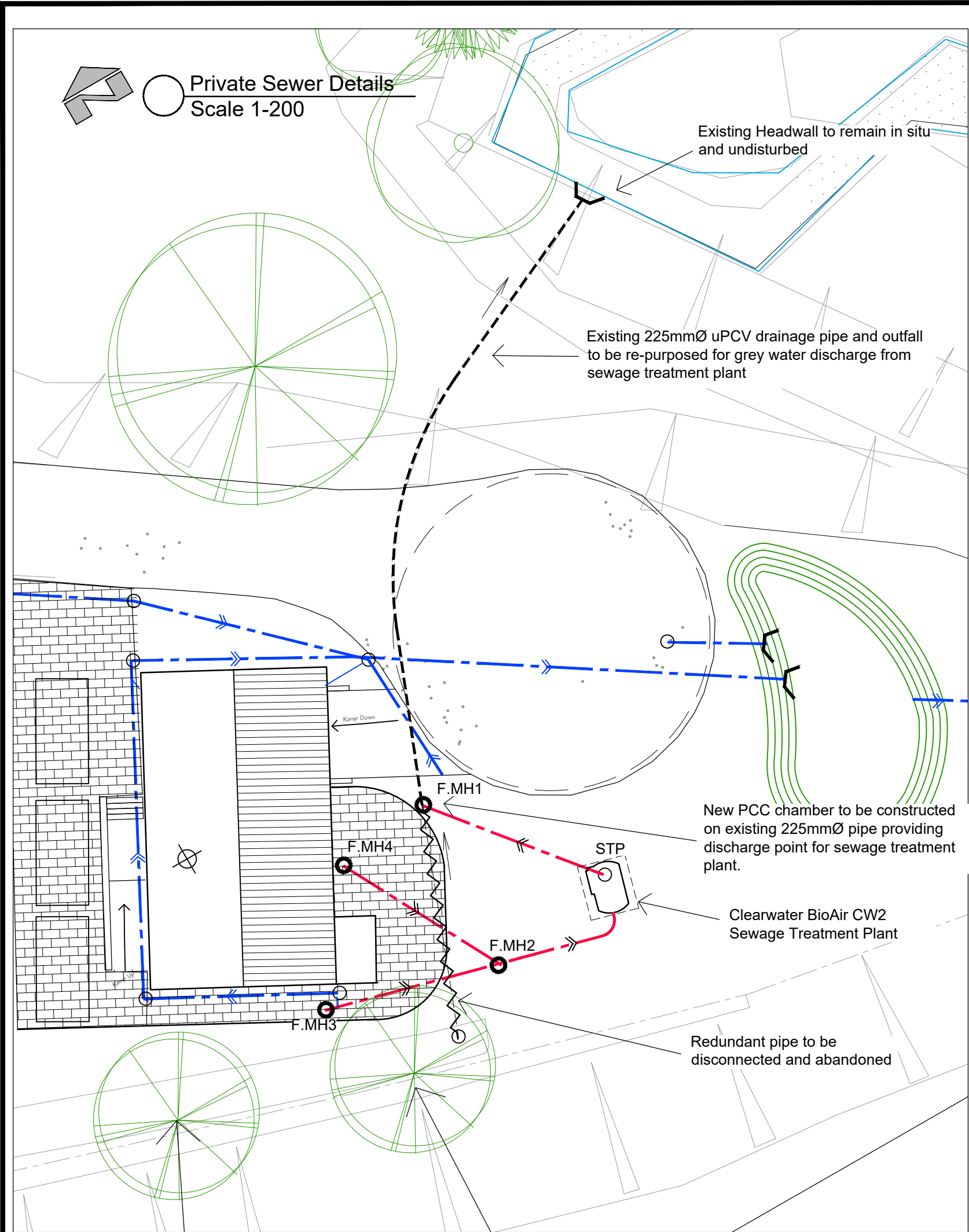
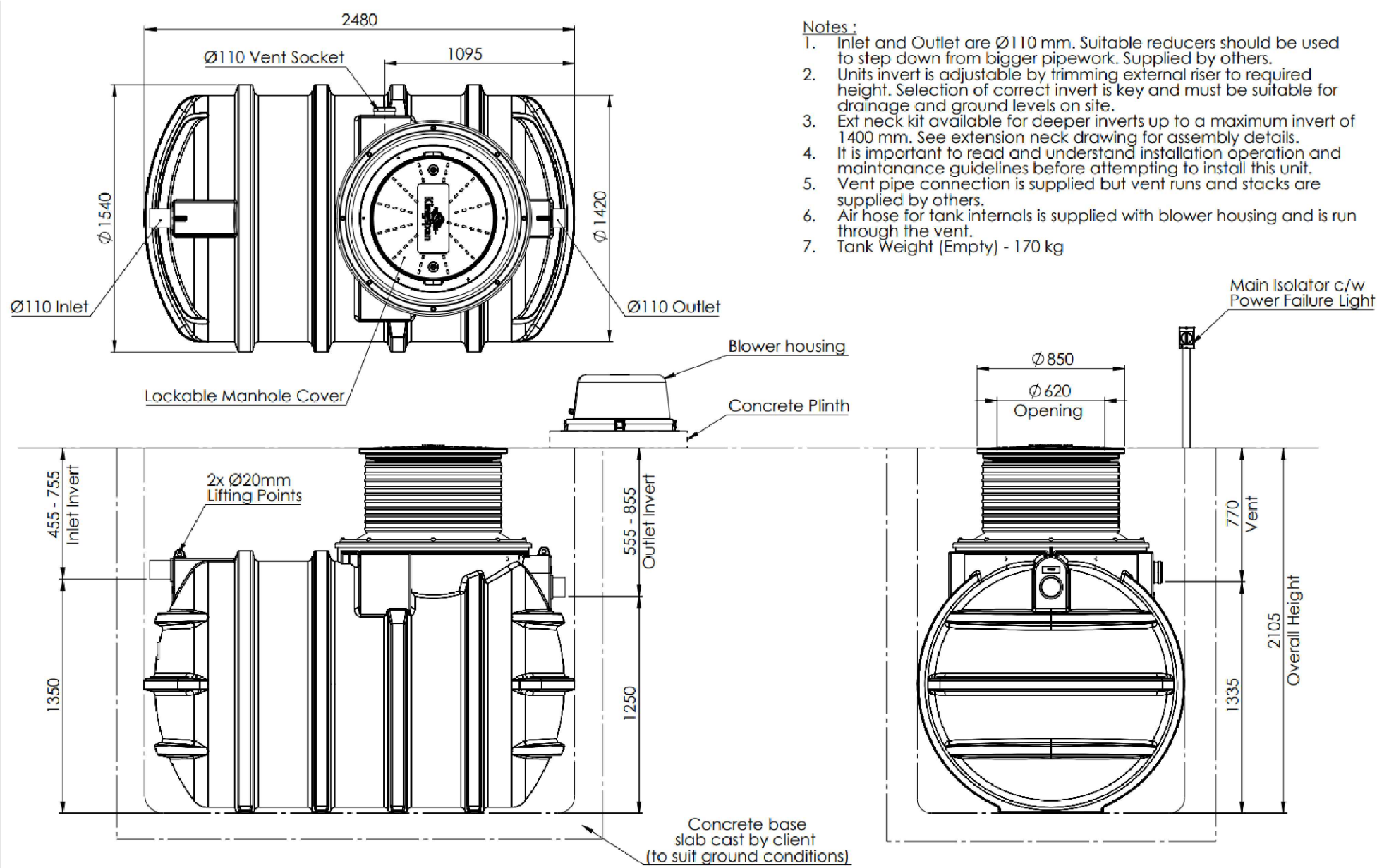
