

MEETING PAPERS



JBA Project Code 2014s1005
Contract Management Services
Client Danvm DC
Day, Date and Time **Friday 28th October 2016, 10:00am**
Meeting Water Level Management Committee
Venue Epsom House, Chase Park, Redhouse Interchange
 Doncaster, DN6 7FE

Item

1 **Apologies for absence**

2 **Declarations of interest**

2.1 Officers declare an interest on behalf of JBA Consulting in Item 5.2 as JBA Consulting (Skipton) are the Consultant delivering the Drainage District Hydraulic Model.

3 **Minutes of the Meeting 13th May 2016**

3.1 The minutes were published as approved in the Board Papers.

4 **Committee Vacancy**

4.1 Nominations are to be sought from the Board due to the retirement of S. Ryder.

5 **Matters Arising**

5.1 (Minute 2016.05) Canal & River Trust (SO d)

The CRT received an instruction to remedy the obstruction to the tidal outfall doors on the Soak Drain system at the R.Don. A temporary measure to remove local siltation has been undertaken and the doors have been returned to an operational condition. A further requirement to address the wider siltation issue both within the upstream channel, including Beavers Bridge culvert and the discharge bay into the R.Don, has been issued. We currently await the full programme of planned maintenance for the whole of the Soak Drain system within the Danvm DC district from the CRT including the start date, such details have been requested for tabling at the meeting.

5.2 (Minute 2015.46) Hydraulic Modelling (SO k, l)

Flood outlines with all assets operational will be demonstrated to the Committee for Fosterhouses, Sykehouse, Toll Bar, Fishlake, Norwood, Hensall, Kirk Bramwith, and hopefully the Gowdall, Carcroft and Went North sub-catchments.

The Coal Authority has provided the following response after the hydraulic modelling presentation delivered to the Board.

Drainage District Hydraulic Modelling

Thank you for inviting the Authority to the hydraulic modelling demonstration on 30 June 2016.

We consider the proposal has potential to provide benefit to the overall management of the Danvm Drainage Commissioners assets. We note that the proposals provide for a variety of options including station decommissioning, increasing station capacity to cater for increased catchment by regrading drainage channels etc. As such, there will be a need for capital expenditure and the operational costs of some pumping stations will increase.

Whilst the aim of the study is to determine an optimum catchment management system, from the Authority's perspective this includes management of water that would otherwise be paid for by other parties and includes provision for flood management.

Before committing to the financial contribution of £39,605 we would like to understand the principles to be adopted in assessing the disbursement of capital and revenue costs amongst the various parties that would retain liability for the pumping stations.

We are also interested in your view regarding the mechanism for the Authority to contribute capital funds to upgrading stations and calculation of a commuted sum based on 25 year operating cost to dispose of on-going liabilities, particularly where effective flood management is the key driver or Coal Authority liability is less than 100%.



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6 Health and Safety

6.1 Accidents, Incidents and Near Misses

Two separate H&S Investigations have been undertaken in relation to the removal of safety critical locks at Pump Stations, one has been finalised and its outcomes implemented the second has a finalised investigation but is still to complete its recommended outcomes.

6.2 Training

MEICA Apprentice, will be attending PASMA and Trailer towing courses and has been invited to spend a week with Paktronic regarding building and commissioning electrical panels. Both MEICA staff have been identified for City & Guilds 2394 & 95 periodic Testing, Inspection & Certification of Electrical Installations.

Operational Staff have not undertaken any further training since the last meeting.

7 **PO 1 – Pumping Stations and Ordinary Watercourses**

7.1 Watercourse Maintenance 2016/17 (SO e, h)

7.1.1 Ordinary watercourse maintenance is ??% complete, including a start in the Dearne & Dove district, all highway works are complete.

A significant pollution issue has occurred within the Sykehouse Main Town Drain this has been referred to the Environment Agency feedback indicates resolution of the source is being dealt with but not the actual clean up. The Board has not undertaken de-weeding as a consequence and will allow the pollution to naturally degrade and dilute during the winter.

The ownership and responsibility for maintenance and the removal of blockages associated with culverts and bridge structures has arisen. Legal advice has indicated

Riparian rights and responsibilities lie with the land over which the water passes. Provided the culvert is located in the same place as the drain that it replaces, the riparian rights and responsibilities which the landowner enjoyed immediately before the culvert was installed, remains with the land. The Commissioners do not inherit any riparian rights simply by culverting the water course.

There is a rule in English law that where something is attached to land or put into the land, it becomes a fixture of that land. In the absence of any agreement, lease, or easement, when that item becomes a fixture it becomes the property of the landowner. There is considerable case law on this.

Who is liable to repair and maintain the culvert. Normally, this responsibility falls to the riparian owner. That can change if there is an agreement in place, or if over time, someone else has assumed responsibility over the culvert. Annual permissive maintenance by the Commissioners under their statutory powers would not normally affect ownership.

I think any suggestion that the Board is liable to maintain or repair the culvert because it installed it can be resisted under normal circumstances. Where the land owner purchased the land with the culvert in situ, he or she must acquire the land as he/she finds it. The only thing that would alter this is an agreement with a third party.

If the Board would like to pay to maintenance or replace some or all of the culvert, it should be made clear that it is doing so with a denial of responsibility. It has the potential to create a difficult precedent, so careful thought should take place before it decides anything of this sort.



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7.1.2 Water Level Maintenance Technicians

The two new members of staff appointed in January 2016 have successfully completed their 6 months probationary period and have been offered full contracts of employment, with effect from 1st August 2016.

