

|                                            |                                                                               |                      |                                                                                      |
|--------------------------------------------|-------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------|
| Provided by the Middle Level Commissioners |                                                                               | Item No:             | 7                                                                                    |
| Meeting:                                   | <b>MARCH WEST &amp; WHITE FEN IDB</b><br>(Hereafter referred to as the Board) | Subject:             | <b>CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY &amp; CAPITAL PROGRAMME</b> |
| Date:                                      | <b>Wednesday 6<sup>th</sup> May 2026</b>                                      | Officer Responsible: | <b>Nicola Oldfield</b>                                                               |

## 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 from MLC.
- B. Consider the development of an investment plan for asset refurbishment/replacement and instruct the Consulting Engineer accordingly.
- C. Confirm which of these Asset Improvement works the board would like to approve for completion in 2026 and 2027.
- D. Confirm if it wishes to consider submitting projects for inclusion in the FCERM Investment Programme (from July 2026) and agree the recommendations for prioritisation.
- E. Confirm if the Board can provide readings or would prefer, the MLC take monthly or quarterly readings; these will be at a cost to the Board.

## 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 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 authorises 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**

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.

### **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 being delivered for this district include the following:

- Weedscreen overhaul
- Improvement works for mobile pump deployment

### **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. Refer to the Mechanical & Electrical report for specific recommendations.

#### **The Board is asked to:**

- **Consider the development of an investment plan for asset refurbishment/replacement and instruct the Consulting Engineer accordingly**
- **Confirm if it wishes to consider submitting projects for inclusion in the FCERM Investment Programme (from July 2026)**

- Liaise with the Consulting Engineer to determine project suitability and timescales
- Agree making a contribution towards the project costs to aid funding prioritisation
- 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 applications since last meeting**

**Appendix 3: Operational Services**

**Appendix 4: Mechanical & Electrical Services**

## Appendix 1

|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
|--------------------------------------------------|------------------------------------------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------|--------------------------|
| <b>March West &amp; White Fen IDB</b>            |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| <b>Capital Improvement Programme (2026/2027)</b> |                                                            | <b>PREVIOUS YEARS</b> | <b>2023/24</b> | <b>2024/25</b> | <b>2025/26</b> | <b>2026/27</b> | <b>2027/28</b> | <b>2028/29</b> | <b>2029/30</b> | <b>2030/31</b> | <b>2031/32</b> | <b>2032/33</b> | <b>FUTURE YEARS</b> | <b>ALL YEARS</b>         |
|                                                  |                                                            | <b>Pre Yr 0</b>       | <b>Year 1</b>  | <b>Year 2</b>  | <b>Year 3</b>  | <b>Year 4</b>  | <b>Year 5</b>  | <b>Year 6</b>  | <b>Year 7</b>  | <b>Year 8</b>  | <b>Year 9</b>  | <b>Year 10</b> | <b>Post Year 10</b> | <b>Total Expenditure</b> |
| Beggars Bridge p/s                               | Pumping station replacement                                | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 500.0          | 0.0            | 0.0                 | 500.0                    |
|                                                  | Pumping station pumping and control equipment replacement  | 4.6                   | 0.0            | 0.0            | 0.0            | 20.0           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 24.6                     |
|                                                  | Pumping station automatic weedscreen cleaning equipmet     | 0                     | 0              | 0.0            | 0.0            | 50.0           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 15.0                | 65.0                     |
|                                                  | 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            | 2.0                 | 2.0                      |
|                                                  | 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                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| Duncombes 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            | 500.0               | 500.0                    |
|                                                  | Pumping station pumping and control equipment replacement  | 33.2                  | 0.0            | 30.0           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 63.2                     |
|                                                  | Pumping station automatic weedscreen cleaning equipmet     | 0                     | 0              | 30.0           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 30.0                     |
|                                                  | 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                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| Moore's 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            | 500.0               | 500.0                    |
|                                                  | Pumping station pumping and control equipment replacement  | 4.6                   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 4.6                      |
|                                                  | 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            | 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                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |

|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
|--------------------------------------------------|------------------------------------------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------|--------------------------|
| <b>March West &amp; White Fen IDB</b>            |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| <b>Capital Improvement Programme (2026/2027)</b> |                                                            | <b>PREVIOUS YEARS</b> | <b>2023/24</b> | <b>2024/25</b> | <b>2025/26</b> | <b>2026/27</b> | <b>2027/28</b> | <b>2028/29</b> | <b>2029/30</b> | <b>2030/31</b> | <b>2031/32</b> | <b>2032/33</b> | <b>FUTURE YEARS</b> | <b>ALL YEARS</b>         |
|                                                  |                                                            | <b>Pre Yr 0</b>       | <b>Year 1</b>  | <b>Year 2</b>  | <b>Year 3</b>  | <b>Year 4</b>  | <b>Year 5</b>  | <b>Year 6</b>  | <b>Year 7</b>  | <b>Year 8</b>  | <b>Year 9</b>  | <b>Year 10</b> | <b>Post Year 10</b> | <b>Total Expenditure</b> |
| Staffurths Bridge p                              | Pumping station replacement                                | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 500.0               | 500.0                    |
|                                                  | Pump and gearbox overhaul                                  | 4.6                   | 0.0            | 0.0            | 0.0            | 40.0           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 44.6                     |
|                                                  | 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            | 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                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| West Fen p/s                                     | Pumping station replacement                                | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 500.0          | 0.0                 | 500.0                    |
|                                                  | Pumping station pumping and control equipment replacement  | 4.6                   | 0.0            | 0.0            | 0.0            | 20.0           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 24.6                     |
|                                                  | Pumping station automatic weedscreen cleaning equipmet     | 0                     | 0              | 1.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 1.0                      |
|                                                  | Pumping station Control building refurbishment/replacement | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 2.0            | 0.0            | 0.0                 | 2.0                      |
|                                                  | 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                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| Pump o/h programme                               |                                                            | 10.0                  | 10             | 10.0           | 10.0           | 10.0           | 10.0           | 10.0           | 10.0           | 10.0           | 10.0           | 10.0           | 0.0                 | 110.0                    |
| Drainage Channels                                | Refurbishment of inlets/outfalls                           | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 0.0                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |

|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
|--------------------------------------------------|------------------------------------------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------|--------------------------|
| <b>March West &amp; White Fen IDB</b>            |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| <b>Capital Improvement Programme (2026/2027)</b> |                                                            | <b>PREVIOUS YEARS</b> | <b>2023/24</b> | <b>2024/25</b> | <b>2025/26</b> | <b>2026/27</b> | <b>2027/28</b> | <b>2028/29</b> | <b>2029/30</b> | <b>2030/31</b> | <b>2031/32</b> | <b>2032/33</b> | <b>FUTURE YEARS</b> | <b>ALL YEARS</b>         |
|                                                  |                                                            | <b>Pre Yr 0</b>       | <b>Year 1</b>  | <b>Year 2</b>  | <b>Year 3</b>  | <b>Year 4</b>  | <b>Year 5</b>  | <b>Year 6</b>  | <b>Year 7</b>  | <b>Year 8</b>  | <b>Year 9</b>  | <b>Year 10</b> | <b>Post Year 10</b> | <b>Total Expenditure</b> |
| White Fen P/S                                    | Pumping station replacement                                | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 500.0          | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 500.0                    |
|                                                  | Pumping station pumping and control equipment replacement  | 0                     | 0              | 24.5           | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 24.5                     |
|                                                  | Pumping station automatic weedscreen cleaning equipmet     | 4.6                   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 4.6                      |
|                                                  | Pumping station Control building refurbishment/replacement | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 5.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 5.0                      |
|                                                  | 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                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
| Pump o/h programme                               |                                                            | 2.5                   | 2.5            | 2.5            | 2.5            | 2.5            | 2.5            | 2.5            | 2.5            | 2.5            | 2.5            | 2.5            | 2.5                 | 30.0                     |
| Drainage Channels                                | Refurbishment of inlets/outfalls                           | 0                     | 0              | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0                 | 0.0                      |
|                                                  |                                                            |                       |                |                |                |                |                |                |                |                |                |                |                     |                          |
|                                                  |                                                            | <b>68.7</b>           | <b>12.5</b>    | <b>98.0</b>    | <b>12.5</b>    | <b>142.5</b>   | <b>12.5</b>    | <b>512.5</b>   | <b>17.5</b>    | <b>12.5</b>    | <b>514.5</b>   | <b>512.5</b>   | <b>1,519.5</b>      | <b>3,435.7</b>           |

