

Provided by the Middle Level Commissioners		Item No:	7
Meeting:	MARCH SIXTH DDC (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY & CAPITAL PROGRAMME
Date:	Thursday 11 th June 2026	Officer Responsible:	Nicola Oldfield

RECOMMENDATIONS

The Board is asked to:

- A. Authorise the Chairman and Vice Chairman to take decisions on enforcement action on behalf of the Board with advice form MLC.
- B. The Board consider the recommendations for the development of an investment plan for asset refurbishment/replacement and grant funding and to confirm acceptance of recommendations to the Consulting Engineer.
- C. The Board to provide meter readings or would prefer, the MLC can take quarterly readings; these will be at a cost to the Board for the time and mileage involved.

1. Enforcement & Compliance Overview

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 22 boards plus Middle Level Commissioners.

We have a total of 102 investigations of which 47 are currently active including:

- 29 surface water or surface water and foul discharges,
- 12 byelaw cases.

The Officers will also be taking over some aspects of Navigation Enforcement.

Since joining they have successfully recovered £445,000 of outstanding discharge contributions across IDBs 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. Summary of Key Planning Issues

We will, when possible, seek the Board's input, rather than wait for Board meetings. This will be done via correspondence with the Chair, Vice Chair, District Officer and any appropriate sub-committees.

3. Technical Services Overview

The team was joined by Project Manager, Ellie Edwards at the end of April. She will be assisting the Engineer in planning and delivering capital projects, significantly increasing our capacity to deliver the developing works programme.

4. 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 delivered for this district included access improvements for deployment of mobile pumps.

5. New FCERM grant funding guidance

The Government published new FCERM funding guidance on 3 March 2026.

To be eligible for funding a project must deliver strategic objectives and government policy. Governments' objectives most relevant to IDBs include:

- value for money (Net Present Value)
- reducing flood risk
- focusing on deprived areas
- prioritising projects with contributions from others (this would include funding provide by IDBs themselves)
- a percentage investment in Natural Flood Management (NFM) across the programme

Project types that are eligible for grant funding include:

- refurbishing or replacing existing assets
- building new assets
- NFM projects
- Sustainable Urban Drainage Systems (SuDS)

Asset Refurbishment Projects

Asset refurbishment is a significant renewal to one or more components in an existing asset that is not covered by routine maintenance.

It includes work to mitigate for the loss of asset performance. This covers issues that asset maintenance cannot manage and that would be significant and permanent if not fixed.

It does not include asset replacement projects where an existing asset at the end of its life is replaced with another like for like asset which sustains the standard of service.

Under the new FCERM funding policy existing FCERM assets are eligible for 100% of funding for refurbishment.

New or Improved Asset Projects

Projects that are not refurbishment are eligible for 100% for the first £3 million, and 90% for costs above £3 million.

These include:

- projects replacing existing assets with a like for like replacement
- projects building new or improved assets
- projects with combined asset interventions

Projects cannot be artificially split into smaller components to fall below the £3 million fully funded threshold.

Applying for funding

It should be noted that there will be more projects that are eligible for investment than funding available. Projects will need to be prioritised to meet government targets and achieve best value for money.

Therefore, it is recommended that should the Board wish to apply for FCERM grant funding, they consider part-funding projects. This is similar to the funding rules that were in place prior to 2011 when IDBs only received 45% of project costs.

Should the Board wish to submit a new project to be considered for funding, the first step is to collate relevant cost and benefit data to submit to the Environment Agency from 1 July 2026. This requires collating costs and benefits and other relevant data required by the EA to determine a project's eligibility and prioritise the programme. The Consulting Engineer can provide resources to do this and this will be recharged to the Board.

If a project already appears on the FCERM investment programme with an allocation for future years, an application for grant funding approval/business case will need to be submitted. The Consulting Engineer can provide resources to do this.

Timescales

The Consulting Engineer currently has limited resources to develop and deliver projects, although recruitment is currently in progress to address this. The likely timescales for project delivery are:

- submit for funding consideration July 2026 onwards
- prepare and submit applications for subsequent funding approval onwards
- delivery 2027/28 onwards

The Consulting Engineer will prioritise workload based primarily on Key Health Indicators.

