

The Punch Bowl Inn,
The Green,
Millom,
LA18 5HJ

Foul Water Inspection.



Initial inspection.

On the 6th of September 2022 Fawcett Percolation Services Ltd visited and inspected the Foul Water (FW) system at the above address to assess the system for compliance with 'The General Binding Rules' as well as general health and condition.

Findings.

1. The existing septic tank is positioned in the beer garden field to South of the property. Layout sketch attached, Fig 1.
2. The tank is a Brick built, triple chamber septic tank, as shown in Fig 2, 3 and 4. It has a liquid capacity of approx. 1,700lt.
3. The dip pipes are missing as shown in Fig 2, 3 and 5.
4. The tank is leaking in and out. The level of contents on the day were well below the outlet drain. Fig 5.
5. When water was introduced to the first chamber, a leak from the outer wall allowed the fluid to enter the 3rd chamber, as per Fig 6.
6. The venue currently serves around 50 covers and with double sittings and no residential loading, this equates to 3,000 lt per day or a 20 Person Equivalent (PE)*.
7. The drains around the property are generally in good condition, there are snags on the last runs between the penultimate chamber and the tank, as shown on Fig 1.
8. The FW drains on the property were all tested and all discharge to the tank.
9. The Rain Water Pipes (RWP) which take the SW were all tested and 3 of these do discharge to the FW system. These are indicated on Fig 1.
10. The discharge is not situated within a Source Protection Zone I (SPz).
11. The tank outfall is currently collapsed and blocked immediately after the tank. Fig 7. However, it is locally believed to discharge to the water course across the road; Black beck.

* Different manufactures may require their WWTP to be specified differently, however per cover, the flow would be 30lt, the BOD 38 grams and the Ammonia of N would be 4.

The following points are observations and findings in relation to the requirements of the General Binding rules.

Showing in **Red** are the negatives, which need addressing in order to fully comply, and showing in **Green** are the positives, the points with which the system currently complies. All points are relevant to the health and compliance of the system and are a true reflection of the system on the date of inspection.

- Maximum discharge from this Septic tank would be around 3,000 litre per day.
- The outlet is blocked.
- The minimum size for a septic tank serving this property is 5,600lt. The existing tank capacity is 1,700lt.
- The effluent would, potentially, be discharged to a watercourse.
- The FW is from domestic use only.
- All FW drains discharge to FW network
- Three SW discharges are being made to the FW system.
- Ground water pollution is occurring due to the leaking tank.
- The discharge is not within a Groundwater Source Protection Zone.
- Although SW pollution is not currently occurring, if the system were working as intended, SW pollution would be occurring.

Recommendations.

The system is non-compliant. There are several reasons for this as indicated in the findings. In order to meet compliance, the most achievable / economical solution would be to replace the existing tank with a WWTP. This, and other items required to comply are listed below.

1. The Septic tank should be replaced with a WWTP suitable to meet the current and future requirements. Currently a minimum 20PE system would be suitable.
2. The outfall connection must be repaired. This will require further CCTV work to establish the blockage point from the outlet pipe at the water course.
3. The SW connections must be removed for the FW drains

