



SCHEMATICS

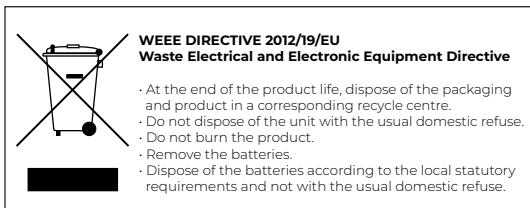
HP290 MONOBLOC HEAT PUMP SYSTEM



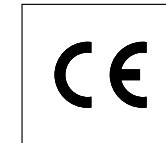
When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require.
Do not use reconditioned or copy parts that have not been clearly authorised by Ideal Heating.

For the very latest copy of literature for specification and maintenance practices visit our website idealheating.com
where you can download the relevant information in PDF format.





The code of practice for the installation, commissioning & servicing of central heating systems



Ideal Heating reserve the right to vary specification without notice

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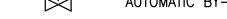
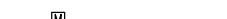
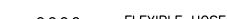
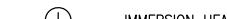
**① IMPORTANT: PLEASE USE THIS MANUAL IN CONJUNCTION
WITH THE HP290 MONOBLOC HEAT PUMP SYSTEM –
INSTALLATION & SERVICING MANUAL**

LEGEND

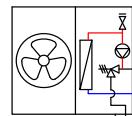
-  CH WATER FLOW PIPEWORK
-  CH WATER RETURN PIPEWORK
-  DHW HOT WATER OUTLET PIPEWORK
-  DHW COLD WATER INLET PIPEWORK
-  SYSTEM BOUNDARY

Figure 1. Schematics Key/Legend

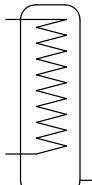
COMPONENT SYMBOLS

-  GATE VALVE
-  BALL VALVE
-  CHECK VALVE
-  DOUBLE CHECK VALVE
-  AUTOMATIC AIR VENT
-  PRESSURE RELIEF VALVE
-  PRESSURE REDUCING VALVE
-  AUTOMATIC BY-PASS VALVE
-  ANTI-FREEZE VALVE
-  2 WAY VALVE
-  3 WAY VALVE
-  CIRCULATING PUMP
-  FLEXIBLE HOSE
-  IMMERSION HEATER
-  PLATE HEAT EXCHANGER
-  PIPE INSULATION
-  MAGNETIC FILTER
-  STRAINER
-  REDUCER
-  FLOW BALANCING VALVE WITH WATER FLOW INDICATOR (10 - 50 l/min)

MONOBLOCK HEAT PUMP



INDIRECT DHW CYLINDER



HEAT Emitter



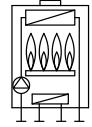
EXPANSION VESSEL



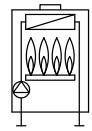
VOLUMISER



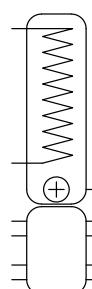
COMBINATION BOILER



SYSTEM BOILER



INDIRECT DHW CYLINDER WITH INTEGRATED BUFFER TANK



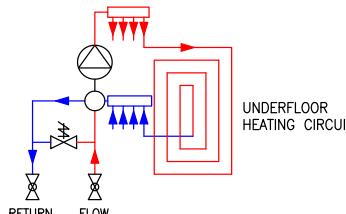
MULTI CONNECTION BUFFER TANK



MULTI CONNECTION HYDRAULIC SEPARATOR



HYDRAULIC SEPARATOR



UNDERFLOOR HEATING CIRCUIT

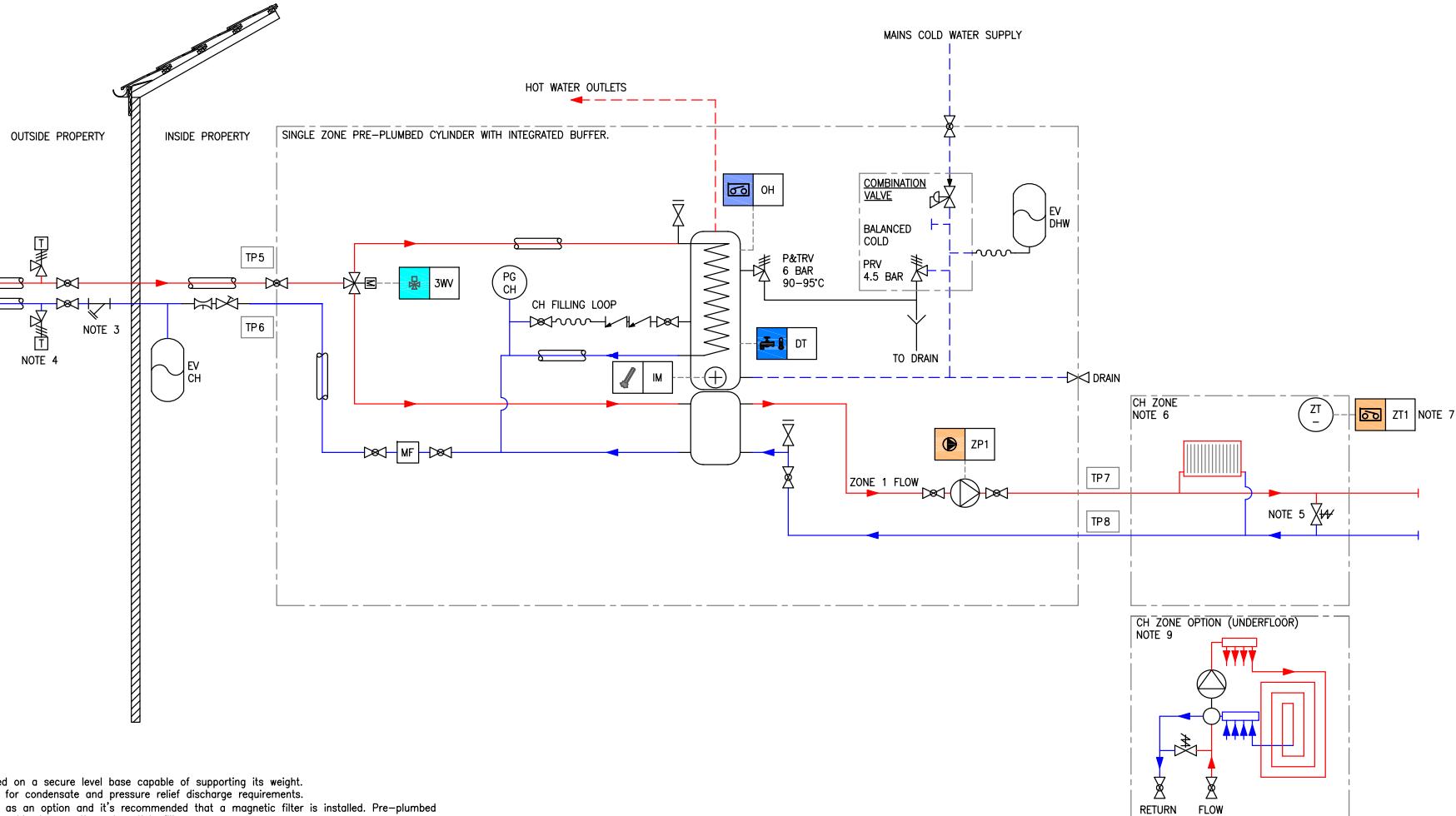
INSTRUMENT ABBREVIATIONS (HP290 CONTROL BOX CONNECTIONS)

 FT2	ZONE 2 FLOW THERMISTOR (PART OF 2 ZONE KIT - 241520)
 T1	T1 COMMON FLOW THERMISTOR (PART OF HYBRID KIT - 240932)
 HT	HEADER THERMISTOR
 DT	DHW THERMISTOR
 ZT1	ZONE 1 ON/OFF THERMOSTAT
 ZT2	ZONE 2 ON/OFF THERMOSTAT
 OH	OVERHEAT THERMOSTAT
 ZP1	HEATING ZONE PUMP 1
 ZP2	HEATING ZONE PUMP 2
 IM	IMMERSION HEATER
 DP	DHW PUMP
 3WV	3 WAY VALVE
 2WV	2 WAY VALVE
 BLR	GAS BOILER

Refer to HP290 monobloc heat pump system installation and maintenance manual in conjunction with these schematic drawings.

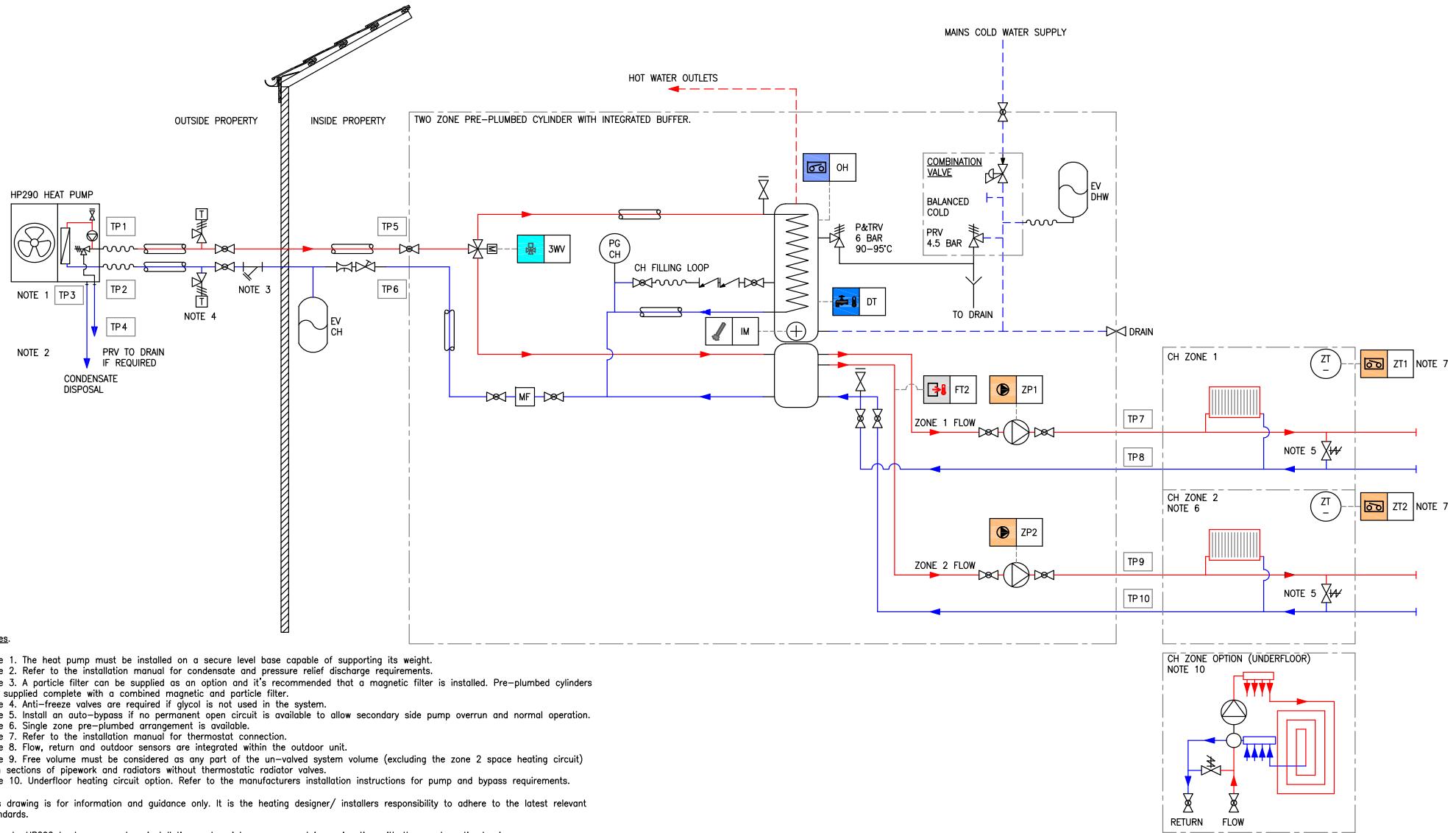
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS	COMPRESSION
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS	COMPRESSION
7	ZONE 1 FLOW	28MM	28MM	BRASS	COMPRESSION
8	ZONE 1 RETURN	28MM	28MM	BRASS	COMPRESSION

