| Provided by the Middle Level Commissioners | | Item No: | 8 |
|---|---|---|---|
| **Meeting:** | **RAMSEY UPWOOD & GREAT RAVELEY IDB (Hereafter referred to as the Board)** | **Subject:** | **CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY & CAPITAL PROGRAMME** |
| **Date:** | **Friday 9th January 2026** | **Officer Responsible:** | **Nicola Oldfield** |

**RECOMMENDATIONS**

The Board is asked to:

A. **Approve the application for consent for works at Ugg Mere Court Road, Ramsey Heights.**
B. **Consider the development of an investment plan for asset refurbishment/replacement. The Board is asked to instruct the Consulting Engineer accordingly.**
C. **Review pumping station key dates and inform the Consulting Engineer of any discrepancies or additional information.**
D. **Plan to refurbish or replace (as needed) a minimum of 1 pump during summer of 2026 at the Board's cost.**
E. **Confirm if it wishes to provide quarterly meter readings or would prefer the Consulting Engineer to do this at cost.**
F. **Inform the Consulting Engineer if the Board would like to be shown some good and bad examples to help with setting and monitoring your pumps.**

## 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, unlicenced 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.

## 2. Planning

*Ramsey Business Park – Galliard Homes Limited Mixed use development on land opposite Viscount Garage, St Marys Road, Ramsey (Phase 1 only) - 328/PL/210, 225, 278, 300, 354, 357, 359, 402, 403 & 416*

We have issued notice of intention to issue Surface Water Discharge Consent for Ramsey Business Park (Phase 1 only) and have advised the developer of the Surface Water Drainage contribution due. This in addition to a Byelaw Consent for the outfall structure, which will be issued when the contribution has been paid and the consent conditions agreed by the developer.

*Ugg Mere Court Road, Ramsey Heights (328/1)*

On November 24th, Mantair Ltd., applied on behalf of their clients of Ugg Mere Court Road, to install a new bio-unit to replace their failing septic tank. They also asked if it was possible to install a positive discharge pipe *c.*70m along the rear of the curtilage to outfall in a riparian headwater ditch, immediately eastwards of Green Dyke at node 69.

**It is recommended that the Board approves this application.**

A separate unconsented outfall at this location is currently subject to investigation.

**Author Name: Nicola Oldfield**
**Role: Chief Engineer**

**Appendix 1: Planning applications since last meeting**
**Appendix 2: M&E Report**

**Appendix 1**

There have been 7 planning applications since the last meeting.

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

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

**Appendix 2**

| Provided by the Middle Level Commissioners | | **Item No:** | **8** |
|---|---|---|---|
| **Meeting:** | **RAMSEY UPWOOD & GREAT RAVELEY IDB (Hereafter referred to as the Board)** | **Subject:** | **CONSULTING ENGINEERS REPORT: MECHANICAL & ELECTRICAL** |
| **Date:** | **Friday 9th January 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**

**Please review the pumping station key dates below, if there are any discrepancies or you can add any details, please let me know. The key dates are an important reference and will feed into the upcoming Key Health Indicators, District Studies and development of an investment plan for asset refurbishment/replacement.**

| | Station | | | |
|---|---|---|---|---|
| **Station** | **Built** | **Pump** | **Pump Overhaul** | **Controls** |
| Green Dyke | 1954 | 1977 | 1986 | 2025 |
| New Fen | 1949 | 1964 (1) 2005 (2) | 2021 (1) 2005 (2) | 2005 |
| Upwood Common | 1966 | 1966 | 2014 | 2025 |

The Key Health Indicators table above shows the critical area for concern and improvement is the pumps. The pumps range from 20 to 60 years old with last refurbishments ranging from 4 to 39 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 Board is advised that it should plan to refurbish or replace (as needed) a minimum of 1 pump during summer of 2026 at the Board's cost.**

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. **Maintenance and minor works**

2.1 Upwood Common Pumping Station

Pump Control Panel Refurbishment & Pulsar Ultimate will be installed this winter as part of the IDB Fund Tranche 2B – IDB Asset Resilience GIA package.

