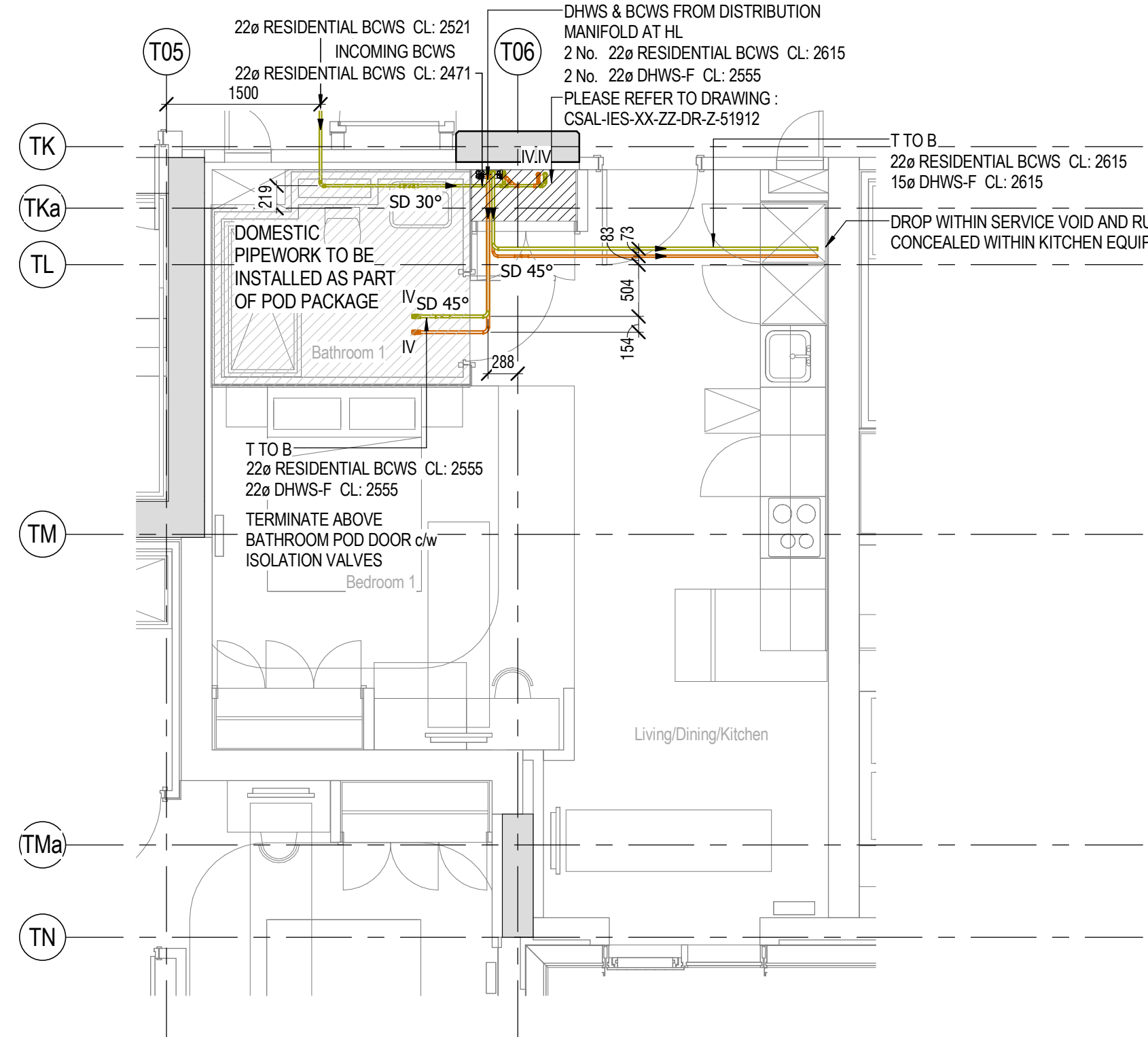
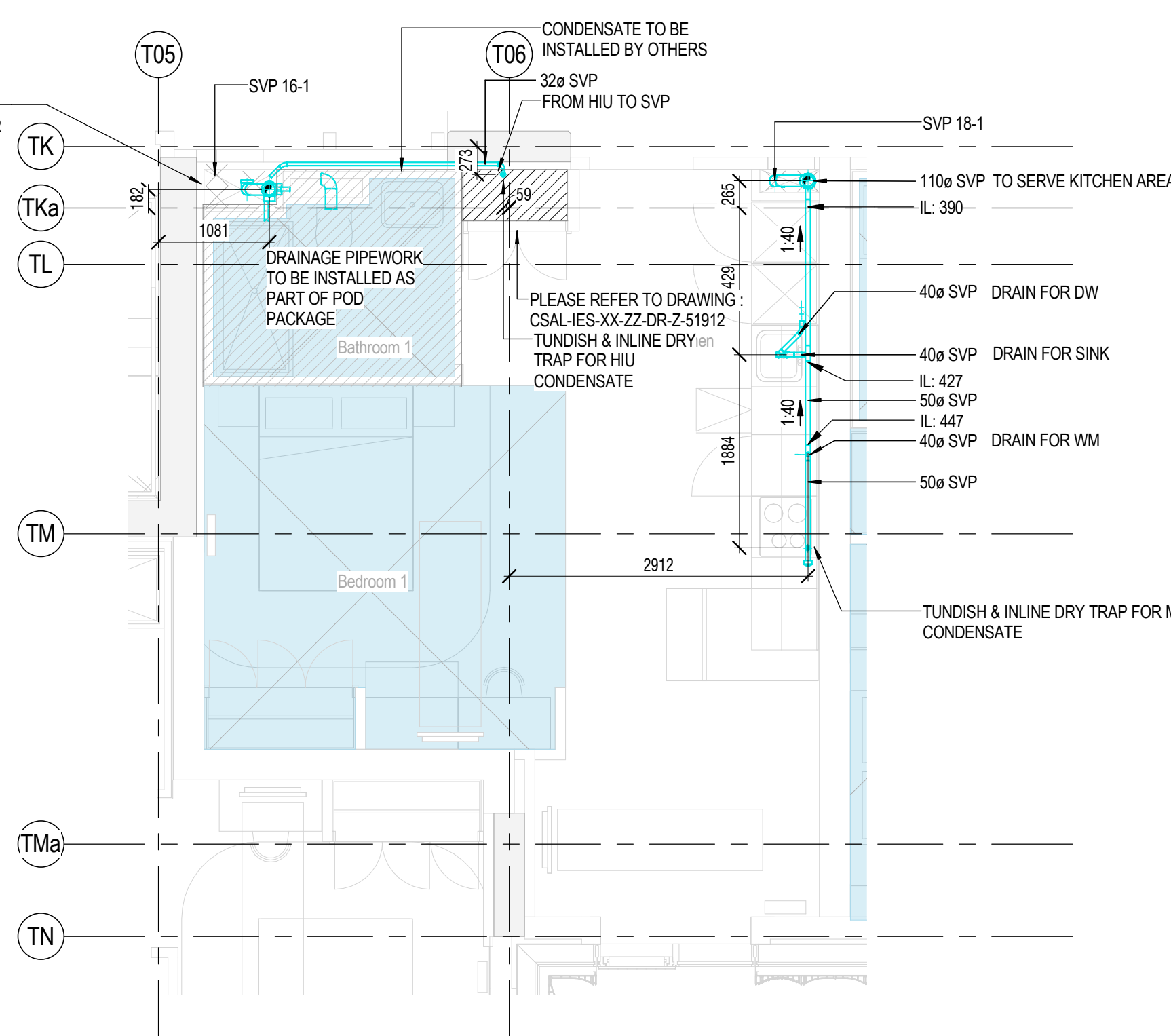