## **Appendix 2**

There have been 23 planning applications responded to since the last meeting.

There have been 1 application for Byelaw Consent (to undertake works in and around watercourses) have been granted since the last meeting.

There have been 3 applications for Byelaw Consent (to discharge to a watercourse) have been granted since the last meeting.

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



|                                            |                                                                               |                      |                                                              |
|--------------------------------------------|-------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------|
| Provided by the Middle Level Commissioners |                                                                               | Item No:             | 7                                                            |
| Meeting:                                   | <b>MARCH WEST &amp; WHITE FEN IDB</b><br>(Hereafter referred to as the Board) | Subject:             | <b>CONSULTING ENGINEERS REPORT:<br/>OPERATIONAL SERVICES</b> |
| Date:                                      | <b>Wednesday 6<sup>th</sup> May 2026</b>                                      | Officer Responsible: | <b>Morgan Lakey</b>                                          |

## 1. Weed Control & Drain Maintenance

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



Health & Safety remedial works and access improvements at West Fen Pumping Station for deployment of Mobile Pumps in the event of a breakdown

The Board were successful in obtaining Government funding again last year, providing improvement works to assist the deployment of mobile pumps in the event of a breakdown. Health & Safety improvements, identified by the Boards Cope Safety Management consultants, were also completed at each pumping station.

Provisional notices for this year's intended machine cleansing works have been sent out and the extent of this year's phased programme of maintenance works is shown on the site location plan at the end of this report.

A recent inspection of the Board's district drains has revealed that the majority are in a generally satisfactory condition and being maintained to a good standard. The inspection indicated that many of the district drains that fall within this year's phased machine cleansing programme will only require light machine cleansing to retain their good status.

Similar to last year's inspection, there are several relatively short lengths of bank subsidence throughout the district. The majority of these are reasonably insignificant and can, with periodic monitoring, hopefully be left to "self-heal". Should remedial intervention be required in the future, they can be prioritised in order of their severity and integrated when the machine cleansing is programmed for the affected reach, also ensuring any ecological requirements are met before any proposed bank re-instatement works take place. If a new area of bank subsidence is identified it is critical that it is reported as soon as possible to allow prompt intervention if required. This reduces the risk of water voles being present and the increased cost of displacing them. An ecological survey would still be required to prove their absence before any works could promptly commence.

As the Board's annual meeting falls during the early part of the growing season, it is proposed that an inspection of the Board's drains be undertaken during the summer months in order to identify other areas of bank subsidence, and then to prioritise the worst affected reaches such that they can be programmed and dealt with under the phased programme of bank revetment works. In this

respect, a sum has been allocated in the Board's estimated costs to allow for toe board and piling works to be undertaken to stabilise and return the side sloping banks to their original profile.

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 growths following the Board's inspection later in the summer months.

The Board's flail mowing requirements were undertaken by M&C Agric Services last year, and they have indicated they are available to undertake the Board's flail mowing requirements again for the ensuing year. A sum for the completion of flail mowing Board's drains has been included within the estimated costs.

A provisional sum has been allocated within the Board's estimated costs to allow for any emergency machine cleansing, Cott (filamentous algae) removal or culvert clearance works that may become necessary later in the year.