6. Capital Programme

- 6.1 It is recommended that the Board considers the development of an investment plan for asset refurbishment/replacement. Pumping station replacement costs are included on the capital programme. Further investment will be needed in the interim and will be developed further in line with the Key Health Indicators.

The Board is asked to consider the development of a capital investment plan for asset refurbishment/replacement and instruct the Consulting Engineer accordingly.

- 6.2 The Board's Capital Programme is shown as Appendix 1.

Author Name: Nicola Oldfield
Role: Chief Engineer

Appendix 1: Capital Programme
Appendix 2: List of applications since last meeting
Appendix 3: Operational Services Report
Appendix 4: M&E Report

Appendix 1

March Sixth District Drainage Commissioners														
		PREVIOUS YEARS	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	FUTURE YEARS	ALL YEARS
Capital Improvement Programme (2026/2027)		Pre Yr 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Post Year 10	Total Expenditure
Norwood p/s	Pumping station replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,600.0	1600.0
	Pumping station pumping and control equipment replacement	4.6	0.0	0.0	15.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	70.0	159.6
	Pumping station automatic weedscreen cleaning equipmet	0	0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
	Pumping station Control building refurbishment/replacement	0	0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
	Pumping station compound/surrounds improvements	0.0	0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0
Drainage Channels														
	Water control strauctures	2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
	Gravity outfall controls	2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
		8.7	2.5	3	15	0	85	10	0	0	0	0	1,670	1,794

Appendix 2

There have been 4 planning applications responded to since the last meeting.

There have been 1 Byelaw Consent (to discharge to a watercourse) application processed since the last meeting.

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

There have been no Byelaw Consent (to undertake works in and around watercourses) applications processed since the last meeting.

Provided by the Middle Level Commissioners		Item No:	7
Meeting:	MARCH SIXTH DDC (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: OPERATIONAL SERVICES
Date:	Thursday 11th June 2026	Officer Responsible:	Morgan Lakey

1. Weed Control & Drain Maintenance

The maintenance works carried out last year generally accorded with the recommendations approved by the Commissioners at its last annual meeting.

Roundup herbicide applications were applied to the district drains included within last year's machine cleansing programme, and to other drains where it was required to control dense stands of reed and emergent aquatic vegetation.

As with the previous year, the Commissioners were successful in securing funding from the DEFRA mobile pumps package, allowing fully funded improvement works to be carried out at the Pumping Station. Hard standings were installed to allow for the deployment of back up mobile pumps in the event of a breakdown. Last year's revetment works were also completed under the same funding package and the pre-planted coir rolls and hydro-seeded banks are re-establishing the vegetation at both sites, however, reach 7-17 will require additional seed to support the grass cover. It was agreed with the Chair, the District Officer would complete this task to save additional visits and costs to the Commissioners.



Re-established Revetment works, reach 6a – 7 April 2026



Completed Revetment works April 2025

A recent joint inspection of the Commissioner's district drains has been undertaken with the District Officer and Chair. The inspection revealed that majority of drains are in a generally satisfactory condition and being maintained to a good standard, indicating that many of the district drains that fall within this year's machine cleansing programme will only require light machine cleansing to retain their current good status.

Drains to the West of the Prison

The Commissioner's district drains to the west of the prison are generally in good condition. The aquatic vegetation in reach 19-20 of the EEDA drain continues to provide a natural filter from the discharge of the industrial area and the high banks will contain any water level rise experienced during a rainfall event. The South West reaches of the Commissioner's drains are programmed for machine cleansing following the harvest of the adjacent crops this season. Reach 19-20 will remain uncleansed and monitored throughout the year to ensure there are no water conveyance issues. This reach will also be included in the proposed Ecological survey this year, to identify the extent of the biodiversity and if there is any evidence of the pollution incidents impacting on the aquatic habitats.



Aquatic vegetation providing natural filtration, reach 19-20



Point 20, Failing concrete bagged headwall

The inspection also highlighted the concrete bagged headwall on the landfill pond discharge, has deteriorated and become dislodged, eroding the toe of the bank. This issue has been raised before, however it still remains unresolved and will only deteriorate further. The Commissioners may wish to take this opportunity to discuss how they wish to proceed with the matter going forward.

