

Edzell Woods Community Trust Sewage System Team March 2021 Bulletin - Contains information from 26/03/2021 team meeting

1. Introduction

A new team of volunteers was established in March 2021 to support Ken with the sewage system.

The team members are;

Ken Williams

Michael Riddell

Emil Wojda

James MacKinnon

Brian Smith

Tomasz Ludian

Daniel Cobb

Nicola Cobb (Documents, Contractors arrangement etc)

A rota has been created to ensure that the wet well basket is emptied every two weeks and to ensure that Ken has at least one volunteer each week to help keep the sewage system running smoothly.

Scottish water attended Edzell Woods in December 2020 and viewed the system, they have advised what the priority list of maintenance actions should be. Therefore, the team will be reaching out for quotes and working to the budget that we have. The budget is dictated by the amount EWCT receives by residents paying the monthly fee.

The volunteers have been discussing the system and issues over the course of the month and have been sourcing quotes.

All the past sewage system work, including the CCTV survey, will be reviewed to help continue the improvements.

The sewage system team will issue a monthly bulletin regarding the sewage work, this will be uploaded onto the Facebook page, the website www.ewct.co.uk and on the two notice boards on Perry Road and Denstrath Road.

Any questions please do not hesitate to ask by commenting on the Facebook post or emailing edzellwoodst@gmail.com

2. Agenda

2.1 Budget reminder

The 2021 Budget for sewage system fixes and improvements is £40,000 - 45,000. The aim is to complete as much of the priority work, as set by Scottish Water, required to allow the sewage system to be improved, costing less to run and reduce the maintenance burden on volunteers.

This budget is to include;

- Brick work at various STW tanks
- Replacement yellow submarine pumps
- Fixing water ingress (leaks in manholes) to reduce flow
- Introducing a telemetry system.

Cleaning of the Pump House at the STW is also due, but this work is kept separate from the maintenance and improvement budget.

2.2 Items to Be Discussed

- Quotes for replacement yellow submarine pumps
- Quotes for brickwork at the STW
- Quotes for water ingress at Manholes MH1, MH19 and M23
- Cleaning of pump house

- Telemetry system
- 2nd wet well basket (not on priority list)
- Contacting contractors
- Clearing the yellow submarine area

3. Discuss quotes and total spend compared to budget

3.1 Replacement of Yellow Submarine Pumps

Pump action and Ferrier Pumps were contacted but couldn't provide quotes. Pump Action spent a day onsite at the yellow submarine and inspected the pumps but could not help us due to too many unknowns as per their response below;

"We've discussed at length the proposed site upgrades/improvements and unfortunately we have to advise you that Pump Action Ltd will not be able to assist moving forwards. There are a few reasons for this but primarily the unknown discharge head, flow rates and the almost certain issues in the discharge pipework mean there are simply too many "unknowns" related to this job and we cannot guarantee that just by fitting some new pumps, valves and a fancy control panel that everything will function perfectly. The condition of the discharge pipework is the key to everything here and will dictate whether any new equipment will perform as expected or poorly."

One Quote Received from Xylem

The quote from Xylem recommends the following items are required for the replacement of the yellow submarine pumps;

- Concertor x2 £7134.81
- Pipework £2259.30
- XPX Gen 2 control panel £5282.98
- Flow meter £3051.65 (cheaper ones are available)
- Installation & commissioning (to be revised on site) £6420
- Documentation £1656.82

TOTAL £22,753.91 without flow

TOTAL £25,805.56 with flow

- Siemens flow meter (separate purchase) **£1500**

Discussion about the acceptance of the quote;

Initial quote was £33,000 but after discussion between Emil and Tomasz, we reduced the work which was actually required for our system.

We could buy the parts from Xylem and have another company install but this would void the warranty and security that we gain by using the one company from the buying to installation process.

All in agreement for xylem to supply and fit new pumps in one process. Need a formal revised quote with a cheaper flow meter.

We cannot install them ourselves as would not be covered by insurance.

