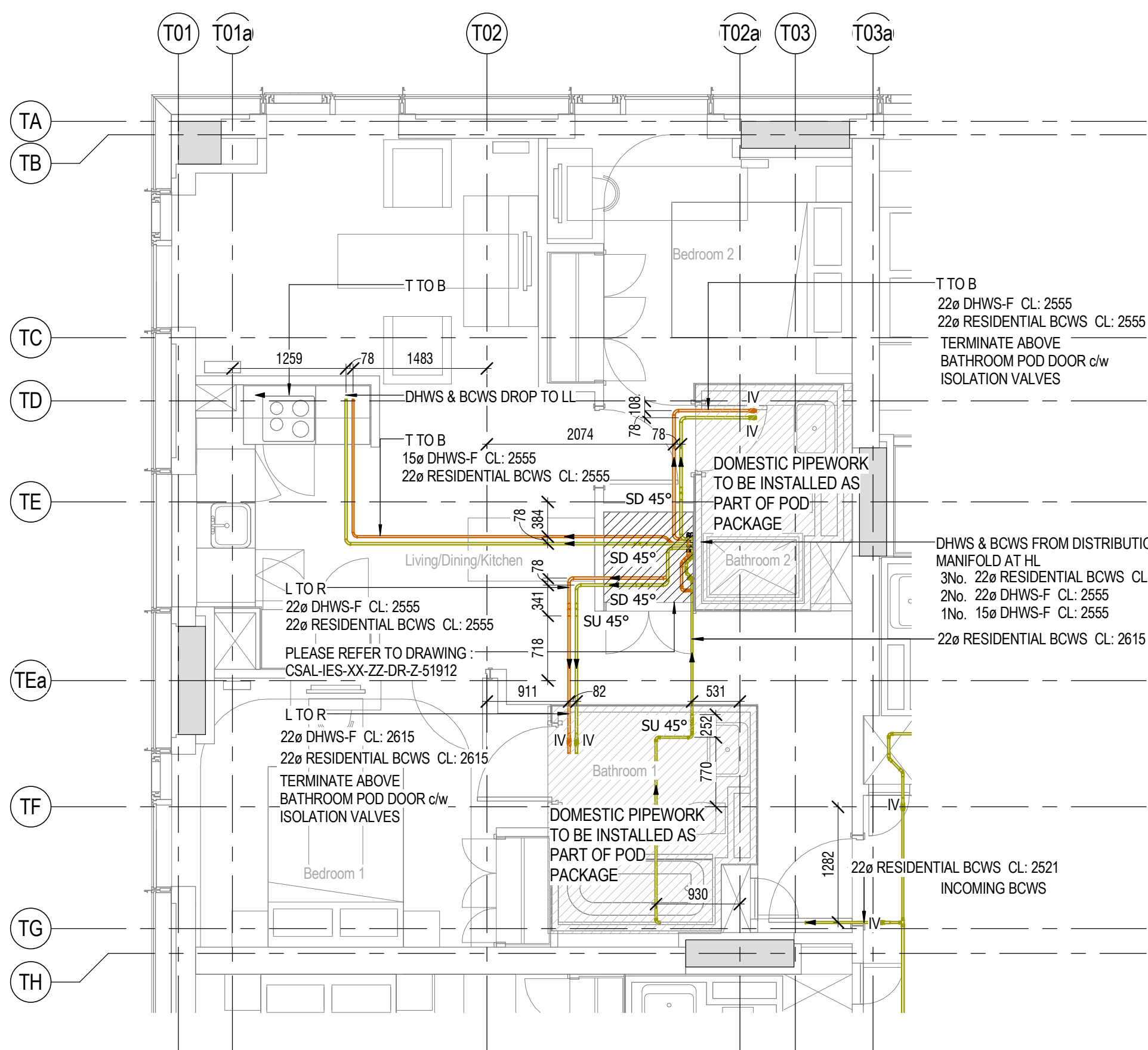
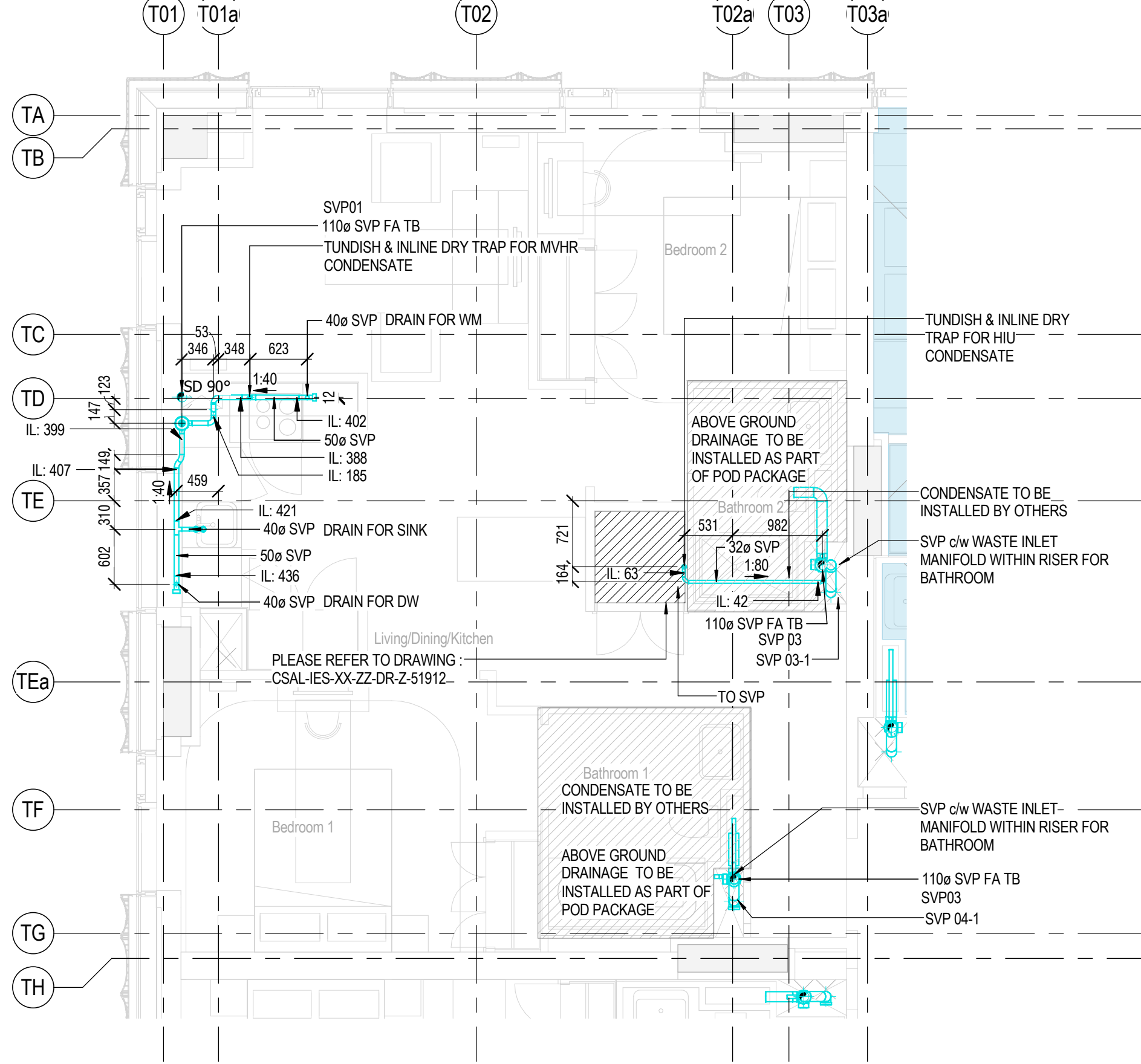
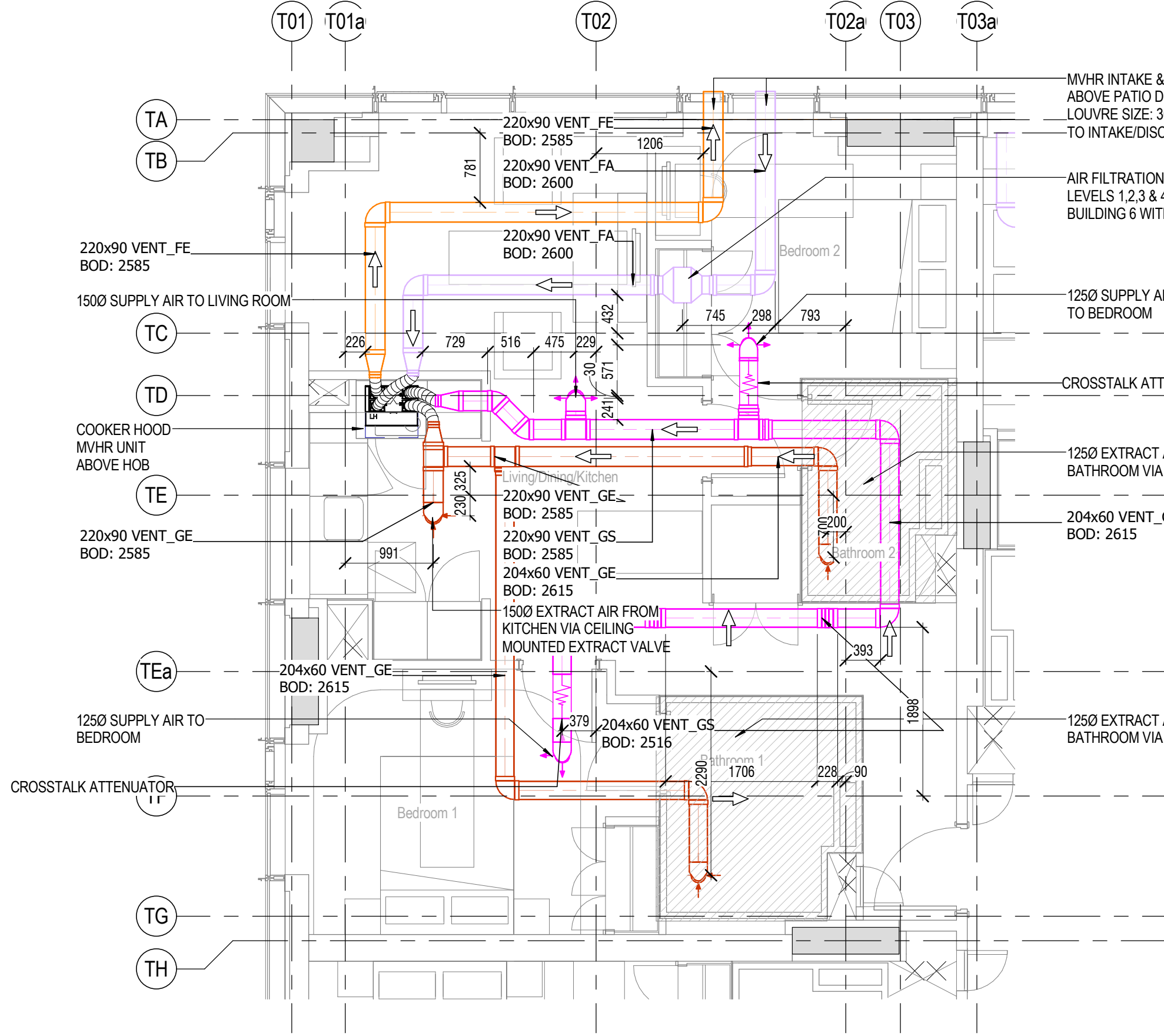