Since the last board meeting two Routine Inspections have been carried out at Upwood Common on 11th June 2025 and 22nd August 2025. The most recent inspection remarks are as follows: 1) Weedscreen corroded at the top, monitor for further deterioration. 2) New timer required – casing has come away. This timer will be replaced as part of the control panel refurbishment.

2.2 New Fen Pumping Station

Since the last board meeting two Routine Inspections have been carried out at New Fen on 11th June 2025 and 22nd August 2025. The most recent inspection remarks are as follows: Subsidence gauge spacing at 10.8mm.

The ground stability is a major concern at this site as there is movement of the surge chamber and the slab for the control room.

2.3 Green Dyke

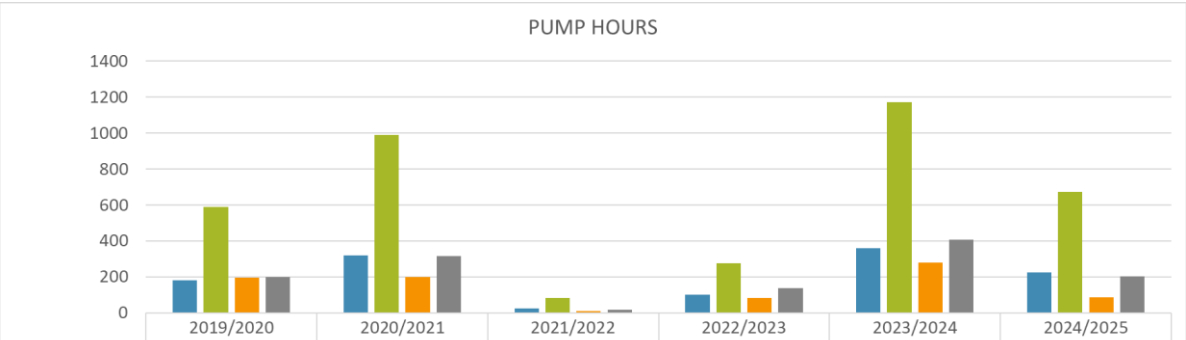
The control panel recently failed to start the pump due to a worn-out key switch, a temporary repair has been made and the full Pump Control Panel with Pulsar Ultimate will be installed this winter as part of the IDB Fund Tranche 2B – IDB Asset Resilience GIA package.

Since the last board meeting two Routine Inspections have been carried out at Green Dyke on 11th June 2025 and 22nd August 2025. The most recent inspection remarks are as follows: 1) Grease pump needs a new flexible coupling. 2) Weedscreen heavily corroded at the top and around the waterline. 3) Flap door knocking on pump shutdown. 4) MLC investigating new undervoltage protection systems. 5) Concrete breaking up around outlet piles.

The last recorded overhaul of the pump is 1986. It had issues with noises and vibration which are thought to have been caused by something trapped within the pump. **The pump is currently running ok, but due to age is due for complete overhaul which is likely to cost in the region of £40k to £60k.** This depends on the amount of wear and how complexity of the removal and reinstallation.

The discharge flap door is noisy which to be investigated fully will need the discharge area to be dammed to allow full inspection and plan for repair.

3. **Pumping summary (Upto April 2025)**




| | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | 2024/2025 |
|---|---|---|---|---|---|---|
| GREEN DYKE | 181 | 319 | 26 | 102 | 361 | 223 |
| NEW FEN 1 | 589 | 988 | 81 | 274 | 1173 | 671 |
| NEW FEN 2 | 195 | 200 | 11 | 83 | 280 | 88 |
| UPWOOD | 200 | 315 | 17 | 138 | 406 | 203 |

4. **Inspections**

4.1 The mandatory site Electrical Installation Condition Reports (due every 5 years) are in date as shown below.

| | | | |
|---|---|---|---|
| Ramsey Upwood & Great Raveley | Green Dyke | 12-Jul-2022 | 12-Jul-2027 |
| Ramsey Upwood & Great Raveley | New Fen | 12-Jul-2022 | 12-Jul-2027 |
| Ramsey Upwood & Great Raveley | Upwood Common | 12-Jul-2022 | 12-Jul-2027 |

5. **Water level Management**

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

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

**Author Name: Dave Bantoft**
**Role: M&E Engineer**