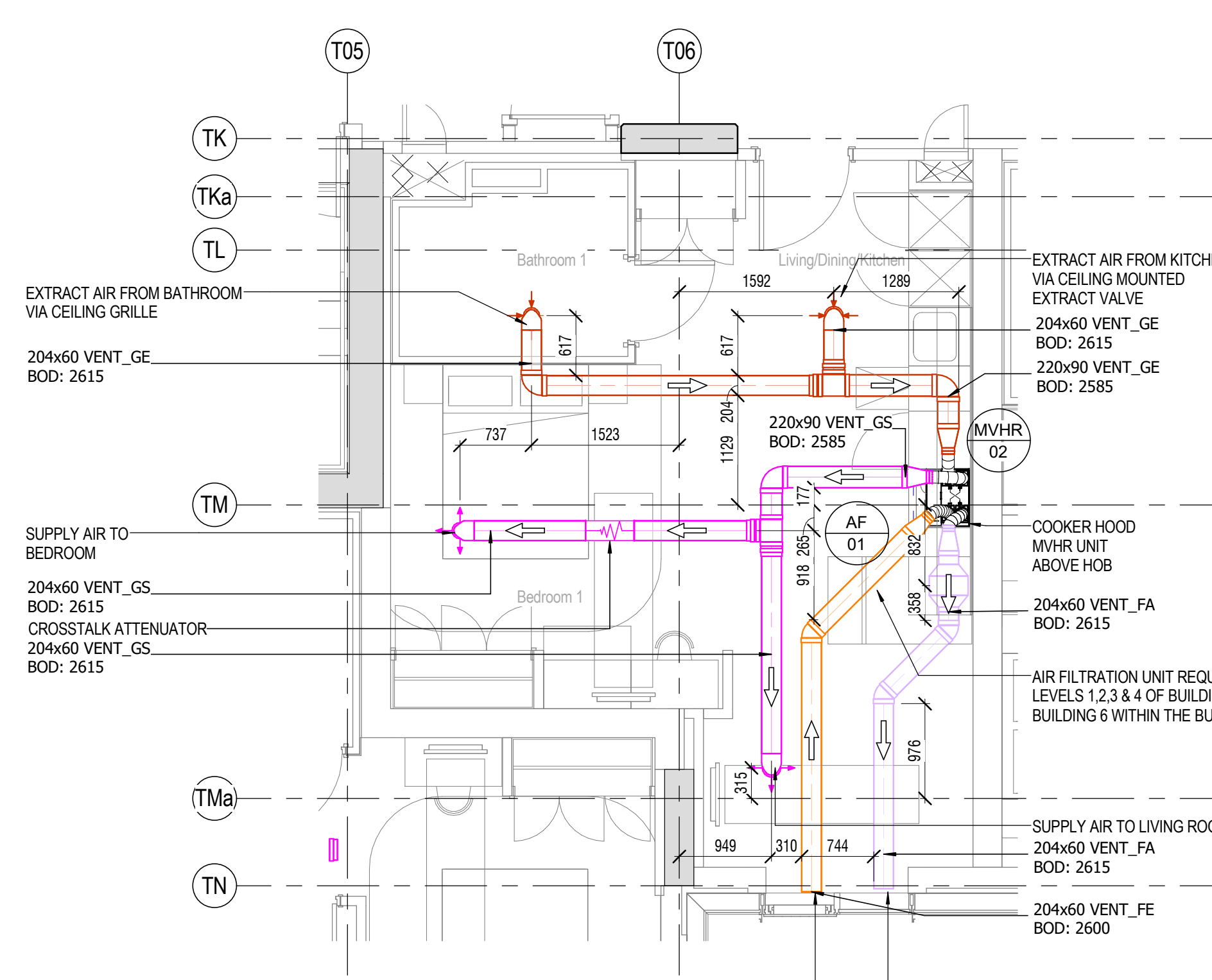