Figure 2. HP290 + Single Zone Pre-plumbed Cylinder with Integrated Buffer



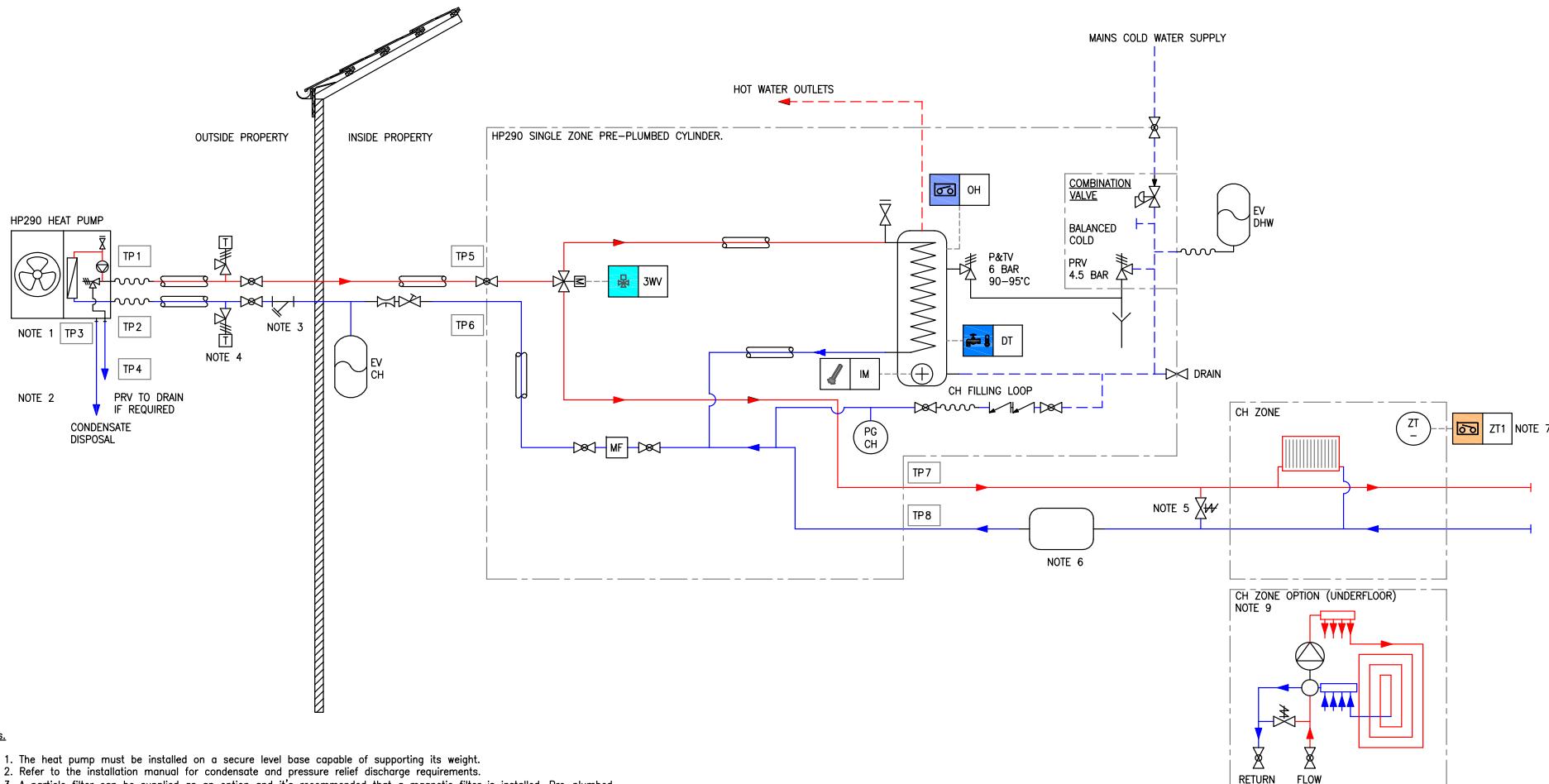
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6KW	SIZE 8-14KW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS	COMPRESSION
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS	COMPRESSION
7	ZONE 1 FLOW	28MM	28MM	BRASS	COMPRESSION
8	ZONE 1 RETURN	28MM	28MM	BRASS	COMPRESSION
9	ZONE 2 FLOW	28MM	28MM	BRASS	COMPRESSION
10	ZONE 2 RETURN	28MM	28MM	BRASS	COMPRESSION

Figure 3. HP290 + Two Zone Pre-Plumbed Cylinder with Integrated Buffer



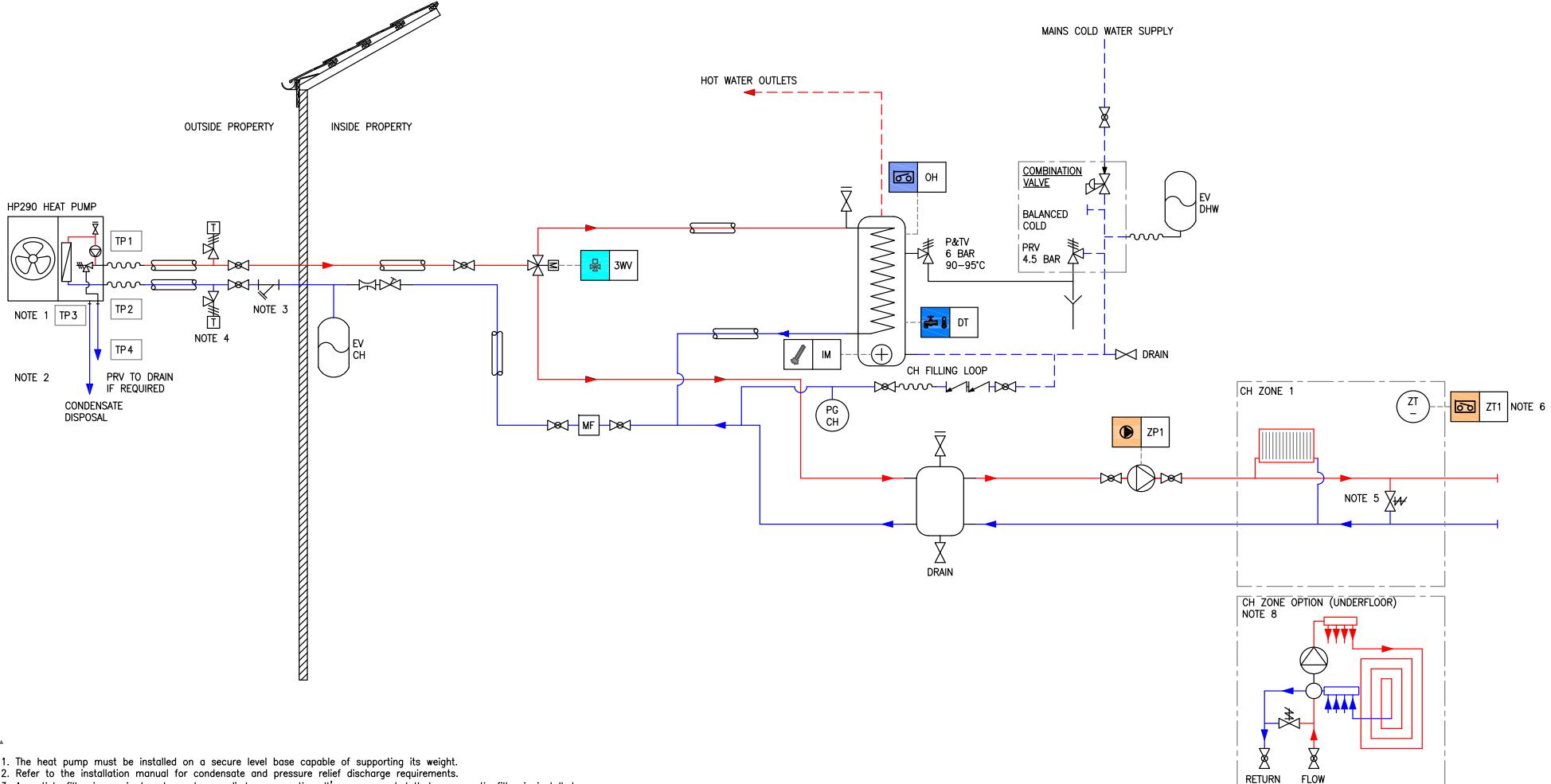
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS	COMPRESSION
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS	COMPRESSION
7	ZONE 1 FLOW	28MM	28MM	BRASS	COMPRESSION
8	ZONE 1 RETURN	28MM	28MM	BRASS	COMPRESSION

Figure 4. HP290 + Single Zone Pre-Plumbed Cylinder



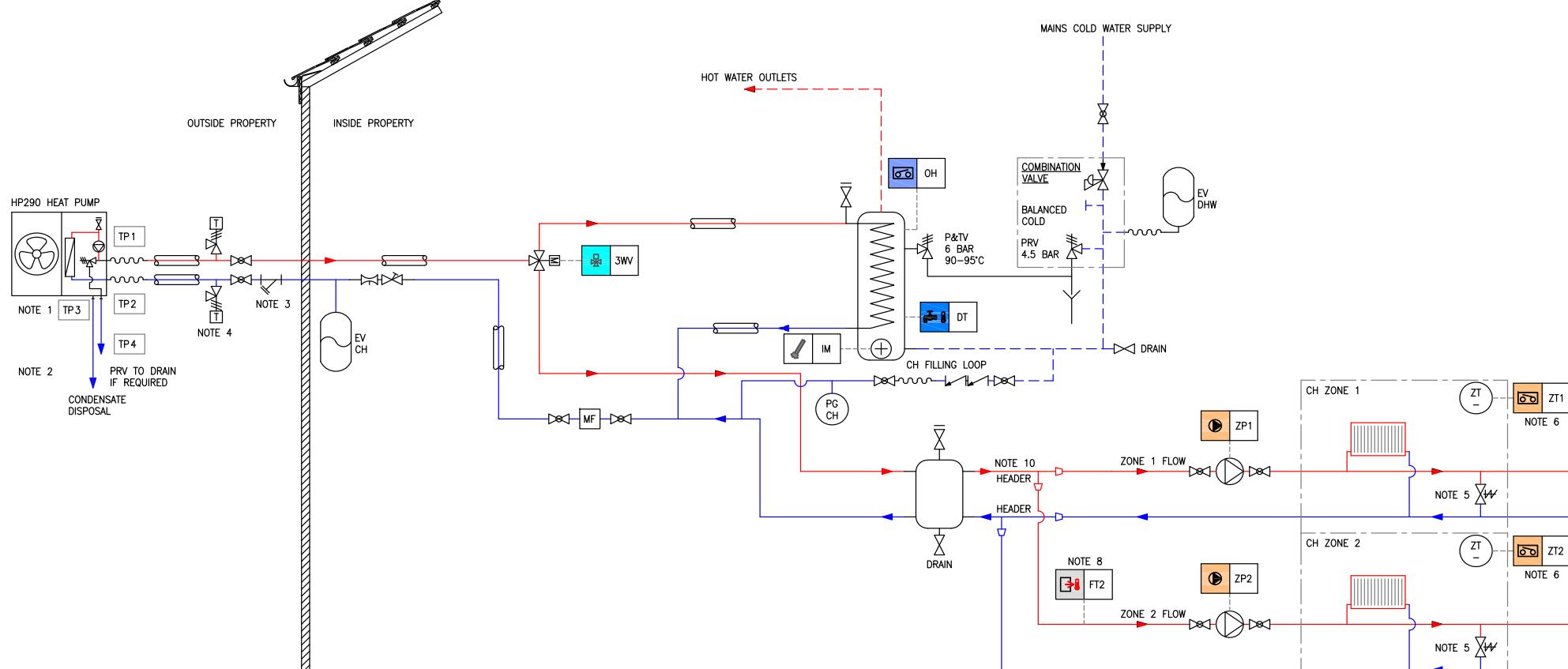
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 5. HP290 + Standard Non Pre-Plumbed Heat Pump Cylinder + Buffer with Single Zone



CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 6. HP290 + Standard Non Pre-Plumbed Heat Pump Cylinder + Buffer with Two Zones



Notes:

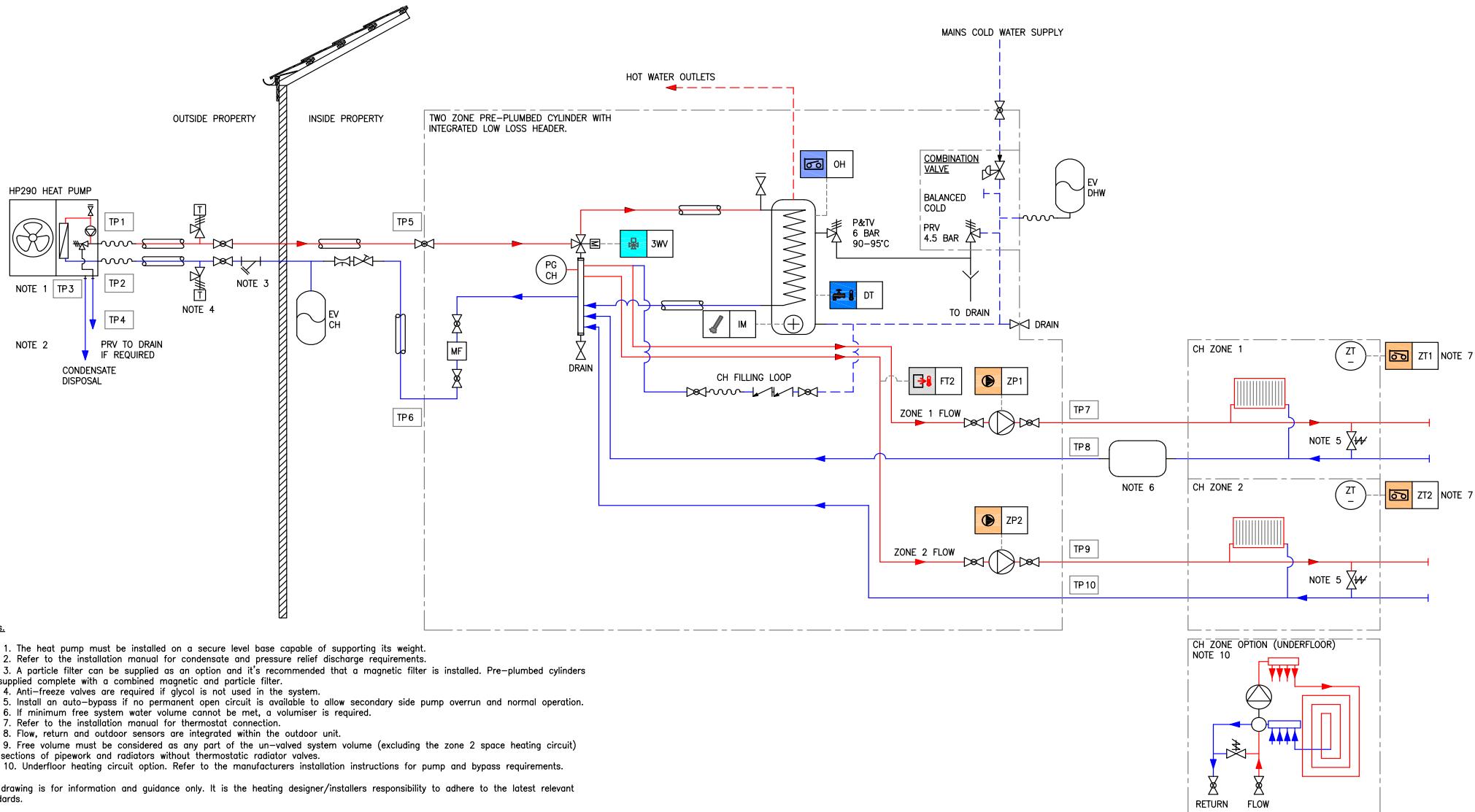
1. The heat pump must be installed on a secure level base capable of supporting its weight.
2. Refer to the installation manual for condensate and pressure relief discharge requirements.
3. A particle filter is required and can be supplied as an option. It's recommended that a magnetic filter is installed.
4. Anti-freeze valves are required if glycol is not used in the system.
5. Install an auto-bypass if no permanent open circuit is available to allow secondary side pump overrun and normal operation.
6. Refer to the installation manual for thermostat connection.
7. Flow, return and outdoor sensors are integrated within the outdoor unit.
8. Two zone kit required.
9. Free volume must be considered as any part of the un-valved system volume (excluding the zone 2 space heating circuit) with sections of pipework and radiators without thermostatic radiator valves.
10. The buffer tank common flow header needs to be appropriately sized to meet the overall system flow requirements of both zones.
11. Make sure both zones are balanced.
12. Underfloor heating circuit option. Refer to the manufacturers installation instructions for pump and bypass requirements.

This drawing is for information and guidance only. It is the heating designer/installers responsibility to adhere to the latest relevant standards.

Refer to HP290 heat pump system installation and maintenance manual in conjunction with these schematic drawings.

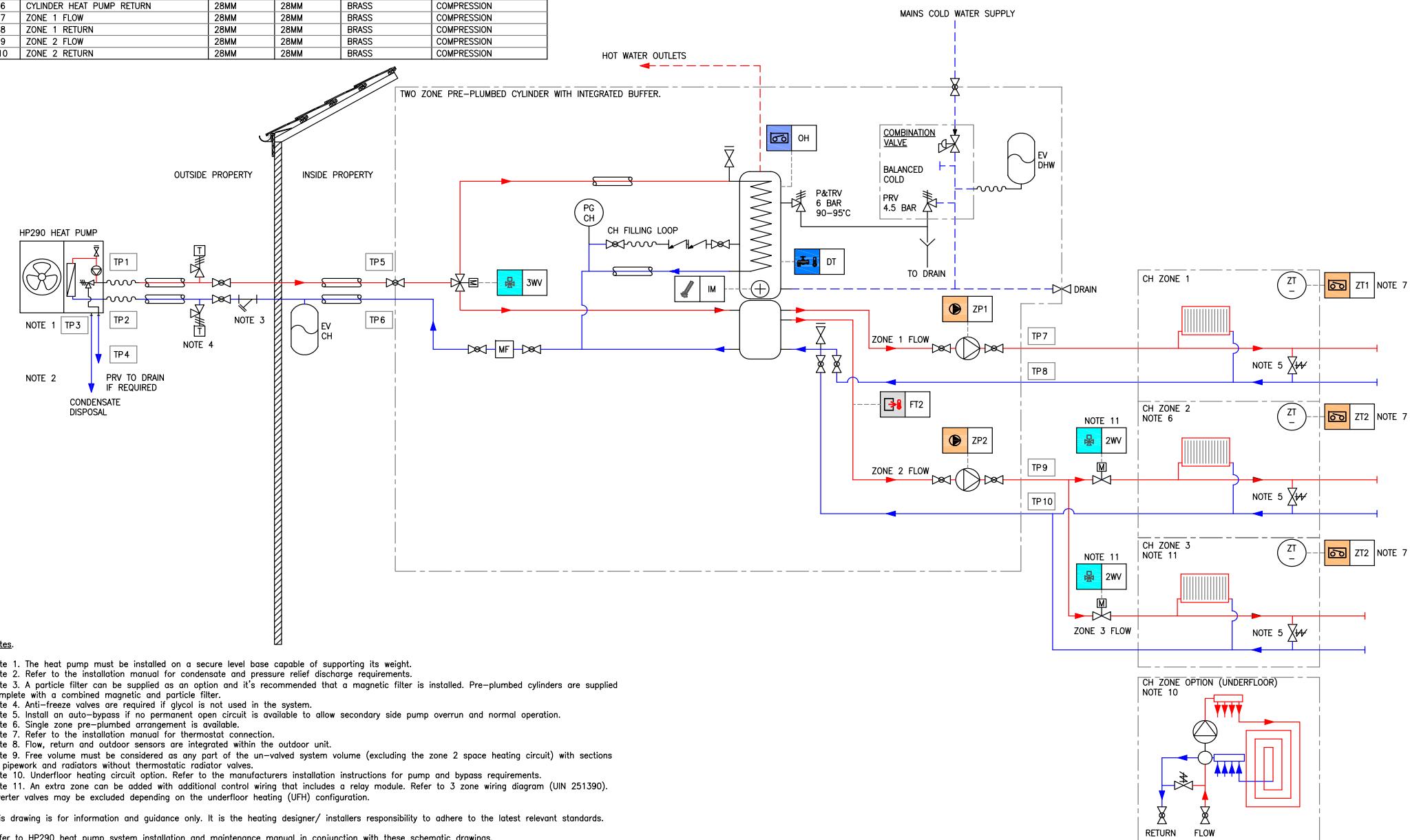
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS	COMPRESSION
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS	COMPRESSION
7	ZONE 1 FLOW	28MM	28MM	BRASS	COMPRESSION
8	ZONE 1 RETURN	28MM	28MM	BRASS	COMPRESSION
9	ZONE 2 FLOW	28MM	28MM	BRASS	COMPRESSION
10	ZONE 2 RETURN	28MM	28MM	BRASS	COMPRESSION

