BLACK SLUICE INTERNAL DRAINAGE BOARD



Joint Works Committee Meeting

Thursday, 21st November 2019 at 2:00pm

Station Road, Swineshead, Lincolnshire PE20 3PW

Front cover: New JCB 145 Excavator



Black Sluice Internal Drainage Board

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Our Ref: IW/DPW/B10_1

Your Ref:

Date: 14th November 2018

To all Northern and Southern Works Committee Members

Notice is hereby given that a Meeting of the Joint Works Committee will be held at the Offices of the Board on Thursday, 21st November 2019 at 2pm at which your attendance is requested.

Yours sincerely

Chief Executive

AGENDA

- 1. Apologies for absence.
- Declarations of Interest.
- 3. To receive a presentation from Simeon Disley regarding improvements to the sea bank since the storm surge of 2013, the resulting works at Wrangle and what needs to be done next.
- 4. To receive and, if correct, sign the Minutes of the last Meeting of the Northern Works Committee held on 26th February 2019 (pages 1 8)
- 5. Matters Arising from the Northern Works Committee Minutes.
- 6. To receive and, if correct, sign the Minutes of the last Meeting of the Southern Works Committee held on 3rd April 2019 (pages 9 14)
- 7. Matters Arising from the Southern Works Committee Minutes.
- 8. To receive a report on Engineering Works for 2019 (pages 15 21) (a) Capital Scheme Budget (page 22)
- 9. Rainfall (pages 23 & 24)
- 10. Any Other Business.

BLACK SLUICE INTERNAL DRAINAGE BOARD

MINUTES

of the proceedings of a Meeting of the Northern Works Committee

held at the Supreme Inns, Bicker Bar on the 26th February 2019 at 15:45pm

Members

Chairman - * Mr P Holmes

* Cllr T Ashton Cllr C Brotherton * Cllr M Cooper * Mr R Leggott Mr R Needham * Cllr C Rylott * Cllr P Skinner Mr R Welberry

- * Cllr P Bedford * Cllr M Brookes Mr D Casswell * Mr J Fowler
 - Mr J E Pocklington * Mr P Robinson
 - Mr N Scott * Cllr Mrs S Waring

(* Member Present)

In attendance: Mr I Warsap (Chief Executive)

> Mr D Withnall (Finance Manager) Mr P Nicholson (Operations Manager) (Pump Engineer) Mr K Methlev

(Grant Applications Manager) Ms N McGarry Mr K C Casswell (Chairman of the Board)

Mr M Rollinson (Chairman Southern Works Committee)

1398 APOLOGIES FOR ABSENCE - Agenda Item 1

The following were not in attendance; Cllr C Brotherton, Mr R Needham, Mr R Welberry, Mr D Casswell, Mr J E Pocklington and Mr N Scott. There was some dispute around the co-opted members receiving the agenda and so officers of the board will investigate this further.

1399 DECLARATIONS OF INTEREST - Agenda Item 2

- (a) CLLR M COOPER BICKER Cllr M Cooper noted that he is a Borough Councillor for Bicker.
- (b) CLLR M BROOKES BICKER Cllr M Brookes noted that he is a County Councillor for Bicker.

1400 MINUTES OF LAST MEETING - Agenda Item 3

The Minutes of the Joint Works Committee, regarding the Northern Works Committee, which was held on 28th November 2018, copies of which had been circulated, were considered. It was AGREED that the Minutes should be jointly signed as a true record.

1401 MATTERS ARISING - Agenda Item 4

There were no matters arising.

1402 TERMS OF REFERENCE - Agenda Item 5

The Chairman presented the Terms of Reference for the Northern Works Committee and invited any opinions or questions.

Proposed by Clir Brookes and seconded by Mr K Casswell, all AGREED that the Terms of Reference be accepted and adopted.

It was noted that there are currently four co-opted members, so there are vacancies if anybody is aware of anybody that may be interested. Cllr Waring questioned what the criteria was for becoming a co-opted member? It was established that it is anybody that can contribute to the committee that has an interest in it; possibly a rate payer or somebody that has a relevant specialist interest.

1403 DISCUSS THE OPERATIONS TOUR & INSPECTION - Agenda Item 6

(a) <u>REPLACEMENT OF WEEDSCREEN CLEANER - WYBERTON MARSH</u> <u>PUMPING STATION</u>

The Operations Manager referred to Wyberton Marsh Pumping Station, explaining that its weedscreen cleaner is at the end of life. There is a proposed budget of £110,000 to replace the whole installation in 2020/21.

Mr R Leggott commented that he is disappointed with the life of the weedscreen cleaner that was only installed in 2000. The Pump Engineer added that most of the equipment at the pumping stations is now Bosker equipment, which is a very reliable make of equipment. The current weedscreen cleaner at Wyberton Marsh is another make of weedscreen cleaner, which has become unreliable. There is only one other pumping station remaining with the unreliable make of equipment. The Chief Executive further noted that it is also a heavily used pump. The weedscreen cleaners operate on a predetermined cycle every time the pump comes on, at this particular pump, the pump is run to maintain water levels within its catchment. The Operations Manager further noted that, where possible, an interim replacement of various parts is completed rather than a whole installation.

Proposed by Cllr T Ashton and seconded by Mr M Rollinson, all AGREED to recommend to the board the replacement of the weedscreen cleaner at Wyberton Marsh Pumping Station in 2020/21 with the proposed budget of £110,000.

(b) PROPOSED THIRD PARTY MAINTENANCE FOR LCC - BOSTON WEST PROCESSING FACILITY

The Operations Manager explained that Black Sluice IDB have been approached by Lincolnshire County Council (LCC) to maintain a section of watercourse that is the outfall for the lagoon from the waste transfer site. There is currently no maintenance being carried out on it. Black Sluice IDB already maintain a section of watercourse on the opposite side of the road.

LCC have requested an initial 'clean out' of the inlet and outlet to the lagoon and to also clear the outfall into the adjacent section of watercourse and section of watercourse along the boundary to the site.

The estimated cost for these works is £1,900 and LCC have further asked if Black Sluice IDB would consider an annual or bi-annual contract. The Operations Manager added that currently, LCC have not established what they would like the contract to entail but they do want Black Sluice IDB to go ahead with the initial clean.

The Chief Executive stated that once specification of the contract is received, then a Public Sector Cooperation Agreement (PSCA) could be established, much like Black Sluice IDB already have with other district councils.

All AGREED that Black Sluice IDB should take on this maintenance work on behalf of the Lincolnshire County Council.

(c) **BOSTON BARRIER TOUR**

The Operations Manager noted that the visit to the Boston Barrier was very interesting and informative and that future visits to site to view the barrier delivery and installation can be arranged.

The Chief Executive noted that there is a meeting being held with Van Heck on Friday 1st March to produce a pumping station disaster recovery contingency plan for Black Sluice IDB. They are also being taken to Black Sluice Pumping Station (Boston) to evaluate a similar opportunity for a disaster recovery contingency plan to be produced.

