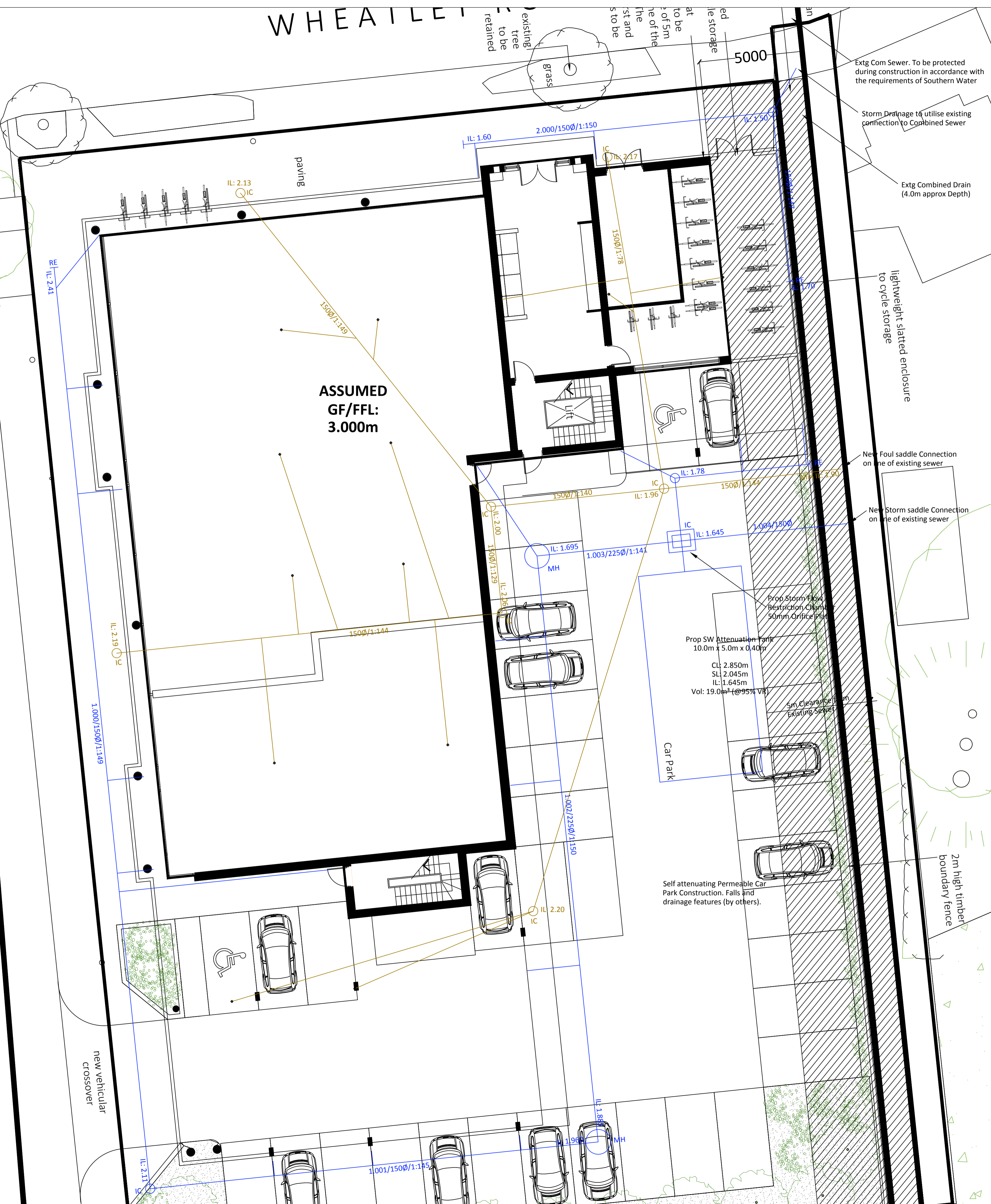
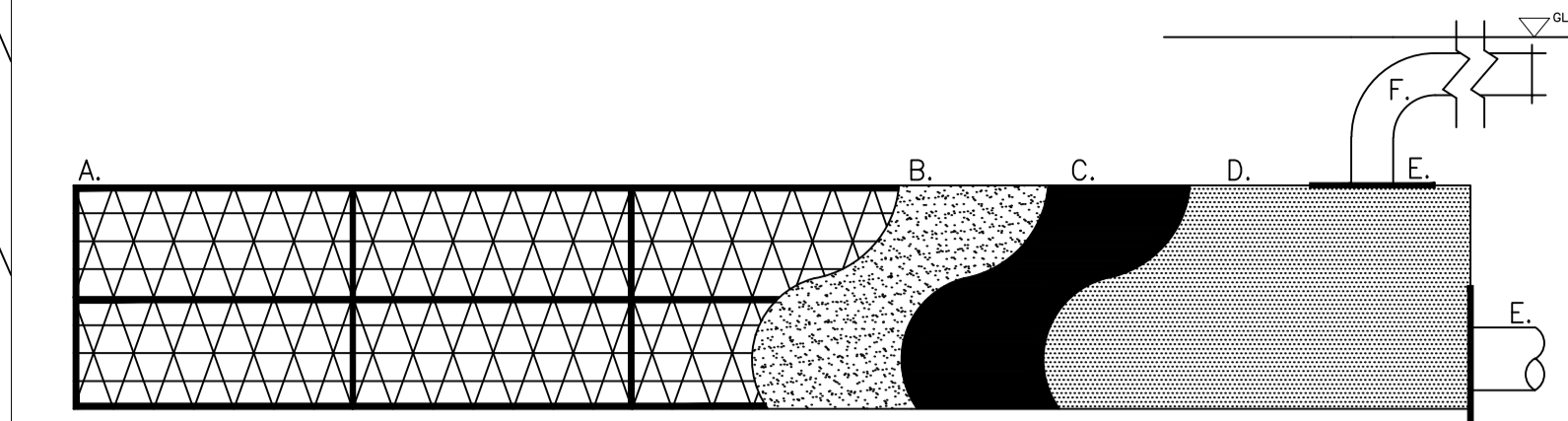