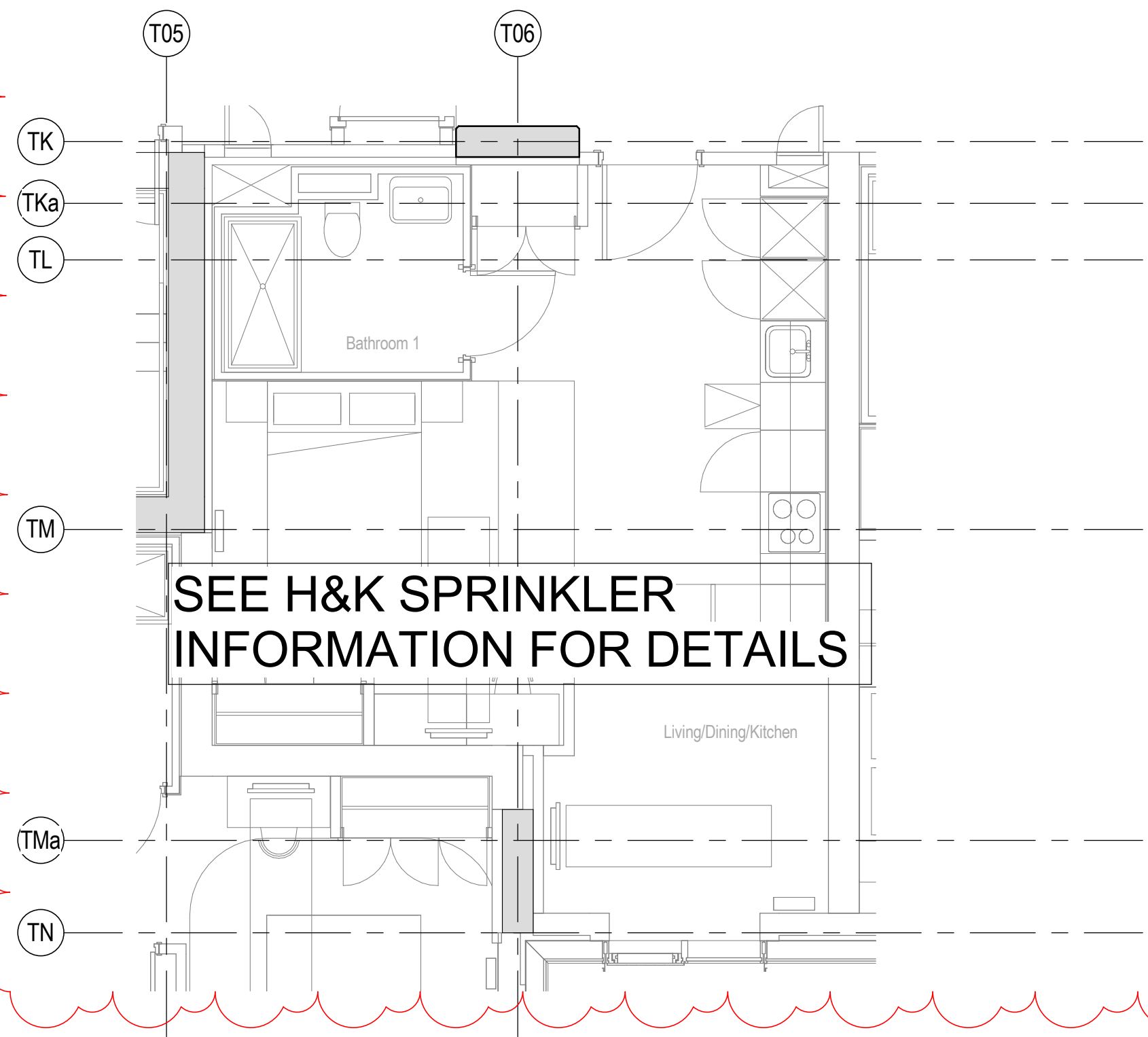
1 T1 - DOMESTIC WATER SERVICES - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1
1:50