(d) PROPOSED CLEANSING WORKS - DRAIN 5/3, CHAIN BRIDGE ROAD, WYBERTON

The Operations Manager made reference to uncropped land with regard to cleansing works. At current, if land is not cropped, there is no reason to offer compensation. However, grass land is not classified as a crop and so there is no opportunity to offer compensation.

With reference to this particular case, the landowner has stated that he does not want the spoil material on his grass land, the Operations Manager noted that the Chairman has further spoken with the landowner.

The Chairman continued by explaining that, initially, the landowner was adamant that he didn't want the spoil on his land due to his concern that it is contaminated with creosote. By the end of the conversation, he had suggested that he may consider it being placed on another suitable site of his own, but that he wouldn't be able to cart it himself.

The Chairman suggested that it should be checked for contamination of creosote, which if it is found in the spoil shall mean it will become contaminated waste and will have to be disposed of in a different manner.

The Operations Manager questioned how, going forward, to standardise agreements between Black Sluice IDB and landowners with regards to uncropped land? This case can be seen as unique standalone case due to the possible contamination, but should there be a standard approach taken to others?

The Chairman suggested that it could be that, if it is to be carted away, the extra expense of this is paid half each by the landowner and board. However, he also suggested that it is not the board's responsibility to cart it away and so the landowner could be asked to pay the full cost for the board to cart it.

The Operations Manager clarified that this is what he is seeking direction on. Operationally, there are issues with carting material away including the slowing down of the process and the damage that can be caused such as the creation of large ruts.

Mr P Robinson questioned if material moving off site is obliged to be analysed? The Operations Manager clarified that it would be classified as waste transfer.

Mr P Robinson further questioned if it is still correct not to recognise grass as a crop? The landowner may take a crop of hay from it for instance.

The Finance Manager made reference to the Land Drainage Act as follows:

'Disposal of spoil by boards and local authorities

Shall not authorise the deposit of any matter if the matter deposited would constitute a statutory nuisance within the meaning of Part III of the Environmental Protection Act 1990.

Where injury is sustained by any person by reason of the exercise by an internal drainage board or local authority of their powers under subsection (1)(b):

(a) the board or authority may, if they think fit, pay to him such compensation as they may determine; and

(b)where the injury could have been avoided if those powers had been exercised with reasonable care, subsections (5) and (6) of section 14 above shall apply as if the injury had been sustained by reason of the exercise by the board or authority of their powers under that section.'

The Finance Manager therefore stated that if the spoil is contaminated and comes under the Environmental Protection Act 1990 the board will be responsible for the disposal of it.

Cllr M Brookes suggested that this particular case isn't a usual one, with the possibility of contamination, and so isn't a good example to be considering to try and determine a standard approach for future grassland / non-cropped land going forward. Cllr M Brookes further felt that in usual cases, with no contamination, on non-cropped land the board shouldn't pay more than they are obliged to.

The Chairman questioned how many of these grassland cases occur? The Operations Manager suggested only a couple of dozen.

Cllr T Ashton felt that option one presented within the agenda item gives the landowner some choice and if they are not contented with that then it should be the landowner paying for carting it away.

Mr R Leggott questioned if this matter can actually be resolved before testing for contamination. Once it is known whether the material is contaminated or not, the board will then be able to make decisions according to that outcome.

The Chief Executive suggested that the material is tested. If it is contaminated, then the board seek an order from Calders for removal off site. If it isn't contaminated, then the landowner be asked to cover the extra costs of the removal from the site, due to it being the landowner's request that it is not spread on the grassland adjacent.

All AGREED with the Chief Executive's proposal.

Mr J Fowler noted that it should possibly be considered to bring grassland into the same category as arable land for compensation.

The Finance Manager noted that he didn't feel that grassland could be categorised as a crop generically as there could be various different scenarios. For instance, it could be somebody's front lawn, but it would then be classed as a nuisance and so the board wouldn't be able to put the spoil there. He felt there ought to be some further investigation done into this matter, so that it is clear when the board have authority to put spoil in a certain area of grass and when the board are required to pay compensation.

Mr R Leggott suggested that the concept of grassland, with regard to identifying a standard approach, be brought to the board meeting when considering compensation as a whole. All AGREED.

(e) <u>WEEDSCREEN CLEANER REFURBISHMENT - CHAIN BRIDGE</u> <u>PUMPING STATION</u>

The Operations Manager stated that the replacement of the moving parts of the weedscreen cleaner at Chain Bridge Pumping Station have been budgeted for 2019/20. The estimated cost is £45,000.

(f) WASTE ISSUE - ALBAN RETAIL PARK

The Operations Manager made reference to the committee viewing this issue whilst on the inspection tour. He further explained that in April 2018 a notice was issued to the retailers around the rubbish that was being generated. It has been brought to this committee to identify a way forward of future maintenance of the site and to identify a way to stop the rubbish leaving the retailers sites and entering the drain.

Cllr M Brookes suggested that the owners of the buildings be asked to erect a catch fence around the car parking area which would prevent anything blowing across into the drain. He also noted that it would be in their interest, if the board keep having to clean the drain and invoicing them for the work, it would be just as cost effective for them to put the fence up. It also isn't very good publically, it is a reputation issue to the companies involved.

Mr P Holmes noted that the only problem with erecting a fence is that the car park goes right up to the brink of the bank and so it may limit the access for the board. The Operations Manager further noted that if an agreement were to be made around erecting a fence then the board would have to make sure there was still access.

Cllr P Bedford questioned whether the board should contact the owners of the site rather than the tenants as they are responsible for the site. The owners can then enforce particular conditions to the tenants.

Mr J Fowler added that they also may not understand the scale of the pollution as they do not have the view that the committee have had today and so photographs should maybe be sent to reinforce the issue.

Mr K Casswell questioned whether a site visit with the managers may be productive to show exactly the level of pollution that is being caused.

Mr R Leggott suggested that the board could offer to be the provider of the fence at the expense of the retailers.

The Finance Manager further noted that there is a new tenant about to join the retail park and suggested it would be good if this was resolved before they move in.

(g) PROPOSED UV LINING - DRAIN 12/2, LANGRICK ROAD, BOSTON

The Operations Manager explained that this is still an ongoing project. This is secondary to the Sempringham Fen site that is currently being worked on. The Operations Manager explained that he cannot give any more positive progress on this, until the business case is approved, which hopefully, will be within the coming months.

The Operations Manager explained that the proposed plan for this site is to clean out the channel, with him believing that the best option is to cutter suction dredge the section highlighted in green on map four of the North Forty-Foot Drain presented in the agenda. There is also potential to line some of the sections within the existing piped watercourse, as shown on map three of Langrick Road presented in the agenda. He further added that the estimate from Royal Smals of £96,100 was obtained in January 2018 with the intention to complete the work in 2018, however, the business case has not progressed significantly since this time last year, requiring a review of the estimate.