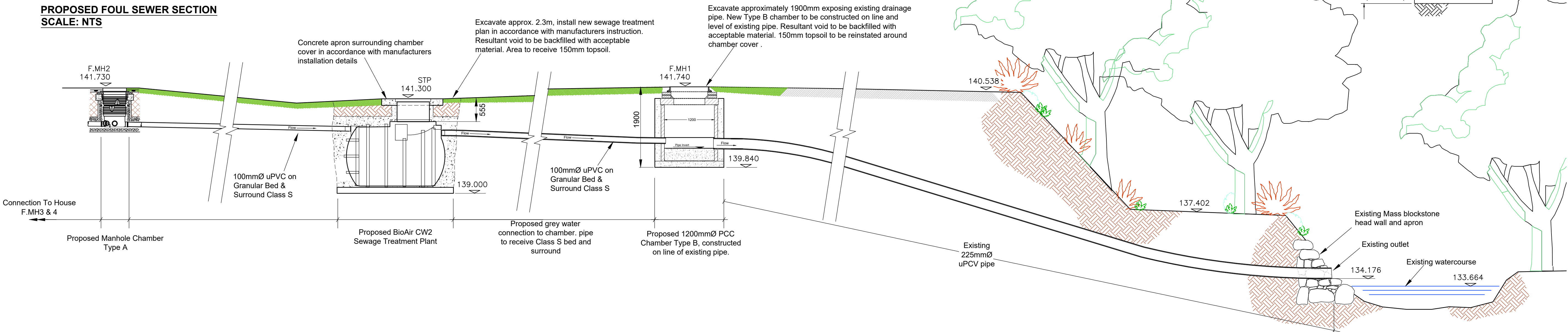




KEY TO DRAINAGE

- Existing Surface Water drains and direction of flow.