As part of the inspection, the water control structure at point 6a was visited to observe and discuss current water level management and review the structure condition. It was noted that some of the timber boardwalk and the dam boards have signs of rot and decay. It is recommended that the machined

hardwood dam boards are replaced along with the treated deck boards and an additional kick board and mid rail on the downstream edge are installed. Once the structure has had the remedial works completed, it will be included in the next Health & Safety inspection to identify any other improvements required and to ensure it remains compliant and safe for the District Officer to continue using. In anticipation of the Commissioners approving the recommendations, a provisional sum has been included within the estimated costs for the remedial works to be completed.

Drains to the East of the Prison

The district drains to the east of the prison remain in a generally satisfactory condition due to being machine cleansed last season. Two sections of redundant rabbit fencing were identified during the programmed works at point 16 & 11. Since installation they have become overgrown with bramble and now restrict the flail mowing and hinder visibility during machine cleansing works. It is recommended the Board contact the relevant landowner to request the removal or agree for it to be removed by the Commissioners when their contractor's excavator is programmed for machine cleansing in the area.

As the Commissioners have formerly agreed, in recent years, it is again recommended that the main Norwood Pumping Drain, reach 1-2-10, is included within this year's phased machine cleansing programme. Historically this has proven to be an effective method of reducing the weed mass at the manually cleansed weedscreen during winter pumping periods.

An allowance has been included within this year's estimated costs to allow for a Roundup Pro-Biactive herbicide application to be made in advance of the programmed machine cleansing work, and in any other district drains identified as requiring herbicide treatments, to control emergent weed and reed growth.

The Commissioner's flail mowing requirements were undertaken by M&C Agriculture last year, and they have indicated they are available to undertake the flail mowing requirements again for the ensuing year. The flail mowing regime was discussed during the inspection and it was agreed to increase the uncut marginal vegetation on the Commissioner's drains for a number of benefits, including cost saving and to enhance biodiversity. The proposal is to cut approximately halfway down the bank, leaving the bottom bank and marginal vegetation uncut. Majority of the district drains have poor soils on the bankside and the vegetation finds it hard to establish and provide complete ground cover. Leaving more uncut will allow the bank vegetation to establish a denser sward, increasing the bank stability and wildlife benefits. A sum for the completion of flail mowing district drains has been included within the estimated costs.

A provisional sum has also been included within the estimate for any other emergency machine cleansing, culvert clearance or filamentous algae (Cott) removal works that may be deemed necessary later in the year.

2.1 The estimated costs of this year's recommended weed control and drain maintenance works are shown below, please refer to the following plan for locations.