Figure 7. HP290 + Two Zone Pre-Plumbed Cylinder with Integrated Low Loss Header



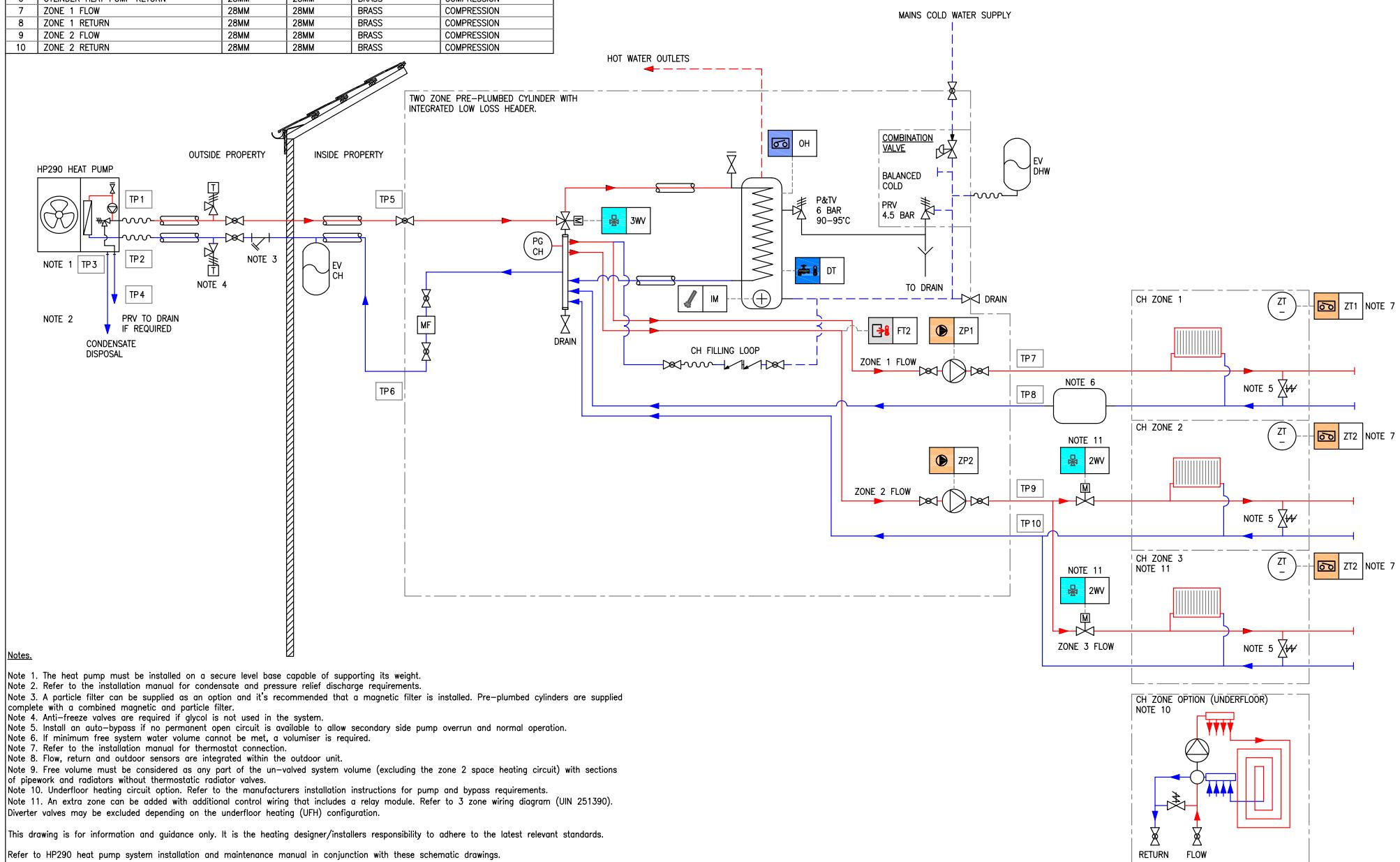
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS	COMPRESSION
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS	COMPRESSION
7	ZONE 1 FLOW	28MM	28MM	BRASS	COMPRESSION
8	ZONE 1 RETURN	28MM	28MM	BRASS	COMPRESSION
9	ZONE 2 FLOW	28MM	28MM	BRASS	COMPRESSION
10	ZONE 2 RETURN	28MM	28MM	BRASS	COMPRESSION

Figure 8. HP290 Three Zone + Two Zone Pre-Plumbed Cylinder with Integrated Buffer
(Note. requires additional 3rd party electrical wiring for a 3rd zone)



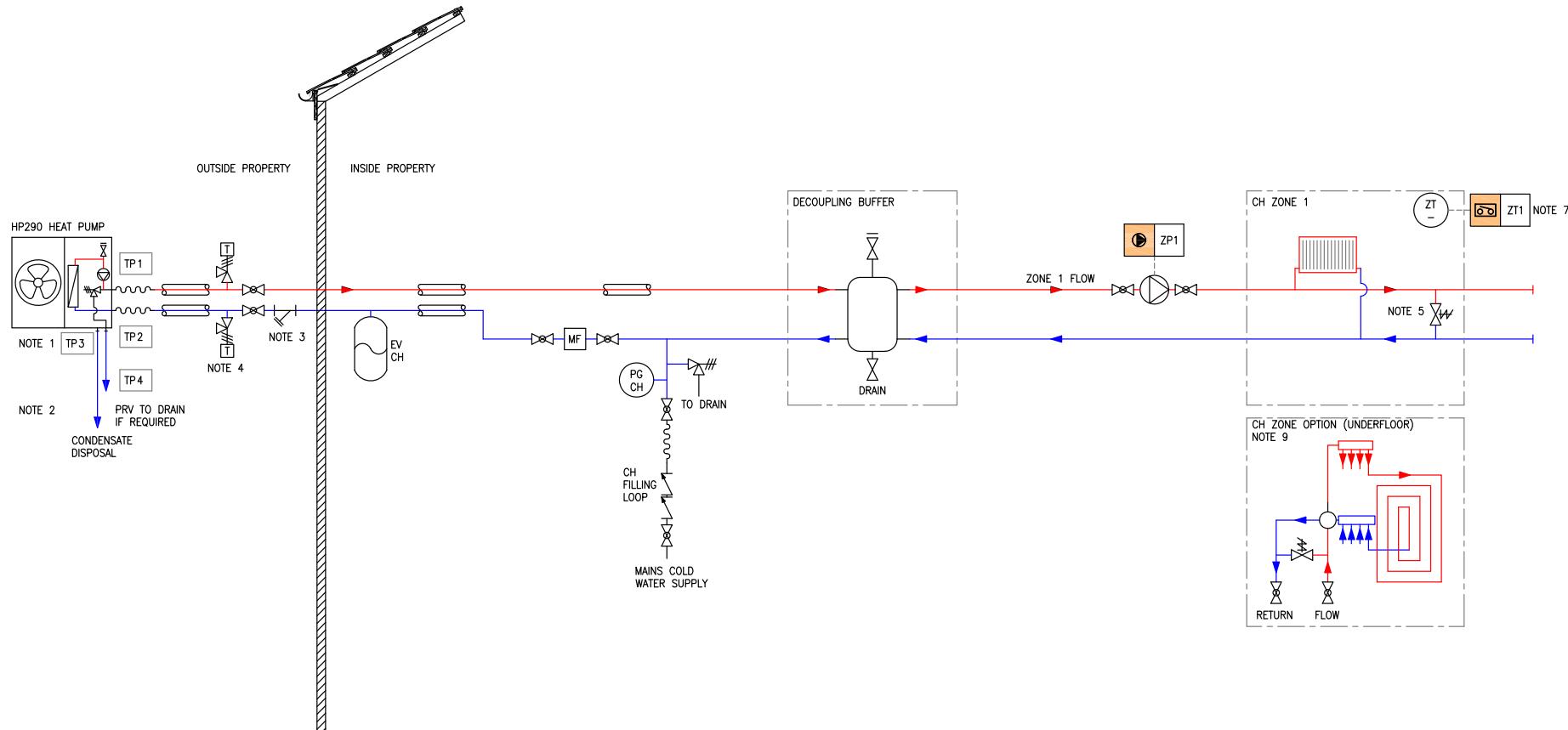
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS	COMPRESSION
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS	COMPRESSION
7	ZONE 1 FLOW	28MM	28MM	BRASS	COMPRESSION
8	ZONE 1 RETURN	28MM	28MM	BRASS	COMPRESSION
9	ZONE 2 FLOW	28MM	28MM	BRASS	COMPRESSION
10	ZONE 2 RETURN	28MM	28MM	BRASS	COMPRESSION

Figure 9. HP290 Three Zone + Two Zone Pre-Plumbed Cylinder with Integrated Low Loss Header
(Note, requires additional 3rd Party Electrical wiring for a 3rd zone)



CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 10. HP290 + Decoupling Buffer for Heating Only with One Zone



Notes.

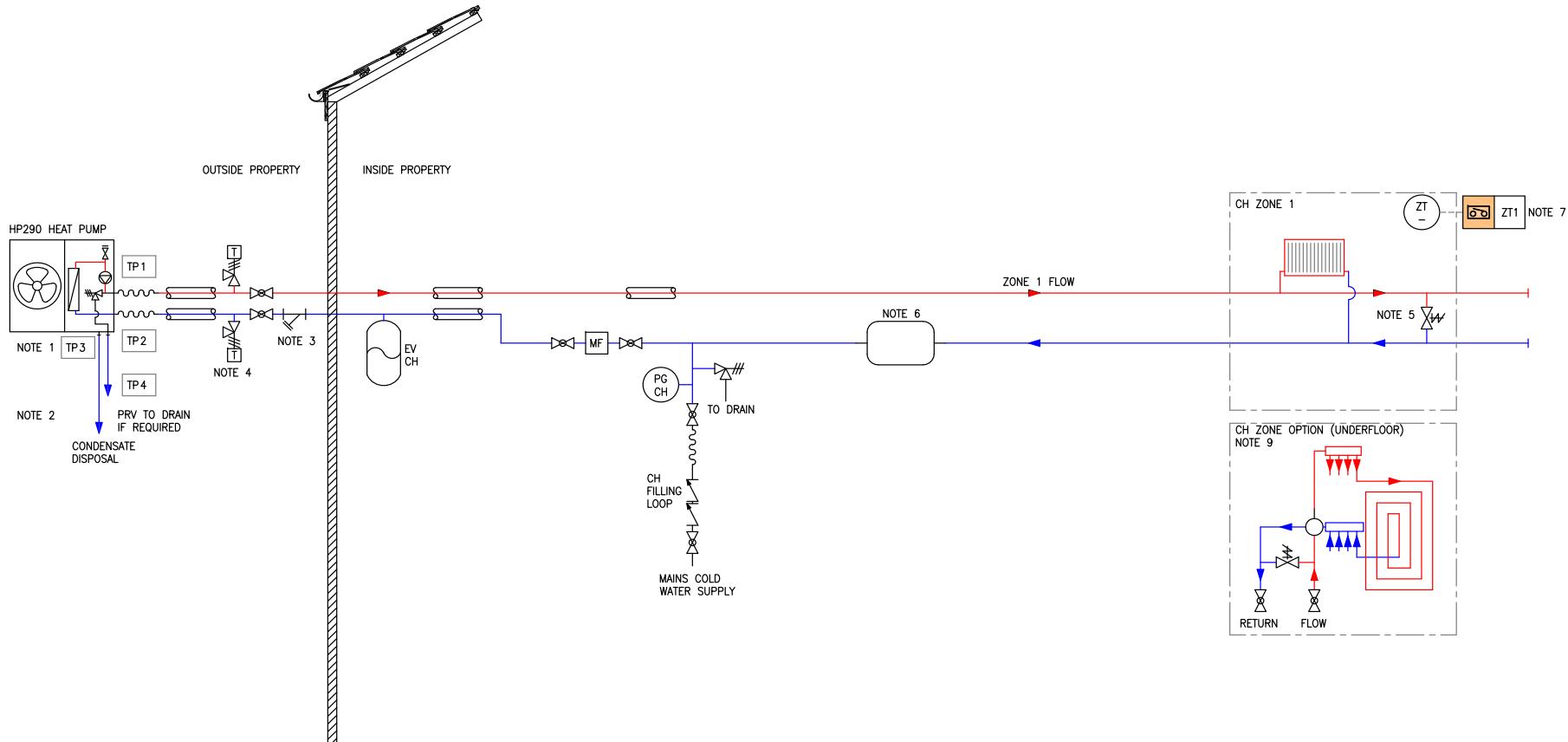
- Note 1. The heat pump must be installed on a secure level base capable of supporting its weight.
- Note 2. Refer to the installation manual for condensate and pressure relief discharge requirements.
- Note 3. A particle filter can be supplied as an option and it's recommended that a magnetic filter is installed. Pre-plumbed cylinders are supplied complete with a combined magnetic and particle filter.
- Note 4. Anti-freeze valves are required if glycol is not used in the system.
- Note 5. Install an auto-bypass if no permanent open circuit is available to allow pump overrun and normal operation. Ensuring minimum circulating water flow rate for heat pump defrost requirements.
- Note 6. If minimum free system water volume cannot be met, a volumiser is required.
- Note 7. Refer to the installation manual for thermostat connection.
- Note 8. Flow, return and outdoor sensors are integrated within the outdoor unit.
- Note 9. Underfloor heating circuit option. Refer to the manufacturers installation instructions for pump and bypass requirements.