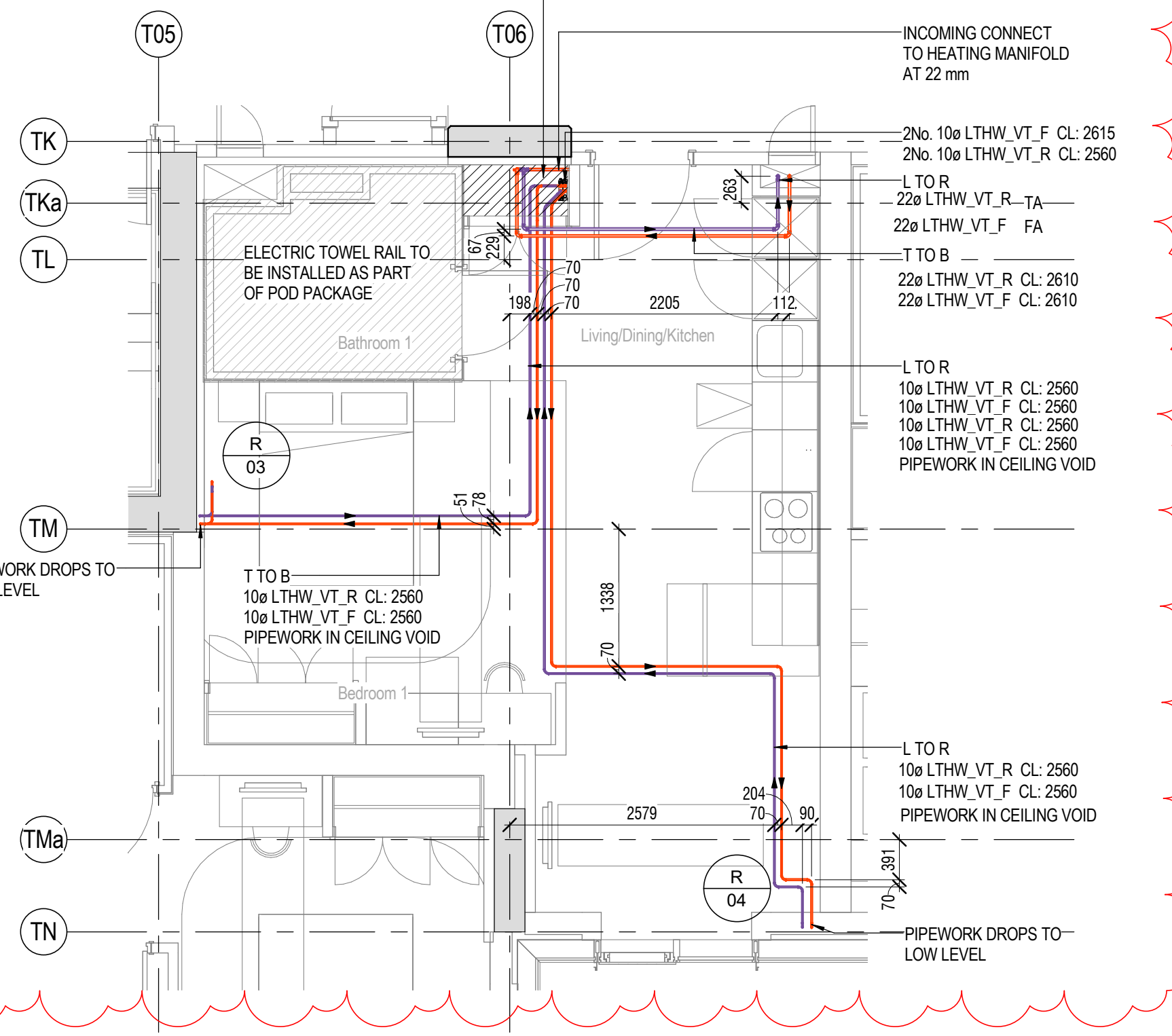
2 T1 - ABOVE GROUND DRAINAGE - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1
1:50