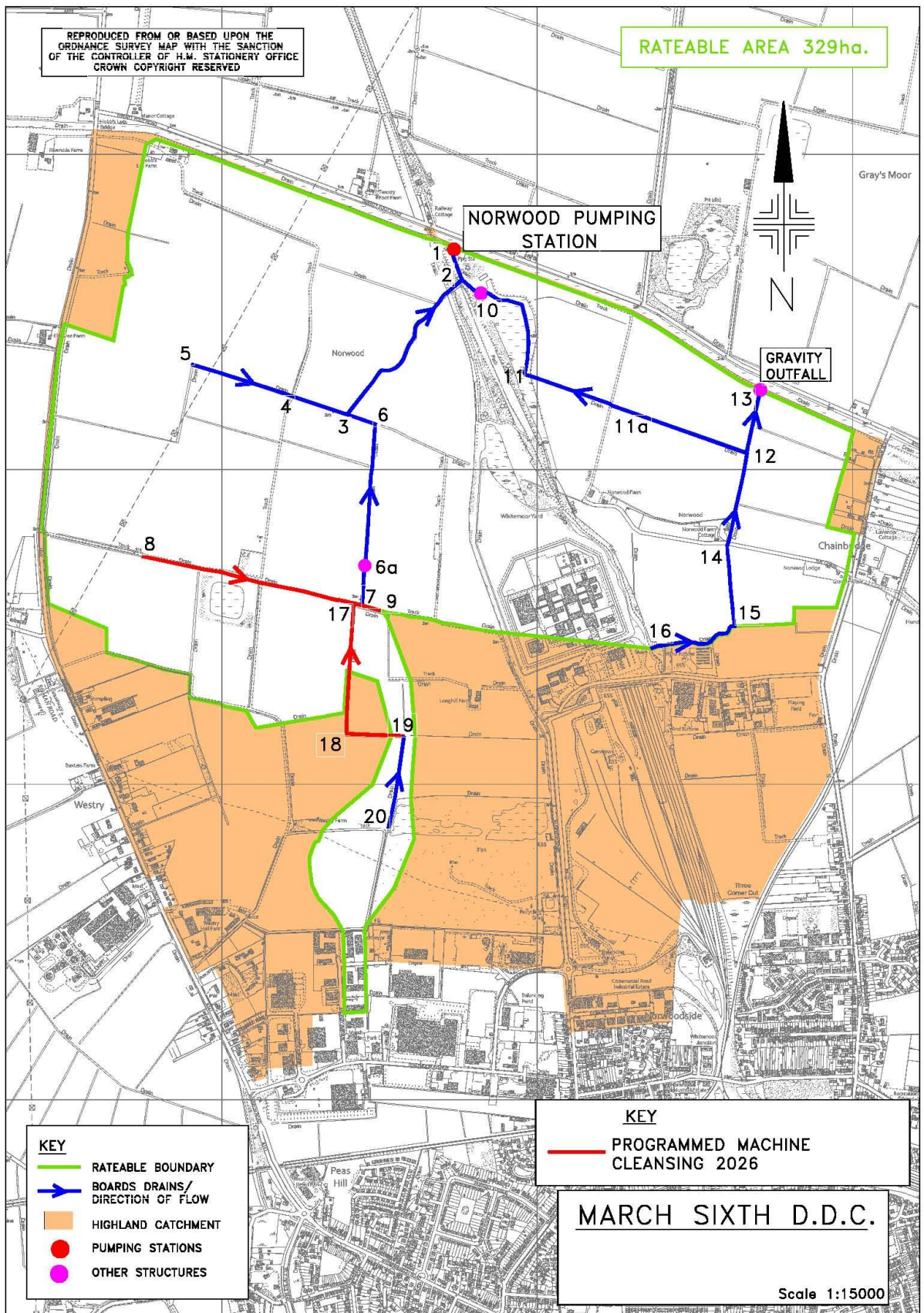
1. Drains to South West of the Prison

Orders for the application of herbicides by the Middle Level Commissioners are accepted on condition that they are weather dependant, and they will not be held responsible for the efficacy or failure of any treatment.

Author Name: Morgan Lakey
Role: Operations Manager

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Provided by the Middle Level Commissioners		Item No:	7
Meeting:	MARCH SIXTH DDC (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: MECHANICAL & ELECTRICAL
Date:	Thursday 11 th June 2026	Officer Responsible:	Dave Bantoft

1. M&E key messages and advice

Other than the matters previously reported or described below, only routine maintenance has been carried out since the last meeting and the pumping plant at each of the stations is mechanically and electrically in a satisfactory condition. The stations and pumps are at an age where reliability is a concern and a plan should be put in place to overhaul or replace items as necessary to ensure ongoing reliability.

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. 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.



Table 1: Key Health Indicators

Station	Built	Pump	Pump Overhaul	Thrust Bearing	Controls	Weedscreen Bars
Norwood	1964	1964	2006	2020	1992	1964

The Key Health Indicators table above shows the critical area for concern and improvement is the pumps. The pump is 62 years old with last refurbishment being 20 years ago. The Board is advised to develop and start a pump refurbishment/replacement plan for the pump that's due refurbishment. Having a plan in place and underway helps to secure further grant funding when it comes available, such as the recent IDB Recovery Fund.

Submersible pumps are often not cost effective to repair and lead time on new pumps can be up to a year. Standard pumps such as Norwood are normally cost effective to repair and lead times can be as short as 4 weeks or can be over a year if impellers are damaged and have to be reverse engineered. Costs can be in the range £30k to £100k depending on pump condition.

