SOW for the installation of a new Sewage Treatment Centre.

Date 29/09/2017

Services Performed By:

Services Performed For:

Avant Installations Ltd

24 Brownrigg Close

Mr. E Johnson Bank Street Glossop

Middleton M24 4BU

This scope of works # Avant 0359 (hereinafter called the "SOW").

Investigation.

Following a site meeting the following recommendations can be made for the off mains drainage requirements.

To meet with current legislation, it is recommended that a WTE vortex 8 Sewage Treatment Plant will be installed. This will allow the foul waste water to be treated in the most effective manner.

Utilization of the WTE Vortex Unit will allow treated waste water to enter a new seasonal soakaway drainage field located to the rear of the site. By utilizing a sewage treatment plant a traditional drainage field will not be required. The recommendation for this site is a seasonal soak away of 20m which will as stated by the environment agency allow treated waste water to release to the ground at dry periods then at times of ground saturation the seasonal soak away will release to the drainage ditch which will then releases to the river allowing the required dilution to take place.

The surface water system will be required to be kept separate till after the seasonal soak away.

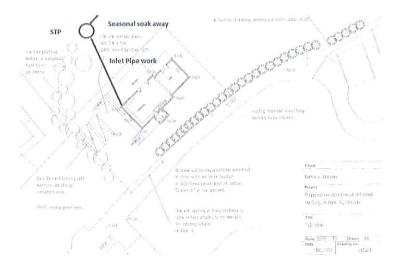
Specification of works

Site location



Proposed layout





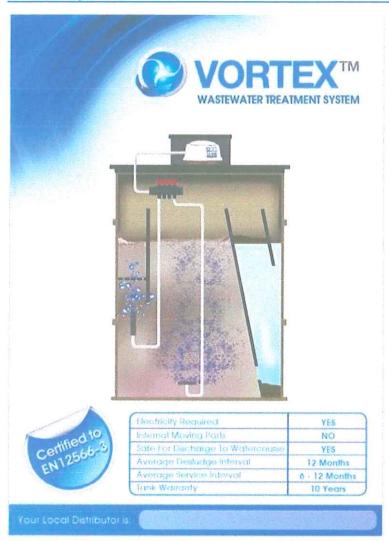
Sewage treatment plant installation details and costs.

- WTE Vortex 8 STP with 800mm inlet.
- 20m seasonal soakaway connection. Pipe work taken to ditch on level ground only.
- Connection to property's inlet system 600mm chamber.
- Cast in situ 2m x 2m base.
- Concrete surround to wet site specification.
- Power supply to be supplied by client.
- Preparation of risk and method statements to meet with HSE and CDM requirements.
- Commissioning of the system.
- Work areas reinstated to a level clean finish.
- Spoil to be left on site.

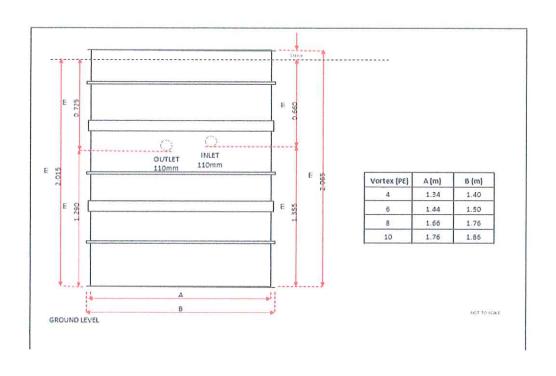
The cost to carry out this work is £9,000.00 plus Vat

Pipe work from property to treatment plant has not be included in this quotation.

Tank Specification.