WHEATLEY



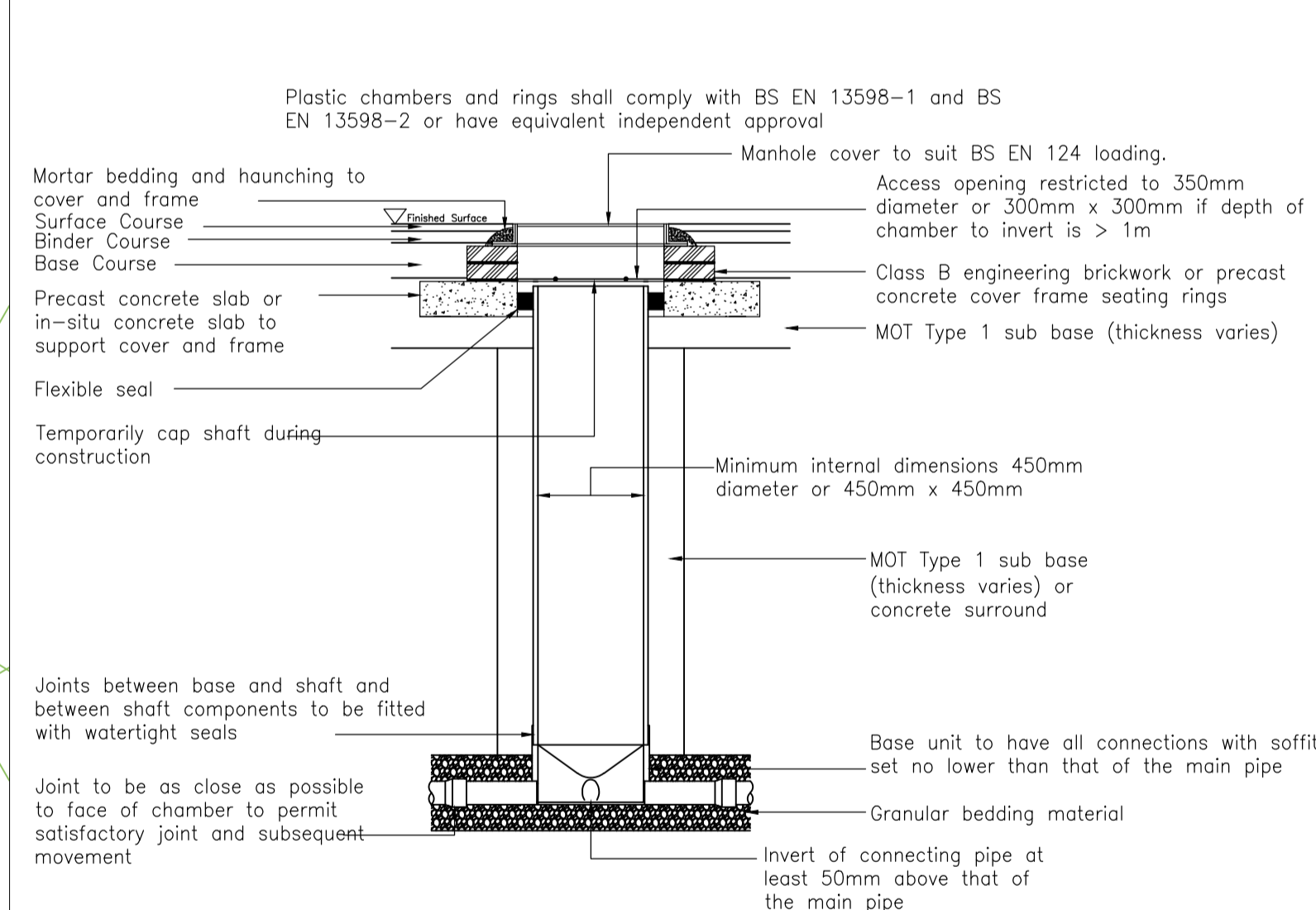
NOTE: THESE DRAWINGS ARE INTENDED FOR GUIDANCE PURPOSES ONLY. PLEASE USE IN CONJUNCTION WITH MANUFACTURERS RECOMMENDED INSTALLATION GUIDANCE AND CONSTRUCTION DRAWINGS