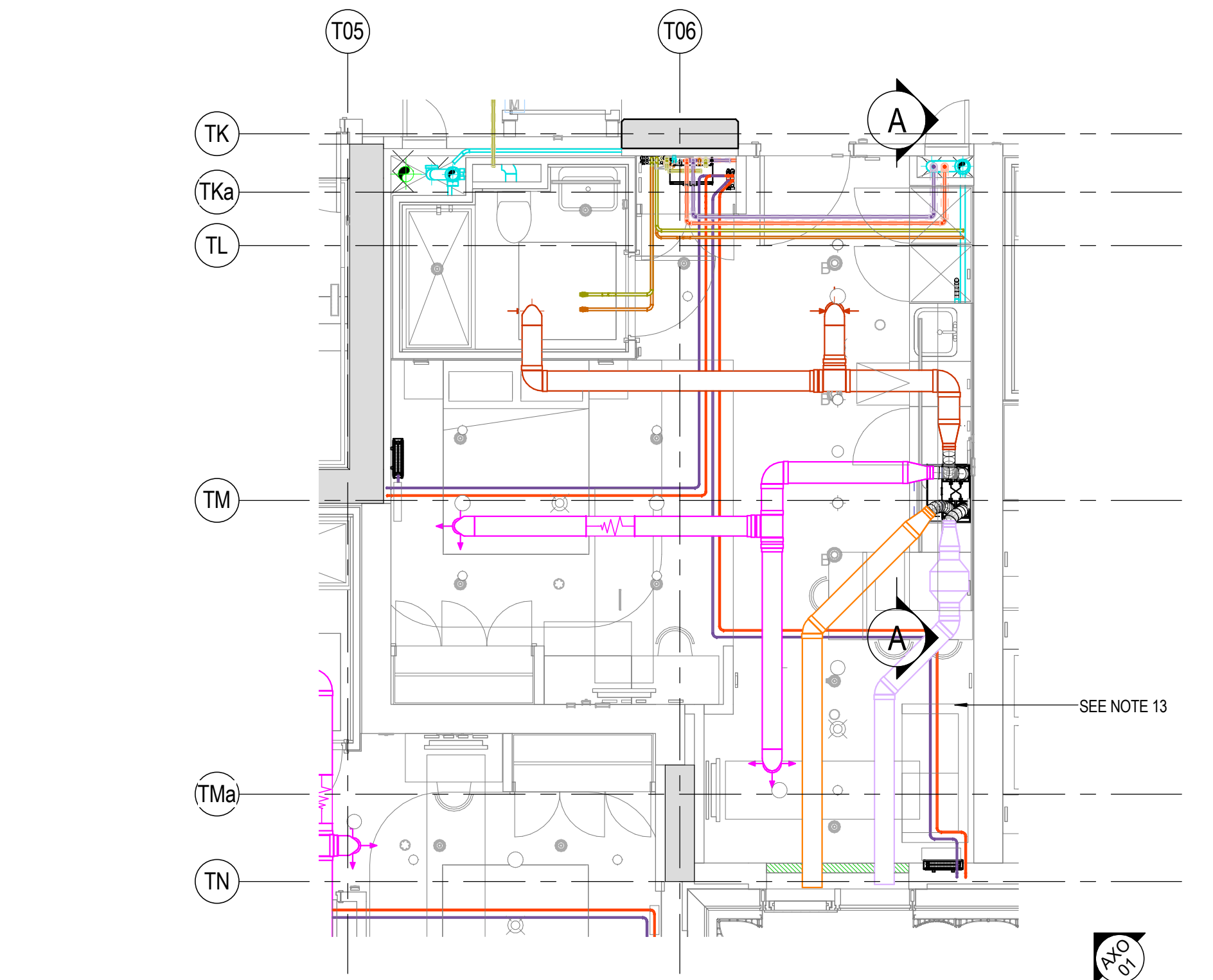
3 T1 - VENTILATION - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1
1:50