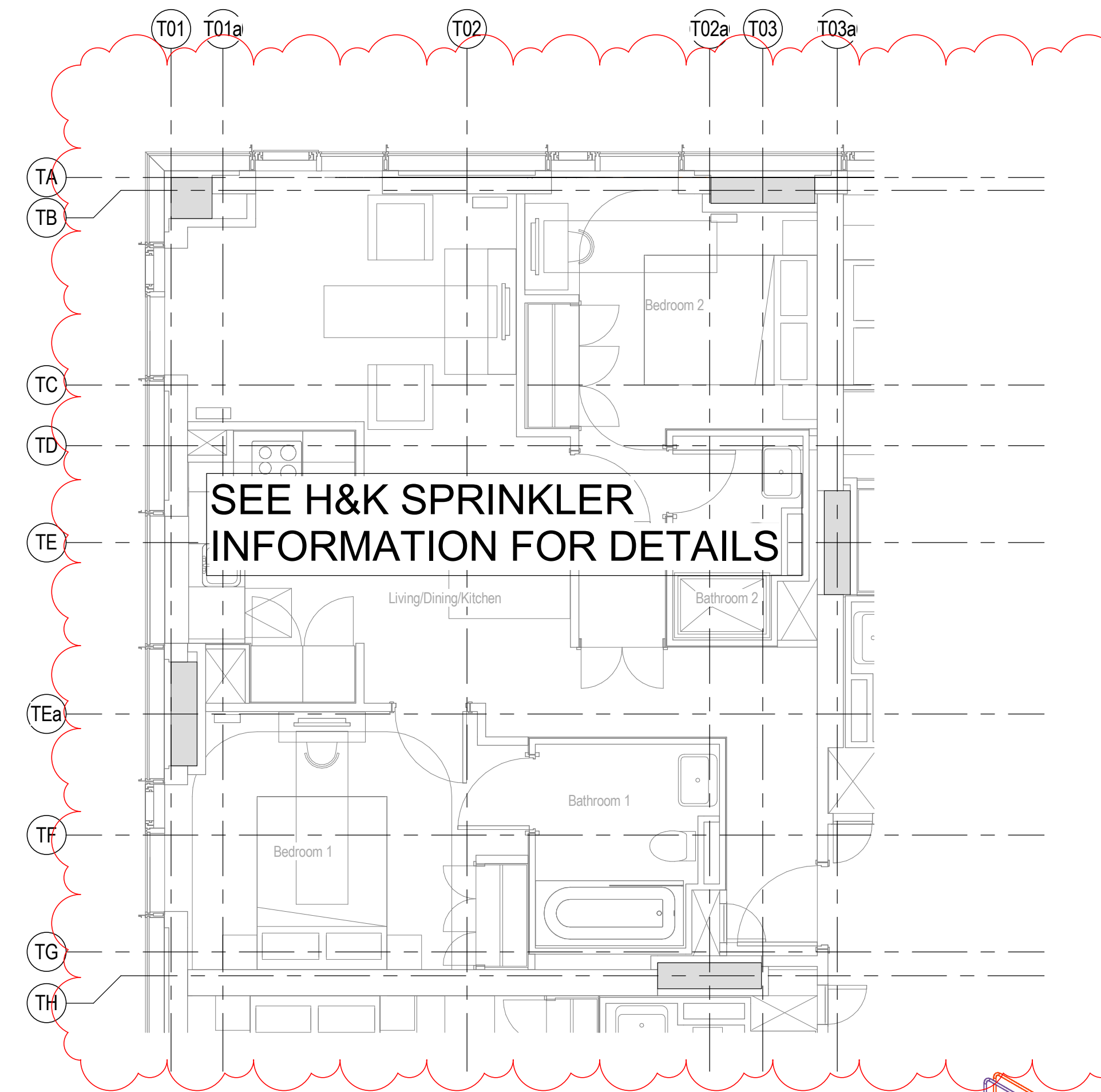
1 T4 - DOMESTIC WATER SERVICES - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4
1:50



