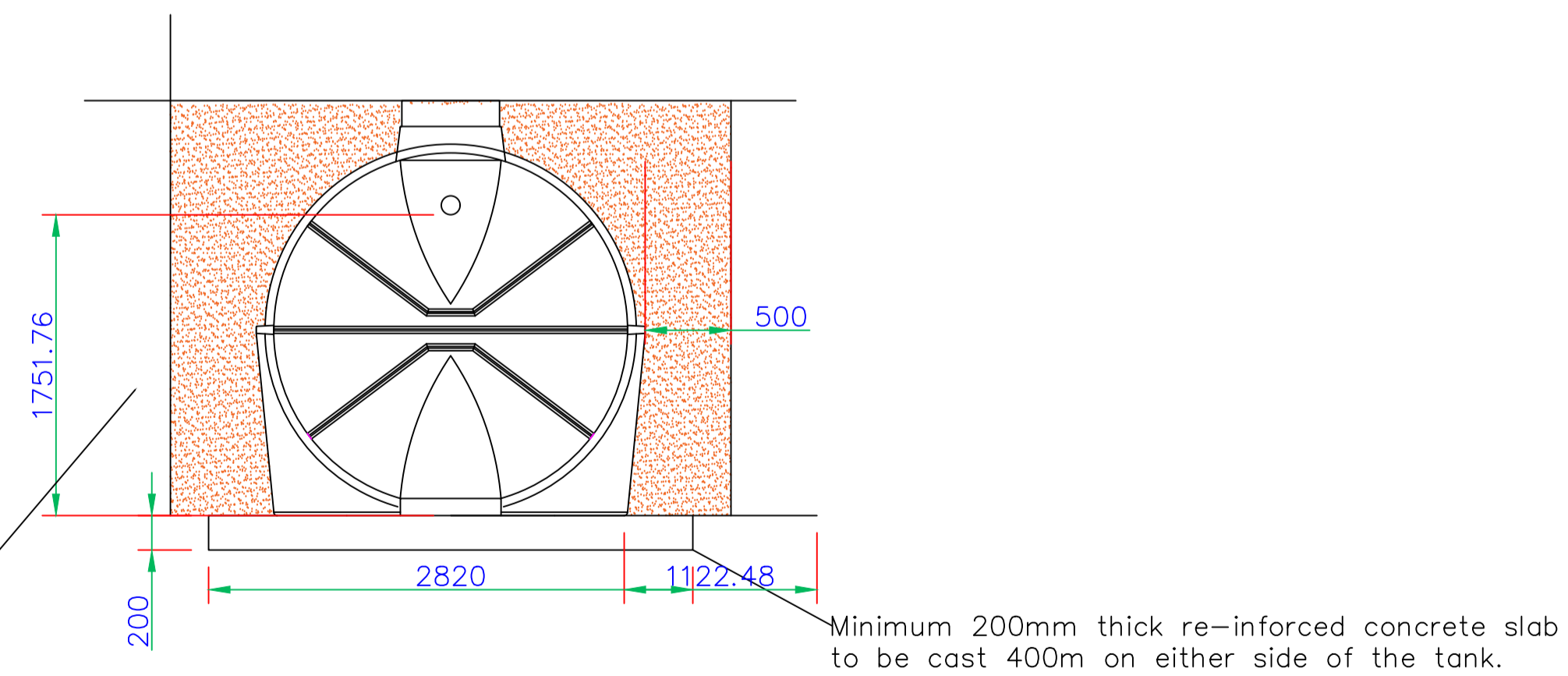


Pump Discharge to irrigation or wetland/leach field



Backfill material to conform to with either, an inert granular material, soilcrete mix of 5% cement to 95% inert granular material (RIVERSAND MIX ACCEPTABLE) or cement slurry. The layers of the backfill should not exceed 250mm and should be compacted to 90% Mod, AASHO. It is particularly important to note that excavated material consisting of rock, peat or clay is NOT USED as backfill material.

The afore-mentioned installation instructions constitute good Civil Engineering practice. They are however subordinate to the Engineer's on-site requirements for a successful installation. The Engineer's decision on every project is therefore FINAL.

**INSTALLATION INSTRUCTIONS:**

Select a site that allows for the system to be installed with the incoming sewer pipe to be laid at a gradient of between 1:40 and 1:60, (for every sixty meters in length one meter in depth) and adequate access must be provided for routine desludging and maintenance. Usually the unit should be sighted within 20m of a hard standing area suitable for a 10 ton Vacuum tanker.

**NOTE:**

**CALCAMITE TANKS ARE NOT DESIGNED TO BE BURIED MORE THAN 0.5M BELOW GROUND LEVEL. IF DEPTHS ARE GREATER THAN 0.5M PLEASE REFER TO SITE ENGINEER/ARCHITECT OR CALCAMITE TECHNICAL PERSONNEL.**

**NOTE: If a high water table exists or where Abnormal soil conditions prevail such as Clay, oukkip), contact Calcamite or your engineer for special installation instructions for these conditions.**

**CAUTION:**

These instructions assume no more than pedestrian duty loadings will be applied to the final installation. Traffic or other heavy superimposed loads must not be transferred through the walls of the tank. This implies a max invert depth of 500mm from the incoming sewer pipe to ground level. For deeper installations please refer to an Engineer for final instruction. Vehicles should not be permitted within a distance equal to the depth of the unit, unless suitable structural projection has been provided. Before installation commences check that the tank(s) are free from damages and always handle with care. Avoid excessive impact and rough handling

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**General Notes**

Excavate a hole in line with the proposed sewer pipe. The size should be approximately 300mm wider than the size of the Bio-Mite Plant and to a depth that allows for the above gradient to be attained.

Once the hole has been dug, remove any sharp objects and begin to back fill with first layering a 100mm thick layer of compacted soil Crete on the floor of the hole, (Modular tanks require cement slab and should be installed according to installation instructions 1ST July 2008.

Lower the unit into the hole.

Connect the incoming pipe to the inlet of the Bio-Mite unit and the outlet from the pump to the dispersion pipe (note: 22mm diameter minimum).

Fill all the tanks one quarter full with water. Once the water has reached this level backfill and compact with an inert granular material (e.g. river sand) that has been mixed with cement in that ratio of ten parts sand one part cement until the level of the water has been matched.

**Never backfill with clay soil or with sand that has stones larger than 20mm**

Once the outlet level is reached you can stop filling with water and can now fill to ground level with backfill. Should high ground water, clay soil or other abnormal conditions exist the tanks will require cement stabilization and should be referred to an engineer for approval.

Cast a slab of concrete 1m x 1m (50mm thick) per blower housing. The location of the housing should be adjacent to the Bio-Mite and preferably not further than 5 meters. An electrical point must be provided to allow connecting the pump and blower. Connect air blower to the diffuser pipe (housed inside the Bio-Reactor module) using 20mm pipe and push lock fitting provided. There should be no sharp bends or kinks causing airflow restriction. Plug the blower and submersible pump into the connection (provided by client). The plant is now ready for use.

No.	Revision/Issue	Date

Firm Name and Address  
 2/Wholesale 2019/2020/2021/2022/CALCAMITE/Logo for Design 2 2019/20

Project Name and Address  
 CALCAMITE  
 BM50  
 BELOW GROUND

Project CAL BM50 BG	Sheet CAL
Date 23.06.2019	
Scale As Noted	