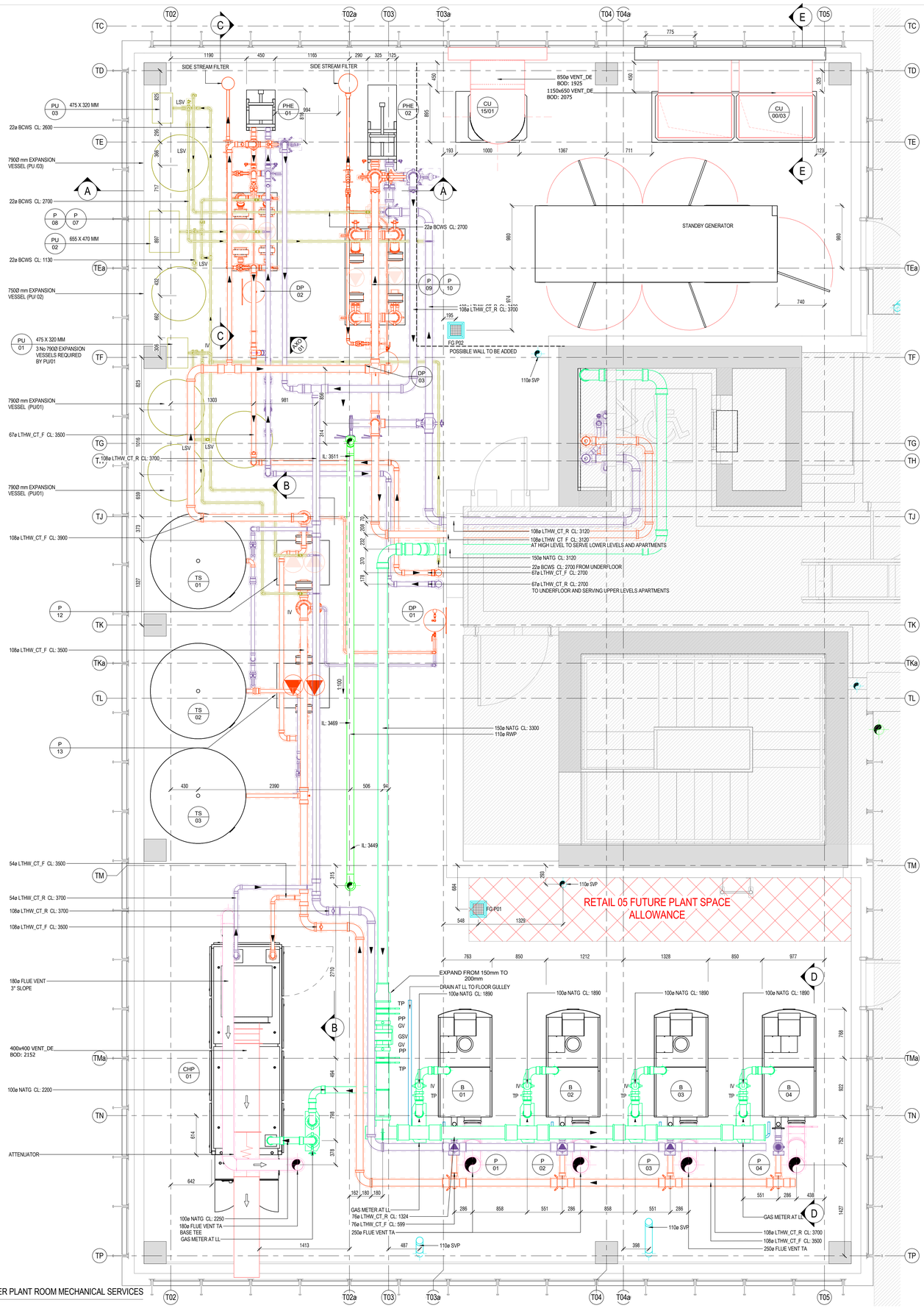
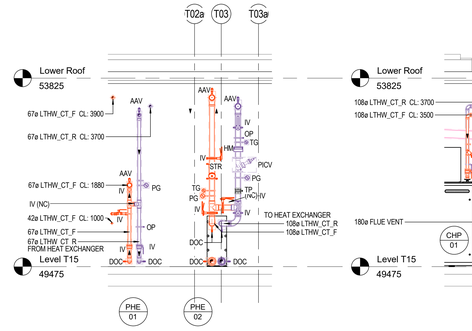
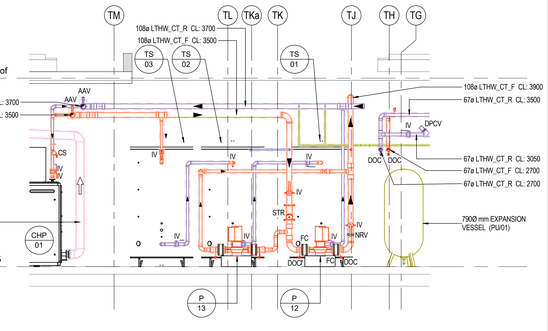


