

## **Outline Method Statement for Drimnin STW outfall replacement**

These instructions will be read prior to any commencement of work on site. If there is any doubt as to what is required stop work immediately. Full clarification will be received before commencement of work.

1. All personnel to wear suitable PPE at all times, including high visibility vests or jackets, gloves, hard hats, safety glasses & safety boots.
2. Ensure adequate materials, plant, pumps, barriers etc. are available before work commences.
3. Ensure adequate ladder access to all excavations.
4. All plant operators to have the relevant CSCS documentation; work practices will be agreed in advance and work teams briefed accordingly. [Tool box talk on excavation's and working in the proximity of underground services].
5. All machinery/plant to be locked/immobilized outside of normal working hours.
6. Ensure that operatives keep clear of excavator and other site plant and that no other site operations are on-going within the reach of excavating plant.
7. Access and egress routes to be agreed prior to any work commencing.
8. The pipes will be delivered from the supplier by lorry and the excavator will be used to off load. Using slings attached to both the excavator and the pipe, carefully lift off the lorry and place onto the ground. Ensure that no-one is within the lifting area until the pipe has been placed. The pipe will require to be made stable to prevent it from rolling along the ground. Use timber posts or some other form of material to "chock" the sides. Store the pipes on site well away from access routes or other excavation areas.
9. All lifting equipment must be checked and certified.
10. All slinging must be carried out by a trained competent person.
11. An authorised Person is to be present on site at all times and will be responsible for co-ordination of all vehicle movement and working practices (co-ordinating works with the Site Manager). A banks man will be in attendance for all vehicle movements within the area.
12. The engineer will agree and set out location and level of Site Drainage and the excavation will be marked with marker spray. The area marked for excavation will be CAT scanned and any live cables detected must be reported to the Site Manager before proceeding.

The pipes shall be laid starting at the lowest point and working toward the highest point.

13. The works on the ductile iron outfall section on the shore will require to be laid at low tide, a small section of concrete base will be laid in situ at the positions required these will be used as a foundation for the precast units that will carry the pipe.
14. The works will commence at the headwall section, this will be a precast concrete unit that will be placed by a 13t excavator. A 150mm dia flap valve will be bolted onto the headwall at the pipe outlet.
15. The precast concrete units will be carried out by a 13t excavator and placed within the concrete.
16. 150mm diameter ductile pipe will be laid on top of the precast units and strapped onto the unit with neoprene rubber and stainless steel straps and bolted onto position.
17. The pipe laying will continue up the shore until the pipe is below ground.
18. The pipe below ground can be laid as per the general pipe laying method statement
19. Whilst laying the new pipework it will be important to make sure there is no contamination within the pipe. The operative will check for any debris inside the pipe before laying it and will remove it if there is. If the ground conditions become wet and muddy then a sump will always be excavated to make sure no dirty water runs down the new pipe, again a stopper will be used while the pipe is unattended.
20. Excavations will be backfilled as soon as possible after pipe laying and any excavations left open will be protected using temporary fencing with mammal ramps installed.

The foul drains will be air-tested in accordance with 'Sewers of Scotland 2<sup>nd</sup> Edition'.

21. All the open ends of the drainage system will be plugged using an expandable stopper. The stoppers will be tightly fitted to prevent air loss.
22. A drain testing kit will be used to pump air into the drainage system, to a pressure of 100mm head of water. This will be clearly shown on the test gauge. To pass the test, the reading must stay above 75mm after a period of 5 minutes without further pumping.
23. The above test will be witnessed by the Clients Representative for approval.