

Provided by the Middle Level Commissioners		Item No:	7
Meeting:	WARBOYS SOMERSHAM & PIDLEY IDB (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY & CAPITAL PROGRAMME
Date:	Thursday 28 th May 2026	Officer Responsible:	Nicola Oldfield

RECOMMENDATIONS

The Board is asked to:

- A. 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.
- B. Confirm if it wants the Engineer to produce a Pump Refurbishment/Replacement Plan for all pumps for the subcommittee.

1. 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.

Refer to Appendix 1 for more details.

2. Technical Services Overview

A new Senior Planning & Consenting Officer, Emma Ryder, joined the team at the beginning of March. She had been working for us on a consultancy basis since November last year and she has extensive experience in flood risk, economics and sustainable drainage. Emma is the first appointment in an ongoing recruitment campaign to better manage the increased planning and consenting workload resulting from new development across the Middle Level.

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.

Works completed for this district include the following:

- 1) Weedscreen Cleaner Upgrade Works (CW Engineering) at Washways Pump Station due to be carried out during the winter months, dates to be confirmed.
- 2) Weedscreen Cleaner Upgrade Works (CW Engineering) at Pidley Pump Station due to be carried out during the winter months, dates to be confirmed.

4. Capital Programme

The Chairman has asked the Consulting Engineer to develop a bid for funding from the recently announced Lowland Peat Discovery & Implementation Fund. This will be for work to replace inlet penstocks.

The Consulting Engineer is progressing this and will liaise with the Chairman during the development of the bid document. We will also confirm if there are resources available to deliver the works once funding is approved. These works are not included on the enclosed Capital Programme.

The Consulting Engineer has also been asked to consider works to refurbish/replace the failing steel sheet piling downstream of Washways Pumping Station. We recommend that a bid is made for FCERM GiA for this.

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 provided 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.

The Board is asked to:

- **Consider the development of an investment plan for asset refurbishment/replacement taking account of the recommendations made in the M&E Report in Appendix 3,**
- **Liaise with the Consulting Engineer to determine project suitability and timescales,**
- **Consider and agree to making a contribution towards the project costs to aid funding prioritisation, and**

- **Confirm acceptance of recommendations so we can prioritise developing funding bids ASAP.**

Author Name: Nicola Oldfield

Role: Chief Engineer

Appendix 1: Capital programme

Appendix 2: List of planning applications since last report

Appendix 3: M&E Report

Appendix 1

Warboys Somersham & Pidley Internal Drainage Board		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
Acre Fen 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	1,400.0	1400.0
	Pumping station pumping and control equipment replacement	4.6	252.0	0.0	10.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	366.6
	Pumping station automatic weedscreen cleaning equipmet	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	0.0	90.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High Fen 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	0.0	0.0
	Pumping station pumping and control equipment replacement	4.6	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.0	59.6
	Pumping station automatic weedscreen cleaning equipmet	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
	Pumping station compound/surrounds improvements	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pidley p/s	Pumping station replacement	0	0	0.0	0.0	0.0	0.0	10,000.0	0.0	0.0	0.0	0.0	0.0	10000.0
	Pumping station pumping and control equipment replacement	4.6	0.0	0.0	0.0	0.0	0.0	0.0	45.0	0.0	0.0	0.0	100.0	149.6
	Pumping station automatic weedscreen cleaning equipmet	0	0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
	Pumping station Control building refurbishment/replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Puddock 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	7,500.0	7500.0
	Pumping station pumping and control equipment replacement	4.6	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	139.6
	Pumping station automatic weedscreen cleaning equipmet	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	0.0	90.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Westmoor 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	4,100.0	4100.0
	Pumping station pumping and control equipment replacement	4.6	0.0	50.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	41.0	135.6
	Pumping station automatic weedscreen cleaning equipmet	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	15.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Washways p/s	Refurbishment of pumping station	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	239.0	239.0
	Pumping station replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23,860.0	23860.0
	Pumping station pumping and control equipment replacement	4.6	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.6
	Pumping station automatic weedscreen cleaning equipmet	0	0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	34.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0
Plant	Isuzu d-Max - AO17 WMW	0	0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
	Doosan DX140W Excavator - AU09 FEW	0	0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
Property	Puddock pumping station bungalow	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drainage Channels	Washways discharge channel piling replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	75.0
		27.6	252.0	130	119	0	0	10,010	185	0	75	255	37,380	48,434

Appendix 2

There have been 19 planning applications responded to since the last meeting.