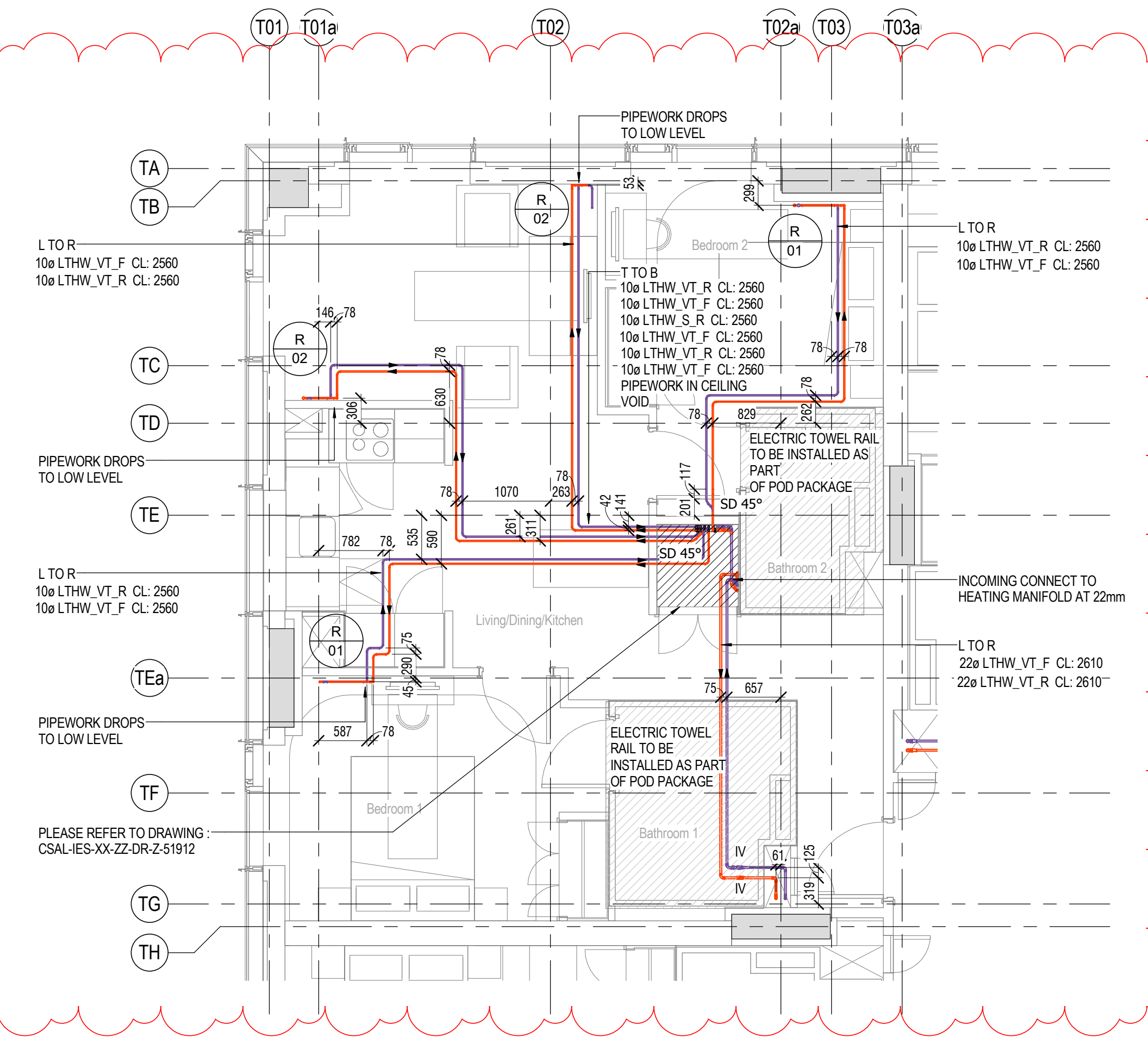
2 T4 - ABOVE GROUND DRAINAGE - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4
1:50