Cllr P Skinner noted that there is a lot of pipeline work being completed in Fishtoft and also questioned the condition of the pipeline? The Operations Manager explained that a survey has been completed and it is in a condition that can be lined. It is not at the point of collapse, but is in a bad enough condition that it requires some work doing to it. He further noted that the consultants are aware of the other work going on in the area and that there is potential for partnership funding.

The Chief Executive summarised that the condition of the existing assets is known, therefore the board is able to identify what work to undertake. Budgets have also been identified for this work. He therefore suggested that the Grant in Aid Manager be introduced to this case to produce a business case to try and progress this further.

Mr K Casswell noted his disappointment around this as it has been talked about for over a year. He acknowledged that it is not at the fault of Black Sluice IDB, further adding that it was stated at ADA Lincolnshire that the area of Lincolnshire is underspent by around £3 million. The Operations Manager noted that it is an overly difficult process for the outcome that it is reached. It was also noted how expensive it is, with a large percentage going to consultants.

(h) TREE ISSUES - DRAIN 4/67, BICKER EAU

The Operations Manager explained that Black Sluice IDB entered into an agreement with the Bicker Buds who are a voluntary organisation that aims to enhance the beauty of the village by improving and maintaining its public spaces. In 2013, Black Sluice IDB were approached by the Bicker Buds with regard to what enhancement the board could provide to the watercourse through the village. Normal board practice is that every watercourse is cut once, with high profile watercourses getting cut twice or three times. This watercourse is classified as a standard watercourse, Bicker pumping station is a booster pump to create the flows required towards the South Forty Foot Drain outfall.

The Parish Council have recently approached Black Sluice IDB regarding the danger of trees that are growing on the drain bank that are at risk of falling. The Operations Manager clarified that the board do not own any of the land that the watercourses or banks are on, just maintain them. The only time the board will intervene with trees or bushes is if they are restricting access for the board's maintenance, whereby the restriction does not allow for mechanical maintenance.

With regard to the section of watercourse with the trees at risk of falling, there are too many trees on this section for a machine to operate and so it is currently maintained by hand.

Therefore, the cost benefit to the board of removing the trees has to be considered, bearing in mind questions such as how long is the section of watercourse, how much would it cost to have the trees removed and would it be more cost beneficial to the board to do this or carry on maintaining by hand? The Operations Manager explained that there are other sections of the watercourse that are maintained by hand and so unless all trees are removed from every section of watercourse that is currently handmaintained, there won't be a cost benefit to the board to remove any trees.

The Operations Manager also noted that this isn't just specific to the site in Bicker. Others in Frampton and Wyberton have also approached the board about trees growing on the banks of watercourses. The Operations Manager has always responded to these that the board do not own any trees or banks and the only time they will be removed is if they are causing obstruction and preventing the board from maintaining the watercourse.

The committee agreed with the Operations Manager's response that the trees are not owned by and therefore not the responsibility of the board.

Mr M Rollinson suggested that the Bicker Buds could make an application for the funding available through Triton Knoll and that the board could support their application.

The Chief Executive summarised that the board will respond to the Bicker Buds that the trees are not owned by the board and are not interrupting with the conveyance of water and so will not be removed by the board but that we are willing to support an application for funding should they wish to pursue it.

Mr M Rollinson questioned if the board had sought any legal advice and whether if the tree did fall the board would be at all liable? The Chief Executive responded that the board have not took legal advice but he would be very surprised if the board was liable.

Cllr T Ashton noted that the trees in the middle of the village have been pollarded in the past and wondered whether somebody in the village would be able to remember who had done it.

The committee thanked the Operations Manager for the organisation of the inspection tour. They also felt that a letter of thanks should be sent to the Environment Agency at the Boston Barrier for the interesting visit and presentation.

1404 REPORT ON RAINFALL - Agenda Item 6

The rainfall figures at Swineshead were circulated. The Committee RESOLVED that this report be noted.

1405 ANY OTHER BUSINESS - Agenda Item 7

(a) Floodex 2019

The Chief Executive noted that it is the Floodex event on the 27th and 28th February at Peterborough Showground.

There being no further business the meeting closed at 16:56.

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 3rd April 2019 at 16:05pm

Members

Chairman - * Mr M Rollinson

* Mr W Ash
* Mr V A Barker
* Mr J Casswell
Mr C Dring
* Mr M Mowbray
Cllr S Wray
* Mr J R Wray

* Mr J F Atkinson* Mr K C Casswell* Mr R Dorrington

* Mr A Mair Clir B Russell

* Mr C Wray

(* Member Present)

In attendance: Mr I Warsap (Chief Executive)

Mr D Withnall (Finance Manager)
Mr P Nicholson (Operations Manager)

Mr P Holmes (Vice-chair & Chairman Southern Works Committee)

Cllr P Bedford (Executive Committee Member)
Cllr M Brookes (Executive Committee Member)
Mr J Fowler (Executive Committee Member)

Mr R Welberry (Northern Works Co-opted Member)

1414 APOLOGIES FOR ABSENCE - Agenda Item 1

Apologies of absence were received from Mr C Dring, Cllr B Russell, Mr J Pocklington and Cllr S Wray.

The Chief Executive acknowledged the Northern Works Co-opted Members and gave the Board's apologies for the oversight of the agenda's that didn't get sent out.

1415 DECLARATIONS OF INTEREST - Agenda Item 2

(a) MR J CASSWELL - PROPOSED NEW ACCESS ROAD TO DONINGTON NORTHINGS PUMPING STATION

Mr J Casswell noted his interest in this as the landowner.

(b) MR V BARKER - DOWSBY LODE PUMPING STATION

Mr V Barker noted his interest in this.

1416 MINUTES OF LAST MEETING - Agenda Item 3

The Minutes of the Joint Works Committee, regarding the Southern Works Committee, which was held on 28th November 2018, copies of which had been circulated, were considered. It was AGREED that the Minutes should be jointly signed as a true record.

1417 MATTERS ARISING - Agenda Item 4

There were no matters arising.

1418 TERMS OF REFERENCE - Agenda Item 5

The Chairman made reference to the email sent previously to the meeting explaining the mistake in the agenda item. The revised terms of reference were displayed on screen, with the only difference being the number of members / council representatives in the first two paragraphs and the quorum number in the first paragraph of section 2, as follows; *eight* members, *one South Holland* Board member, *one South Kesteven* Board member and a quorum being *six* members.

The Chairman noted that there are only five Southern Works Committee Co-opted Members and so there is availability for three more, further noting that it would be good to encourage younger members.

All AGREED that the Southern Works Committee Terms of Reference be RECOMMENDED to the Board for approval.

1419 DISCUSS THE OPERATIONS TOUR & INSPECTION - Agenda Item 6

The Operations Manager presented the agenda item as follows:

(a) FDGIA WORKS - DRAIN 2/11, MALTING LANE, DONINGTON

These works have been started and are due to be complete within the following few weeks. A total of 80 metres will have been replaced.