There have been 3 applications for Byelaw Consent (to undertake works in and around watercourses) granted since the last meeting.

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

There have been 2 infiltration device applications acknowledged since the last meeting.

Provided by the Middle Level Commissioners		Item No:	7
Meeting:	WARBOYS SOMERSHAM & PIDLEY IDB (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: MECHANICAL & ELECTRICAL
Date:	Thursday 28 th May 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. For example, the weedscreen cleaner overhauls at Washways and Pidley. 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

			Pump		Weedscreen			
Station	Built	Pump	Overhaul	Control Panel	Weedscreen Bars	WSC Gantry	WSC O/H	WSC Controls
Acre Fen	1984	1984	2006	1984	1984	N/A	N/A	N/A
High Fen	1976	2021 (1)	2021 (1)	2020	2020	2020	2020	2020
		2009 (2)	2009 (2)					
			2005 (1)					
Pidley	1940s	1979	2007 (2)	2016	2003	2003	2026	2026
Puddock	1992	1992	2004 (1)	1992	1992	N/A	N/A	N/A
Washways	1975	1975	2016	2016	1998	1998	2026	2026
Westmoor	1962	1962	2007 (1)	2011	2000	2016	2016	2016
			2008 (2)					

The Key Health Indicators table above shows the critical area for concern and improvement is the pumps. The pumps range from 5 to 64 years old with last refurbishments ranging from 5 to 22 years ago. The Board is advised to develop and start a pump refurbishment/replacement plan for the 7 pumps that are overdue 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. The figures have been updated to include the weedscreen trolley and controls refurbishments at Pidley and Washways.

Submersible pumps such as those at Puddock and High Fen are often not cost effective to repair and lead time on new pumps can be upto a year. Standard pumps 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 Board is requested to confirm if it wants the Engineer to produce a Pump Refurbishment/Replacement Plan for all pumps for the subcommittee.

2. Minor Works

2.1 Puddock

The pumps at Puddock regularly show water ingress on the control panel. The insulation resistances are currently satisfactory. These submersible pumps have been in the longest of the boards pumps and lead times for overhaul or replacement of pumps of this type can be from 6 months to well over a year.

Last routine inspection took place at Puddock Pump Station on 4th March 2026. Recommendations / remarks include:

- 1) Slacker leaking excessively
- 2) Outlet doors not closing completely
- 3) Pump 1 PFC Fuse 1 blown – removed other fuses on capacitor

2.2 **Westmoor**

Last routine inspection took place at Westmoor Pump Station on 4th March 2026. Recommendations / remarks include:

- 1) Hose Drums need re-coating
- 2) Level Controller Buzz
- 3) Top Grease lines on both pumps don't seem to be getting grease through

2.3 **Acre Fen**

The Pump Cabinet is heavily corroded, and replacement should be considered or fencing around the station which would allow better access with digger to clean the screen. The control panel is from 1984 and the oldest of the WS&P control panels so should be replaced. This is likely to cost in the region of £18k.

2.4 **High Fen**

Routine inspections have identified that Pump 2 insulation resistance has been fluctuating over the last few years. This may be an indication of water ingress into the motor. Pump 2 has been set to duty and will continue to be monitored. If Pump 2 requires replacement the support frame will also need replacing as it is heavily corroded. Pump 2 discharge pipe is weeping which needs to be investigated to determine the repair required. Pumps of this type are often not viable to repair and replacements can be over 6 months lead time.

Last routine inspection took place at High Fen Pump Station on 4th March 2026. Recommendations / remarks include:

- 1) Pump 2 resistance varying, switched Pump 2 to duty, MLC to Monitor
- 2) Pump support frame is heavily corroded, if pump 2 needs to be removed a new frame will be required
- 3) Pump 2 outlet pipe is showing signs of weeping
- 4) Replaced heater in WSC panel

2.5 **Washways**

The electricity meter at Washways has been replaced and bills have been checked and verified against pump hours to ensure their accuracy.