- ~~~~~ Redundant carrier drain to be abandoned (or grouted up where specified with cement grout)
- F.MH1 Proposed Foul Manhole
- Proposed 110mm Ø Surface Water sewer and direction of flow. on "Type S" pipe bedding.
- Proposed 110mm Ø Foul Water sewer and direction of flow. on "Type S" pipe bedding.

PROPOSED FOUL SEWER SECTION
SCALE: NTS



TECHNICAL SPECIFICATIONS

Clearwater BioAir	Model	CW 2
Population Equivalent	Unit	6
Daily Flow	m ³ /d	0.9
Daily Load	kg BOD ₅ /d	0.36
Measurements		
Inlet invert	mm	455-755
Discharge option		Gravity / IPS
Outlet invert (Gravity / IPS)	mm	555-855 / 400-700
Diameter	mm	1540
Length	mm	2500
Installation depth	mm	1805-2105
Inlet pipe work	mm	Ø110
Outlet pipe work (Gravity / IPS)	mm	Ø110 / Ø50
Material Construction	MDPE / GRP	MDPE
Unit Weight	kg	170

OPERATION AND MAINTENANCE OF SEWAGE TREATMENT PLANT

Clearwater BioAir CW2 Sewage Treatment Plant - 6 Person

MAINTENANCE

Every sewage treatment plant needs regular maintenance as does the upkeep of drains and outfall. This is the responsibility of the owner/user. Plant maintained by qualified service personnel.

MAINTENANCE SCHEDULE

DAILY

Check the operation of the compressor. It should be possible to hear it running by standing close to the unit.

MONTHLY

Check the operation of the compressor (bubbles should be rising in the reactor).

Visually check that the inlet and outlet zones are clear of debris.

Odour from the plant should be 'earthy' and hydrogen sulphide odours ('rotten eggs') should not be present.

Visually check the final effluent. If cloudy or containing many suspended particles, then the humus and or primary tank is likely to require desludging.