(b) PROPOSED REPLACEMENT OF A BRICK ARCH TUNNEL FOR THE LANDOWNER CULVERT 1684 - DRAIN 2/37 - MILL DRAIN, DONINGTON

This has been reviewed on multiple occasions over the last few years in relation to a replacement. The current price being offered to the landowner for a 12 metre x 1500mm culvert replacement is C£17,550. The Board could complete this work, if the landowner wanted to use other contractors to complete it then it would still have to be completed to the Board's specification. A response form the landowner is awaited.

(c) PROPOSED NEW ACCESS ROAD TO DONINGTON NORTH INGS PUMPING STATION

There is ongoing negotiation with Network Rail regarding proposed alternative access to Donington North Ings Pumping Station. Currently, the negotiations have not progressed any further than an initial cost for the access.

The Board does not wish to cross the railway line needlessly, there is an alternative, which is currently being discussed in more detail, subject to any compensation that may be available from Network Rail. This is now four years on from the first site visit. Once this alternative has been more established, consultations will take place with the landowner to negotiate access over his land. Mr J Casswell noted that he is happy to discuss with the Board as soon as they are in a position to do so.

The Operations Manager also added that the existing access culvert is not in very good condition and so the new access would remove the use of the current culvert.

(d) RMRN BSIDB ADOPTION OF EA MAIN RIVERS - HORBLING CATCHWATER, TOWN BECK & DIVERSION DRAIN

The Operations Manager made reference to the five previous Environment Agency main rivers that have been taken on by the Board for future maintenance and responsibility.

In reference to Horbling, there are some problems encountered during high flows, with the local farmer taking action to mitigate the possibility of the house flooding. There has been consideration of potential work to increase the capacity at Horbling Pumping Station to try and help resolve these issues.

(e) DOWSBY LODE PUMPING STATION

The roadway is in poor condition and requires repair. The Operations Manager has suggested two options for repair as follows; reclaim existing material or level out the existing material and import new material to level the existing tracks and looking just at the tracks rather than the whole road. A material that can compact would be used, a suitable material will be further reviewed.

The Operations Manager made further reference to a roadway at Bicker Fen, that the reclamation process was used on. It is quite a small outlay, however, it has a short shelf life, being dependent on the existing material in the road.

Mr V Barker mentioned the technique of pitch pointing, which is how the road was originally made.

(f) SOUTH FORTY FOOT DRAIN & SILT LAGOON - BILLINGBOROUGH FEN PUMPING STATION

The Chief Executive acknowledged Mr J Atkinson, Mr M Mowbray and Mr A Mair and posed the hypothetical question regarding if they were to own land adjacent to the South Forty Foot Drain and whether they would be interested in providing land for another lagoon in the section proposed to next be desilted; to which they all said they would be interested.

Mr V Barker suggested that for the next lagoon negotiation the solicitors are brought in earlier as he felt it was embarrassing that the Board hadn't got everything in place for Royal Smals to start working with the last lagoon.

The Chief Executive added that a suitable area has been identified which is privately owned and so will hopefully be privately negotiated, adding that in the last case there were a lot delays from the solicitors employed by the landowner.

(g) ANGLIAN WATER VALVE - HACCONBY PUMP DRAIN

This is an unconsented site with a concealed valve in the bank. The Board have been working at the site completing cleansing works and it has been supposed that the Board has damaged the valve.

Anglian Water have suggested that they won't look to recover the cost for the damage from the Board if the Board doesn't try to recover the cost of the repair of the bank.

The Chief Executive added that it is believed that the Board didn't actually hit the valve, but that the damage may have been caused by the vibrations from tracking across the bank. There were a few weeks between the Board carrying out the work and the problem being reported.

Mr V Barker noted that there are many Anglian Water pipe crossings etc. and that he suspects very few of them have the Board's consent for. He felt that they should be asked to provide detail of where they are all located.

The Chief Executive agreed, explaining that following the irrigation and abstraction meeting on the 14th May 2019, there will be another meeting with utilities to discuss this matter.

The Chairman added that with the twelve-month amnesty, all of the Anglian Water obstructions also need to be consented.

The Operations Manager continued that the valve was not protected, there was no concrete chamber around it, it was unmarked and not visible. It is believed that a meeting with them is the way to resolve and prevent these issues in the future. At current, the Board have asked for Anglian Water to prove they have consent for the structure to be there which is still awaited.

(h) LAND LOSS CLAIMS DUE TO BOARD WORKS AFTER AWS BURST

With regard to the new dyke at Dyke Fen, the ground is poor, the channel and the gradients of the bank aren't consistent. There have been several bursts along the drain. The Board generally maintain it from the south side. The landowner is concerned that the bank is in such a poor state that he is losing a considerable amount of land that he isn't being compensated for, and so action needs to be taken to ensure that the landowner doesn't lose any more land. The landowner feels he should be compensated for the land lost.

The Operations Manager noted that the benefit to the Board has to be considered if the bank was to be re-profiled, noting that he doesn't believe there would be a great benefit in spending time and money reprofiling it. In the short term, the Board are looking to carry out maintenance from the north side to give the land some respite and allow it to recover.

Mr W Ash noted that there have been numerous bursts in the past and that the soil is not stable, adding that he doesn't believe it is solely due to the Board's equipment.

(i) NEW FIELD ACCESS CULVERT - GRAFT DRAIN, NORTHGATE

The Operations Manager has met with the landowner on a few occasions, he has recently acquired the land and is keen to push this forward. The Operations Manager has agreed the location with the landowner for the placement of the new culvert. There may be an oppurutnity for the Board to offer a contribution towards it of around £1,000 in respect of the Board using it once / twice a year.

(j) BSIDB SCHEME WORKS - GRAFT DRAIN, NORTHGATE

The Graft Drain works (silt removal, cleansing, replacement / removal of culverts) have now started again, a budget of £20,000 is required to continue these works into 2020/21.

Proposed by Mr V Barker and seconded by Mr K Casswell, the committee AGREED to RECOMMNED a budget of £20,000 for the continuation of the Graft Drain works in 2020/21 to the Board.

(k) DE-SILTING WOKRS - HAMMOND BECK, QUADRING FEN

The Operations Manager noted that the same drain is also being worked on at Wyberton within the northern area.

The Chief Executive noted his thanks for the contributions and discussions that took place throughout the day. He also urged committee members to pass the word about the irrigation and abstraction meeting being held at the offices of the Board on the 14th May 2019 at 10:00am, also asking for people to ring the office to confirm their attendance.

1420 REPORT ON RAINFALL - Agenda Item 6

The rainfall figures at Black Hole Drove were circulated. The March 2019 figures were presented on screen and noted that they are now on the website. The committee RESOLVED that this report be noted.

1421 ANY OTHER BUSINESS - Agenda Item 7

(a) YELLOW FLOWER

Mr J Atkinson made reference to the 'yellow flower' that grows on the banks. He noted that it is now the time of year where it is about to start and questioned if farmer's can mow their own patches if they so wish?