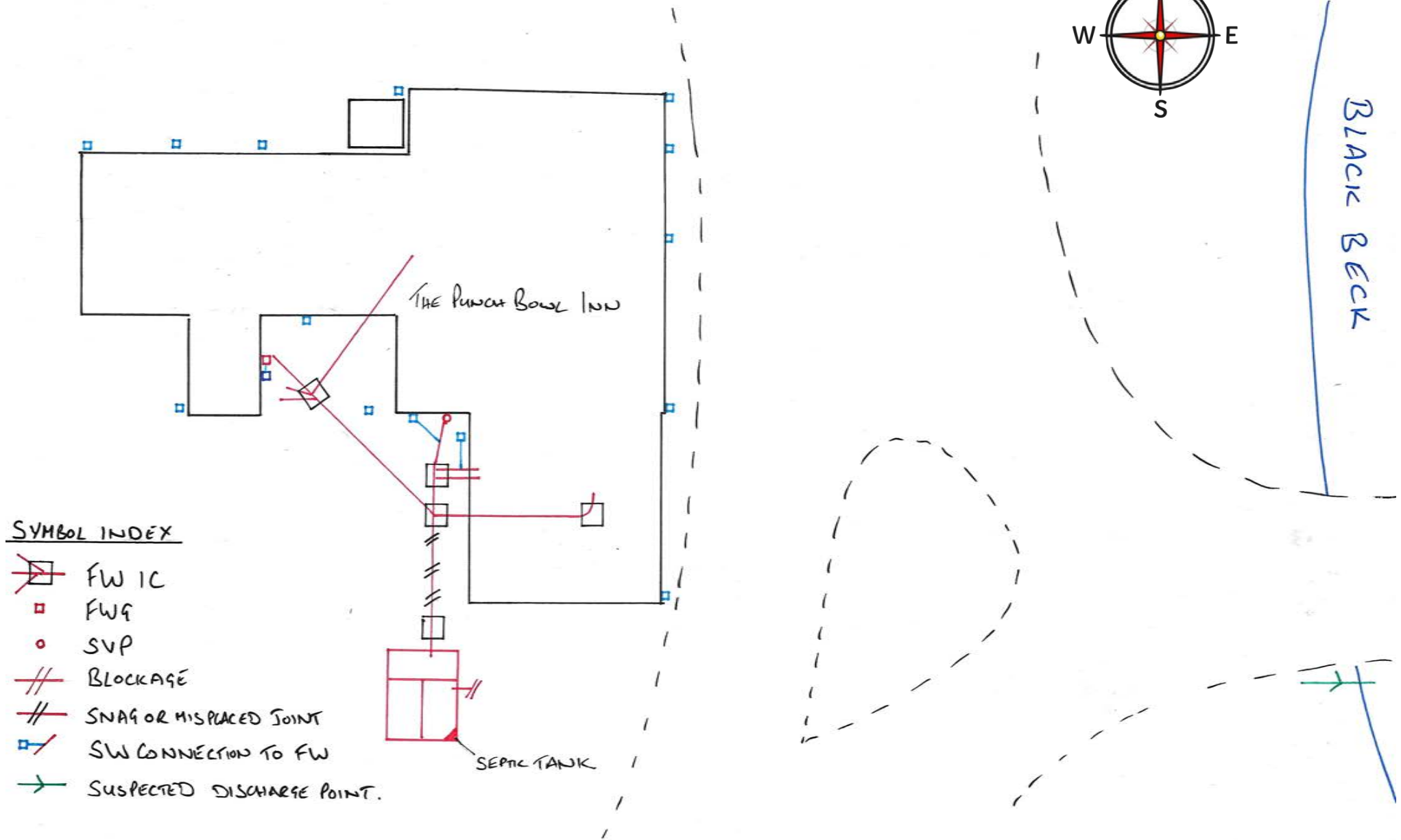
If a new system is installed in a different position, the old tank must be decommissioned, however, a new WWTP is likely to be positioned in the same location as the existing tank. If points 1, 2 and 3 above are carried out, then this would then be a legal discharge as per the link below;

<https://www.gov.uk/permits-you-need-for-septic-tanks/general-binding-rules>

Recommendations provided by;

Martyn Fawcett
Lead Drainage consultant

Fig 1. Existing Layout.



Not to scale.

Fig 2, 3 and 4. Brick built, triple chamber septic tank.



Fig 5. Liquid level below outlet pipe.



Fig 6. Leak from the outer wall.



Fig 7. Outlet pipe blocked



Reference.

British Loads and Flows 4.

<https://www.britishwater.co.uk/code-of-practise-flows-and-loads-4-on-sizing-criteria-treatm.aspx>

The General Binding Rules.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/397173/ssd-general-binding-rules.pdf

The Building Regulations 2010 (Revised 2015). Drainage and waste disposal. Approved Document H

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/442889/BR_PDF_AD_H_2015.pdf

British Water codes of practice.

<https://www.britishwater.co.uk/page/Publications>

Acronym list.

ADH	Building regulations, Approved Document H.
EA	The Environment Agency
FW	Foul Water
FWG	Foul Water Gully
GBR	The General Binding Rules
GRP	Glass Reinforced Plastic or Fiberglass
GW	Ground Water
IC	Inspection Chamber
RWG	Rain Water Gully
RWP	Rain Water Pipe
SPZs	Ground Water Source Protection Zones
SSSI	Sites of Special Scientific Interest
ST	Septic Tank
SVP	Soil Vent Pipe, Stack Pipe or Stink Pipe.
SW	Surface Water
WWTP	Waste water Treatment Plant
TP	Trial Pit
UU	United Utilities