Specification of works





Specification of works

Method Statement – Installation of STP

Item	Description of Works	No. Trades	Duration (Days)	Plant/Tools Required	Materials
1.0	Set up site. Install protective hardboard and sheeting over all work areas and Take collection of all plant and secure site compound. Carry out a full CAT scan of the site before any excavations take place.			 Safety Signs Heras Fencing C.A.T Scanner Skip PPE Site WC 	Sterlingboards Plastic Sheeting
1.1	Setting out of works as show in scope of works			Hand tool Speed line paint	
2.0	Take up and set aside land scape materials.			Hand ToolsC.A.T ScannerPPE	
2.1	Excavate and install structural shuttering to allow and maintain safe access in to work environment. Waste to be place into skips. Compliance with working at height edge protection and safe access established. NC2 Confined space assess provisions established. A de water pump may be required to control ground water. Excavation to be 150mm lower than the base of the tank.			 Excavator Skip loader. Shutter box Lifting slings/chains Edge and access protection. NC2 Compliance Kit Gas Detector. PPE Skips 	
2.2	Installation of new concrete sub base for the STP. Bottom of excavation to be levelled. Concrete provided by external supplier. Concrete to be place in situ using excavator bucket. Second operative to carry out banks duty.			 Excavator Concrete truck Edge protection Hand tools NC2 Compliance kit 	 Concrete C25 semi dry. Tank
2.3	Installation of new sewage treatment centre, New STP to be lifted in to place using tested chains/slings attached to the excavator with approved shackles. Second engineer to act as banks man. No one is to be present in excavation while tank is installed.			ExcavatorLifting chains/slingsHand toolsPPE	
2.4	Surrounding of new STP with concrete to meet with wet site specification as per manufactures details. Steel shutter box to be lined with 50mm polystyrene, Concrete to then be placed around the tank up to required level. Concrete to be placed around tank with excavator A Hose pipe to be used to being the water level up at the same rate as the concrete surround this is to equalize the pressures on the unit and prevent deformation or floatation during installation. Water Hose to be clearly identified and place to prevent trip hazard.			 Excavator Concrete truck Water pipe/hose Hand tools PPE 	Polystyrene sheets 50mm Concrete C25

2.5	With the new tank installed inlet and outlet connections to be made, once connections are made pipe work to be flushed before commissioning to remove any debris from the lines. CCTV completed and recording made for QA	Excavator.Hand toolsPPECCTV	Pipe workPipe bedding.
3.0	Electrical (Not required for septic tank installation) connection to be made by NIC qualified engineer. Supply to be connected to tank by means stated in manufactures installation guidance. Supply cable to be SWA core cable. Control measures to be provided on supply. RCD & MCB protection. Cable to have marker tape place above before backfilling.	 Hand tools Cordless power tools Tester PPE 	 SWA Cable. Ducting Control equipment as required.
4.0	Excavation to be back filled once installation works have been completed. Spoil to be place and compacted with hand tamp as required. Finishing to be applied as pre-works records show. Or as agreed with home owner.	ExcavatorHand tools	0

Plant & Welfare Facilities Required

- Excavator
- Skip loading dumper.
- Site WC
- Marwood shutter box.
- Lifting chains/slings
- Lifting shackles
- Hand tools
- De watering pump
- Petrol cut off saw
- 7kg Breaker
- Site Fencing
- Welfare Facilities
- C.A.T Scanner
- Drain Camera
- Hose pipe
- Laser level.

Completion Criteria

Contractor shall have fulfilled its obligations when:

- Contractor accomplishes the Contractor activities described within this SOW
- The Client agrees that works have been carried out as per the agreed specification to an acceptable standard.
- Site has been vacated and all plant and materials removed.

Terms

Payment terms

- 50% Payable 1 week before installation date.
- 50% Payable upon completion of works.

Care will be taken while carrying out the works stated. Damage to surfaces will be incurred while carrying out works due to the nature of the equipment required to carry out the works. Although care will be taken, Avant cannot be held responsible for damage while carrying out described works.

Costs for carrying out works are based on good ground conditions. Should bed rock or a high-water table be encountered additional costs may be incurred.

Project Variation Procedure

The following process will be followed if a change to this SOW or a Variation of works is required:

- A project variation request will be submitted to Chris Tate. The variation must describe the change, the rationale for the change, and the effect the change will have on the project.
- Avant will review the proposed change and determine whether to submit the request to the other party.
- If variation works are agreed, works will be booked in at the request of the Avant engineer and will seek formal approval via SMS.
- Upon completion of the variation works, these will be invoiced separately to the initial authorized project.