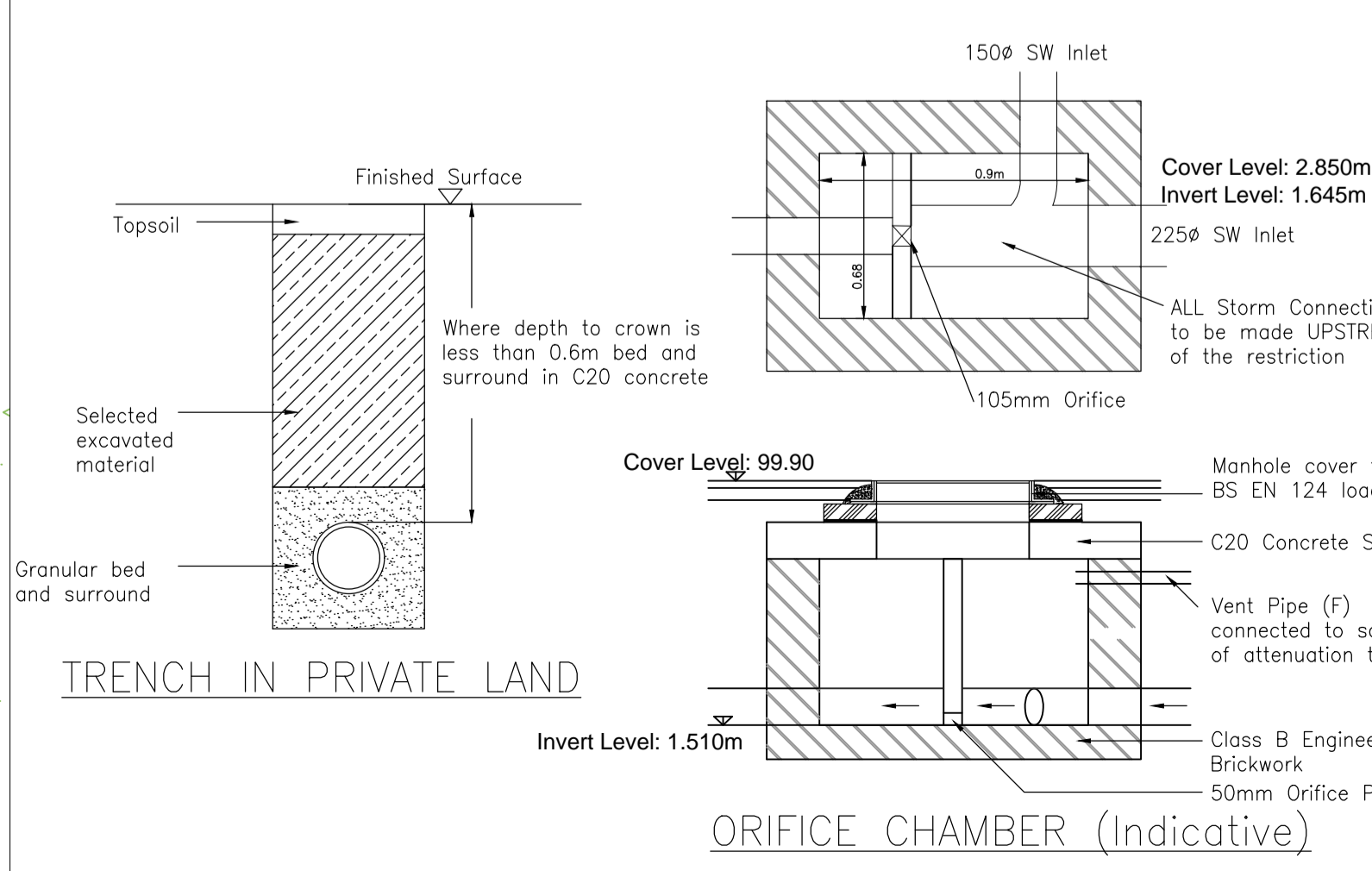
CELLULAR CRATE ATTENUATION TANK - ASSEMBLY INSTRUCTIONS

INSTALLATION INSTRUCTIONS

- Excavate to the required length, width and depth (refer to engineering layout) and level the base. Ensure area is enough to allow plant access around sides to compact the backfill material (500mm minimum). Ensure base is smooth and level with no sharp protrusions. cut back slopes to a safe angle or adequately support and allow safe access for site personnel.
- Inspect the base for soft spots and if any are present, excavate and replace with compacted granular fill material.
- Lay 100mm drainage aggregate to base of trench then cover with 50mm layer of sharp sand then level off. Lay 175g non woven, needle punched type G1900 protection fleece (D), ensuring a minimum 150mm overlap. Lay 1mm thick geomembrane (C) over protection fleece and seal joints with a watertight seam. Lay NW8 non woven, geotextile membrane (B) over sealed geomembrane.
- Install cellular storage crates (A) in accordance with manufacturers recommendations. The amount of crates and configuration for assembly will be shown on the engineering drawings. Arrange the units so that the outlet positions are in correct alignment with the inlet and outlet pipes. In multi layer installations care should be taken during backfill to avoid displacement around the edges of the structure.
- Complete the NW8 geotextile (B) encapsulation to the sides and top of the installation. Complete the geomembrane (C) encapsulation to the sides and top the installation and ensure all joints are welded and checked for water tightness. Finally complete the G1900 protection fleece (D) encapsulation. All geotextiles and geomembrane layers must have a minimum 150mm overlap.
- Mark inlet/outlet positions and cut through the first two layers of geotextile/geomembrane exposing the inner geotextile (B). Seal top hat connectors (E) to the geomembrane (C) ensuring the size matched that of the inlet/outlet pipe. The vertical vent pipe (F) must be connected to the geomembrane (C) also by top hat connector (E). Use nominal pipe size 110mm unless otherwise specified for the vent pipe (F). Connect all pipework.