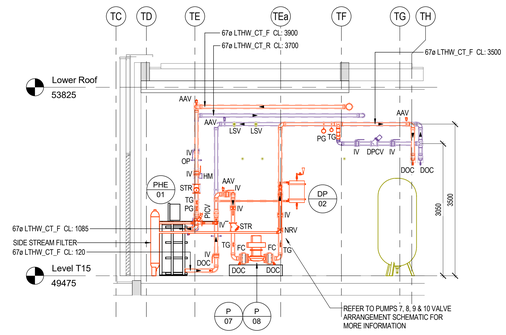
15 5T - BOILER PLANT ROOM MECHANICAL SERVICES
1 : 25



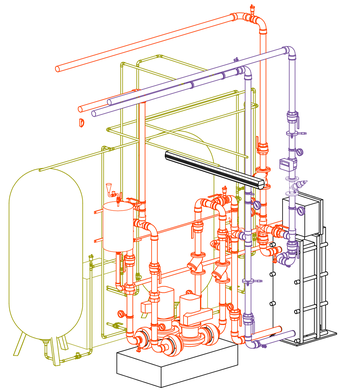
A 5T - BOILER PLANT ROOM MECHANICAL SERVICES - SECTION A
1 : 50



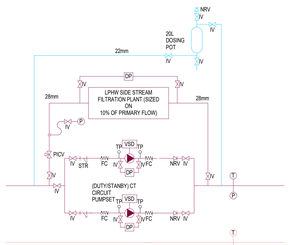
B 5T - BOILER PLANT ROOM MECHANICAL SERVICES - SECTION B
1 : 50



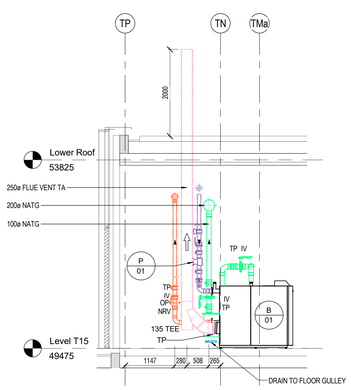
C 5T - BOILER PLANT ROOM MECHANICAL SERVICES - SECTION C
1 : 50



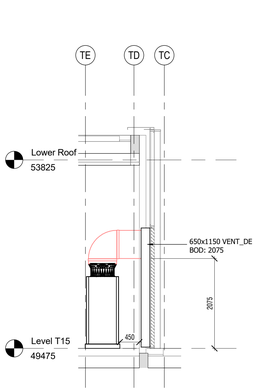
01 5T - BOILER PLANT ROOM MECHANICAL SERVICES - LEVEL 15 - VIEW 01



PUMPS 7, 8, 9 & 10 VALVE ARRANGEMENT SCHEMATIC



D 5T - TYPICAL BOILER ARRANGEMENT -SECTION D
1 : 50



E 5T - BOILER PLANT ROOM MECHANICAL SERVICES -SECTION E
1 : 50

LEGEND	
SYMBOL	DESCRIPTION
AAV	AUTOMATIC AIR VENT
DP	DIFFERENTIAL PRESSURE GAUGE
DCV	DOUBLE CHECK VALVE
DRV	DOUBLE REGULATING VALVE
DPCV	DIFFERENTIAL PRESSURE CONTROL VALVE
DC	DRAIN COCK
FC	FLEXIBLE CONNECTION
GM	GAS METER
HM	HEAT METER
IV	ISOLATION VALVE
LSV	LOCKSHIELD VALVE
MAV	MANUAL AIR VENT
MS	METERING STATION
NRV	NON RETURN VALVE
OP	ORIFICE PLATE
P	PRESSURE GAUGE
PICV	PRESSURE INDEPENDENT CONTROL VALVE
	SAFETY VALVE
STR	STRAINER
T	TEMPERATURE GAUGE
T	TEMPERATURE SENSOR
TP	BINDER TEST POINT
VSD	VARIABLE SPEED DRIVE

INSULATION TABLE

SERVICE	PIPE MATERIAL	PIPE DIAMETER	INSULATION THICKNESS	INSULATION MATERIAL
LTHW F&R	COPPER	ø15	25 mm	
	STEEL	ø15	30 mm	MINERAL WOOL
		ø20-ø50	40 mm	
		ø65 & ABOVE	50 mm	
BCWS	COPPER	ø15-ø35	20 mm	
		ø42-ø54	25 mm	MINERAL WOOL
		ø67-ø108	30 mm	
		ø133-ø159	40 mm	
	STAINLSTEEL	ø159 & ABOVE	40 mm	
DHWS F&R	COPPER	ø15-ø22	25 mm	
		ø28-ø42	30 mm	MINERAL WOOL
		ø54-ø159	40 mm	
	STAINLSTEEL	ø159 & ABOVE	40 mm	