The Chief Executive responded that Black Sluice IDB don't own any of the banks and so farmers can mow should they wish to. Mr P Holmes added that the environment committee encourage landowners, if they feel they can do it themselves and wish to do so, to flail the vegetation themselves.

The Chief Executive further noted that at the next environment committee meeting on the 15th May 2019, the Operation's Manager will be reporting about the yellow flower.

Mr J Atkinson noted that there is tremendous potential for yellow flower at Dunsby Fen along the South Forty Foot Bank and wondered whether the Board or the Environment Agency would be willing to make a contribution and mowing the worst patches? He further noted that it has been so thick in the past that birds aren't nesting.

The Operations Manager responded that it was agreed that some trial sections would be flailed by the Board in May which is being worked towards. It was noted that the length Mr J Atkinson made reference to along the South Forty Foot Bank could be used as a suitable trial area.

(b) INDENTIFICATION OF CONSENTED OBSTRUCTIONS

Mr J Fowler suggested that prior to the irrigation and abstraction meeting on the 14th May, the GIS department look into the use of the 'what three words' app. The app identifies geographical location by giving three unique words of any three metre square area. This would be a simple method for landowners to report the position of obstructions through.

(c) IRRIGATION & ABSTRACTION MEETING 14TH MAY 2019

The Chairman asked committee members to encourage those who should be at the meeting to attend.

There being no further business the meeting closed at 16:50.

BLACK SLUICE INTERNAL DRAINAGE BOARD

JOINT WORKS COMMITTEE MEETING - 21st NOVEMBER 2019

AGENDA ITEM No 08

ENGINEER'S REPORT

1. CAPITAL ASSET IMPROVEMENTS

1.1 2019/20 Defra/EA Funded Grant In Aid (GiA) Schemes

GiA Scheme works to be commenced this financial year:

(a) North Forty Foot cleansing/revetment & Langrick Road pipeline, lining/replacement works, total scheme value is £472,000. The approved sum is calculated as follows: -

£394,000 GiA £70,000 Board contribution £8,000 Development contribution Local Levy support is no longer required for this scheme.

As stated last year based on the Outline Business Case for this scheme more benefits were available which affected the GiA and therefore meaning that Local Levy was no longer required to make the scheme viable to achieve GiA funding. The Business Case has just achieved final approval in October and the funding applied for.

This scheme is now estimated to be completed by March 2021.

(b) Sempringham Fen weedscreen cleaner/pumping station refurbishment, total scheme value is £208,000. The approved sum is calculated as follows:-

£153,500 GiA £27,500 Board contribution £27,000 Local Levy support

As stated last year based on the Outline Business Case for this scheme more benefits were available, which affected and increased the GiA. Local Levy and Board contribution remaining the same. The Business Case has just achieved final approval in October and the funding applied for. This scheme was originally re-profiled from 2015/16.

1.2 2019/20 Board Funded Capital Schemes

Remaining Capital Scheme works to be completed this financial year:

(a)	Chain Bridge P/S refurbish weedscreen cleaner	£45,000(estimate)
(b)	Dyke Fen P/s replacement control panel	£43,000(estimate)
(c)	Pinchbeck Fen p/s new roof - Completed Sept 2019	£8,230(actual)
(d)	Dowsby Lode improvements	£50,000(estimate)

(e)	Graft drain improvements	£67,516(estimate)
(f)	Wyberton Towns drain realignment	£23,500(estimate)
(g)	Jetting to Major pipelines	£30,050(estimate)
(h)	Sempringham Fen p/s refurbishment	£17,175(estimate)
(i)	NFF revetment & Langrick Road pipeline scheme	£56,889(estimate)
(j)	Swaton Bank Stability(17/18)	£6,000(estimate)
(k)	Scredington Beck improvement(17/18)	£15,915(estimate)
(l)	Board Emergency Working	£27,300(estimate)

1.3 **Proposed Works 2020/21**

Please refer to the Capital Scheme Budget on page 22.

(a) Defra/EA Granted Schemes

Remote monitoring and control H&S scheme.

A business case is to be presented to establish potential for approval for funding for this scheme

GiA	£55,000
Local levy	£55,000
Board contribution	£57,000

(b) Board Funded Capital Schemes

(i) Graft Drain improvements	£60,000(estimate)
(ii) Jetting to major pipelines	£50,000(estimate)
	 0== 000

(iii) Remote monitoring and control H&S scheme £57,000

(iv) General culvert contributions £5,000(estimate)

(c) Pumping Station Schemes

(i) Wyberton Marsh P/S replace weedscreen cleaner £110,000(estimate)

2. DRAIN MAINTENANCE

(a) Annual Summer Flailmowing/Cutting

The summer flail mowing and cutting commenced with the flail mowers on 8th July, and the cutting on 22nd July. A sixth 13 ton excavator operating one of the Boards 4m cutting baskets has been hired in for twelve weeks. Therefore, the Boards maximum production has three flails (Spearhead Twiga No 1 SPV 2 with side flail and cutting basket, Twiga No 2 SPV2 with side flail and front flail, and Twiga No 3 SPV2 with side flail and front flail) flailing in front of the six cutters (Hitachi ZX 210, JCB JS 160, JCB JS 145, 2 x JCB JS 130 and hired in JCB131) albeit the Twiga No 1 does change cutting heads and cuts some watercourses.

The 67km (Northern & Southern Works areas) of high profile watercourse assets are constantly being monitored to determine whether a second flail and/or cut is required, these will most probably require a second cut.

The SKDC (c£33k) & Mayflower (c£11.5k) Hand Roding contract works have been completed. All the Board hand roding watercourses have been completed. Additional hand roding works are also being completed for the Environment Agency through PSCA.

A bulldozer has been hired in to grade out the previous year's winter cleansing arisings, these works are completed within a small window of opportunity (between harvest and drilling) and will continue as budgets dictate.

EA Waste Management exemptions have been applied for over the next year for burning wood on site, dredging inland watercourses and spreading watercourse arisings over adjacent land.

(b) Prior Notice Given for Summer Cutting

Notice was issued within the 2019/20 Drainage Rates brochure, along with a provisional works programme, stating that all landowners/farmers can view weekly updated accurate summer cutting works programmes on the Boards web site.

Landowners/farmers, were requested, to contact the Board with any summer cropping issues throughout the summer cutting season.

A new text messaging service informing landowners/tenants that Boards machinery is working in the area began this year. This has proved successful and all landowners/tenants are encouraged to provide mobile phone contact details to enable ongoing success.

This has been a success, and we recommend that the Board continue with this approach.

(c) Summer Crop Loss/Damage Compensation

In line with the summer cutting landowners/farmers are encourage to agree to the Boards equipment travelling through their crops whereby the Board agree crop loss compensation, where crop damage/loss has occurred, instead of the higher costs associated with removing the machine and subsequently returning once the crop has been harvested, albeit in some cases a new crop may have already been planted.