7.1.3 Vehicle & Plant – Forward Plan 2017/18

Proposed purchase requirements have been identified for consideration based on the established principles of the V&P Forward Plan;

- *Purchase of Pool Vehicle based on minimum life of 75,000 miles or 5yrs*
- *Purchase of Plant (Excavators) based on minimum life of 10yrs*
- *Purchase of Plant (Tractors+ Small Excavator) based on minimum life of 5yrs*

The following are identified requirements, replace Komatsu Excavator £128K (potential trade in value £30K), replace McCormick & Herder £155K (potential trade in £25K), plus additional vehicles for the new starters £38K (1 4x4 and 1 Van to replace current hired vehicles).

The Excavator requires as a minimum the complete replacement of track running gear (£15K) and the McCormick & Herder requires full set of tyres £6K and new head & bush pins (£20K).

7.2 Telemetry Installation (SO h)

The Coal Authority have funded telemetry upgrades at a number of their Pump Stations managed on their behalf by the Board, these systems will shortly be capable of being monitored via a web based system. The remainder of the telemetry system is approximately 10 years old and consideration should be given to an upgrade.

7.3 Main River (SOi)

Discussions are ongoing with the EA regarding the Lower Went Strategy, both in respect of its maintenance of the Barrier Banks and the Went itself. A strategy report has been completed for the Barrier Banks whilst a review of maintenance requirements for the Went is still ongoing based on concerns passed to the Board by local landowners.

8 **PO 3 – Hydraulic Modelling**

8.1 Local Levy application for Optioneering (SO k, l)

The Board at their meeting on 30th June were provided with a presentation on the hydraulic model and discussed further Optioneering that would benefit moving forwards, supported in principle, by the Environment Agency who were also in attendance.

Those discussions have been translated into a submission for Local Levy, as below, and is being presented to the Yorkshire RFCC on 20th October seeking 100% Local levy funding.



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DDC Drainage District Hydraulic Model Optioneering

The Danvm DC Hydraulic Model is an existing approved Project with Local Levy funding.

This is the 1st time an IDB has approached hydraulic modelling from a Drainage District-wide perspective to inform future strategy and provide an evidenced based decision tool in relation to Asset Management and Total Catchment Management.

13 of 20 catchments within the District are to be completed and the next phase of modelling relates to optioneering. Some option testing has already been commissioned including pump failure scenarios, impacts of vegetation/roughness within channel, and 21 pump/channel storage/rationalising options against one storm event.

On behalf of the Danvm DC we are looking at the funding opportunities for the next phase of hydraulic model optioneering as follows.

Danvm DC Drainage District Hydraulic Model - Optioneering	
<i>Option Testing</i>	<i>Estimated Cost (£)</i>
<i>Pumping station optimisation Review of current operating rules against flows/type of pumps, motors etc. including writing interface with existing model to review pump efficiency.</i>	20,000
<i>Blockage Scenarios (say ¼ culvert structures within the District, c.210)</i>	20,000
<i>Saturation during a series of storm events</i>	20,000
<i>Critical duration tests 1in10, 1in100 & 1in100+cc storm, duration multiplied with resultant volumes compared for largest volume/critical duration.</i>	10,000
<i>Long term multiple storm events With and without pumping</i>	20,000
<i>Comparison of night time tariff</i>	10,000
<i>Storage and pump station rationalisation</i>	5,000
<i>Total Estimated Item Cost</i>	105,000
<i>Risk Contingency (30%)</i>	31,500
<i>Total Estimated Project Cost</i>	136,500

The 1st area of special drainage need within the Danvm Drainage Commissioners Drainage District was identified in 1827, and to date continues to provide water level management on a daily basis across 22,000 hectares (220 km²) of low lying land. Without asset management of the 43 pumping stations, and over 400km (250 miles) of ordinary watercourse and gravity structures, over time, ground water levels may



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rise, exaggerate rainfall events on the catchments and increase flood risk to beneficiaries.

Up to 40% of the Drainage District relies upon mechanical means of lifting water from the low lying areas into the River Aire, River Went, River Don, Ea Beck, River Dearne, River Dove and Aire & Calder Navigation with gravity discharge dependant on Main River catchment rainfall, topographic levels, and/or tidal influences

Our estimate of the likely flood receptors that derive a benefit from artificial drainage include:

- 7,500 households (equally between detached/semi-detached/terraced) representing an estimated 20% of households within the relevant Doncaster MBC Wards and estimated 20,000 people.
- 300 farms
- 500 businesses
- 6 SSSI and 2 Local Nature Reserves
- M62, A19
- Eggborough Power Station, Thorpe Marsh Power Station
- East Coast Main Line

The Danvm Drainage Commissioners continues to work with other public bodies to provide a public service by continuing to manage water levels for the overall benefit of people, property, commerce, industry, agriculture and the aquatic environment within the defined Drainage District.

9 PO 8 – 3rd Party Works

9.1 Coal Authority subsidence schemes (SO n)

The Stoney Lane Pumping Station, Fosterhouses/Fishlake, has been commissioned and we have agreed on behalf of the Board that the General Supervision of the station will be undertaken by Danvm DC MEICA (Mechanical, Electrical, Instrumentation, Control & Automation) Team as per the existing agreement with other Coal Authority subsidence pumping stations.

Construction of Field House Pumping Station, also in the Fosterhouses/Fishlake area, is expected to be complete by the end of this financial year.

The Great Heck pumping station construction is expected within 2017/18 and The Coal Authority are requesting the Board take the lead on the Works using their Permitted Development rights under the Town & Country Planning Act. This is to be considered by the DDC Finance Committee.

10 Any other business

10.1 Shire Group Twitter

11 Date of next meeting