OUTSTANDING INFORMATION REQUIRED

PUMP SKID SPECIFICATIONS
DOSING POTS SPECIFICATIONS
AIR/ DIRST SEPARATOR SPECIFICATIONS
PRESSURISATION UNITS SPECIFICATIONS
PARTITION WALLS LAYOUT

REFERENCE DRAWINGS & MODELS		REV
ARCHITECTURAL	CSAL-FCBS-ZT-ZZ-M3-A-0001	P20
	CSAL-FCBS-ZT-ZZ-M3-A-0002	P05
STRUCTURAL	CSAL-CUR-ZT-XX-M3-S-0001	P26

GENERAL:

FA	FROM ABOVE
TA	TO ABOVE
FB	FROM BELOW
TB	TO BELOW
HL	HIGH LEVEL
LL	LOW LEVEL
ML	MID LEVEL
DTLL	DROP TO LOW LEVEL
RTHL	RISE TO HIGH LEVEL
SU	SET UP
SD	SET DOWN
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
AFFL	ABOVE FINISHED FLOOR LEVEL
IL	LEVEL TO UNDERSIDE FROM FFL
CL	LEVEL TO CENTRE FROM FFL
BOD	BOTTOM OF DUCT FROM FFL

MECHANICAL:

LTHW F	LOW TEMPERATURE HOT WATER FLOW
LTHW R	LOW TEMPERATURE HOT WATER RETURN
VRF	VARIABLE REFRIGERANT FLOW
IV	ISOLATION VALVE
NRV	NON RETURN VALVE
DCV	DOUBLE CHECK VALVE
DPV	DIFFERENTIAL PRESSURE VALVE
DPCV	DIFFERENTIAL PRESSURE CONTROL VALVE
3PMV	3 PORT MOTORISED VALVE
FODRV	FIXED ORIFICE DOUBLE REGULATING VALVE
2PMV	2 PORT MOTORISED VALVE
PICV	PRESSURE INDEPENDENT CONTROL VALVE
STR	STRAINER
OP	ORIFICE PLATE/METERING STATION
CS	COMMISSIONING STATION
TP	TEST POINT
PP	PURGE POINT
T/P	GAUGES (T-TEMPERATURE; P-PRESSURE)
S	SENSOR
M	METER
FCU	FAN COIL UNIT
DAC	DRY AIR COOLER
AB	AIR BOTTLE
N/C	NORMALLY CLOSED
FC	FLEXIBLE CONNECTION
DOC	DRAIN COCK
AV	AIR VENT
HE	HEAT EXCHANGER
RXX	RADIATOR
PCV	PRESSURE CONTROL VALVE
GV	GATE VALVE
PRV	PRESSURE REDUCING VALVE
AAV	AUTOMATIC AIR VENT
WETR	WET RISER
DRV	DOUBLE REGULATING VALVE
LSV	LOCKSHIELD VALVE

DRAINAGE:

AAV	AUTOMATIC ADMITTANCE VALVE
FG	FLOOR GULLY
RE	RODDING EYE
RWP	RAINWATER PIPE
SS	STUB STACK
SVP	SOIL VENT PIPE
GSVP	GROUND SOIL VENT PIPE
MSVP	MEZZANINE SOIL VENT PIPE
RSVP	RETAIL SOIL VENT PIPE
SWP	SOIL WASTE PIPE
VP	VENT PIPE
WP	WASTE PIPE
D	DRAINAGE
BGD	BELOW GROUND DRAINAGE
AP	ACCESS POINT
SNK	SINK
KSK	KITCHEN SINK
DW	DISH WASHER
WM	WASHING MACHINE
WHB	WASH HAND BASIN
WC	WATER CLOSET
SHR	SHOWER
BTH	BATH

1:XX FALL

C02	IMTECH COMMENTS			SW	IES 06.12.19
C01	CONTRACT ISSUE			SW	IES 20.06.19
Rev	Revision Description			DRN	CHK Date
drawn by	drawn date	checked by	checked date	approved by	approved date
CWC	06.12.19	MM	23.08.18	MM	23.08.18

CHECK PLOT
UNCONTROLLED DRAWING
Return to

A	OK	ready for transmittal
B	Minor Comments	mods to be actioned then ready for transmittal
C	Major Comments	mods to be actioned then returned for checking

signed .....
date .....

Imtech
Imtech Engineering Services North
Calder House, St George's Park
Kirkham, Lancashire PR4 2DZ
T +44 (0)1772 471 111
www.imtech.co.uk

client approval	A	Approved
	B	Approved with Comments
	C	Not Approved

client approval, initials and date

client/main contractor

consultant/structural

project
Circle Square
Affinity Living

drawing title
Zone: 5T Level: 15
Service: Plant Room
Mechanical Services

drawing status	purpose of issue
For Comment	S3

scale @ paper size	project number	drawn by	date
As indicated @ A0	P070090	CWC	23.08.18

drawing no.
CSAL-IES-5T-15-DR-Z-51530
Project Code Originator Zone Level or Facility Classification Number

revision
C02

Contract Issue