Pump 1 vibration needs to be investigated to determine the cause, and it may need the pump or gearbox to be overhauled, the gearbox is likely to cost c£10k and the Pump c£40k.

Last routine inspection took place at Washways Pump Station on 5th March 2026. Recommendations / remarks include:

- 1) Running order 3241
- 2) Pump 4 Engine showing fault code 000729(002D9h). Also Pump 4 Engine won't re-engage switch back to engine
- 3) Terminal Box to replace in pipe chamber at rear of building – only 12
- 4) Excessive vibration on Pump 1 – investigation needed

2.6 Pidley

Access to Pidley station is problematic through the majority of the pumping season due to the condition of the tracks and these should be improved to facilitate safe access for machinery. Pidley level probes have been replaced with new and the mounting raised to reduce chance of water ingress and level control issues.

Last routine inspection took place at Pidley Pump Station on 19th March 2026. Recommendations / remarks include:

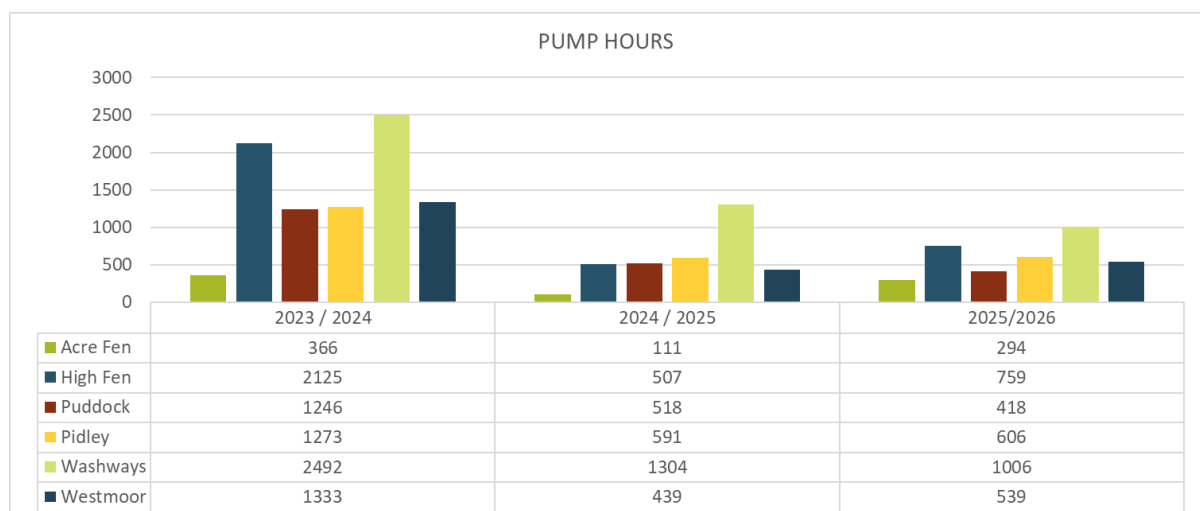
- 1) Pump 1 Noisy Motor (bottom bearing?)
- 2) Upstream sensor not displaying anything
- 3) Pump 2 Motor heater fuse has been removed

3. Inspections

- 3.1 HSB Engineering annual inspections for insurance were carried out on 4th September 2025 at Westmoor, High Fen, Pidley & Washways. All weedscreen cleaners passed inspections with no advisories.
- 3.2 The mandatory site Electrical Installation Condition Reports (due every 5 years) were completed successfully in December 2023.

Station	EICR Date	EICR Due
Acre Fen	6-Dec-2023	6-Dec-2028
High Fen	6-Dec-2023	6-Dec-2028
Pidley	13-Dec-2023	13-Dec-2028
Puddock	13-Dec-2023	13-Dec-2028
Washways	6-Dec-2023	6-Dec-2028
Westmoor	13-Dec-2023	13-Dec-2028

4. Pump Hours



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.

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Role: M&E Engineer