3.2 Brickwork at the STW

Quotes Received from;

- Deck Reid
- RWL Property Maintenance
- Gordon smith

Deck Reid

Quote includes;

- Estimate to seal chamber at tank two and copping one
- Tanks to be drained and cleaned by EWCT

- Point any large cracks with rapid set cement
- Coat tanks with bitumen
- Labour £360
- Material £120

TOTAL £480

Discussion; Not sure the remit was entirely understood, seems very low quote, all in agreement.

RWL Property maintenance

Quote includes;

- To repair and seal all leaking brickwork
- Redo or replace including inside tanks
- Materials and vat

TOTAL £2985

Discussion; This company visited the STW but did not seem very professional, a team member has also heard some worrying information about this company.

Gordon Smith

Quote includes;

- To carry out work on tanks 1 & 2 and Coffin 1
Labour and material **£4425.10**
- To carry out work on syphon tanks should work on a daily rate and do a couple of days at a time as it is very hard to see amount work required.
Daily rate being £200 a day per man, hard to know full costings, will depend on how many days required, for example 5 days for 2 men would cost £2,000

Total Estimate £6425

Discussion; concern and worry about number of days and the work adding up. The team should determine brickwork section priority to ensure cost doesn't get out of hand i.e. Tank 1 and Tank 2. Adams Arms could be left out if cost is spiralling.

All in agreement to go with this quote but with the priorities identified, set a maximum number of allowable working days.

3.3 Water Ingress Manhole cracks/leaks

Drain Dogs visited Edzell Woods to scope out the work but two and a half weeks later, still awaiting a quote.

One quote received from Drainflow.

Quote includes;

- Item 1 - To carry out jetting and CCTV survey of drains and to provide DVD and structural report. Half day rate £357.50 Full day £715.00 ex vat
- Item 2 - To carry out patch repairs as deemed necessary. One patch £750.00 ex vat, two patches £1100.00 ex vat (two patches can normally be installed in one working day)
- Item 3 - To carry out seal guard manhole sealing as per specification. Provision of materials £350.00 ex vat Provision of safety gear and plant £336.00 per day (tripod, harness, gas monitor, 110v drill, jetting unit to wash down manhole, generator etc.) Provision of labour 8hrs @ £55.00 = £440.00 per day. Assuming works are completed in one day to seal approx. three manholes a cost of £1,125.00 ex vat is to be anticipated.

Discussion; Confirm differences between patch and seal guard. Quote looks like 5 repairs rather than 3? Will get confirmation from Drainflow.

We cannot fix the leaks ourselves due to insurance.

3.4 Cleaning of STW Pump House

Drain Dogs visited Edzell Woods to scope out the work but two and a half weeks later, still awaiting a quote.

Diamond Drainage were keen but have been working away so have yet to quote for this work.

Quotes received from;

- Lanes for Drains
- Block Aid

Lanes for Drains

Quote includes;

- Hire of tanker 6 hours with 3 engineers- £1,080
- £75 +Vat per tonne of wastage removal

Block Aid

Quote includes;

- Pump down & clean the pump well would be £300.00
- £60.00/ton for effluent disposed of, off site.
- Cost includes plant, labour & safety equipment

As it is domestic sewage, the job ought to be zero-rated for VAT.

Discussion; Block Aid much cheaper go with them, not waiting any longer on Drain Dogs or Diamond Drainage if they do not respond by Friday 2nd April 2021.

3.5 Telemetry System

To put a plan together.

Xylem quoted £5,000

Emil costs for computer etc- £5,000 too expensive, but we should look into getting one cheaper.

Discussed whether it was urgently needed or not.

Records flow and pings to people notifications of performance, required in heavy rainfall episodes.

If we want it now we should get it before we lose the money for it.

DIY may be okay because it doesn't affect the flowing of the sewage system, therefore no issues with insurance of the sewage system.

Check with Emil's plans and ideas. Would we just pay for parts? How would Emil be paid for his time?

