

Provided by the Middle Level Commissioners		Item No:	7
Meeting:	SUTTON & MEPAL IDB (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY AND CAPITAL PROGRAMME
Date:	Thursday 15 January 2026	Officer Responsible:	Nicola Oldfield

RECOMMENDATIONS

The Board is asked to:

- A. The Board authorises the Chairman and Vice Chairman to take decisions on enforcement action on behalf of the Board with advice from MLC.
- B. Consider the development of an investment plan for asset refurbishment/replacement. The Board is asked to instruct the Consulting Engineer accordingly.
- C. Confirm the action to be taken regarding the pump 1.

1. Enforcement

Our Enforcement and Compliance Officers Dave Coles and Tony Payne joined us on the 23 June 2025 as a job share. They are currently investigating cases across 17 boards plus Middle Level Commissioners, including:

- 47 active enforcement cases,
- 23 surface water or surface water and foul discharges,
- 24 byelaw cases.

Cases already concluded:

- Eight cases in the last two months including trespass, unlicensed moorings, unauthorised structures and encroachment,
- Six major developments have been referred to Technical Services following enforcement action, as consent applications for outstanding discharge consents.

In September and October, they were successful in recovering more than £70,000 of historic outstanding drainage charges for three developments across two boards and the MLC.

It is recommended that the Board authorise the Chairman and Vice Chairman to take decisions on enforcement action on behalf of the Board, having taken advice from MLC Officers. They will engage other Board Members as they see appropriate and determine whether a Special Meeting of the Board is needed on a risk and complexity basis.

2. Specific Issues

Cranbrook/Counter Drain (CCD) Flood Risk Management (FRM) Strategy

Representatives from the Board and MLC met with the Environment Agency who informed us that they are no longer in a position to progress their project as planned.

We have agreed to use the allocated GiA funding to deliver a control panel refurbishment.

3. IDB Recovery Fund T2B

Following the initial unsuccessful bid for funding, the Environment Agency subsequently awarded funding for the 'Asset Resilience Pumps & Channels' package in June 2025. These works are due for completion by March 2026.

Works to upgrade the weed screen cleaner are in progress.

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Role: Chief Engineer

Appendix 1: Applications responded to since last report

Appendix 2: M&E Report

Appendix 1

There have been 8 planning applications responded to since the last meeting.

There has been 1 Byelaw Consent (to undertake works in and around watercourses) processed since the last meeting.

There have been 2 Byelaw Consents (to discharge to a watercourse) processed since the last meeting.

There has been 1 infiltration device application processed since the last meeting.

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Date:	Thursday 15 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 and control panels are at an age where reliability is starting to become 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. The details below include any works already scheduled and funded to be completed this year. For example, the Weed screen upgrade works with CW Engineering.

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				Weedscreen		
Station	Built	Pump Canisters	Pump Overhaul	Controls	WSC	WSC O/H	Controls
Mepal	1929/ 1990	1990	Pump 1: new 2025, Pump 2: new 2023, Pump 3: new 2019	1990	1990	2025	2025

1.2 Pumps

Pump 1 - New unit fitted Oct 2025, **2** - New unit fitted Oct 2023, **3** New unit fitted Oct 2019

Pump 1 was replaced in October 2025, the pump that was removed had low insulation resistance and was noisy and although it was still runnable it cannot be deemed as a reliable spare. Although this pump could be refurbished previous experience and costs have shown that refurbishment is not usually cost effective on pumps of this type and age. The board has previously resolved to keep a spare pump in stock.

Please confirm if the board would like to have this pump overhauled, order a new pump as spare unit or wait and order a pump if any of the 3 pumps start to show signs of deterioration.

There has recently been a fault on pump 1 which we believe to be the motor overload failing, this unit is now 35 years old and has been replaced with a modern unit. The start delta contactors may also need to be changed to rectify this issue.

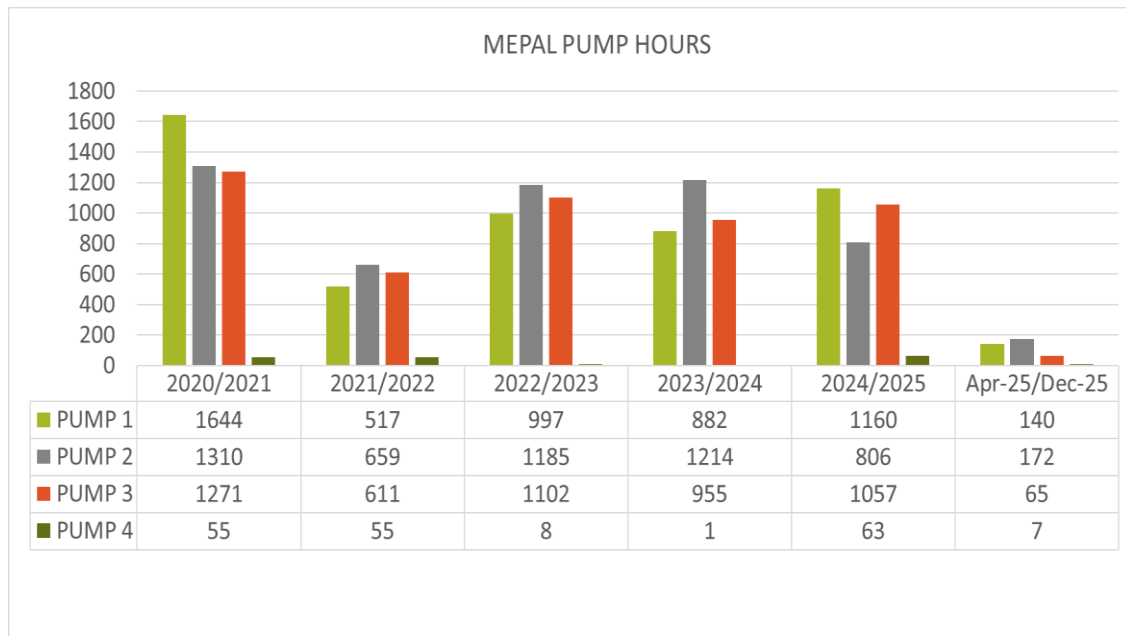
The pump control panel is now 35 years old, and replacement should be considered to ensure continuing reliability. Replacement of this control panel is likely to cost in the region of £40k to £70k. It may be viable to overhaul the current panels with modern components.

A quote has been requested for refurbishment of this control panel to include a generator change over switch. An application is being made for Grant in Aid to cover the control panel manufacture, if granted there is likely to be some cost to the board for installation during summer 2026. If not granted, then the board will need to fund the refurbishment of this control panel as it is becoming unreliable.

There have been two routine inspections at Mepal Pump Station since the last board meeting in May 2025. These inspections took place on 27th June 2025 and 6th November 2025. The last inspection confirms the following recommendations/remarks:

- 1) Pump 4 rails are showing signs of corrosion and should be planned in to replace with stainless tube.
- 2) Pump 1 & 3 cable protection has corroded and needs repair.
- 3) Pump order 2, 3, 1. 4) Swapped Duty to Pump 2 as Insulation Resistance Low.
- 4) The Power factor correction has failed on Pump 1.

2. Pumping summary



3. Inspections

- 3.1 HSB Engineering annual inspections for insurance were carried out during May 2025.
- 3.2 The mandatory site Electrical Installation Condition Report (due every 5 years) was successfully completed in August 2024.

Board	Station	EICR Date	EICR Due
Sutton & Mepal	Mepal	30-Aug-2024	30-Aug-2029

4. 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.

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