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Refer to HP290 heat pump system installation and maintenance manual in conjunction with these schematic drawings.

CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5–6kW	SIZE 8–14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 11. HP290 + Volumiser for Heating Only with One Zone



Notes.

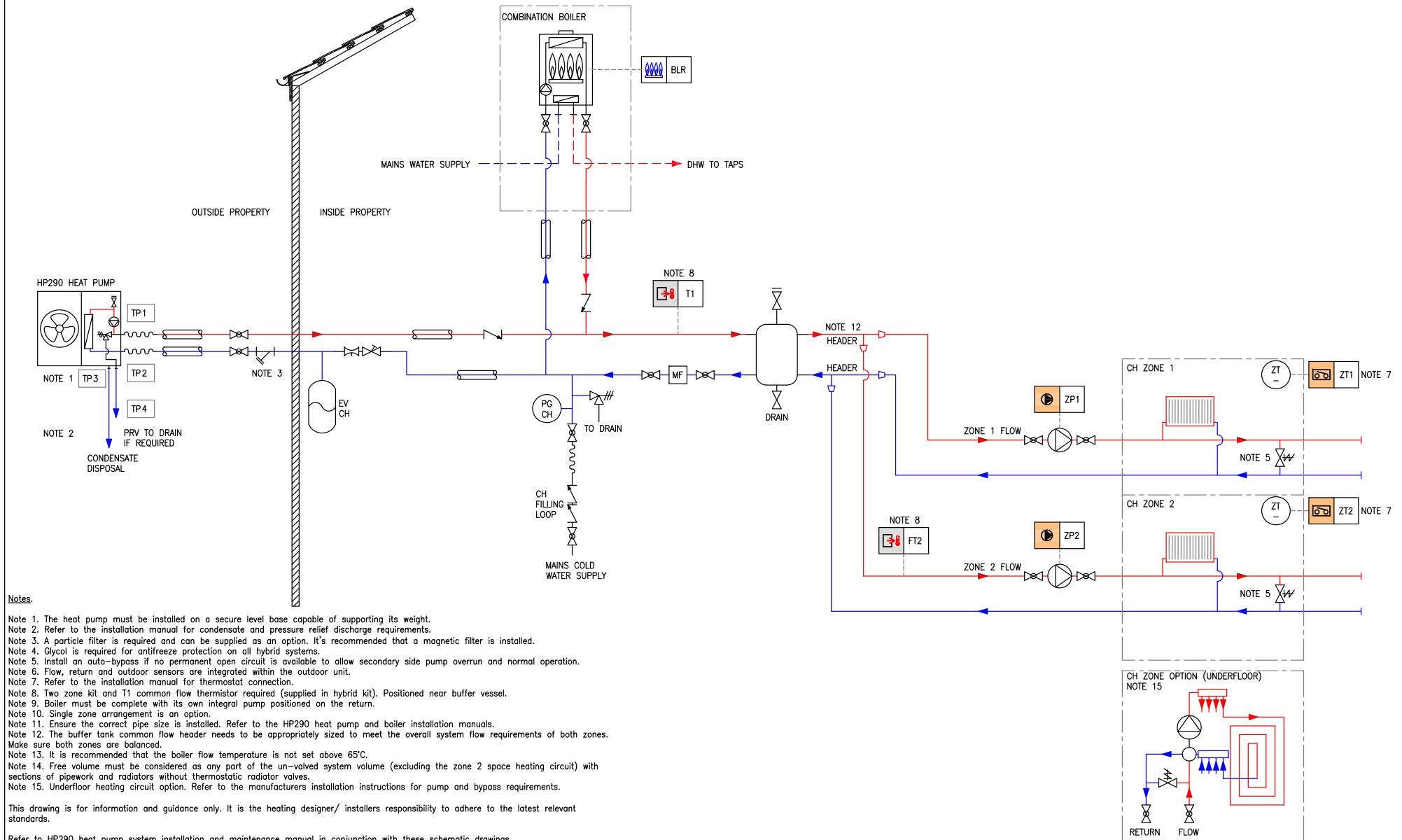
- Note 1. The heat pump must be installed on a secure level base capable of supporting its weight.
- Note 2. Refer to the installation manual for condensate and pressure relief discharge requirements.
- Note 3. A particle filter can be supplied as an option and it's recommended that a magnetic filter is installed. Pre-plumbed cylinders are supplied complete with a combined magnetic and particle filter.
- Note 4. Anti-freeze valves are required if glycol is not used in the system.
- Note 5. Install an auto-bypass if no permanent open circuit is available to allow pump overrun and normal operation. Ensuring minimum circulating water flow rate for heat pump defrost requirements.
- Note 6. If minimum free system water volume cannot be met, a volumiser is required.
- Note 7. Refer to the installation manual for thermostat connection.
- Note 8. Flow, return and outdoor sensors are integrated within the outdoor unit.
- Note 9. Underfloor heating circuit option. Refer to the manufacturers installation instructions for pump and bypass requirements.

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Refer to HP290 heat pump system installation and maintenance manual in conjunction with these schematic drawings.

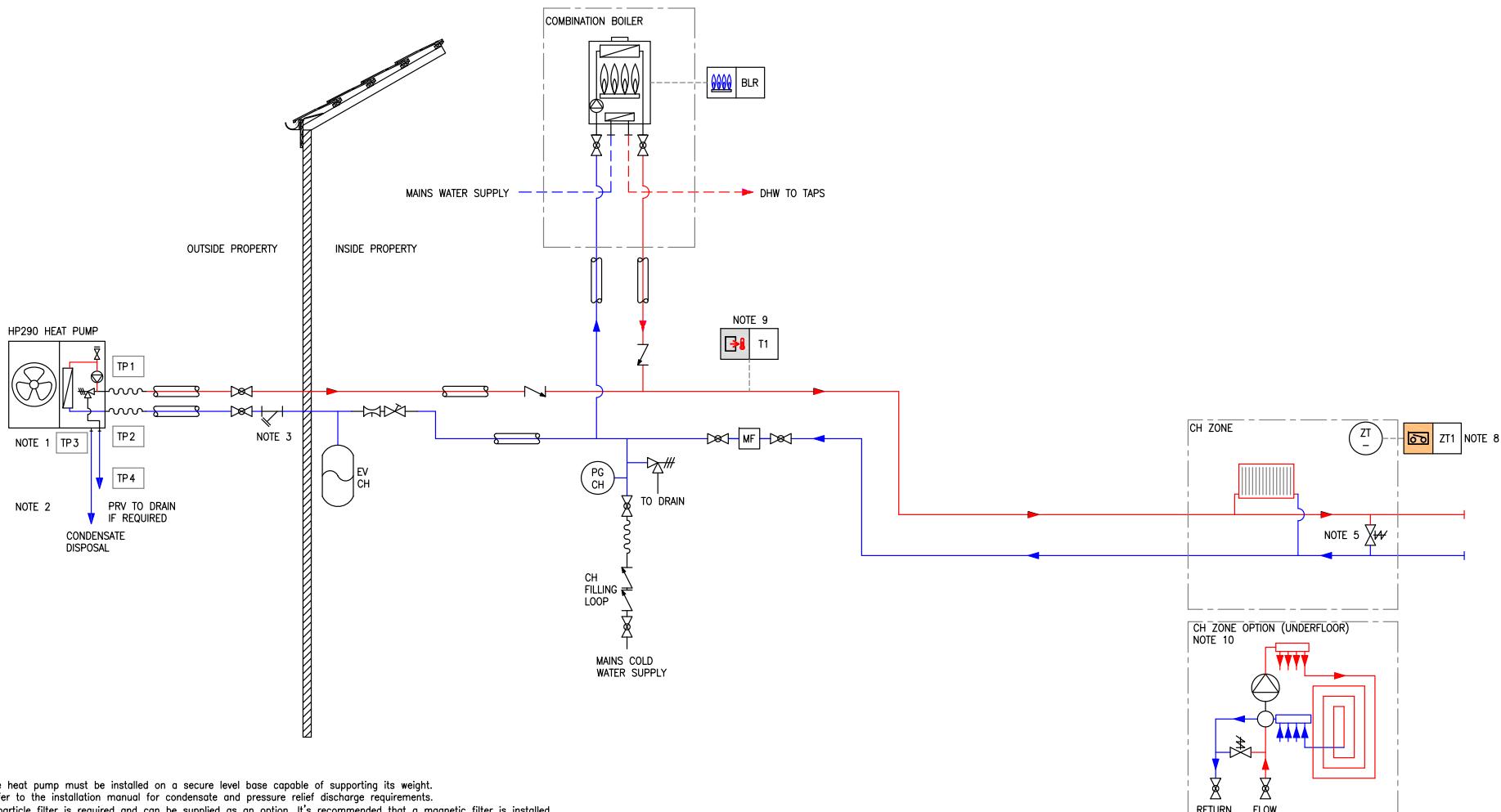
CONNECTION POINT LIST				
TP No	DESCRIPTION	SIZE 4.5–6kW	SIZE 8–14kW	MATERIAL
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC HOSE

Figure 12. HP290 + Combi Boiler + Buffer + Two Zones (Bivalent System)



CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 13. HP290 + Combi Boiler + Single Zone (Bivalent System)



Notes:

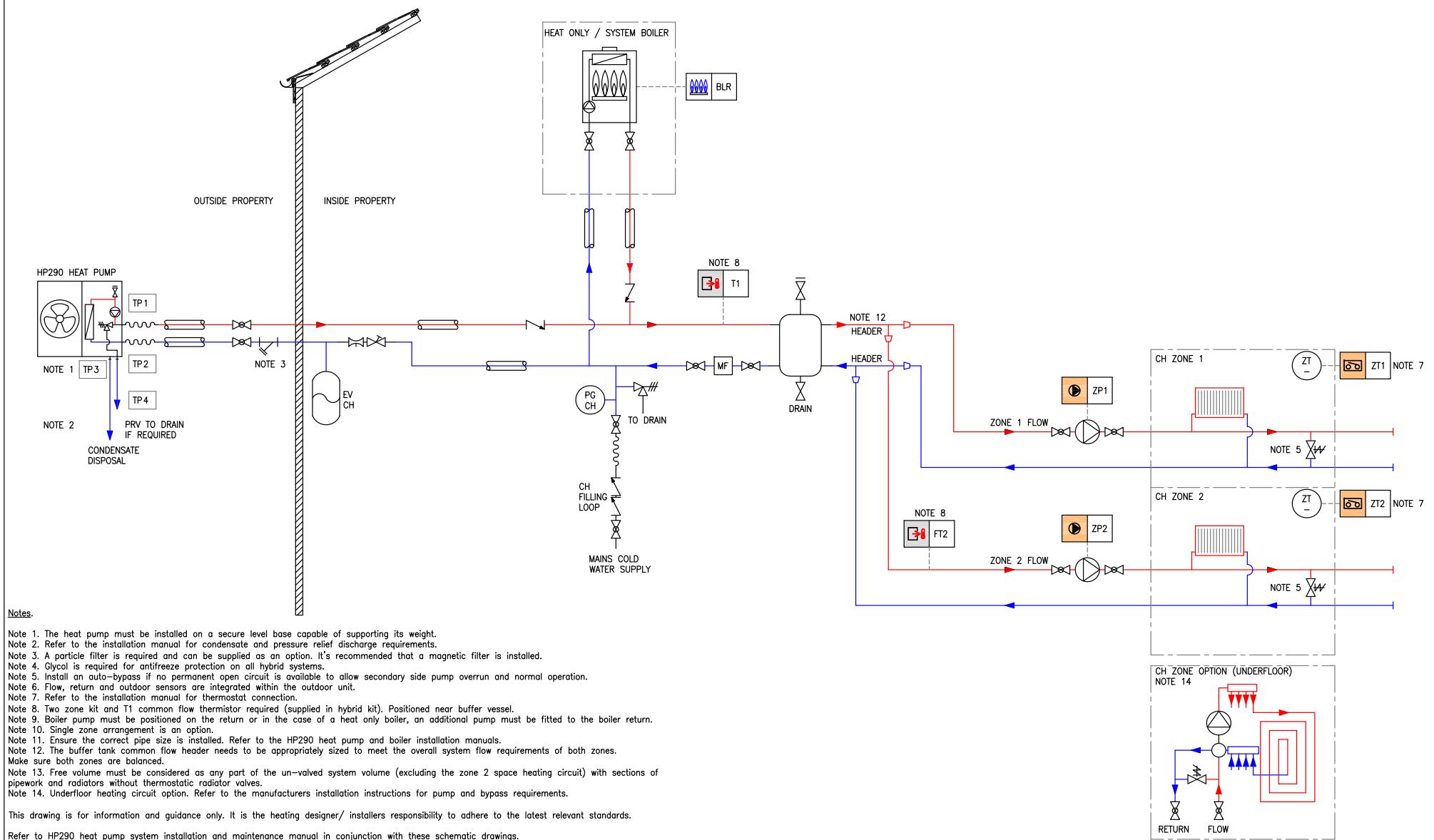
- Note 1. The heat pump must be installed on a secure level base capable of supporting its weight.
- Note 2. Refer to the installation manual for condensate and pressure relief discharge requirements.
- Note 3. A particle filter is required and can be supplied as an option. It's recommended that a magnetic filter is installed.
- Note 4. Glycol is required for antifreeze protection on all hybrid systems.
- Note 5. Install an auto-bypass if no permanent open circuit is available to allow pump overrun and normal operation.
- Note 6. If minimum free system water volume cannot be met, a volumiser is required. This is installed on the return circuit.
- Note 7. Flow, return and outdoor sensors are integrated within the outdoor unit.
- Note 8. Refer to the installation manual for thermostat connection.
- Note 9. T1 sensor required (supplied in hybrid kit).
- Note 10. Boiler must be complete with its own integral pump positioned on the return.
- Note 11. Ensure the correct pipe size is installed. Refer to the HP290 heat pump and boiler installation manuals.
- Note 12. It is recommended that the boiler flow temperature is not set above 65°C.
- Note 13. Underfloor heating circuit option. Refer to the manufacturers installation instructions for pump and bypass requirements.

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Refer to HP290 heat pump system installation and maintenance manual in conjunction with these schematic drawings.

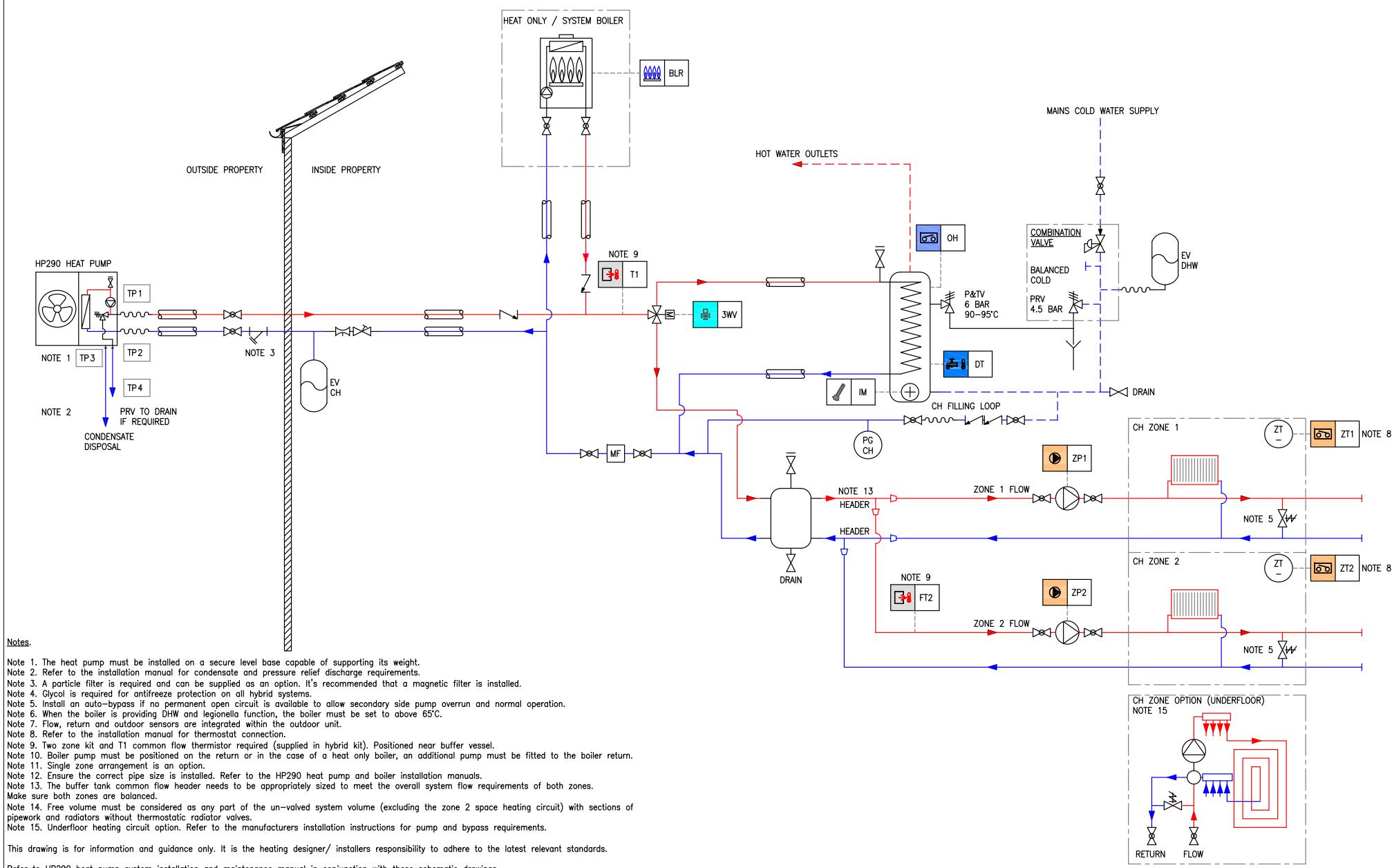
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPICOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 14. HP290 + Heating Only + System Boiler + Buffer + Two Zones (Bivalent System)



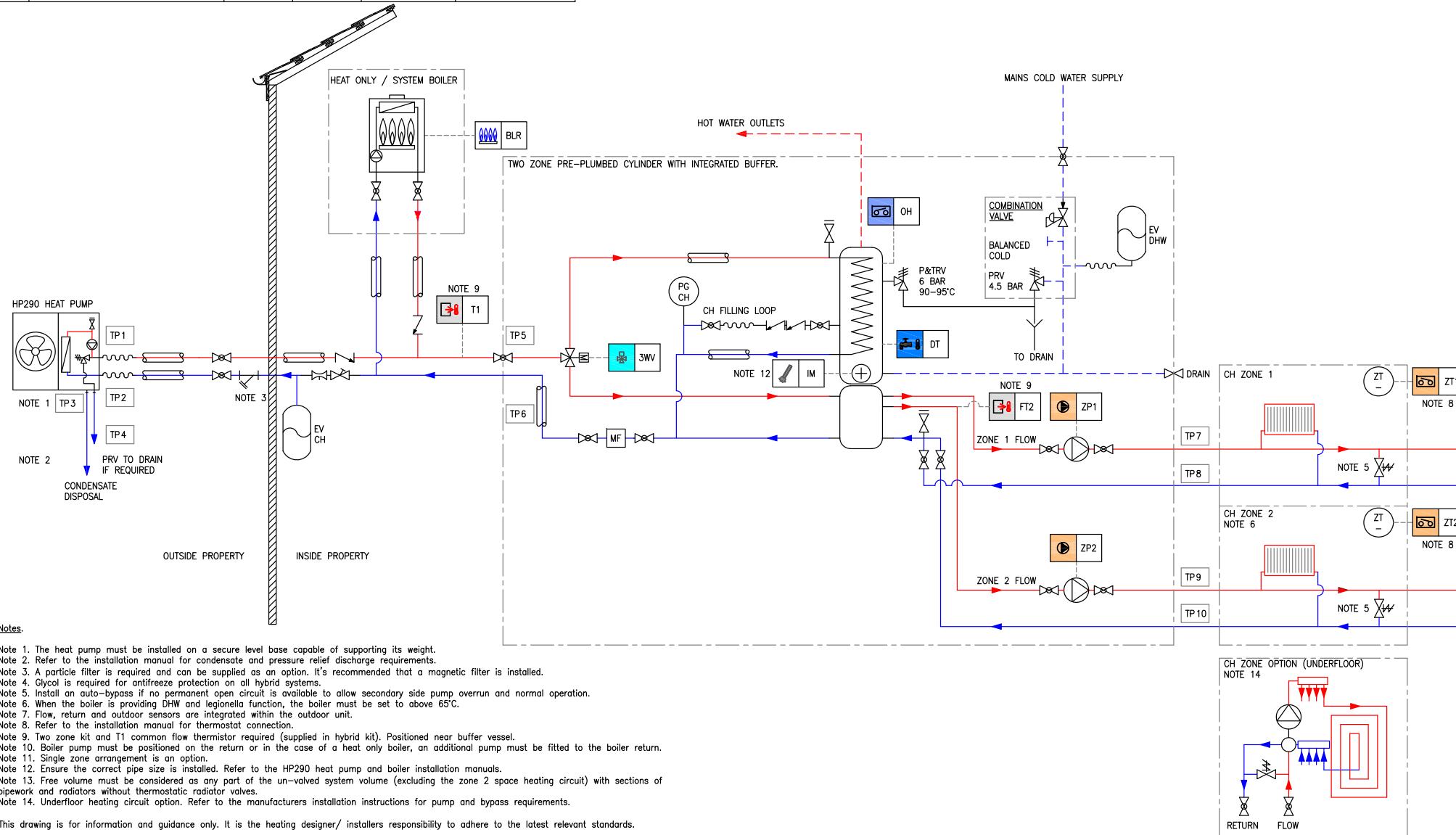
CONNECTION POINT LIST					
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 15. HP290 + System Boiler + DHW + Two Zones (Bivalent System)



