

BLACK SLUICE INTERNAL DRAINAGE BOARD

MINUTES

of the proceedings of a Meeting of the
Southern Works Committee

held at the Offices of the Board on the
9th April 2024 at 15:50

Members

Chairperson - * Mr M Rollinson

* Mr W Ash	* Mr J F Atkinson
* Mr V A Barker	Mr K C Casswell
Mr J Casswell	* Mr R Dorrington
Mr C Dring	* Cllr M Geaney
Cllr Z Lane	* Mr A Mair
Mr M Mowbray	* Mr M Taylor
* Mr C Wray	

(* Member Present)

In attendance: Mr D Withnall (Chief Executive)
Mr P Nicholson (Projects Director)
Mr K Methley (Pump Engineer)
Mr S Harrison (Maintenance Director)
Mrs A Chamberlain (Finance & Admin Director)
Mr P Holmes (Northern Works Chairperson)
Cllr P Bedford (Executive Committee)
Mr C Bird (Guest)

2293 Recording the Meeting - Agenda Item 1

Members were informed that the meeting would be recorded.

It was noted that guests Mr M Sly and Mr N Morris attended the inspection tour but couldn't stay for the meeting.

2294 Apologies for absence - Agenda Item 2

Apologies for absence were received from Mr K Casswell, Cllr Z Lane, Mr J Casswell, Mr C Dring, Cllr M Brookes, Mr J Fowler, Mr M Mowbray and Mrs G Nichols.

2295 Declarations of Interest - Agenda Item 3

There were no declarations of interest received.

2296 Minutes of the last meeting - Agenda Item 4

The Minutes of the Joint Works Committee, which was held on 3rd October 2023, copies of which had been circulated, were considered. It was AGREED that the Minutes should be signed as a true record.

2297 Matters Arising - Agenda Item 5

There were no matters arising.

2298 Discuss the Operations Report and Inspection - Agenda Item 6

The Projects Director led discussions about the inspection, as follows, with an accompanying presentation.

(a) Delivery of new machine - Hooby

It was noted that the new flailing machine has been received, the operator is currently undergoing training. The machine can be used for both cutting and flailing and was demonstrated as part of the inspection.

(b) Collapsed pipe - Drain 2/9 at 28 Northorpe Road, Donington (FX1935)

It was noted that a section of this pipe has started to fail, it was installed in the mid 1980's. It is a 30-metre section that requires replacing. This is not work that the Board are comfortable undertaking. Two quotes to complete that work have been received so far; £73,500 and £35,000. A third quote has been requested from another contractor but is not being responsive. The Executive Committee will make the decision around whether the Board goes ahead with one of these quotes, noting the big difference. The Board are also going to CCTV survey the upstream section to identify if the pipe is in good enough condition to line.

Mr C Wray noted that the farmer of the land behind this site was requested by the Board to leave some land uncropped for a compound and needs to know if this is still required or if it can be cropped. The Maintenance Director acknowledged that he will contact the landowner.

(c) Replacement of culvert - Drain 2/9 Wykes Road, Donington (FX1938)

This culvert failed under the road, installed in 1988 as part of the Donington Wykes improvement scheme. It being noted that there were a lot of pipes like this (Armco steel corrugated) installed in the 1980's.

Mr P Holmes questioned if it is known how many more of these pipes there are that are likely to require replacing? It was responded that there are a lot, exact numbers are unknown due to the culvert surveys not yet being completed to build the database.

The Projects Director highlighted the photographs taken from the CCTV surveying, shown on screen, noting that it is not always easy to identify holes within the pipe from it.

Lincolnshire County Council (LCC) have replaced this culvert, the Board's Officer's are due to make contact with them as it does not meet the Board's specification (headwall of two rows of blockwork above the pipe soffit).

The Chairperson pinpointed Drain 2/9 on the map, noting that there is a piped section downstream from the pump and his concern that this could also potentially be in poor condition. It was confirmed that it requires surveying to establish what condition it is in and whether it can be lined.

(d) Part collapsed headwall to level crossing access culvert - Donington Northings Pumping Station

This culvert headwall has failed, meaning there is currently no vehicular access to Donington Northings Pumping Station.

Negotiations are ongoing for an alternative access route to the pumping station, so that the crossing of a railway line that currently has to be completed, wouldn't be required.

It was noted that the culvert itself would not need replacing, it would be the headwalls only.

Mr V Barker noted a technique used by other IDBs; the use of tie bars. The Projects Director noted that it could be a possibility, dependant on if any of the bank is salvageable.

The Chairperson noted the importance of this, noting that this was the site of a fatality and so for employee safety, an alternative access needs identifying.