The cutting programme in the drainage rates brochure along with the updated programme on the website will remind all landowners adjacent to all the Board maintained watercourses of the Boards intension to carry out summer vegetation flailing/cutting to the programmes identified on the Boards web site and therefore try to manage fields accordingly. At the same time the programme should be used to assist timely removal of any obstructions (electric fencing, bird scarers, irrigation pumps & pipes etc).

(d) Winter Crop and Land Loss Compensation

The Boards written intention of improvement cleansing works have been issued to landowners in October 2019 for the works to be undertaken throughout December to April 2020. The notice being given, the farmer can decide whether to plant the affected area or not, the arisings are spread and levelled by the landowner or by the Board generally the following year.

(e) Proposed Desilting, Bushing and Cleansing Works

The total length of proposed watercourse for 2019/20 is 67 km.

The total length of watercourses cleansed over the 2018/19 season was 41 km, this will maintain a 1 in 10 year cleansing programme over the entire catchments.

Letters have been sent to landowners/occupiers adjacent to the drains above giving notice that the Board intend to bush where required and de-silt during the winter months.

Letters will also be sent to occupiers where the Board proposes to carry out other bushing works in preparation for next year's de-silting. We are currently employing Scarborough Nixon Associates as an external Environmental Consultant to carry out surveys of any relevant drains on our desilting programme.

3. PUMPING STATION MAINTENANCE

At the end of September (Period 7) the budget for maintenance works is £209,963 with the actual expenditure being £352,300 which includes estimated electricity payments

4. EXTERNAL RECOVERABLE WORKS

Current external recoverable income is £280,222 for rechargeable works compared to £96,236 last year.

5. HEALTH & SAFETY

The Board have appointed Cope Safety Management agreeing terms on a new contract as their Health & Safety consultants for a 5-year period commencing June 2019.

All employees and contractors to the Board required to work alone, are now using the automated Peoplesafe system using mobile phone technology.

6. EXTERNAL PARTNERSHIPS, STRATEGIES & AGREEMENTS

(a) Boston Barrier

The barrier construction is well underway. The main barrier being delivered and lifted into position w/c 03.11.19.

(b) <u>EA/BSIDB Public Sector Cooperation Agreement (PSCA)</u>

We have, as in other years, continued to flail and cut the highland carrier main rivers along with the health and safety bank top cut. We have also been approached to provide estimates for additional bushing works on some of the EA main river systems currently maintained through PSCA. All works completed with our own machinery and recharged back to the EA.

(c) South Lincs Water Partnership (SLWP)

The Chairman and Chief Executive are members of the Technical Steering Group (TSG) working towards developing an Integrated Water Resource Management Plan (IWRM) for the Black Sluice Catchment.

The SLWP consists of several key organisations such as the Environment Agency, Anglian Water Services, Natural England, Lincolnshire Wildlife Trust including South Lincolnshire Fens Partnership, Lincolnshire County Council, Greater Lincolnshire LEP, Fens Agricultural Water Group, NFU, UK Irrigation Union, WDIDB and BSIDB.

The TSG's next steps are to produce a business plan with more focus towards water resources with good governance within a strong business case.

This will include: -

- high volume open water transfer through our catchment from the North
- increased capacity flows and flood resilience works to the SFFD
- increased agricultural access to water (possibly by means of agricultural irrigation reservoirs)
- increased fen land/wet land availability (probably adjacent to the large reservoir)
- a c600 hectare (1,500 acre) reservoir capable of holding c50 million cubic metres of water, that equates to a similar size to Grafham Water Reservoir
- the availability of navigation through our catchment (Boston to Peterborough Wetland Corridor), which in turn will require further locks along the system
- increased benefits to tourism and leisure

This project is linked to the Priority Catchment Abstraction Reform project.

(d) Rationalising The Main River Network (RMRN) - De-Maining

The five lengths of main river (Ewerby Catchwater, Northlands Dyke, Horbling Catchwater, New Cut and Diversion, Pointon Lode and Atkinson's Cut) totalling 12.3km which includes one bridge and a penstock sluice have a combined transfer value of £59,310. The transfer agreements have been signed by both parties and we are now completing the first season of maintenance as adopted Board maintained watercourses.

(e) <u>The Black Sluice Pumping Station (Boston) (BSPS) Effectiveness Initiative</u> Project

Following the announcement to the RFCC on 12 October 2018 with no objections (following questioning) a press release along the lines set out below went out on the 15 October 2018, there has been very little coverage or concern received to date.

A partnership including the Environment Agency (EA), Black Sluice Internal Drainage Board (IDB), Lincolnshire County Council (LCC), Boston Borough Council (BBC), Anglian Northern Regional Flood and Coastal Committee (RFCC), the Association of Drainage Authorities (ADA) and the National Farmers Union (NFU) has been working to review how water is managed in the SFF Catchment near Boston.

This partnership is working together to investigate ways to further manage flood risk across the catchment, including that to agricultural land. Work has already begun to strengthen banks along the South Forty Foot Drain, trial ways to slow the flow of water in the upper catchment to better protect rural homes. During this work it has been decided that a pumping station that has rarely been used for the last 70 years will be decommissioned.

The pumps at Black Sluice pumping station in the South Forty Foot catchment have remained idle for more than 98% of the time since it was built in the 1940s. Rigorous studies have shown that decommissioning the pumping station won't increase flood risk to local homes or businesses, and using the adjoining sluice and navigation lock when flows on the South Forty Foot are high will manage flood risk more effectively. This approach was used to successfully discharge the water out of the catchment during a period of heavy rain early this spring.

Over the next few months, the partnership will work with Heritage Lincolnshire to consider the future of the pumping station building – one option is that it becomes a heritage hub or a community educational resource.

In 2015, the pumping station was included as part of a wider public consultation on flood risk across the catchment. As a result, the EA, Black Sluice IDB and other partners worked closely to explore funding to allow the IDB to take over management of the pumping station.

However, a thorough review found that the substantial cost to refurbish and maintain it did not offer a significant benefit for the wider area. Instead, the partnership will invest the money across the catchment where it will be more effective at reducing flood risk.

The Environment Agency will continue to manage the waterway for navigation, allowing boats to travel through Black Sluice lock and onto the South Forty Foot Drain.

The partnership will offer public drop-in sessions at the Boston Community Hub on Marsh Lane, Boston on a Wednesday from 12 - 7pm.

(f) SFFD Embankment Armouring to 'Low Spots'

One length of 'low bank' on the Swaton Eau raised bank has been armoured in order to allow flood water to run over the bank without the fear of a breach.

The EA have informed us they are reviewing other similar low lengths to armour but as yet have not released any information regarding locations.

(g) SFFD De-Silting Works

Works have now been completed between Neslam Bridge and the A52 with the silt being pumped into a settlement lagoon near Billingborough Pumping Station.

Further bushing works north of the A52 commenced in October and are being completed in preparation for continuation of the de-silting programme along the SFFD.