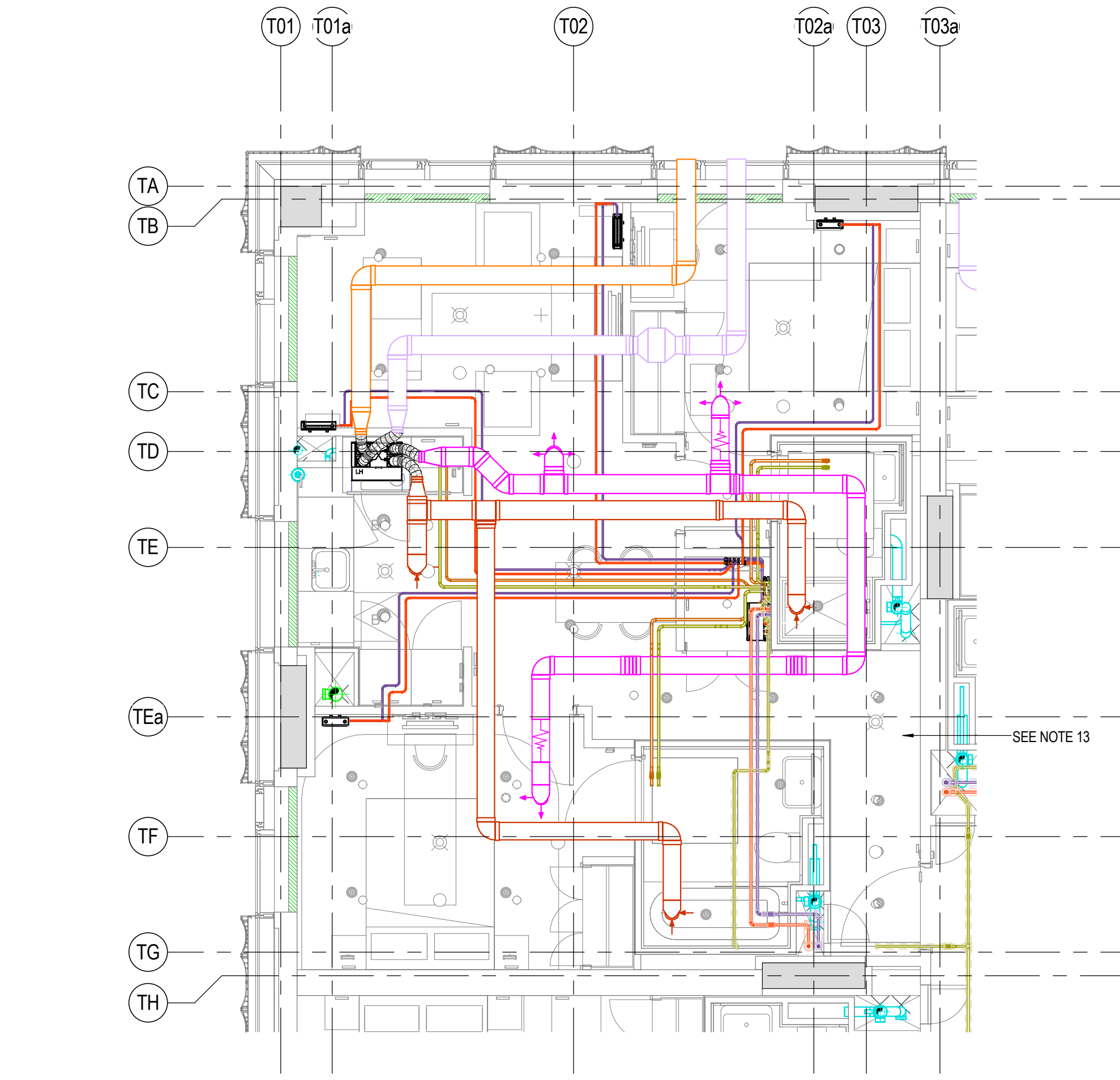
3 T4 - VENTILATION - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4
1:50