It was noted that the Board's contribution towards alternative access would be what it would cost to replace the culvert (c£20,000). If an alternative access was successful, the 'easier' option would be to dig out the current failed culvert, but then bank stability will need to be considered.

Mr C Wray questioned the process for crossing the railway line with a vehicle? It was confirmed that there are phones on site to ring Network Rail who inform when there is a safe time slot to cross. It was noted that it is a busy line. Mr C Wray noted that Network Rail are duty bound to give the Board access to cross.

The Projects Director noted the frustration in the length of time the negotiations with Network Rail around an alternative access are taking (started 2015).

(e) Reduced maintenance of Environment Agency (EA) Highland Carriers

The Projects Director noted that the EA have responded to the recent wet weather conditions and have requested a change to the maintenance the Board carries out on their behalf. This change entails less 'health and safety' cuts on raised banks (cutting top of banks) and more cuts on the full height of the banks. Low consequence systems are to be continued to be maintained.

The Chairperson referred to the location of Bell House Farm (Cliff Beck) and that he believes the culvert has collapsed due to observing higher water levels upstream of it.

It was noted that during the Rationalising the Main River Network (RMRN) process, the Board refused to take on the Cliff Beck drain due to it not having been maintained for a number of years, there being well established trees and vegetation on the bank tops. This has since been cleared by the Board through PSCA on behalf of the EA, these problems being due to previous lack of regular maintenance.

Mr C Bird noted that there was several hundred acres flooded, which was all reported through the Flood Line process. The Chief Executive added that the Board are working with Lincolnshire County Council (LCC) (Lead Local Flood Authority) to start on Section 19 reports which now have to be completed for both residential and agricultural land flooding. Section 19 reports look at the cause and how it can be prevented in the future.

(f) Recent flooding events - Helpringham Fen Pumping Station

It was noted that the Helpringham Eau overtopped in many places, affecting hundreds of acres.

Concerned residents have questioned what the Board can do regarding this, them being informed that it is Environment Agency (EA) responsibility, with the Board completing maintenance work on their behalf only. Discussion with the EA is ongoing about best practice and interventions going forward. The Projects Director added that a holistic approach needs to be taken around reducing the capacity of flow into the downstream sections.

Some issues were experienced with the pumps as the motor was running high amps, working beyond their design capacity, causing them to trip out.

Mr V Barker referred to variable speed pumps and that they could be run at a lower speed for some of the time to try and prevent this. The Pump Engineer noted that this would be of no advantage as they would still generate the same amount of heat causing the issues. It was further noted that Helpringham has got variable speed drive.

Mr P Holmes questioned how long it needs to be left to cool down when it overheats? It was noted that it can be dependant, but mostly it has cooled down enough by the time the workforce arrive at the site. It was further added that larger fans are being installed at some of the pumping station sites in the Motor control centre(MCC) panels in the pumping stations that have known issues with this.

It was further noted that the Board have been out to site since and surveyed near the footbridge at Helpringham and have provided the results to the EA.

(g) Improvements to Drain 18/7 - Donington Road, Horbling

It was noted that this drain overtopped during recent storm events, as it has done during high water levels previously. The landowner would like to know what could be done to prevent this.

One of the possibilities is to lower the section of bank adjacent to the catchment drain install a high level controlled overflow structure, potentially a penstock, which would then allow flows to run into the Horbling catchment, which would then be pumped into the South Forty Foot Drain (SFFD). A further option would be a filter drain on the opposite side of the road (existing syphon).

One of the 'quick fixes' is to plug the gap on the low point adjacent to the road with sandbags.

A survey has now been taken along this drain, with the next stage to analyse this data and discuss a way forward with the landowner. Funding may be achievable but is unlikely.

Mr V Barker made another suggestion of the raising of the bank on the roadside for a short length and where the water would usually run through grips into the drain, a pipe with a slacker door could be installed.

The Projects Director acknowledged this suggestion, adding that discussion still needs to be had with Lincolnshire County Council (LCC) about the water being able to camber off the road.

The Chairperson noted that he likes the concept of a diverter so that it goes down the Swaton Eau which is gravity fed and therefore not an expense for the Board to pump.

(h) Sempringham Fen Pumping Station

The installation of the weedscreen cleaner has now commenced, due to be completed in the following couple of weeks. There are also some civil works to take place, with the potential proposal being to install a precast unit adjacent to the existing gravity outfall pipe (existing headwall is brickwork which requires replacement) with a tilting weir to control the levels in the catchment (quotation c£20,000 for unit only to be installed by the Board).

(i) Natural Flood Management (NFM) Scheme, Pickworth

It was highlighted that an NFM scheme payment can be claimed alongside Sustainable Farming Incentive (SFI) payments. The Chairperson added that he believes it is a good time to promote possible NFM schemes, whilst farmers are looking for alternatives, the uptake may be better. The Maintenance Director added it is helpful now people can see the NFM work of the Board. It was added that it is £1250 for an SFI to encourage it to flood, with reedbeds etc.