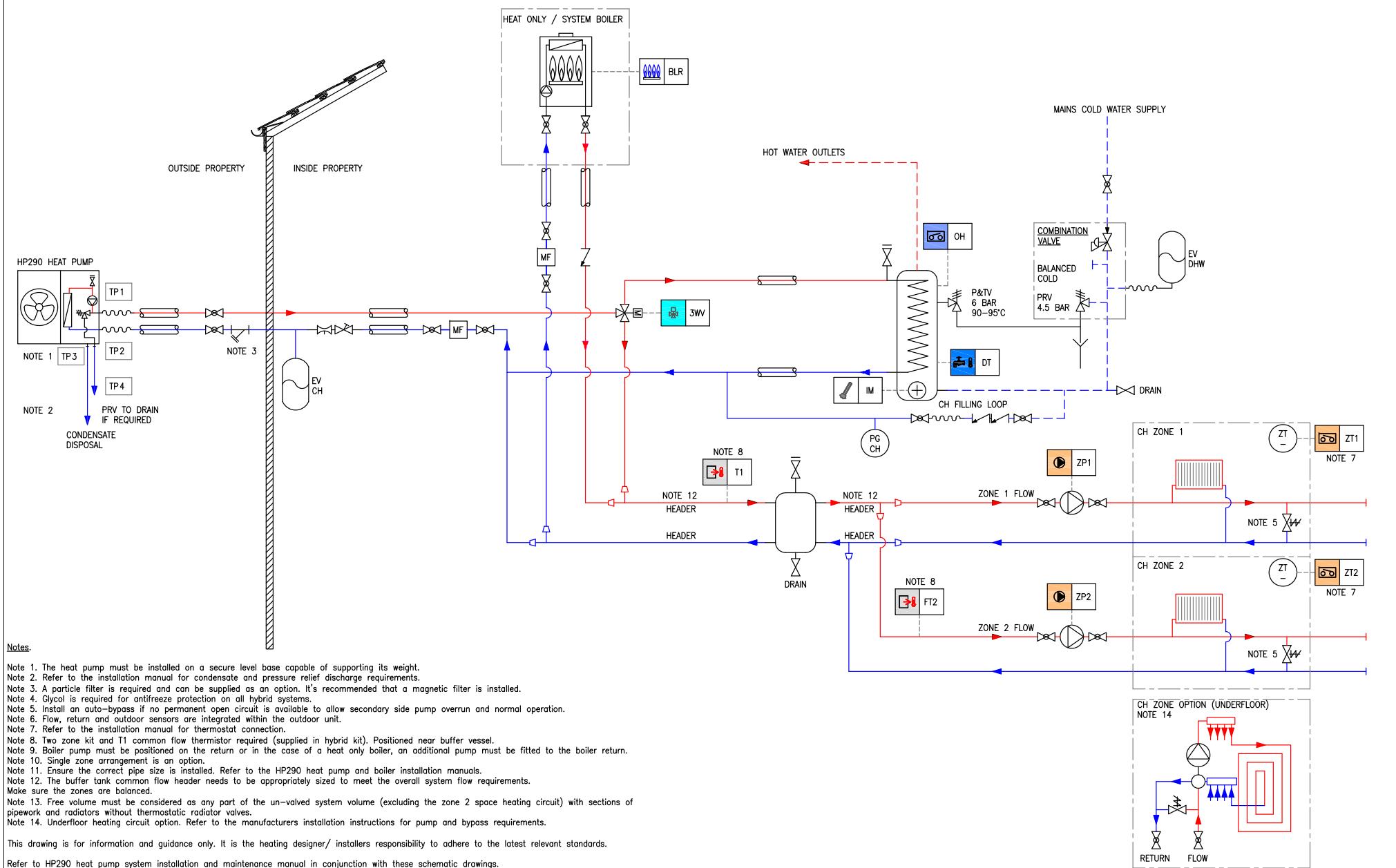
CONNECTION POINT LIST				
TP No	DESCRIPTION	SIZE 4.5–6kW	SIZE 8–14kW	MATERIAL
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	HOSE
5	CYLINDER HEAT PUMP FLOW	28MM	28MM	BRASS
6	CYLINDER HEAT PUMP RETURN	28MM	28MM	BRASS
7	ZONE 1 FLOW	28MM	28MM	BRASS
8	ZONE 1 RETURN	28MM	28MM	BRASS
9	ZONE 2 FLOW	28MM	28MM	BRASS
10	ZONE 2 RETURN	28MM	28MM	BRASS

Figure 16. HP290 + System Boiler + Two Zone Pre-plumbed Cylinder with Integrated Buffer (Bivalent System)



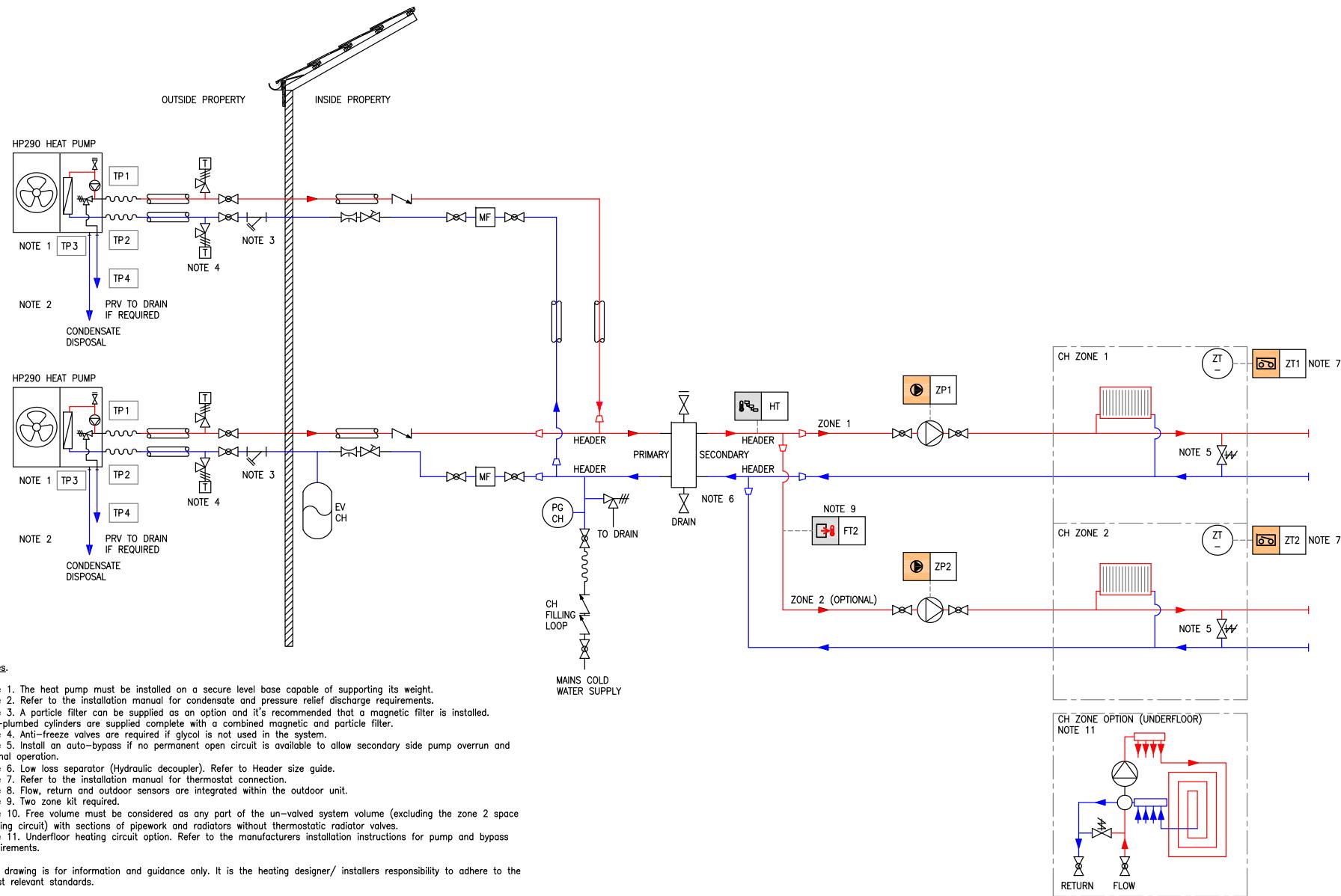
CONNECTION POINT LIST				
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC HOSE

Figure 17. Hydraulically separated HP290 + System Boiler + DHW + Two Zones (Bivalent System)



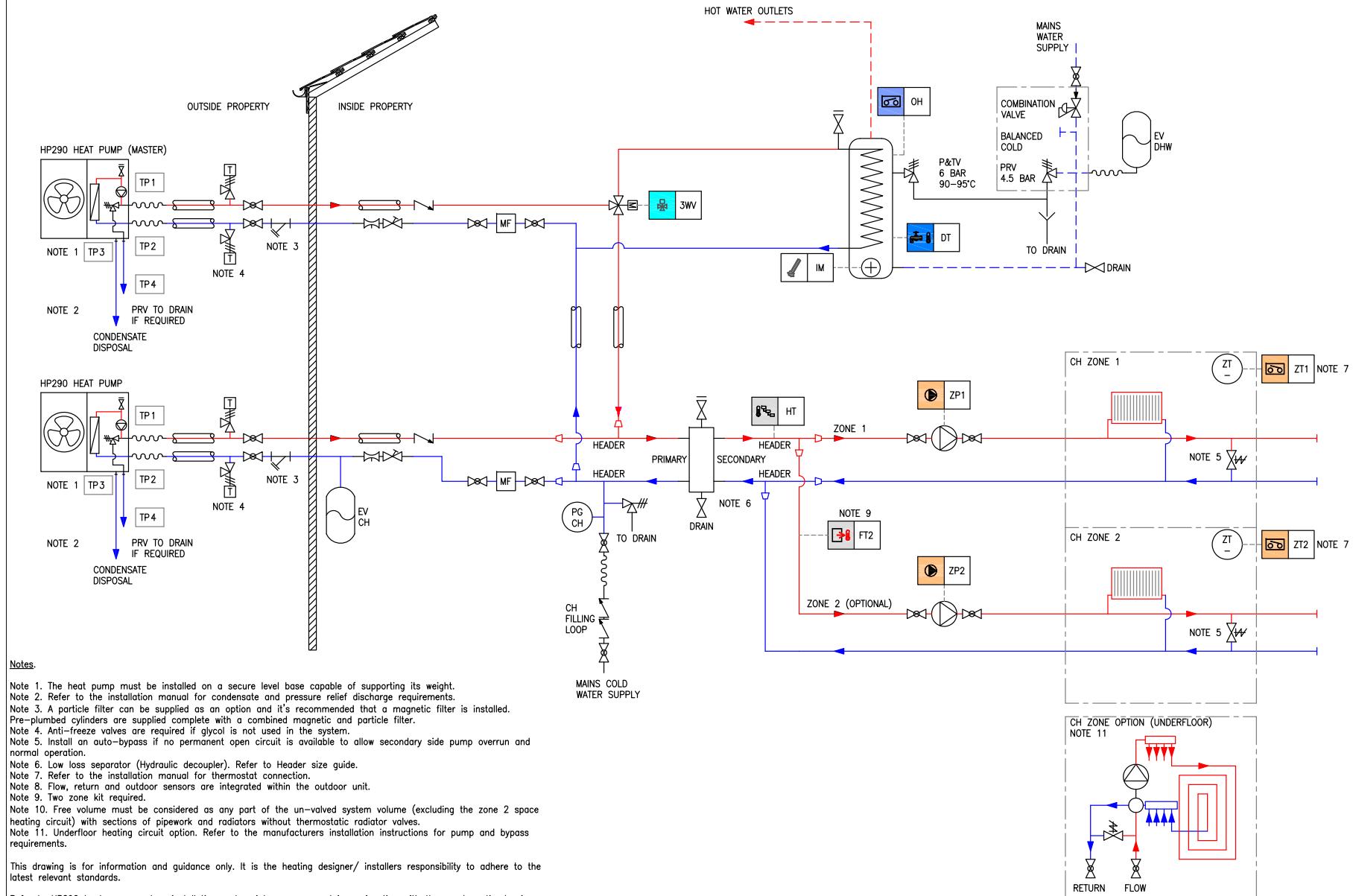
CONNECTION POINT LIST					HEADER SIZE GUIDE		
TP No	DESCRIPTION	SIZE 4.5–6kW	SIZE 8–14kW	MATERIAL	TYPE	HP290 HEAT PUMP	HEADER SIZE (mm)
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE	2 x 4.5kW	28 OD (26.2 ID)
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE	2 x 6kW OR 2 x 8kW	35 OD (32.6 ID)
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT	2 x 10kW OR 2 x 12kW	42 OD (39.6 ID)
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE	2 x 14kW	54 OD (51.6 ID)

