS/X STUB STACK REFERENCE X
- FOUL DRAINAGE
- SOIL VENT PIPE OR STUB STACK
- RODDING EYE
- WC CONNECTION
- WASH-HAND BASIN OR SINK CONNECTION
- FLOOR GULLY

**KEY - PIPED SERVICES**

- COLD WATER (POTABLE)
- HOT WATER (DHW)
- HOT WATER RETURN
- COLD WATER TAP OR CONNECTION
- MIXER TAP
- HOT WATER TAP OR CONNECTION

**KEY - VENTILATION**

- F/X FAN REFERENCE X
- ATT/X ATTENUATOR REFERENCE X
- EG/X EXTRACT GRILLE/DIFFUSER REFERENCE X
- TER/X INTAKE/EXHAUST TERMINAL REFERENCE X
- EXTRACT DUCTWORK
- FIRE RATED DUCTWORK
- CONTROL
- CEILING EXTRACT GRILLE/DIFFUSER
- WALL EXTRACT GRILLE/DIFFUSER
- WALL EXTRACT GRILLE/DIFFUSER
- WINDOW ACTUATOR
- BLIND MOTOR

**KEY - HEATING**

- H/R/N/X NEW RADIATOR REFERENCE X
- H/R/E/X EXISTING RADIATOR REFERENCE X
- H/UFH/X UNDERFLOOR HEATING MANIFOLD X
- H/UFH/XY UNDERFLOOR HEATING ZONE Y SERVED FROM MANIFOLD X
- RADIATOR
- FLOW PIPEWORK
- RETURN PIPEWORK
- SINGLE PIPE SYSTEM PIPEWORK
- EXISTING PIPEWORK
- FLUE
- TEMPERATURE SENSOR
- THERMOSTAT

**KEY - DRY RISER**

- DRY/1 RISER REFERENCE X
- DRY RISER

**NOTES**

1. DO NOT SCALE
2. TO BE READ IN CONJUNCTION WITH ALL OTHER LAURENCE OWEN LTD AND DESIGN TEAM PROJECT DOCUMENTS ISSUED
3. FINAL SETTING OUT BY ARCHITECT
4. IF IN DOUBT ASK
5. DESIGN OF FIRE ALARM SYSTEM BY SPECIALIST INSTALLER - EQUIPMENT SHOWN INDICATIVE ONLY
6. WHERE EMERGENCY LIGHTS OR EMERGENCY ESCAPE SIGNS ARE PRESENT, CIRCUITS MUST BE RUN WITH AN UNSWITCHED LIVE IN ADDITION TO THE SWITCHED LIVE, LIKEWISE PHASE-PULSE CONTROLLED LIGHTS

**KEY - PIPEWORK**

- PIPEWORK AT HIGH LEVEL (HIDDEN)
- PIPEWORK AT HIGH LEVEL
- PIPEWORK AT LOW LEVEL
- PIPEWORK AT LOW LEVEL (HIDDEN)
- PIPEWORK DROP
- PIPEWORK RISE

UNDERFLOOR HEATING SPECIFICATION						
REF	ITEM	LOCATION	MAKE / MODEL	PORTS/CAPACITY/SPEC	DIMENSIONS (ØXH OR WXLXH)	NOTES /ACCESSORIES
UFH/1	MANIFOLD	IN CUPBOARD - REFER TO LAYOUT	WARMAFLOOR STANDARD COMPOSITE MANIFOLD	11 PORT	185X980X810MM*	150X500X200MM ZONE REQUIRED ABOVE OR ADJACENT FOR CONTROLS
UFH/1/TC	CONTROLLER	*	HEATMISER NEOSTAT V2		13X85X85MM	
UFH/1/WC	WIRING CENTRE	*	HEATMISER UH4*		348X148X60MM	
UFH/1/TS	TEMPERATURE SENSOR	IN ROOM - REFER TO LAYOUT	HEATMISER THIMBLE SENSOR			
UFH/2	MANIFOLD	IN CUPBOARD - REFER TO LAYOUT	WARMAFLOOR STANDARD COMPOSITE MANIFOLD	2 PORT	185X530X810MM*	
UFH/2/TC	CONTROLLER	AS UFH/1				
UFH/2/WC	WIRING CENTRE	AS UFH/1				
UFH/2/TS	TEMPERATURE SENSOR	AS UFH/1				

\*INDICATIVE; SPECIALIST TO ENSURE COMPATIBILITY WITH NUMBER OF ZONES SELECTED BY SPECIALIST

RADIATOR SCHEDULE												
REF	MANUFACTURER	RANGE	MODEL	COLUMNS /PANELS	SECTIONS	OUTPUT (W)*	HEIGHT (MM)	LENGTH* (MM)	DEPTH (MM)	FINISH	MOUNTING	CONNECTIONS
R/2/1	CASTRADS	MERCURY	N/A	3	14	924	760	826	140	PEWTER	FLOOR	TOP: BLANKING VALVE, BRASS BLEED VALVE BOTTOM: WINDSOR TRV, WINDSOR LOCKSHIELD
R/2/2	CASTRADS	MERCURY	N/A	3	13	858	760	767	140	PEWTER	FLOOR	AS R/0/1
R/2/3	CASTRADS	MERCURY	N/A	3	12	792	760	708	140	PEWTER	FLOOR	AS R/0/1
R/2/4	AS R/2/2											
R/2/5	CASTRADS	MERCURY	N/A	6	30	3480	660	1770	140	PEWTER	FLOOR	AS R/0/1
R/2/6	AS R/2/2											
R/2/7	AS R/2/2											
R/2/8	AS R/2/1											
R/2/9	CASTRADS	MERCURY	N/A	6	28	3248	760	1416	215	PEWTER	FLOOR	AS R/0/1

\*STANDARD OUTPUT (80°C/60°C, Δ50); \*APPROXIMATE

**ABBREVIATIONS**

- H/L, L/L HIGH LEVEL, LOW LEVEL
- F/A, F/B FROM ABOVE, FROM BELOW
- T/A, T/B TO ABOVE, TO BELOW
- FA/TB FROM ABOVE TO BELOW
- FB/TA FROM BELOW TO ABOVE

REV.	DATE	ISSUE
P1	2020-11-09	STAGE 3 FOR COSTING
P2	2020-11-15	STAGE 3
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.

**FOR INFORMATION**

CLIENT  
**EXETER COLLEGE, OXFORD**

ARCHITECT  
**NEX ARCHITECTURE**

PROJECT NAME  
**THE LIBRARY RENEWED**

DRAWING TITLE  
**COMBINED MECHANICAL LAYOUT  
FIRST FLOOR**

PROJECT DRAWING NAME REV FIRST DRAWN SCALE AT A1  
**P111 T[90]102 P2 2020-11 1:50**

Building Services  
Engineering &  
Environmental Design  
**LAURENCE OWEN**