The Billingborough silt lagoon is being monitored, and when dried out sufficiently will be spread and levelled.

(h) Swaton Natural Flood Management

This project is moving forward by working with farmers to implement trial Natural Flood Management measures to reduce flood risk to the three villages within the Swaton Catchment, it is possible that the Board could become involved with these works. Any updated information will be provided at the meeting.

(i) Upper Catchment Natural Flood Management and Control Analysis

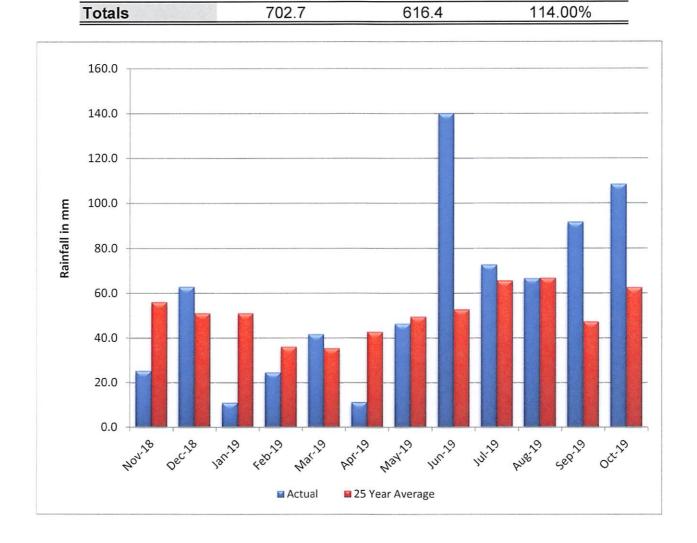
We have obtained a grant to employ a Graduate Flood Risk Specialist and a Farm Engagement Advisor for twelve months, they will be reviewing and assessing how best to slow, hold and/or divert high flows within all our fast reacting upper catchments. They will be engaging with the local farming community, RMS's and other interested organisations with a direction to complete Outcome Reports to assist with business cases seeking funding to help reduce flooding via Natural Flood Management. Any updated information will be provided at the meeting.

