Provided by the Middle Level Commissioners		**Item No:**	**8**
Meeting:	**BLUNTISHAM IDB**	**Subject:**	**CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY & CAPITAL PROGRAMME**
Date:	**Friday 16 January 2026**	**Officer Responsible:**	**Nicola Oldfield**

RECOMMENDATIONS

The Board is asked to:

A. Consider the development of an investment plan for asset refurbishment/replacement. The Board is asked to instruct the Consulting Engineer accordingly.

There are no specific updates other than those contained in the M&E Engineer's Report.

Author Name: Nicola Oldfield
Role: Chief Engineer

Appendix 1: Applications responded to since last report
Appendix 2: M&E Report

Appendix 1

There have been 2 planning applications responded to since the last meeting.

There have been no Byelaw Consent (to undertake works in and around watercourses) or (to discharge to a watercourse), or infiltration device applications processed since the last meeting.

Appendix 2

Provided by the Middle Level Commissioners		**Item No:**	**8**
Meeting:	**BLUNTISHAM IDB**	**Subject:**	**CONSULTING ENGINEERS REPORT: MECHANICAL & ELECTRICAL**
Date:	**Friday 16 January 2026**	**Officer Responsible:**	**Dave Bantoft**

1. M&E key messages and advice

Other than the matters described below or previously reported, only routine maintenance has been carried out since the last meeting and the pumping plant at the station is mechanically and electrically in a satisfactory condition. The station, pump and control panels are at an age where reliability is a concern.

The Board is strongly advised to consider the development of an investment plan for asset refurbishment/replacement. The Board is asked to instruct the Consulting Engineer accordingly.

1.1 M&E Equipment Key Health Indicators

Over the past 2 years we have been compiling and verifying Pumping Station Key Date to allow easier identification of equipment age and the need for refurbishment to assist in developing an investment plan for asset refurbishment or replacement.

To ensure reliability, resilience and longevity of the pumping equipment it needs to be refurbished or replaced at suitable intervals. We have experienced examples lately of pumps being left too long and failing, or when they are removed for overhaul, the condition is very poor and the pump overall lifetime has been reduced significantly, which is not cost-effective use of the asset. The same is true for control panels, component failures often damage other components incurring costly repairs and machine downtime. Overall, it is more cost effective to run well maintained equipment.

The pictures below are of pump bolts that have been in situ for 20 years and have corroded to the point of failure as shown by the gap between the flanges. Although now rebuilt with stainless steel bolts they were not in the past. The pump tubes are also heavily corroded which reduces pump life considerably. Ideally pumps should be refurbished every 10 years because by the time they reach 15 to 20 years it is likely the corrosion will heavily impact their overall residual life.

Station	Built	Pump	Pump Overhaul	Controls
Barley Croft	2001	2001	2001	2001

As shown by the key health indicators above the pump and control panel need refurbishment, the station piles are also heavily corroded, and the station needs a structural survey to determine its remaining lifespan.

Last routine inspection took place on 30/9/25 and lists the following remarks

1) Seal leaking between inner & outer pumps tubes, water running back from river.

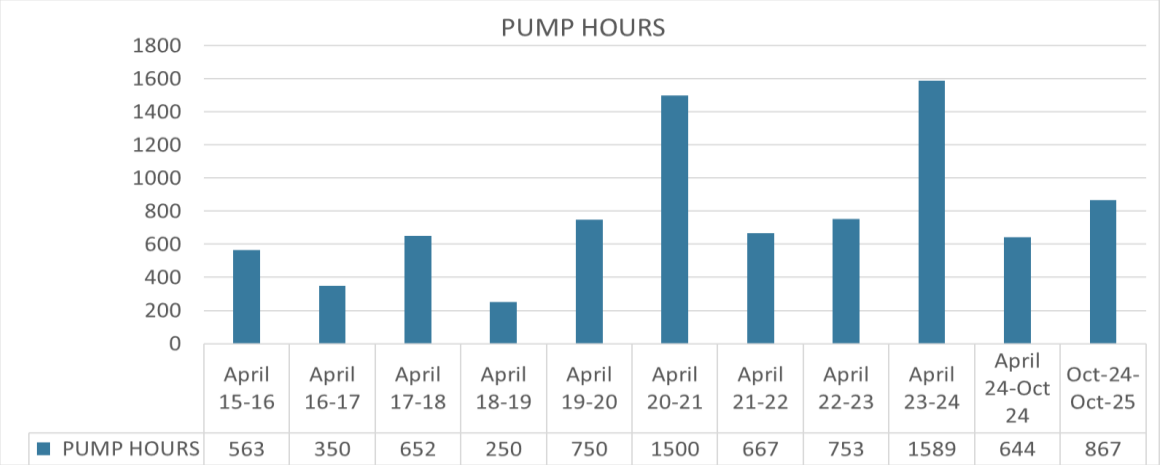
2) PFC fuses 2 & 3 blown, new PFC capacitor required.

3) Outside light not working.

4) Pump short cycling due to blocked screen which is not good for the pump life.

5) The MLC lock has been removed from gate which makes accessing site difficult using the old worn out ASEC lock which is temperamental.

2. Pumping summary



3. Inspections

3.1 EICR Test and Due dates as below. The EICR was successfully completed on 29th March 2024.

Board	Station	EICR Date	EICR Due
Bluntisham	Barley Croft	29-March 2024	29-March-2029

4. Pumping Station Key Dates

4.1 Please review the pumping station key dates below, if there are any discrepancies or you can add any details, please let me know. The key dates are an important reference and will feed into the upcoming Key Health Indicators and District Studies.

Station	Built	Pump	Pump Overhaul	Controls
Barley Croft	2001	2001	2001	2001

5. Water level Management

The pumping stations have summer and winter pump level references based on historic values which serve as very good reference points. I would actively encourage pump attendants to vary these to suit their current catchment conditions. For example, running pump start and stop levels at intermediate settings above the base winter settings during times of high Soil Moisture Deficit and then reducing towards winter level setpoints as the SMD reduces or if there is heavy rainfall forecast. This needs to be balanced with ensuring the pump has a good operating range so it is never short cycling (hunting). This can also be used to ensure maximum benefit of the lower night electricity rate.

Ultimately this takes more operator time but will produce more efficient running and reduce costs. We can advise on this if needed and show some good and bad examples to help with setting and monitoring your pumps.

Author Name: Dave Bantoft
Role: M&E Engineer