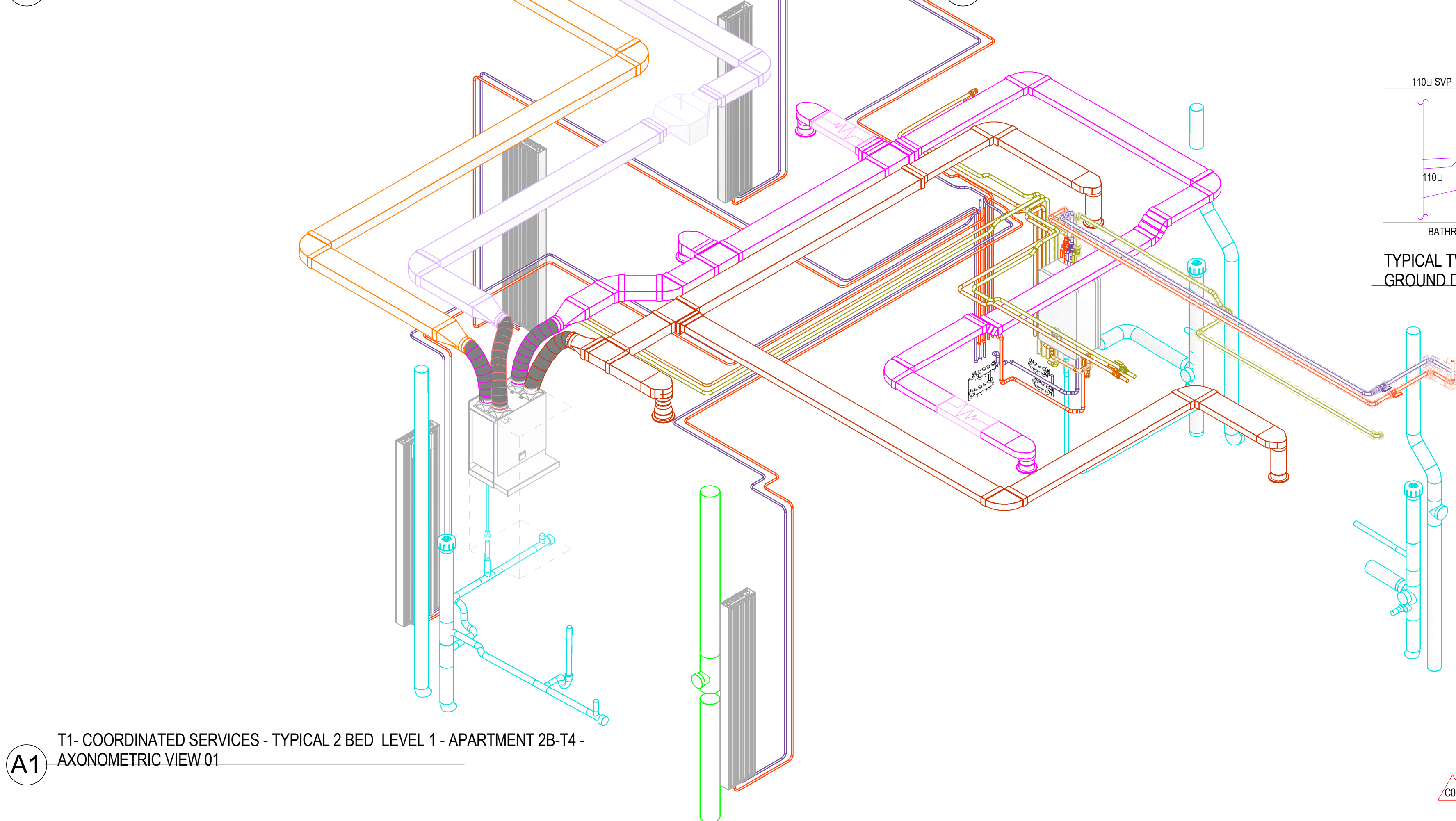
4 T4 - SPRINKLERS - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4
1:50