Black Sluice Internal Drainage Board Capital Scheme Budget 2019/20 to 2029/30

		2019	120	to 202	913	00						
Year	Type	Scheme		Total		Grant	Local Levy		Drain		PS	Dev Fund
STATE OF THE		Chain Bridge PS, refurbish weedscreen cleaner	£	45,000				170	GHARA	£	45,000	HERON AND
		Dyke Fen PS, replacement control panel	£	43,000	100					£	43,000	
		Pinchbeck Fen PS, new roof	£	9,000	100					£	9,000	
A STATE OF		Dowsby Lode Improvements	£	50,000	1			£	50,000	-	3,000	
					13			£		-		
en all fac		Graft Drain improvements	£	67,516	1				67,516	333		
The second		Wyberton Towns Drain re-alignment	£	23,500				£	23,500	1		The Later
2019/20		Jetting to major pipelines	£	30,050				£	30,050	100		
		Sempringham Fen PS refurbisment	£	170,175		43,000	£ 110,000	£	17,175	300		THE PL
	Drain	NFF Revetment & Langrick Road pipeline scheme	£	436,889	£	81,000	£ 299,000	£	56,889	33		
	1226	Swaton Bank Stability 17/18	£	6,000	- 33			£	6,000	100		
	1227	Scredington Beck Improve 17/18	£	15,915				£	15,915	-		1000
	1999	Board Emergency Working	£	27,300				£	27,300			
0.55	Drain	General culvert replacement contributions	£		188							
	THE STATE		£	924,345	£	124,000	£ 409,000	£	294,345	£	97,000	£ -
September 1	Pump	Wyberton Marsh PS, replace weedscreen cleaner	£	110,000				-	the state of the	£	110,000	
		Graft Drain improvements	£	60,000				£	60,000			
		Jetting to major pipelines	£	50,000				£	50,000			
2020/21		Remote monitoring and control H&S scheme	£	167,000	0	55,000	£ 55,000		00,000	£	57,000	
		General culvert replacement contributions	£	5,000	-	55,555	2 00,000	£	5,000	~	01,000	
	Diam	General culvert replacement contributions	£	392,000		55,000	£ 55,000	£	115,000	£	167,000	C
	Dumo	Creat Hale BC refurbish woodsgroop classes	£	46,000	-	33,000	2 33,000	_	113,000	£	46,000	
		Great Hale PS refurbish weedscreen cleaner										
		Dunsby Fen PS, replace control panel	£	30,000						£	30,000	
		Jetting to major pipelines	£	54,000	186			£	54,000			
		Graft Drain improvements	£	60,000				£	60,000	13		
2021/22		Kirton Marsh PS new roof	£	10,000	132					£	10,000	
	Pump	Telemetry & Webwax Upgrade	£	10,000						£	10,000	
NE STA		Horbling ps new roof	£	9,000						£	9,000	
1877	Drain	Lane Dyke culvert replacement	£	103,000	£	102,000		£	1,000	3		330774
WE 72	Drain	General culvert replacement contributions	£	5,000				£	5,000			
Charles A	2000		£	327,000	£	102,000	£ -	£	120,000	£	105,000	£ -
NO YOU	Pump	Dunsby PS, replacement weedscreen cleaner	£	90,000						£	90,000	
Will street	100790000000000000000000000000000000000	Helpringham Fen PS, new roof	£	10,000			1			£	10,000	
TO THE LAND		Graft Drain improvements	£	60,000		HE TO		£	60,000	~	. 5,500	
2022/23		SFFD Desilting Guthrum to Blackhole Drove PS	£	65,000	130	I CHARLES		£	65,000			
The second									The second second second	3,33		
DE YEAR	Drain	General culvert replacement contributions	£	5,000				£	5,000	0	400.000	C
	-	0.1.1.00	3	230,000	£	•	-	£	130,000	3	100,000	-
		Gosberton PS, replace control panel	£	65,000	175					£	65,000	
		Quadring North Fen roadside revetment	£	24,000				£	24,000			
	Pump	Dunsby Fen PS Refurbish axial flow pump	£	13,000						£	13,000	
2023/24	Pump	Dowsby Fen PS, refurbish axial flow pumps	£	25,000						£	25,000	
2023/24	Drain	SFFD Desilting Guthrum to Blackhole Drove PS	£	65,000				£	65,000			
	Drain	Jetting to major pipelines	£	40,000				£	40,000	ie t		
		General culvert replacement contributions	£	5,000				£	5,000			
10.000	1		£	237,000	£		£ -	£	134,000	£	103,000	£ -
(10 to 10 to	Pump	Ewerby Fen PS Replace control panel	£	45,000						£	45,000	
	, dirip	Every 1 on 1 o respude control parisi	£	10,000						~	10,000	
	Dumm	Duke Fee DC Befurbish 2v avial flavy number	£	26,000	No.					£	26,000	
		Dyke Fen PS Refurbish 2x axial flow pumps								£		
0004/05		Dyke Fen PS new roof	£	15,000	15				00 000	L	15,000	
2024/25		Jetting to major pipelines	£	60,000	100			£	60,000			
		Dyke Fen (New Dyke) revetments	£	25,000	3	2.11		£	25,000			
		NFF Desilting	£	65,000				£	65,000	SY.		
	Drain	General culvert replacement contributions	£	5,000				£	5,000			
			£	241,000	£	•	£ -	£	155,000	£	86,000	£ -
		Claydyke desilting	£	65,000	CAT			£	65,000			
	Drain	NFF Desilting	£	20,000				£	20,000			
	Drain	Jetting to major pipelines	£	50,000				£	50,000		Selenia.	
2025/26	Pump	Kirton Marsh PS refurbish axial flow pump	£	14,000	16					£	14,000	
2023/20	Pump	Donington NI Replace control panel	£	65,000	3					£	65,000	
	Drain	Dyke Fen (New Dyke) revetments	£	35,000		The same		£	35,000			
	Drain	General culvert replacement contributions	£	5,000				£	5,000			
			£	254,000	£		£ -	£	175,000	£	79,000	2 -
	Drain	Jetting to major pipelines	£	50,000				£	50,000			
	Drain	Cleansing Wyberton Marsh PS Suction Bay	£	60,000		No.		£	60,000			
	Didiii	oleansing tryberton marsh 1 o edealon bay	£	00,000	- 50			-	00,000			
	Pump	Coshorton Fon DS Defurbish 2 v avial flow numps	£	40,000						£	40,000	
2026/27		Gosberton Fen PS Refurbish 3 x axial flow pumps Hacconby Fen PS Replace control panel	£	35,000	112	18.83				£	35,000	
17.5	Drain	Claydyke desilting	£	65,000				£	65,000	-	00,000	
100 ST	Drain		£	5,000	11			£	5,000			
19 (BA)	Didili	General culvert replacement contributions	£	255,000		Contract of	6	£		C	75.000	c
	D	Old Hammand Book Desilies			L		4		180,000	L	75,000	-
	Drain	Old Hammond Beck Desilting	£	80,000			P. C. Street	£	80,000		LINE STORY	
		New Hammond Beck Desilting	£	40,000	50		A STATE	£	40,000			
452		Jetting to major pipelines	£	50,000		1000		£	50,000	-	45.000	
2027/28		Bicker Fen 1 x axial flow pump refurb	£	15,000		T. Will				£	15,000	
A-10-15		Bicker Fen replacement control panel	£	33,000						£	33,000	
TO THE		Cooks Lock p/s refurbish weedscreen cleaner	£	50,000		1 60				£	50,000	
16725	Drain	General culvert replacement contributions	£	5,000				£	5,000		TO SECURE	
	1000		£	273,000	£		£ -	£	175,000	£	98,000	£ -
THE WATER		Old Hammond Beck Desilting	£	80,000			TIS TO DES	£	80,000			
12/2		Jetting to major pipelines	£	60,000		N-8-10	10 - 5	£	60,000			
	Pump	Donington NI refurbish 3 x axial flow pumps	£	43,000		48 1 1 1				£	43,000	
4 11 15	Pump	Kirton Marsh p/s replace control panel	£	37,000		S. P. C. C.				£	37,000	
2028/29	Pump	Helpringham p/s new roof	£	11,000		7.5				£	11,000	
149E 1999	Drain	Bourne Fen 28/10 Revetment	£	30,000		SV TOTAL		£	30,000		14.04.12	
13.00		To be allocated	£	15,000		25 12 1		£	15,000			
STATE OF	Drain	General culvert replacement contributions	£	5,000				£	5,000		THE SHALL	
W-1/12			£	281,000	£		£ -	£	190,000	£	91,000	£ .
AL PARTY	Drain	Gosberton pump drain desilting/pump inspection	£	40,000				£	40,000			
	Drain	Dowsby Fen pump drain desiliting/pump inspection	£	40,000				£	40,000			
EN ALTE	Company of the Compan	Chain Bridge pump drain desilting/pump inspection	£	20,000				£	20,000		NEW STREET	
		Jetting to major pipelines	£	60,000		108	11/2/2014	£	60,000			
2029/30	Pump	Chain Bridge p/s refurbish 3 x axial flow pumps	£	45,000						£	45,000	
PROPERTY.		Quadring Fen p/s replace control panel	£	40,000						£	40,000	
	Pump	Allen House p/s replace control panel	£	32,000		Treat Ell				£	32,000	
	5 9 8 1	To be allocated	£	8,000				£	8,000			
	Drain	General culvert replacement contributions	£	5,000				£	5,000			
10 V 10 10	STATE OF	The second secon	£	290,000		2220000		£	173,000	£	117,000	
				THE PERSON NAMED IN		The second secon	THE RESERVE OF THE PARTY OF THE	-	- THE PROPERTY OF THE PARTY OF	of Street, or other Designation of the last of the las		

BLACK SLUICE INTERNAL DRAINAGE BOARD Rainfall at Swineshead Depot

	F	Rainfall				
MONTH	Actual	25 Year Average	Actual / Average			
	mm	mm				
Nov-18	25.3	56.0	45.18%			
Dec-18	62.8	51.0	123.14%			
Jan-19	11.1	51.0	21.76%			
Feb-19	24.6	36.1	68.14%			
Mar-19	41.7	35.5	117.46%			
Apr-19	11.3	42.7	26.46%			
May-19	46.4	49.5	93.74%			
Jun-19	140.0	52.7	265.65%			
Jul-19	72.7	65.5	110.99%			
Aug-19	66.6	66.7	99.85%			
Sep-19	91.7	47.2	194.28%			
Oct-19	108.5	62.5				



BLACK SLUICE INTERNAL DRAINAGE BOARDRainfall at Black Hole Drove Pumping Station

		Rainfall	Actual / Average		
MONTH	Actual	25 Year Average			
	mm	mm	%		
Nov-18	19.4	56.1	34.58%		
Dec-18	50.0	48.8	102.46%		
Jan-19	7.2	49.0	14.69%		
Feb-19	16.8	33.9	49.56%		
Mar-19	28.8	34.2	84.21%		
Apr-19	12.8	41.9	30.55%		
May-19	36.6	50.2	72.91%		
Jun-19	115.6	54.5	212.11%		
Jul-19	68.2	61.4	111.07%		
Aug-19	51.2	62.2	82.32%		
Sep-19	76.8	46.9	163.75%		
Oct-19	85.6	59.1	144.84%		
Totals	569.0	598.2	95.12%		

	140.0
	120.0
	100.0
Rainfall in mm	80.0
Rainfa	60.0
	40.0
	20.0
	0.0
	Now 18 Dec 18 1911 Cep 19 War 19 Mar 19 Mar 19 Mir 19 Mir 19 Mir 19 Sep 19 Oct 19
	■ Actual ■ 25 Year Average