The Pump current has been rising over the last years inspections and the pump does sometimes trip out. This could be caused by a build up of debris in the sump, electrical or mechanical issues with pump. The sump should be checked and cleared of any debris and if that does not rectify the issue then the pump should be overhauled. It is difficult to estimate pump overhaul costs as condition is not fully known until the pump is removed but it is likely to cost c£30k to £50k. The pump was last overhauled in 2006. The weedscreen bars are heavily corroded and consideration should be given to their replacement which is likely to cost c£10k plus dam and dewatering costs. The control panel is now in excess of 30 years old should be replaced to ensure its reliability. A replacement panel is likely to cost c£10k to £20k.

The power factor correction in the current control panel has failed and this should be replaced which is likely to cost c£2K.

1.2 Electricity Readings

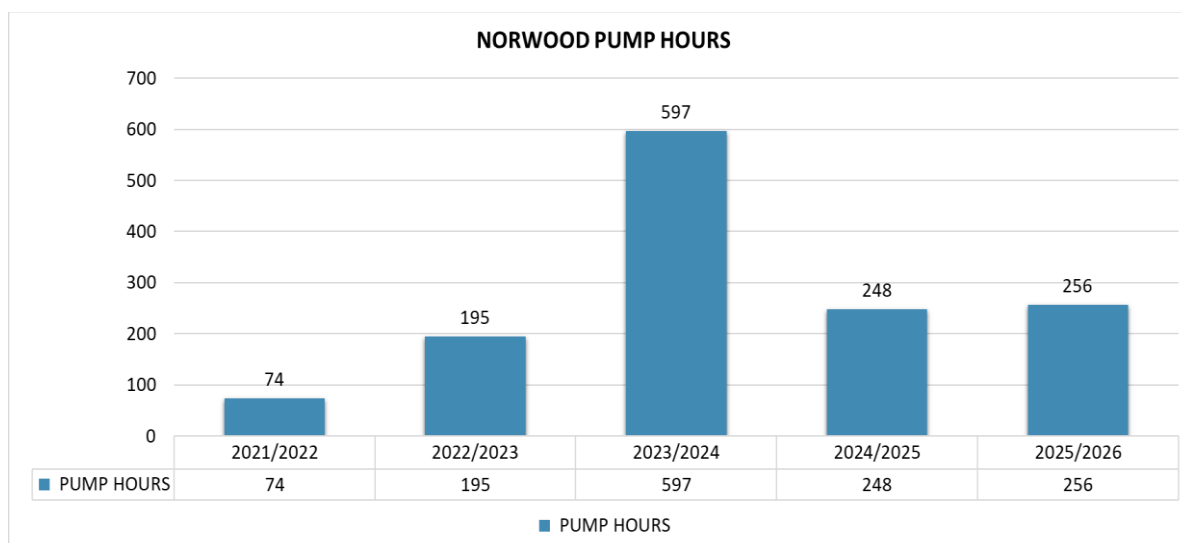
Taking regular and accurate manual electricity meter readings is very important; even for sites with meters that are read remotely. There have been cases of significant variances between bills and actual usage, regular meter readings and pump hours readings are essential for verifying bills and forecasting usage.

Moving forward it is requested that the Pump Attendants/District Officers take electricity meter readings and pump run hours readings monthly (as close to the 1st of each month as they can) and then forward them onto the M&E Engineer David Bantoft on david.bantoft@middlelevel.gov.uk or 07768 026119.

If you are unable to provide readings, or would prefer, the MLC can take quarterly readings; these will be at a cost to the Board for the time and mileage involved. Please approve this if it is required. Approximate cost will be £60 per station per quarter.

Without regular electricity meter readings, the MLC cannot verify electrical bills.

2. Pumping summary



3. Inspections

- 3.1 The last routine inspection at Norwood Pump Station took place 26th February 2026.
Recommendations / Remarks include:

- 1) The level controller needs resetting to include an offset for telemetry.
- 2) Weedscreen is severely corroded and needs replacing.
- 3) New winch and wire rope to be fitted to flap door (when area is clear – currently overgrown).
- 4) Mains cable leaking tar / oil.
- 5) Power factor correction fuses removed as one of the cables to capacitor has burnt out. Also, sump pump winding resistance to earth now 1.86 MΩ 1.8A.

- 3.2 The mandatory site Electrical Installation Condition Report (due every 5 years) are in date.

Station	EICR Date	EICR Due
Norwood	23-Apr-2024	23-Apr-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.

Author Name: Dave Bantoft

Role: M&E Engineer