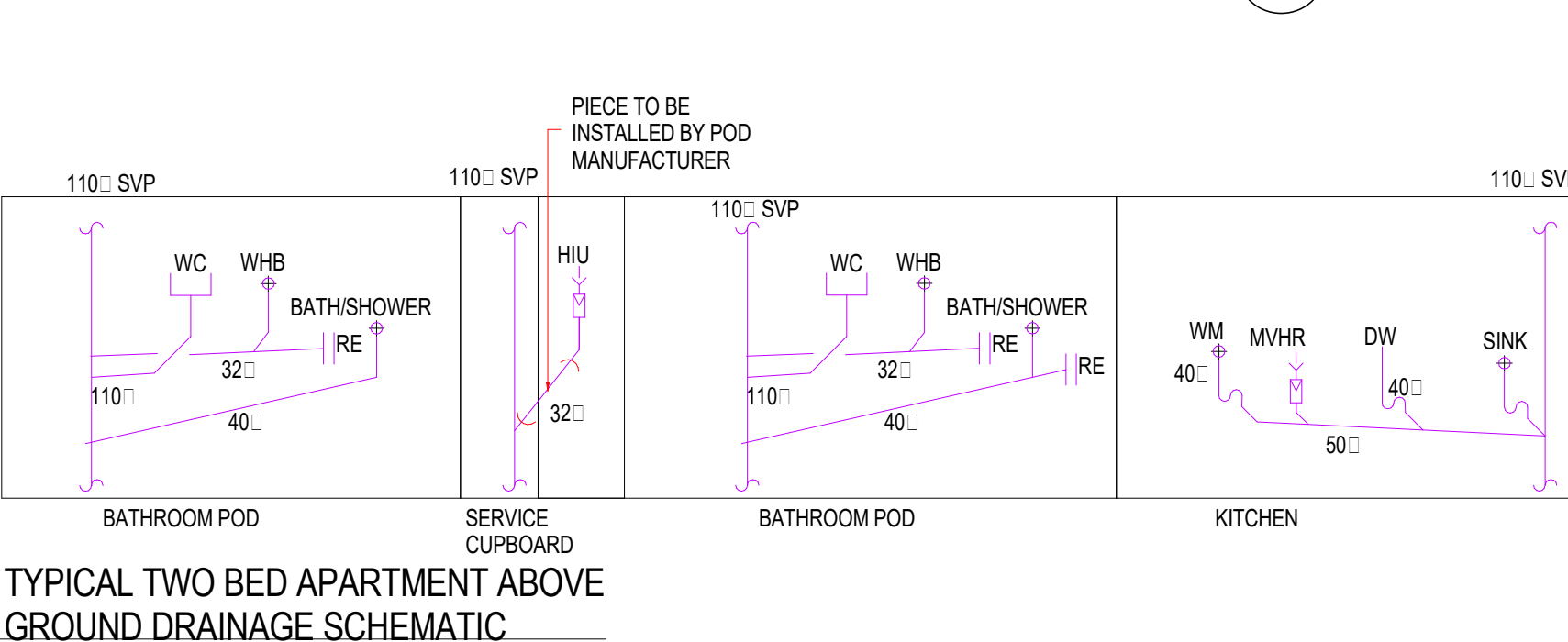
5 T4 - HEATING - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4
1:50



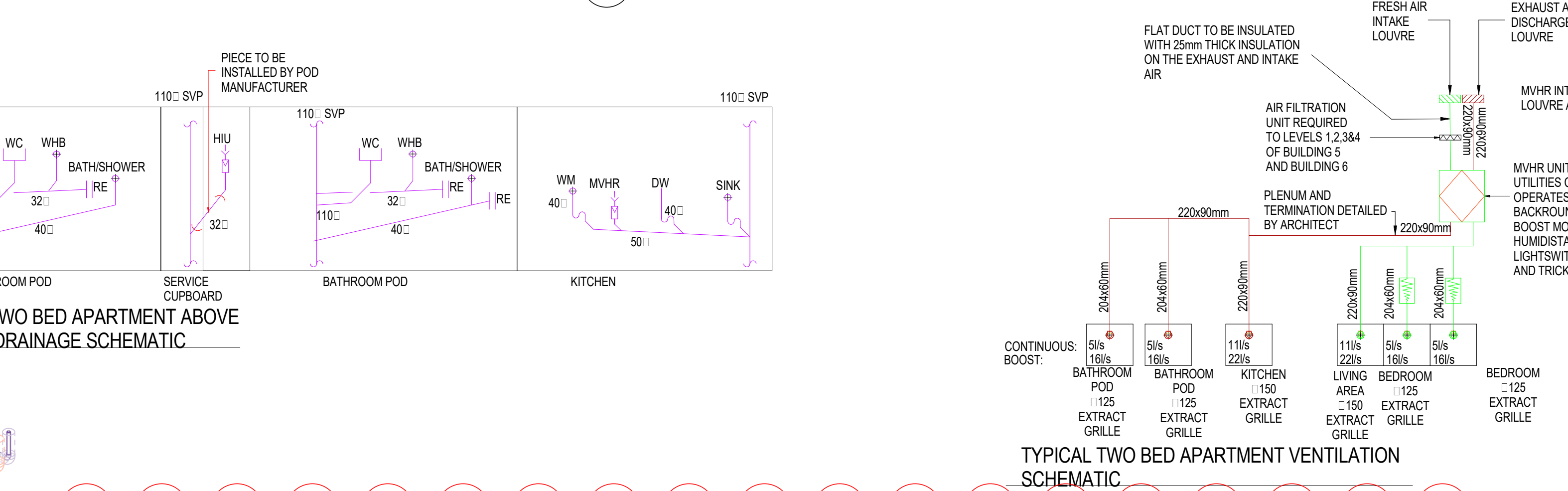
6 T4 - COORDINATED SERVICES - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4
1:50