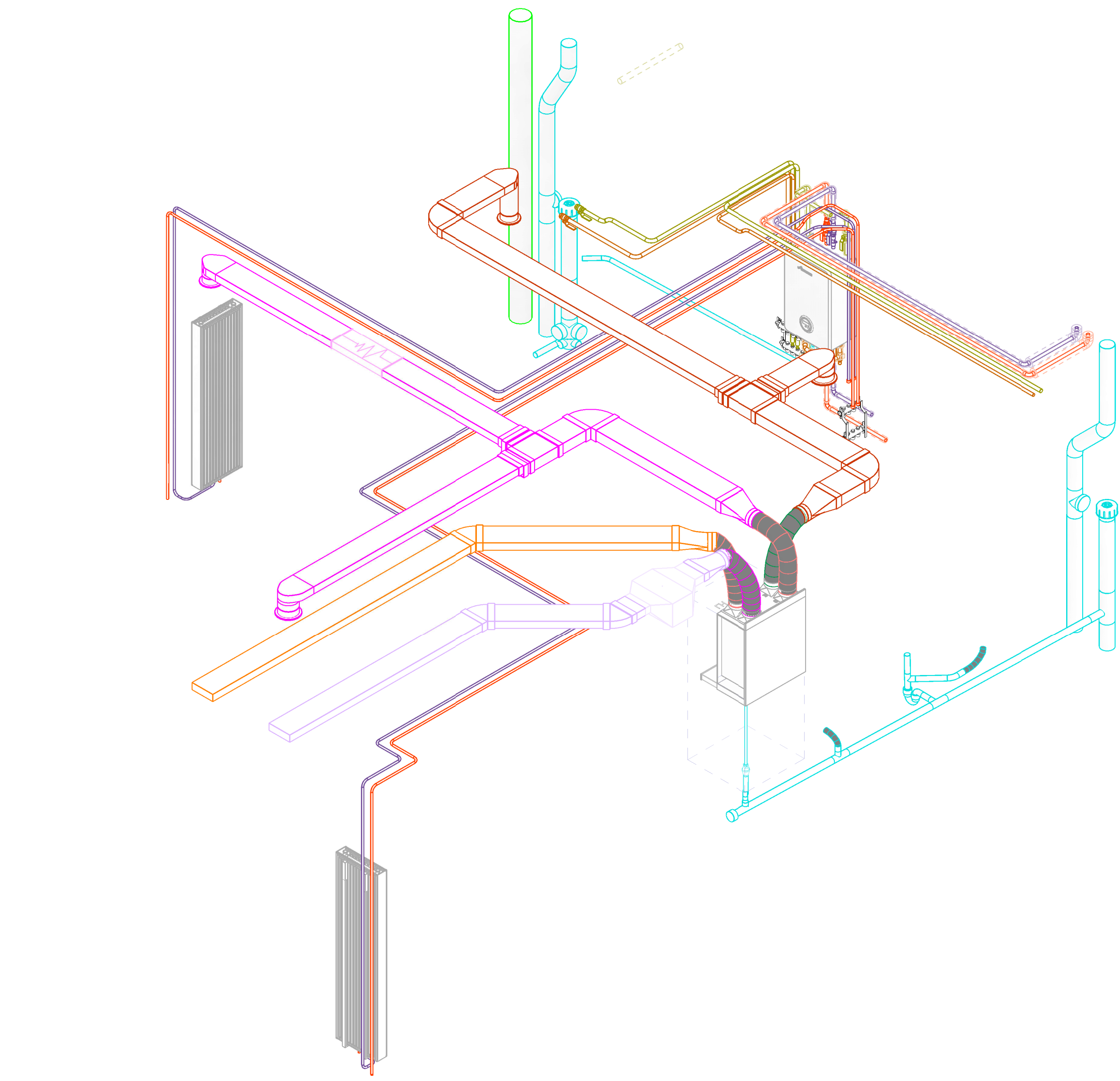
4 T1 - SPRINKLERS - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1
1:50



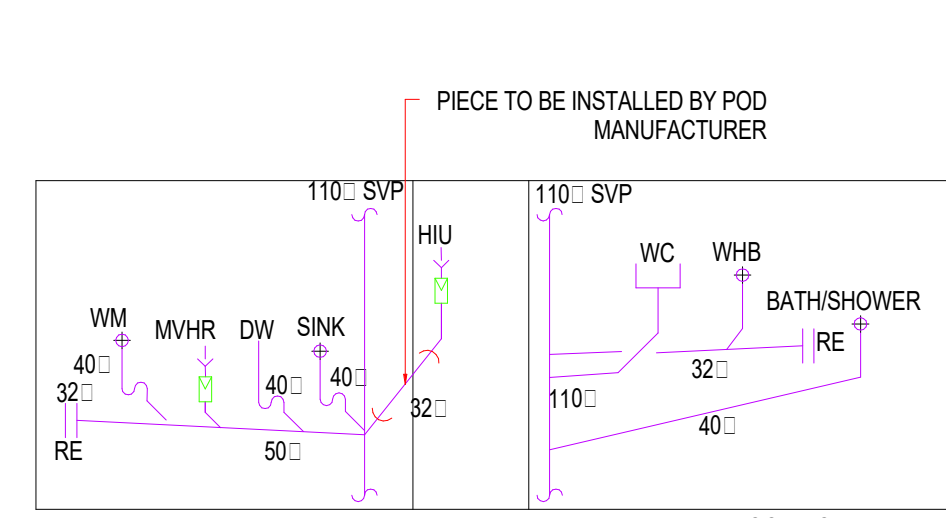
5 T1 - HEATING - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1
1:50