4. Non priority list- Do we have budget to get anything from this list, e.g. 2nd Wet Well Basket?

Pumps- Total estimated £28,000

Brickwork- £6425

Manhole Cracks- Total would be £3528

TOTAL = £37953

Therefore, a budget of £45,000 leaves approximately £7,047 or a budget of £40,000 leaves approximately £2,047. However, this may change once quotes are confirmed or requirements change due to number of day rates.

Discussion; 2nd wet all basket advantages are that the basket is pulled out and clean basket replaced straight away. Currently the basket is out of the wet well for about 2 hours every 2 weeks whilst it is being cleared of wipes and cleaned. During this 2 hours, any undesirable items are getting into the sewage system which in turn increases maintenance issues and reduces the life expectancy of the system. Also means that the manhole isn't open for 2 hours, which is a safety concern. It also means we have a spare incase of any emergencies. By having a 2nd basket, we can take the dirty basket to the STW to be thoroughly cleaned away from cars. Therefore, quotes should be sourced for a 2nd wet well basket.

5. Contacting contractors for work to be completed- What order to have the work done?

Once agreed at EWCT trustee committee meeting on 5th April 2021 we can begin to contact contractors to complete the jobs. Nicola happy to contact contractors.

Some questions regarding contractors before awarding work;

Xylem – quote valid and inc VAT

Manholes – confirm what each item means

Gordon Smith – Confirm / explain priorities – max no of days.

Emil's time for Telemetry – how do we pay.

Brian to measure basket.

Tomasz will speak to Xylem

Michael – Emil telemetry and manholes

Contractors who have been approached this month are;

Xylem

Diamond Drainage

Lanes for Drains

WM Donald

Drain Dogs

Drainflow

Block Aid

Gordon Smith

Deck Reid

RWL Property Maintenance

6. Clearing the Yellow Submarine area

The tree needs pulled out to prevent further fence damage and the ground requires levelling for a storage shed (as proposed by Karen Traill)- not in our remit, however volunteers have been asked for.

Ask residents to help with this. The shed will be for items such as wet well equipment and winter team equipment such as salt spreaders and salt.

7. Sewage System March Report

7.1 Wet Well Report

Cleaning of the wet well 08/03 report

- Ken and Daniel
- Still too many wet wipes
- Lots of fat present

- Took 2 hours due to the amount of wet wipes and fat bergs. Should not take this long.

Cleaning of the wet well 16/03 report

- Ken and Daniel
- After only 8 days, the basket was the fullest and heaviest it has been in a long time, consider that it is usually emptied at longer intervals of time.
- Took almost 2 hours.
- Ken had to manually scoop out two black bin bags worth of wipes.
- Possibly so bad due to a blockage reported by a resident on Halsey

Cleaning of the wet well 27/03 report

- James and Ken.
- Took 2 hours.
- Usual items; wipes, sanitary products. Also dog poo bags, insulation tape and sanitary wrappers.
- Wipes and hair entanglement within the basket, took time to clear this.
- 2 and 1/2 buckets of waste

7.2 STW Report

Sewage system is running okay, the syphon in tank 2 has been playing up, will need to be looked at. Tank 1 syphon is working fine.

The settlement tanks valves are opened daily to allow the treatment works to do its job. Each day, the contents of the lagoons and humus tanks are pressure washed to keep the flow going.

Updates after meeting between 27th and 30th March 2021;

Diamond Drainage have been in touch again, but still not confirmed a date for site visit.

Yellow Submarine Pumps – Xylem

Revised quote received £29,468.28 inc VAT

Xylem will be onsite w/c 05/06/2021 for a site visit.

Brickwork - Gordon Smith

Gordon Smith to come onsite to finalise quote.

Manholes – Drainflow

Drainflow have requested that EWCT give Drainflow a budget and they will work through the priority list set by EWCT. We can use the example of initial price as a guide, e.g. one patch £750.00 ex vat, two patches £1100.00 ex vat.

There is a maximum of £5,000 budget for this work.

Telemetry System – Emil

Will be designed, parts and installed for maximum cost £1500.