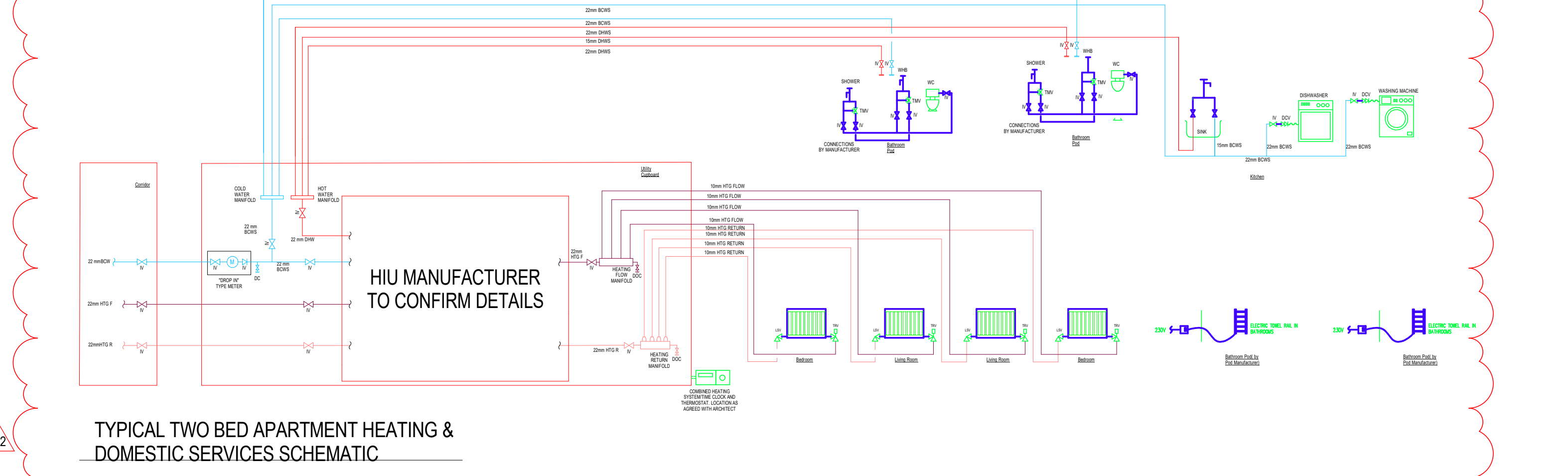
A1 T1 - COORDINATED SERVICES - TYPICAL 2 BED LEVEL 1 - APARTMENT 2B-T4 - AXONOMETRIC VIEW 01



TYPICAL TWO BED APARTMENT ABOVE GROUND DRAINAGE SCHEMATIC



TYPICAL TWO BED APARTMENT VENTILATION SCHEMATIC



TYPICAL TWO BED APARTMENT HEATING & DOMESTIC SERVICES SCHEMATIC

REFERENCE DRAWINGS & MODELS			REV
ARCHITECTURAL	CSAL-FCBS-ZT-ZZ-M3-A-001		P19
STRUCTURAL	CSAL-FCBS-ZT-ZZ-M3-A-002	FAÇADE	P04
	CSAL-CUR-ZT-ZZ-M3-S-001		P18

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	
SFL	STRUCTURAL SLAB LEVEL	
AFFL	ABOVE FINISHED FLOOR LEVEL	
IL	LEVEL TO UNDERSIDE FROM FFL	
CL	LEVEL TO CENTRE FROM FFL	
BD	BOTTOM OF DUCT FROM FFL	
MECHANICAL		
LTHW	LOW TEMPERATURE HOT WATER FLOW	
LTHW	LOW TEMPERATURE HOT WATER RETURN	
VRF	VARIABLE REFRIGERANT FLOW	
IV	ISOLATING VALVE	
NRV	NON RETURN VALVE	
DCV	DOUBLE CHECK VALVE	
DPV	DIFFERENTIAL PRESSURE VALVE	
PCV	PRESSURE CONTROL VALVE	
SPMV	3 PORT MOTORISED VALVE	
FOCV	FIXED ORIFICE DOUBLE REGULATING VALVE	
2PMV	2 PORT MOTORISED VALVE	
PICV	PRESSURE INDEPENDENT CONTROL VALVE	
STR	STRAINER	
ORV	ORIFICE PLATE/METERING STATION	
CS	COMMUNICATING STATION	
TP	TEST POINT	
PR	PURGE POINT	
TP	GAUGES (T-TEMPERATURE, P-PRESSURE)	
S	SENSOR	
M	METER	
FCU	FAN COIL UNIT	
DAC	DRY AIR COOLER	
AB	AIR BOTTLE	
NC	NORMALLY CLOSED	
FC	FLEXIBLE CONNECTION	
DOC	DRAIN COCK	
AV	AIR VENT	
PCV	PRESSURE CONTROL VALVE	
RDX	RADIATOR	
PCV	PRESSURE CONTROL VALVE	
GV	GATE VALVE	
PRV	PRESSURE REDUCING VALVE	
AAV	AUTOMATIC AIR VENT	
WETR	WET RISER	
DRV	DOUBLE REGULATING VALVE	
LSV	LOOKED VALVE	
VENTILATION		
GS	GENERAL SUPPLY	
GE	GENERAL EXTRACT	
FA	FRESH AIR	
FE	EXHAUST	
SE	SMOKE EXTRACT	
FC	FAN COIL	
KE	KITCHEN EXTRACT	
CSED	CIRCULAR CEILING EXTRACT DIFFUSER	
CSEV	CEILING SUPPLY & EXTRACT VALVE	
F	FILTER	
ATT	ATTENUATOR	
MOBD	MOTORISED OPPOSED BLADE DAMPER	
VCD	VOLUME CONTROL DAMPER	
MD	MOTORISED CONTROL DAMPER	
SD	SIDE FIRE & SMOKE DAMPER	
HC	HEAT COIL	
FAN	FAN	
CPEX	CROSS-FLOW PLATE HEAT EXCHANGER	
DF	DIRECTION OF FLOW	
LSD	LINEAR SLOT DIFFUSER	
CTA	CROSS-TALK ATTENUATOR	
EX.LSD	PASSIVE LINEAR SLOT FOR RETURN AIR PATH	