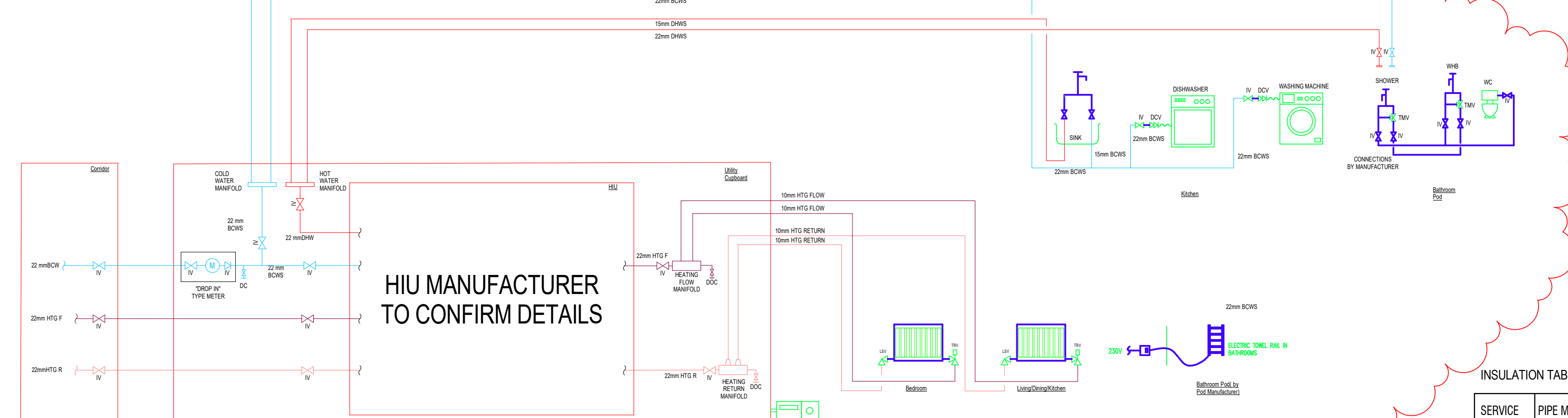
6 T1 - COORDINATED SERVICES - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1
1:50



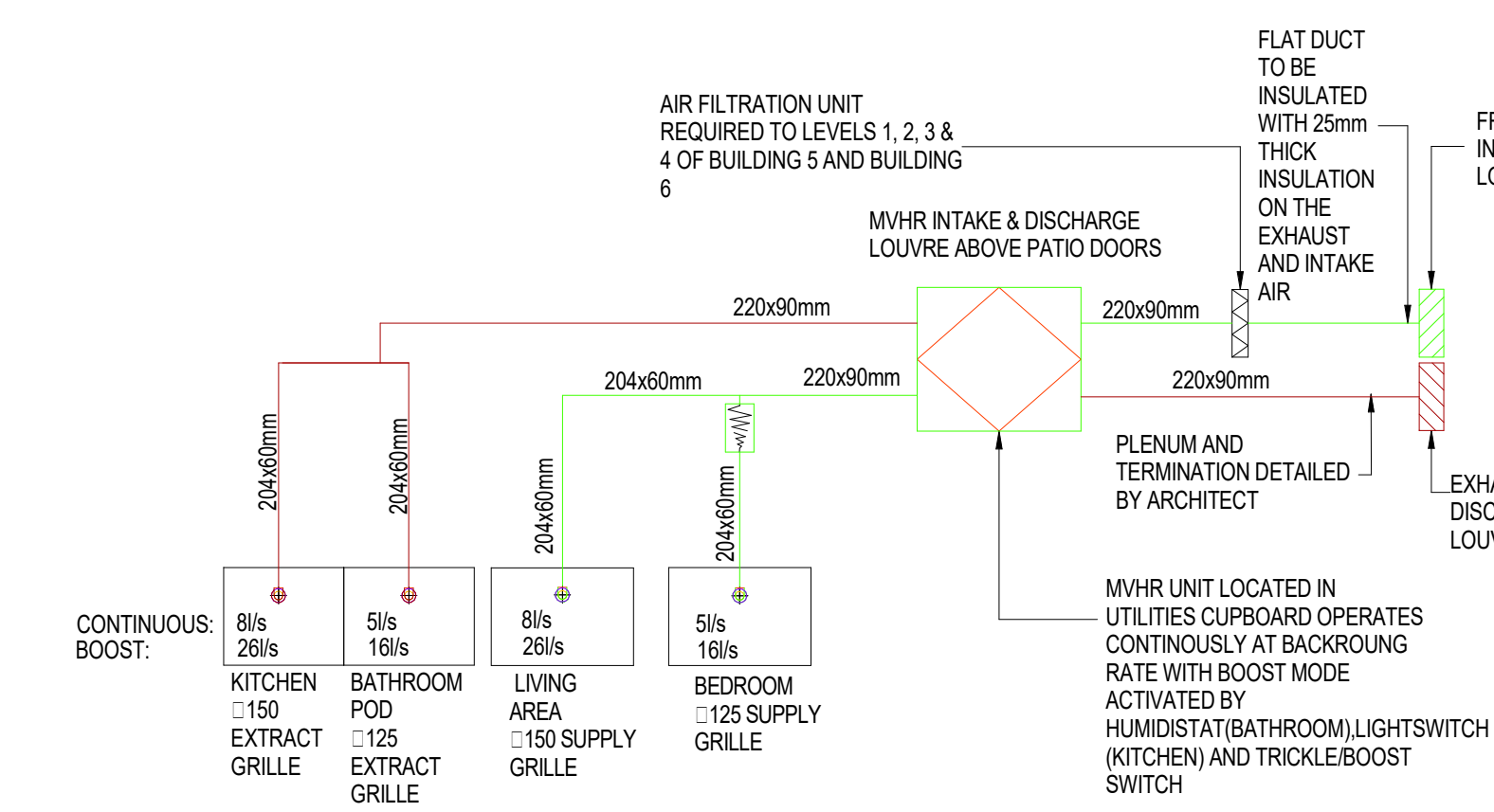
A1 T1 - COORDINATED SERVICES - TYPICAL STUDIO LEVEL 1 - APARTMENT SB-T1 - AXONOMETRIC VIEW 01