## 2. **Estimated Costs of Anticipated Drain Maintenance and Weed Control Programme**

The estimated cost of this year's recommended Weed Control and Drain maintenance works is as follows. Please refer to the following site plan for locations.

|                                                                                    |                                        |      |     |      |          | £ |
|------------------------------------------------------------------------------------|----------------------------------------|------|-----|------|----------|---|
| 1.                                                                                 | Machine cleanse the following reaches: |      |     |      |          |   |
| <u>Doncombes Catchment Area</u>                                                    |                                        |      |     |      |          |   |
| 4-5-6-7-8-9-10                                                                     | 1500                                   | m    | @   | 1.30 | 1950.00  |   |
| <u>West Fen Catchment Area</u>                                                     |                                        |      |     |      |          |   |
| 29-30-31-32-33-34                                                                  | 1100                                   | m    | @   | 1.30 | 1430.00  |   |
| 36-34-35                                                                           | 1400                                   | m    | @   | 1.30 | 1820.00  |   |
| 37-130-131-132                                                                     | 900                                    | m    | @   | 1.30 | 1170.00  |   |
| <u>White Fen Catchment Area</u>                                                    |                                        |      |     |      |          |   |
| 143-144-145-145a                                                                   | 1400                                   | m    | @   | 1.30 | 1820.00  |   |
| <u>Provisional Item/Estimated sum</u>                                              |                                        |      |     |      |          |   |
| Allow sum for bank<br>reinstatement works<br>sub total                             | Item                                   | Sum  |     |      | 15000.00 |   |
| 2.                                                                                 | Roundup herbicide application          | Item | Sum |      | 2400.00  |   |
| 3.                                                                                 | Flail mowing of District Drains        | Item | Sum |      | 14000.00 |   |
| 4.                                                                                 | <u>Provisional Item</u>                |      |     |      |          |   |
| Allow sum for emergency machine<br>cleansing, Cott removal or<br>culvert clearance | Item                                   | Sum  |     |      | 3000.00  |   |

|                                                                                                                                                      |      |     |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|-------------------|
| 5. Fees for inspection, preparation and submission of the report to the Board, arrangement and supervision of herbicide applications and maintenance | Item | Sum | 3700.00           |
|                                                                                                                                                      |      |     | <hr/>             |
| <b>TOTAL</b>                                                                                                                                         |      |     | <b>£46,290.00</b> |
|                                                                                                                                                      |      |     | <hr/> <hr/>       |