THREE MONTHLY

Assess the sludge build up in the reactor and final settlement zone.

Check the blower filter and replace if necessary. Note. The filter will collect dirt particles from the air and the location of blower/inlet will influence the frequency of filter change.

TWELVE MONTHLY

The desludging frequency will be approximately 12 months.

DESLUDGING

Desludging should be carried out by a licensed waste disposal contractor holding the relevant permits to transport and dispose of sewage sludge.

Do not empty the entire reactor and FST, as some biology should remain in the system to continue to work.

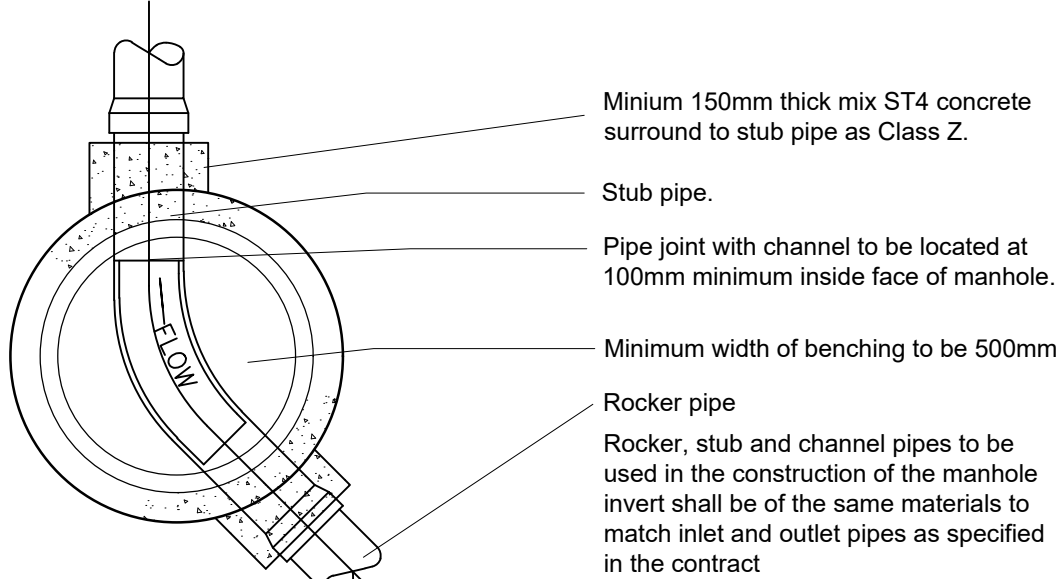
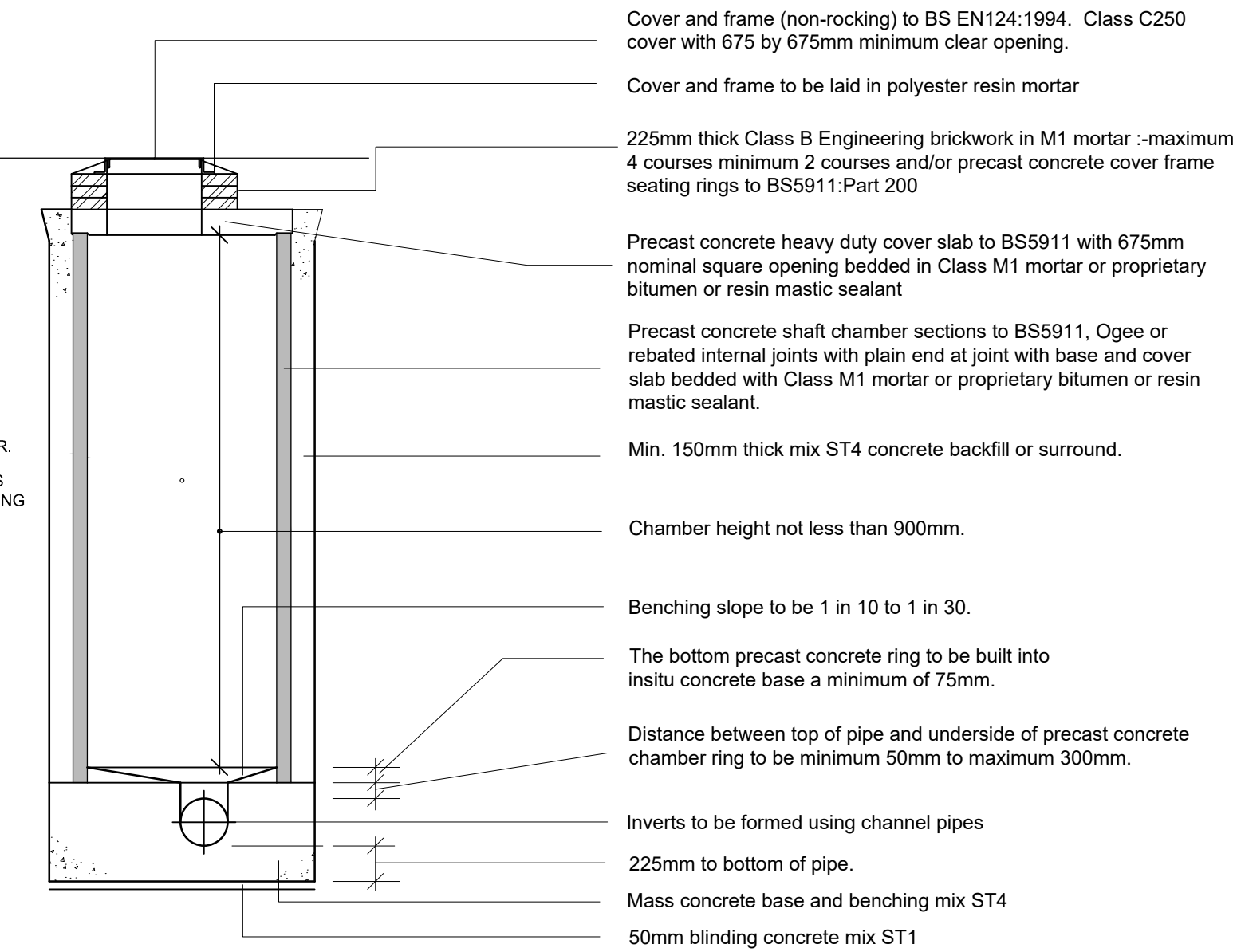
Insert the suction hose into the FST, taking care not to damage the sludge return pipework. Approximately 300mm of active sludge must remain in the bottom of the reactor. Desludging frequency is dependent on the incoming organic load, and therefore site specific.

The final settlement tank is where humus solids settle out and are returned via the sludge return airlift to the biozone for further treatment. An amount of sludge will periodically require removing from the reactor. This is removed through the Final Settlement Tank ONLY, thus allowing the required amount of active sludge to remain in the reactor.

Approximate de- Sludge volumes – 2445 Litres (538 gal)
Desludge Period – 12 MonthsMaximum

MANHOLE CHAMBER TYPE B

Maximum depth from cover level to soffit of pipe 0.9m to 3m - NTS



PIPE BED & SURROUND - CLASS S