(j) Dunsby Fen Pumping Station

It was noted that overtopping occurred here in a high-water level event in January 2021 and so when levels exceeded that previously highest known level, it was expected this would overtop, which it did, over c250 acres. It was noted that the land was cleared within a week, with the aid of the Board's mobile pump.

Discussion has taken place with the Environment Agency (EA) about this, and their short-term fix has been to use black polythene over the bank top a temporary measure to protect the bank from further damage to, ultimately, prevent failure.

The Projects Director added that himself and the Chief Executive have monthly meetings with the EA about any concerns in the catchment.

Mr V Barker referred to the temporary measure of using black polythene to cover the bank, noting that the EA have done similar at Quadring. Further noting his concern that when the water level rises, the water will go underneath the plastic covering.

Mr V Barker furthered his concern about the fact that the vegetation will be lost, meaning no roots holding the soil structure. Mr V Barker added that he felt there should be a continuous row of bags on the polythene on the waters edge side.

The Projects Director noted that a long term solution will be probably cost them several hundreds of thousands, which there is no budget allowed for.

It was questioned whether there are any other lower spots? On the section the Board have surveyed, it was confirmed that this is the lowest spot. It was added that if the low spots are built up, then overtime, there shouldn't be a low spot.

The EA's current preferred method was noted; finding a mean bank level so that rather than overtopping over a small low spot of 10 metres wide, it would overtop over a wider area of bank and therefore cause less damage to the banks. However, this will still require the Board to pump the overtopped water and the landowner will still have water on their land.

The committee were of the opinion that the polythene used on the bank top as a temporary measure needs to be removed as soon as possible for the life of the vegetation to be established before next winter, otherwise there will be a section of dead bank at risk of collapse.

(k) Lowland Agricultural Peatland Small Infrastructure Pilot (LAPSIP) Peat Protection Sites - Dyke Fen

It was noted that the Board have achieved funding (£172,000) for the LAPSIP project. ADA have led this project, it being about the protection of peat soils. This funding will enable the Board to control water levels in the in the Morton, Bourne & Leaves Lake Drove (Blackhole Drove PS).

The project involves the installation of two ~~land~~ water management control features. The Board have decided on titling weirs (solar powered, also has battery) which the Projects Director and Pump Engineer saw demonstrated in the Netherlands last year. These are due to be installed this financial year. The locations of the titling weirs are to be adjacent to the main road, and one towards Dyke Fen Pumping Station.

Mr W Ash noted that the land surrounding the one towards Dyke Fen Pumping Station is not peat land.

The Projects Director noted that it is about the control of water levels and being able to control certain areas at different levels.

(l) Lincolnshire Wildlife Trust (LWT) Wetland Project - Bourne North Fen

The Projects Director highlighted the wetland design, included in the agenda, created on CAD by the Board's Site Engineer.

Originally, it was hoped that work would commence on site in May, this is now looking unlikely, with work more likely to commence towards the end of the year. The Projects Director noted his concern around digging a new drain in the winter. This project aims to create a new wetland but also to polish the water that is introduced onto the site.

(m) Pump repairs / water levels / weed cleaner faults

The circumstances at Dyke Fen were noted; one of the pumps being unavailable as it was awaiting re-installation after repair. The Board therefore used all their auxiliary pumps (1 x 8 inch and 2 x 6 inch), and an 8-inch pump hired from South Holland IDB, in addition to the one pump in the pumping station. It was further noted that the water level came higher than the electrical control supply for the weedscreen cleaner and now requires replacement, which will be done higher than where it is currently, estimated at £6,000.

(n) SFFD overtopping - Quadring Fen Pumping Station

Similar to Dunsby, it overtopped at a low point near Quadring Fen Pumping Station. The Environment Agency (EA) have used the same method as discussed at item (j), polythene covering the bank, no soil put in previously to covering it over.

The Chairperson questioned whether the pumping station could be in danger if that bank breached? It was noted that it could.

(o) Capital Schemes Budget

The Capital Scheme Budget was noted, it being added that the only things to be added to it is the £2million of funding achieved for Damford and Trinity College pumping stations and the £132,000 for their specifications.

It was also noted that page 37 of the agenda details the projects that were removed from the budget.

2299 Receive the Engineer's Report - Agenda Item 7

Capital Asset Improvements

(a) 2024/25 Defra/EA Funded Flood and Coastal Erosion Risk Management (FCERM) Grant in Aid (GiA) Schemes

(i) Swaton Natural Flood Management (NFM) Schemes

This is now complete (delivered on behalf of the Environment Agency (EA) through the Public Sector Cooperation Agreement (PSCA)), and data is now being captured. The landowners are feeding back that they feel the valves should be closed off completely in order for them to work most efficiently, but in order for the EA to capture comparable data, everything needs to remain the same.