NOTES		
1.	ALL INSULATED DOMESTIC COLD WATER PIPEWORK SHALL BE PROVIDED WITH VARIOUS SEAL AND AIRVENTS AT ALL HIGH POINTS.	
2.	DRANCOCKS TO BE INSTALLED AT ALL LOW POINTS AND AIRVENTS AT ALL HIGH POINTS.	
3.	ALL PIPEWORK PASSING THROUGH FIRE BARRIERS AND WALLS TO PASS THROUGH FIRE SLEEVES.	
4.	EXACT LOCATIONS OF SANITARY WARE SHALL BE AGREED WITH THE ARCHITECTS PRIOR TO INSTALLATION.	
5.	DEAD LEGS ON HOT WATER SERVICES SHALL BE KEPT TO A MINIMUM.	
6.	FIRE COLLARS SHALL BE INSTALLED WHERE DRAINAGE PIPE CROSS FIRE COMPARTMENTS.	
7.	THE INSTALLATION OF THE DRAINAGE SYSTEM SHALL COMPLY WITH BUILDING REGULATIONS PART H AND BS 1555.	
8.	RODDING EYES SHALL BE INSTALLED AT THE BASE OF ALL STACKS AND ALL CHANGES IN DIRECTION.	
9.	EXPANSION JOINTS TO BE ADDED IN VERTICAL & HORIZONTAL PIPEWORK IN LINE WITH MANUFACTURERS RECOMMENDATIONS.	
10.	ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH HWS DW144 & DW122.	
11.	AIR GRILLES WITHIN APARTMENTS TO BE AIR VALVE TYPE.	
12.	FLEX DUCTS SHALL BE A MAXIMUM OF 500mm AND SHALL NOT BE USED TO TAKE OUT BENDS AND DEVIATIONS.	
13.	VENTILATION WITHIN APARTMENTS TO COMPLY WITH BUILDING REGULATION PART F.	
14.	SPRINKLER LAYOUT SIZES TO BE BY SPRINKLER INSTALLER SPECIALIST DESIGN.	

DRAINAGE		
AAV	AUTOMATIC ADMITTANCE VALVE	
FG	FLOOR GULLY	
RE	RODDING EYE	
RWP	RAMMATER PIPE	
SS	STUB STACK	
SVP	SOIL VENT PIPE	
MSVP	MEZZANINE SOIL VENT PIPE	
RSVP	RETAIL SOIL VENT PIPE	
SVP	SOIL VENT PIPE	
VP	VENT PIPE	
WP	WASTE PIPE	
BD	BELOW GROUND DRAINAGE	
AP	ACCESS POINT	
SKN	KITCHEN SINK	
KSK	KITCHEN SINK	
DW	DISH WASHER	
WM	WASHING MACHINE	
WB	WASH HAND BASIN	
WC	WATER CLOSET	
SHR	SHOWER	
BTH	BATH	
1XX	FALL	

C02	UPDATED TO DESIGN COMMENTS	SW	IES	11.06.19
C01	CONTRACT ISSUE	SW	IES	31.01.19
Rev	Description	Drawn by	Checked by	Approved by
CWC	11.06.19	MM	MM	31.08.18

CHECK PLOT		
UNCONTROLLED DRAWING		
A	OK	ready for transmission
B	Minor Comments	ready to be actioned then ready for transmission
C	Major Comments	ready to be actioned then returned for checking

INSULATION TABLE			
SERVICE	PIPE MATERIAL	PIPE DIAMETER	INSULATION THICKNESS
LTHW FAR	COPPER	a15	25 mm
	STEEL	a15	30 mm
		a20-a50	40 mm
BOWS	COPPER	a15-a35	25 mm
		a42-a54	30 mm
		a57-a109	40 mm
DHW FAR	STAINL. STEEL	a159 & ABOVE	40 mm
	COPPER	a15-a42	25 mm
		a45-a159	40 mm
	STAINL. STEEL	a159 & ABOVE	40 mm

client approval			client approval, initials and date			
A	Approved		A	Approved		
B	Approved with Comments		B	Approved with Comments		
C	Not Approved		C	Not Approved		
client/main contractor			consultant/structural			
project			drawing title			
Circle Square Affinity Living			Type: XX			
Service: Apartment Mechanical Services			2 Bed Type T4			
drawing date			revision of issue			
11.06.19			S3			
scale @ paper size			project number			
As indicated @ A0			P070090			
drawing by			date			
CSAL-IES-XX-ZZ-DR-M-51011			23.07.18			
Project/Client/Engineer/Owner/Consultant/Designer/Author			Contract Issue			