Figure 18. HP290 Heat Only Cascade + Decoupler with Two Zones



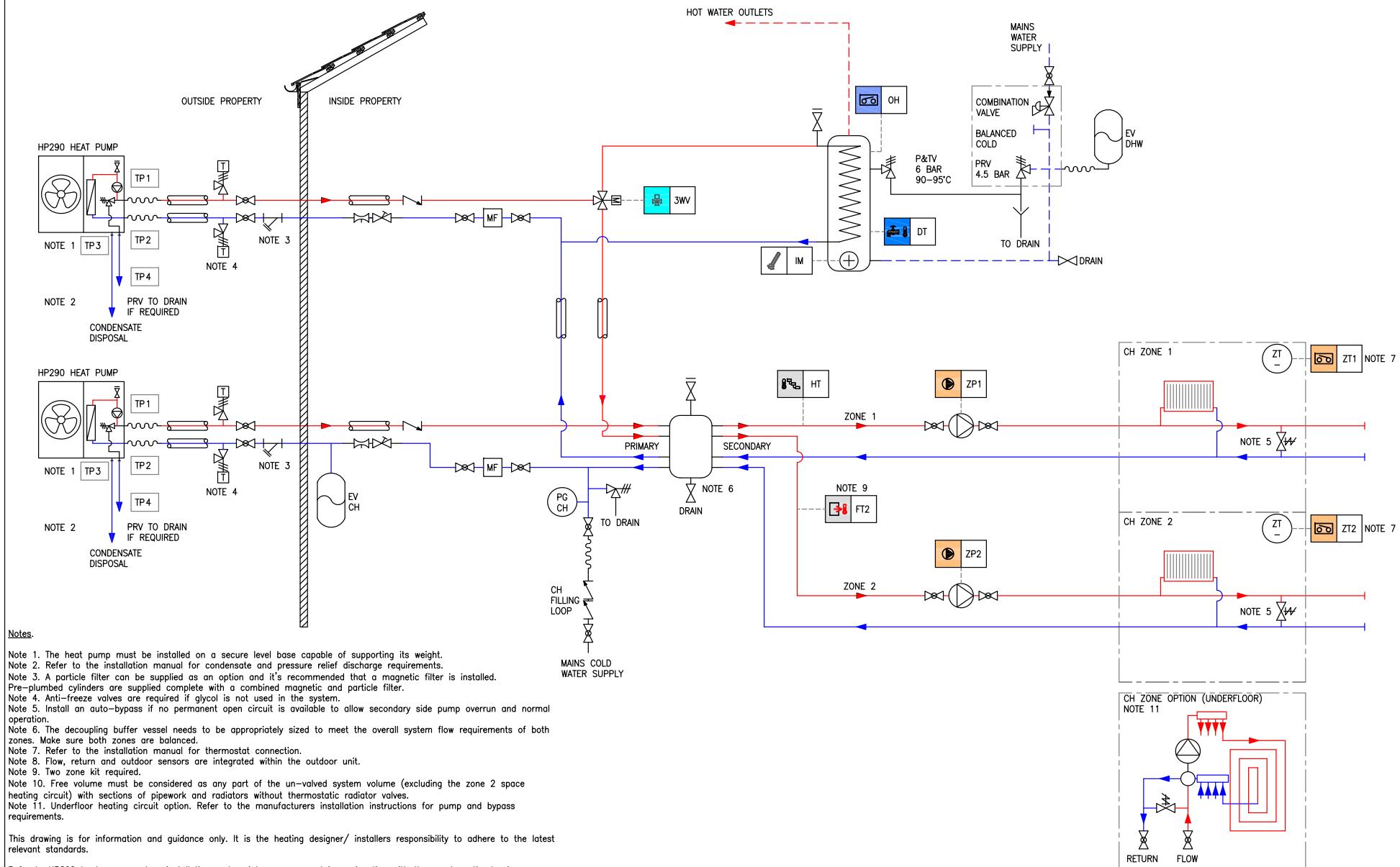
CONNECTION POINT LIST				HEADER SIZE GUIDE	
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL	TYPE
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS	BSP MALE
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC	BARBED SPIGOT
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC	HOSE

Figure 19. HP290 Cascade + 3rd Party DHW Cylinder + Cylinder + Decoupler with Two Zones



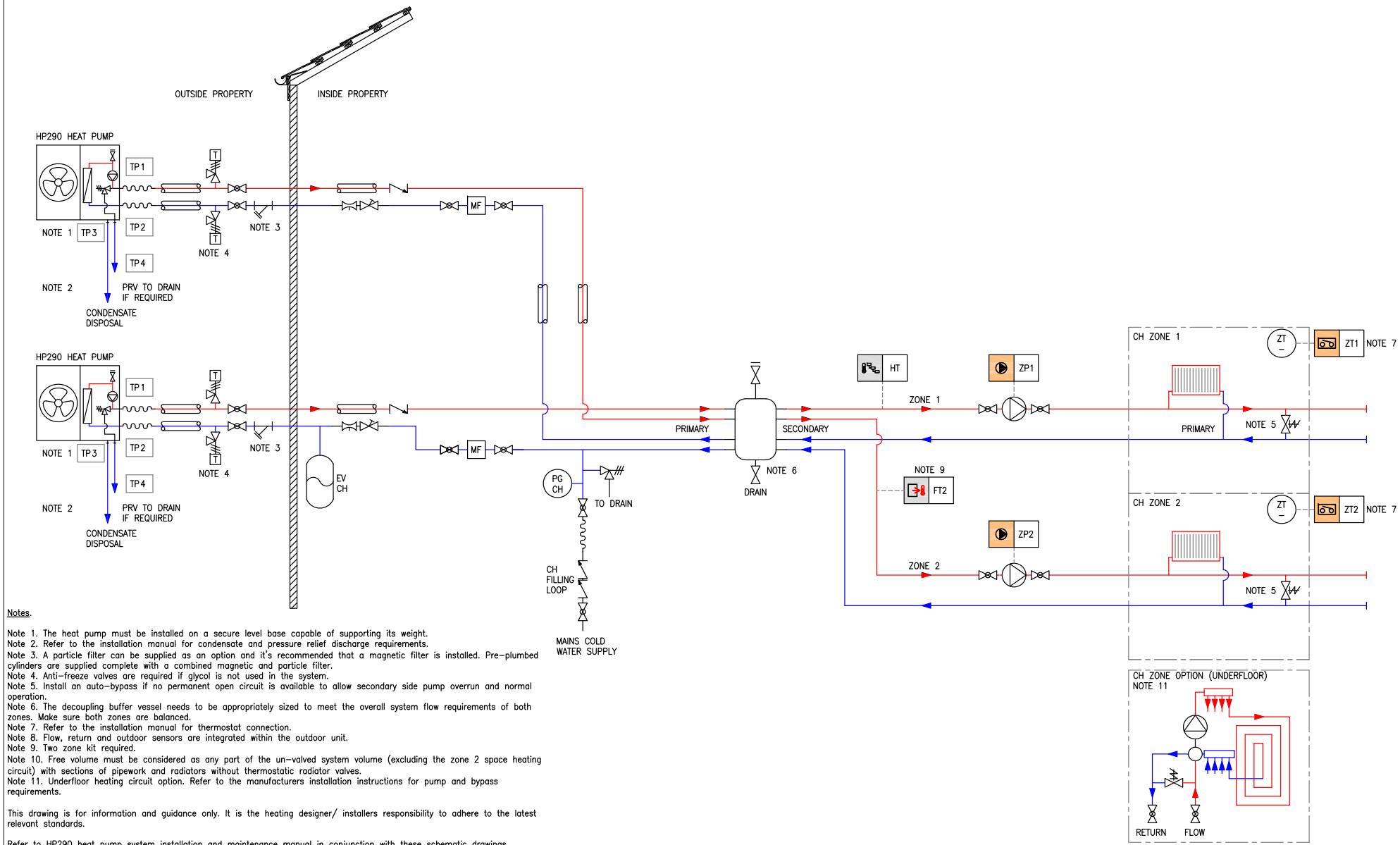
CONNECTION POINT LIST				
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC HOSE

Figure 20. HP290 Cascade + 3rd Party DHW Cylinder + Multi-Port Decoupler with Two Zones



CONNECTION POINT LIST				
TP No	DESCRIPTION	SIZE 4.5-6kW	SIZE 8-14kW	MATERIAL
1	HEAT PUMP FLOW	1" BSP	1. 1/4" BSP	BRASS
2	HEAT PUMP RETURN	1" BSP	1. 1/4" BSP	BRASS
3	HEAT PUMP CONDENSATE DISPOSAL	32MM OD	32MM OD	PLASTIC
4	PRESSURE RELIEF VALVE (PRV)	9MM ID	9MM ID	PVC
				HOSE

Figure 21. HP290 Heat Only Cascade + Multi-Port Decoupler with Two Zones



At Ideal Heating we take our environmental impact seriously, therefore when installing any Ideal Heating product please make sure to dispose of any previous appliance in an environmentally conscious manner. Households can contact their local authority to find out how. See <https://www.gov.uk/managing-your-waste-an-overview> for guidance on how to efficiently recycle your business waste.

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Our Expert Academy offer a range of training options designed and delivered by our experts in heating.

For details please contact: expert-academy.co.uk



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