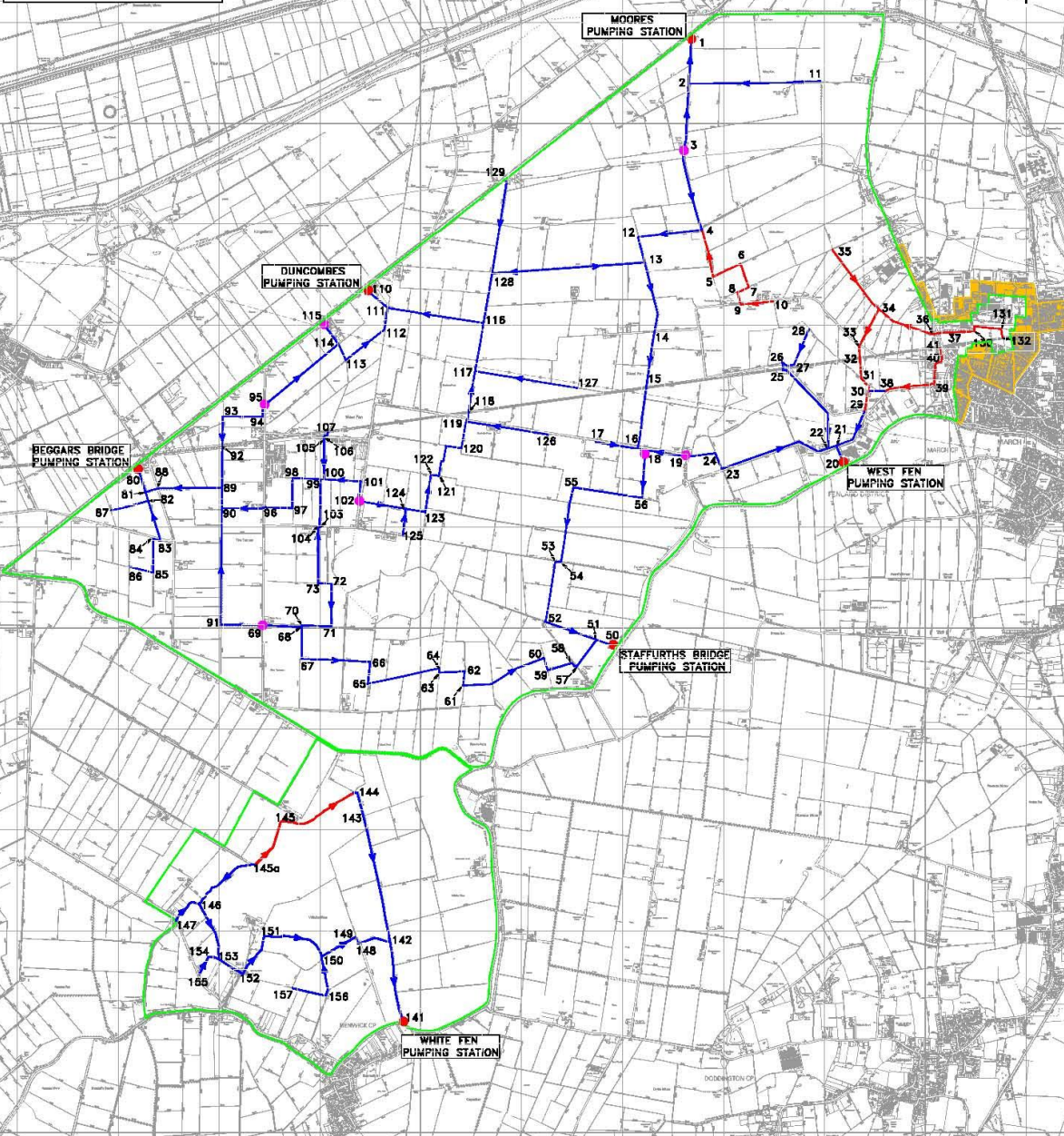
Orders for the application of herbicides are accepted on condition that they are weather dependant, and the MLC will not be held responsible for the efficacy of any treatments.

**Author Name: Morgan Lakey**

**Role: Operations Manager**

**KEY**

-  RATEABLE BOUNDARY
-  BOARDS DRAINS/  
DIRECTION OF FLOW
-  HIGHLAND CATCHMENT
-  PUMPING STATIONS
-  OTHER STRUCTURES



**MARCH WEST & WHITE FEN I.D.B.**

**PROGRAMMED WORKING SIDES 2026**

March 2026 NOT TO SCALE



|                                            |                                                                               |                      |                                                                     |
|--------------------------------------------|-------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|
| Provided by the Middle Level Commissioners |                                                                               | Item No:             | 7                                                                   |
| Meeting:                                   | <b>MARCH WEST &amp; WHITE FEN IDB</b><br>(Hereafter referred to as the Board) | Subject:             | <b>CONSULTING ENGINEERS REPORT:<br/>MECHANICAL &amp; ELECTRICAL</b> |
| Date:                                      | <b>Wednesday 6<sup>th</sup> May 2025</b>                                      | Officer Responsible: | <b>Dave Bantoft</b>                                                 |