(ii) Sempringham Fen Pumping Station Refurbishment

The installation of the weedscreen cleaner has now commenced, due to be completed in the following couple of weeks.

There are also some civil works to take place, with the potential proposal being to install a precast unit adjacent to the existing gravity outfall pipe (existing headwall is brickwork which requires replacement) with a tilting weir to control the levels in the catchment (quotation c£20,000 for unit only to be fit by the Board).

(iii) Upper Catchment South Forty Foot Natural Flood Management (NFM) Studies and Works

It was noted that the Board are carrying out engagement and encouraging landowners to partake in these projects.

(iv) Black Sluice Catchment Strategy

The Projects Director, Pump Engineer and Grant in Aid Manager have been completing visual inspections of the pumping stations. This has identified some problems, however, all those that have been structurally inspected are not in the Southern Works area.

Currently the existing catchment (made up of 37 catchments, 34 pumped & 3 gravity), is being modelled based upon a division into 12 catchments.

(b) 2024/25 Board funded capital schemes

(i) Large Slips repairs - Estimate £159,000

The weather has not been favourable on being able to complete some of the slips that require repair. There are 47 large slips to repair so the budget of £159,000 may not go very far (spent six figures on one slip).

(ii) Jetting/CCTV survey of major pipelines - Estimate £75,000

Works will continue in the Wyberton area.

(iii) Dunsby Fen Catchment Works - Estimate £10,000

The contribution required for these works will not be known until the outcome of the Black Sluice Catchment Strategy is known.

(iv) Donington Wykes Pumping Station Motor Control Centre - Estimate £30,000

Issues have been experienced with pump control at this site.

(v) Pumping Station various water level controllers - Estimate £30,000

It was explained that during high water levels, the water level controllers become submerged under water and therefore cannot provide an accurate telemetry trace. Therefore, some are to be replaced and repositioned.

(vi) Rippingale Fen Pumping Station under pump inspections - Estimate £25,000

This is work to be carried out at all pumping stations; for visual inspection of condition and to replace nuts and bolts.

(vii) Hacconby Fen Pumping Station under pump inspections - Estimate £25,000

This is work to be carried out at all pumping stations; for visual inspection of condition and to replace nuts and bolts.

(viii) Lowland Agricultural Peatland Small Infrastructure Pilot (LAPSIP) Peat Protection Sites - Dyke Fen
As discussed at item Minute 2298(I).

(ix) General Culvert Replacement Contributions - Estimate £5,000
This budget allows for any contributions towards culvert replacement that the Board needs to access for maintenance, as per the terms of the Structures Replacement Policy.

(c) 2025/26 Defra/EA FCERM GiA Schemes

(i) Dunsby Fen Catchment Works Study - Estimate £414,000
This is going to be reprofiled into future year and will be dependent on the outcome of the Black Sluice Catchment Study.

(ii) Horbling Town Beck Flood Alleviation Scheme - £10,000
This is going to be reprofiled into future year and will be dependent on the outcome of the Black Sluice Catchment Study.

(d) 2025/26 Board Funded Capital Schemes

(i) Jetting to Major Pipelines – Estimate £40,000
The jetting and condition surveying of major pipelines is proposed to continue.

(ii) Graft Drain – Estimate £35,000
This scheme has been deferred to 2025/26.

(iii) SFFD Desilting Guthrum to Blackhole Drove Pumping Station - Estimate £70,000
This scheme has been deferred to 2025/26.

(iv) General Culvert Replacement Contributions - Estimate £5,000
This budget allows for any contributions towards culvert replacement that the Board needs to access for maintenance, as per the terms of the Structures Replacement Policy.

The Projects Director reminded the committee about the Emergency Response Plan procedure, included within the agenda, noting that it has been reviewed by management and is to be presented to the Audit & Risk Committee this month.

The Projects Director reminded the committee about the Crop Loss Compensation procedure, also included within the agenda.

2300 Report on Rainfall - Agenda Item 8

The rainfall figures at Black Hole Drove were circulated. The Committee RESOLVED that this report be noted.

The Chairperson noted that Middle Level Commissioners have rainfall records going back to 1833 and this is the wettest six months on record. The second wettest year was in 1838 and this year has seen 150mm more rain than then.

Electricity costs for pumping were noted:

December 2023: £168,000

January 2024: £98,000

2020/21 comparison - 12 months electricity cost: £121,000

The increase in standing charges was also noted (from £39,000 per annum to £168,000 per annum).

There being no further business the meeting closed at 17:27.