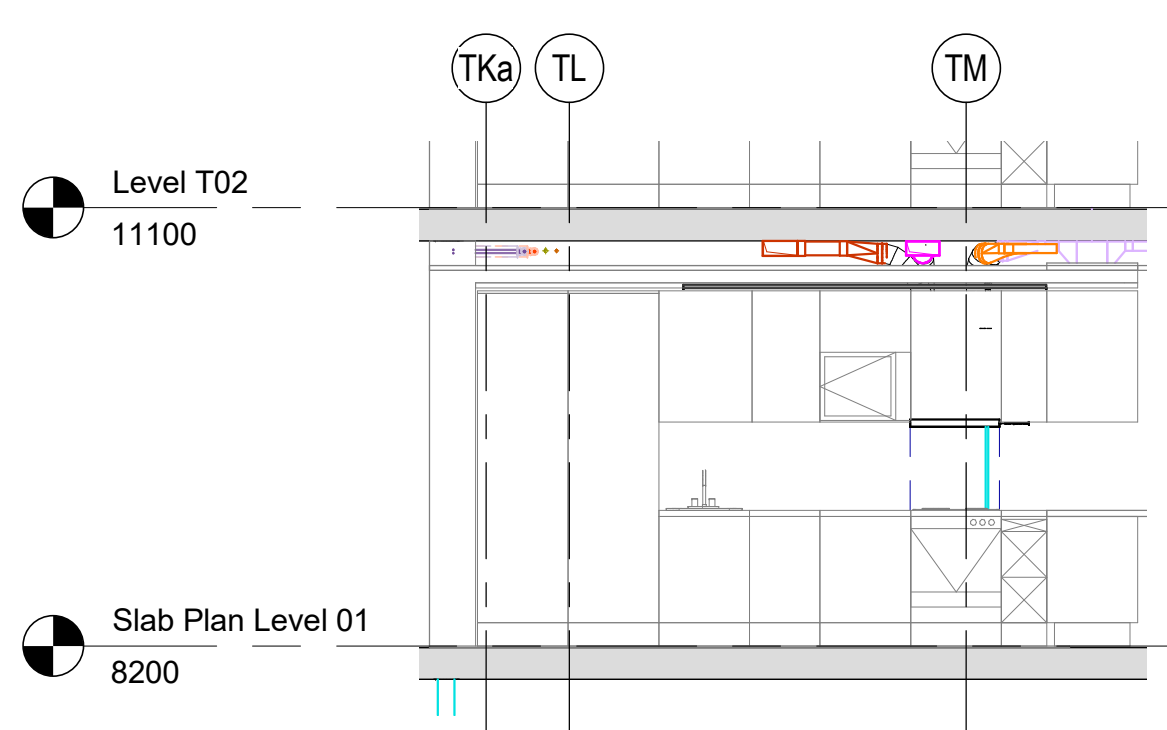
TYPICAL ONE BED APARTMENT ABOVE GROUND DRAINAGE SCHEMATIC



TYPICAL ONE BED APARTMENT HEATING & DOMESTIC SERVICES SCHEMATIC



TYPICAL ONE BED APARTMENT VENTILATION SCHEMATIC



A T1 - COORDINATED SERVICES - TYPICAL APARTMENTS SB-T1 - SECTION A
1:50

REFERENCE DRAWINGS & MODELS	REV
ARCHITECTURAL	CSAL-FGBS-ZT-ZZ-M5-A-001
STRUCTURAL	CSAL-FGBS-ZT-ZZ-M5-A-002
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
RTLL	RISE TO HIGH LEVEL
SU	SET UP
SD	SET DOWN
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
APFL	ABOVE FINISHED FLOOR LEVEL
IL	LEVEL TO UNDERSIDE FROM FFL
CL	LEVEL TO CENTRE FROM FFL
BCD	BOTTOM OF DUCT FROM FFL
MECHANICAL:	
LTHW	LOW TEMPERATURE HOT WATER FLOW
LTHWR	LOW TEMPERATURE HOT WATER RETURN
VRF	VARIABLE REFRIGERANT FLOW
IV	ISOLATION VALVE
NRV	NON RETURN VALVE
DCV	DOUBLE CHECK VALVE
DV	DIFFERENTIAL PRESSURE VALVE
DPCV	DIFFERENTIAL PRESSURE CONTROL VALVE
3PM	3 PORT MOTORISED VALVE
FCRV	FIXED ORIFICE DOUBLE REGULATING VALVE
2PM	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
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	DOOR COCK
AV	AIR VENT
HE	HEAT EXCHANGER
ROX	RADIATOR
PCV	PRESSURE CONTROL VALVE
GV	GATE VALVE
PRV	PRESSURE REDUCING VALVE
AAV	AUTOMATIC AIR VENT
WET	WET RISER
DRV	DOUBLE REGULATING VALVE
LSV	LOCKSHIELD VALVE
WATER:	
BCWS	BOOSTED COLD WATER SERVICE
CAT 5	BOOSTED COLD WATER SERVICE CAT 5
HWFS	HOT WATER SERVICE FLOW
HWRS	HOT WATER SERVICE RETURN
MWS	MAINS WATER SERVICE
IV	ISOLATING VALVE
DRV	DOUBLE REGULATING VALVE FOR HWS
NRV	NON RETURN VALVE
PRV	PRESSURE REDUCING VALVE
DCV	DOUBLE CHECK VALVE
DOC	DOOR COCK
DP	TEST & DRAIN POINT
FS	FLOW SWITCH
PC	PRESSURE GAUGE
M	WATER METER
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
RSP	RETAL SOIL VENT PIPE
SWP	SOIL WASTE PIPE
VP	VENT PIPE
WP	WASTE PIPE
D	DRAINAGE
BGD	BELOW GROUND DRAINAGE
AP	ACCESS POINT
SKK	KITCHEN SINK
DK	DISH WASHER
WM	WASHING MACHINE
WB	WASH HAND BASIN
WC	WATER CLOSET
SHR	SHOWER
BTH	BATH
1:XX	FALL

- NOTES:
- ALL INSULATED DOMESTIC COLD WATER PIPEWORK SHALL BE PROVIDED WITH VAPOUR SEAL.
 - DRAINCOCKS TO BE INSTALLED AT ALL LOW POINTS AND AIR VENTS AT ALL HIGH POINTS.
 - ALL PIPEWORK PASSING THROUGH FIRE BARRIERS AND WALLS TO PASS THROUGH FIRE SLEEVES.
 - EXACT LOCATIONS OF SANITARY WARE SHALL BE AGREED WITH THE ARCHITECT PRIOR TO INSTALLATION.
 - DEAD LEGS ON HOT WATER SERVICES SHALL BE KEPT TO A MINIMUM.
 - FIRE COLLARS SHALL BE INSTALLED WHERE DRAINAGE PIPE CROSS FIRE COMPARTMENTS.
 - THE INSTALLATION OF THE DRAINAGE SYSTEM SHALL COMPLY WITH BUILDING REGULATIONS PART H AND BS 12566.
 - RODDING JOINTS SHALL BE INSTALLED AT THE BASE OF ALL STACKS AND ALL CHANGES IN DIRECTION.
 - EXPANSION JOINTS TO BE ADDED IN VERTICAL & HORIZONTAL PIPEWORK IN LINE WITH MANUFACTURERS RECOMMENDATIONS.
 - ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH HVAC DW144 & DW172.
 - AIR GRILLES WITHIN APARTMENTS TO BE AIR VALVE TYPE.
 - FLEXI DUCTS SHALL BE A MAXIMUM OF 500mm AND SHALL NOT BE USED TO TAKE OUT BENDS AND DEVIATIONS.
 - VENTILATION WITHIN APARTMENTS TO COMPLY WITH BUILDING REGULATION PART F.
 - SPRINKLER LAYOUT/SIZES TBC BY SPRINKLER INSTALLER SPECIALIST DESIGN.

C02	UPDATED TO DESIGN COMMENTS				SW	IES	11.06.19
C01	CONTRACT ISSUE				SW	IES	31.01.19
Rev	Description				DRN	CHK	Date
drawn by	drawn date	checked by	checked date		approved by	approved date	

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

date	11.06.19
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SERVICE	PIPE MATERIAL	PIPE DIAMETER	INSULATION THICKNESS	INSULATION MATERIAL
LTHW FAR	COPPER	ø15	25 mm	MINERAL WOOL
	STEEL	ø15	30 mm	MINERAL WOOL
		ø20-ø50	40 mm	MINERAL WOOL
		ø65 & ABOVE	50 mm	MINERAL WOOL
BOWS	COPPER	ø15-ø35	20 mm	MINERAL WOOL
		ø42-ø64	25 mm	MINERAL WOOL
		ø67-ø108	30 mm	MINERAL WOOL
		ø133-ø159	40 mm	MINERAL WOOL
	STAINL. STEEL	ø159 & ABOVE	40 mm	MINERAL WOOL
DHWS FAR	COPPER	ø15-ø22	25 mm	MINERAL WOOL
		ø28-ø42	30 mm	MINERAL WOOL
	STAINL. STEEL	ø44-ø159	40 mm	MINERAL WOOL
		ø159 & ABOVE	40 mm	MINERAL WOOL

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client approval	A Approved	client approval, initials and date
	B Approved with Comments	
	C Not Approved	

client/main contractor	SISK
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consultant/structural	CWC
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project	Circle Square Affinity Living
drawing file	Type: XX
Service:	Apartment Mechanical Services
Studio Type	T1

drawing date	31.08.18	project number	P070990	drawn by	MM	date	23.07.18
scale	As indicated @ A0	project number	P070990	drawn by	MM	date	23.07.18
For Comment	S3	project number	P070990	drawn by	MM	date	23.07.18

CSAL-IES-XX-ZZ-DR-M-51018	C02
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Contract Issue