## 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 Upgrade works at Staffurths Bridge and West Fen. 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 (not a MWWF station) 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 |               |               |               |               |               |
|-------------------------|---------|---------------|---------------|---------------|---------------|---------------|
| Station                 | Built   | Pump 1<br>NEW | Pump 2<br>NEW | Pump 1<br>O/H | Pump 2<br>O/H | Control Panel |
| Staffurths Bridge       | 1983    | 1983          | 1983          | 1983          | 2004          | 1983          |
| White Fen               | 1964    | 1991          | 1991          | 1992          | 2014          | 2006          |
| Turves (Beggars Bridge) | 1972    | 1972          | N/A           | 2004          | N/A           | 1972          |
| Moores                  | 1989    | 1989          | N/A           | 2018          | N/A           | 1989          |
| Duncombes               | 1993    | 2022          | 2025          | 2022          | 2025          | 1993          |
| West Fen                | 1972    | 1972          | N/A           | 2018          | N/A           | 1972          |

|                         | Weedscreen |         |              |
|-------------------------|------------|---------|--------------|
| Station                 | WSC        | WSC O/H | WSC Controls |
| Staffurths Bridge       | 2006       | 2026    | 2026         |
| White Fen               | 2017       | 2017    | 2017         |
| Turves (Beggars Bridge) | 2007       | 2007    | 2007         |
| Moores                  | N/A        | N/A     | N/A          |
| Duncombes               | 2004       | 2024    | 2004         |
| West Fen                | 2002       | 2026    | 2026         |

The Key Health Indicators table above shows the critical area for concern and improvement is the pumps. The pumps range from 1 to 62 years old with last Overhauls ranging from 1 to 43 years ago. The Board is advised to develop and start a pump refurbishment/replacement plan for the 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 short term Asset Improvement works for consideration this year (in priority order) are

1. Overhaul Pump and gearbox at Staffurths, This is the pump that has been in the longest of all the boards pumps. Circa **£40k** depending to condition.
2. Replace control panels at West Fen and Beggars circa **£20k each, so c£40k total** advised doing together as both panels are the same and it would make parts easily interchangeable.
3. Overhaul Weedscreen cleaner at Beggars circa **£30 to 50k** depending on condition.

**Please confirm which of these Asset Improvement works the board would like to approve for completion in 2026 and 2027.**

## 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 1<sup>st</sup> of each month as they can) and

then forward them onto the M&E Engineer David Bantoft on [david.bantoft@middlelevel.gov.uk](mailto:david.bantoft@middlelevel.gov.uk) or 07768 026119.

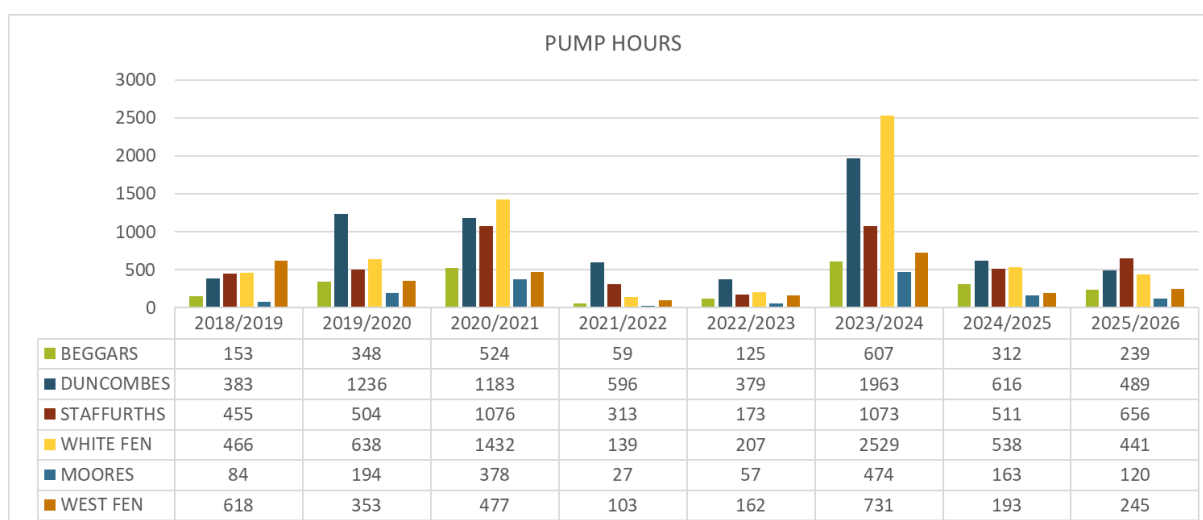
If you are unable to provide readings, or would prefer, the MLC can take monthly or quarterly readings; these will be at a cost to the Board for the time and mileage involved.

Please approve this if it is required. Estimated cost will be £126.00 per month or quarter as required.

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

## 2. Pumping summary

### 2.1 Pumping Hours



### 2.2 Pumping station routine inspection issues are summarised below.

#### 2.2.1 West Fen

The last routine inspection took place at West Fen Pump Station on 9/1/26. Recommendations / remarks include 1) Greased Pump – New Grease nipples required 2) Weedscreen Cleaner – Hydraulic hoses have perished and two buffer rubbers are missing.

WSC Upgrade Works through T2B for West Fen Ordered – Dates TBC

#### 2.2.2 Duncombes

The last routine inspection took place at Duncombes Pump Station on 9/1/26. Recommendations/remarks include 1) Pump 2 replaced 14/10/25, 2) Both outlets have broken bearing casings, 3) Outlet door not shutting fully.

#### 2.2.3 White Fen

The last routine inspection took place at White Fen Pump Station on 5/1/26. Recommendations / remarks include 'PFC Capacitors failed on both panels – new capacitors and new contactors required. Pump 2 tripped on arrival. Weedscreen Cleaner – right hand hose has slipped a notch on hose reel. - now rectified.

#### 2.2.4 Beggars Bridge (Turves)

The last routine inspection took place at Beggars Bridge (Turves) Pump Station on 5/1/26. Recommendations / remarks include 1) Requires offset programming on Telemetry for accurate water level readings, 2) Flap Door held open, 3) Motor Insulation Resistance dropping significantly. This needs further investigation and may require motor overhaul this summer.

#### 2.2.5 Staffurths Bridge

The last routine inspection took place at Staffurths Bridge Pump Station on 5/1/26. Recommendations / remarks include 1) Flap door held open. Flap door should only be open when letting in water. 2) Requires offset programming on Telemetry for accurate water level readings. 3) Control Levels currently set to drain works levels. Weedscreen Cleaner inspected – squeaking from cable wheels and floodlight on WSC broken off.

WSC Upgrade Works through T2B for West Fen Ordered – Dates TBC

#### 2.2.6 Moores

The last routine inspection took place at Moores Pump Station on 5/1/26. Recommendations / remarks include 1) Requires offset programming on Telemetry for accurate water level readings. Telemetry showing 98.68, level at station is 97.46. Telemetry has failed and needs repair. 2) Signs of subsidence and bank washing around the outlet. 3) Cables in motor terminal box damaged, temp repair made, needs further investigation and repair.

### 3. Inspections

- 3.1 The mandatory site Electrical Installation Condition Reports (due every 5 years) at Staffurths Bridge, Beggars Bridge, Moores, Duncombes and West Fen were carried out in April 2024. The EICR at White Fen was carried out in Jan 2025.

| Station                 | EICR Date   | EICR Due    |
|-------------------------|-------------|-------------|
| Staffurths Bridge       | 24-Apr-2024 | 24-Apr-2029 |
| White Fen               | 23-Jan-2025 | 23-Jan-2030 |
| Turves (Beggars Bridge) | 24-Apr-2024 | 24-Apr-2029 |
| Moores                  | 23-Apr-2024 | 23-Apr-2029 |
| Duncombes               | 24-Apr-2024 | 24-Apr-2029 |
| West Fen                | 24-Apr-2024 | 24-Apr-2029 |

- 3.2 HSB Engineering annual inspections for insurance were carried out in September 2025.

### 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**