- Backfill the installation with 150mm layer of drainage aggregate. Place a 75mm sharp sand protection layer over the top of the units and continue to backfill as follows:
FOR TRAFFICKED AREAS (CAR PARKS ETC):
Type 1 or 2 sub base material compacted in 150mm layers in accordance with the Specification for Highway Works. Compaction Equipment on top of the system not to exceed 2,300kg per metre width.
FOR LANDSCAPED AND NON-TRAFFICKED AREAS:
Selected 'as dug' material with a unit size no more than 75mm compacted to 90% maximum dry density. Compaction equipment on top of the system not to exceed 2,300kg per metre width.
- Finalise the pavement construction/landscaping over the attenuation crate system.



MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE IN AREAS SUBJECT TO VEHICLE LOADING 3M, NON-ENTRY



- Notes:
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH SITE LAYOUT PROPOSALS PREPARED BY MDC LONDON.
 - PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF BUILDING REGULATIONS 2000, 'PART H', 'DRAINAGE AND WASTE DISPOSAL'. (1ST APRIL 2002)
 - ALL PRIVATE BUILDING DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURERS.
 - PIPES WHICH RUN ADJACENT TO BUILDINGS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH BUILDING REGULATIONS PART H, CLAUSES 2.23 TO 2.25 AND DIAGRAM 8.
 - ALL PRIVATE MANHOLES AND INSPECTION CHAMBERS SITUATED IN AREAS SUBJECT TO VEHICULAR LOADING TO HAVE CLASS C250 COVERS AND FRAMES TO BS EN124 AND THOSE NOT SUBJECT TO VEHICULAR LOADING MAY HAVE CLASS B125 COVERS AND FRAMES.
 - ANY DRAINS LOCATED IN THE VICINITY OF EXISTING OR PROPOSED TREES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NHBC PRACTICE NOTE 3.
 - IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL BUILDING DRAINAGE IS CONSTRUCTED CORRECTLY AND ALL MANHOLE COVERS ARE SUITABLY FIXED TO THE FRAMES.
 - PRIVATE BUILDING DRAINAGE WORKS TO BE INSPECTED ON SITE BY BUILDING CONTROL AS REQUIRED AND BUILT IN ACCORDANCE WITH THE INSPECTORS RECOMMENDATIONS SHOULD THEY DEVIATE FROM WHAT IS SHOWN ON THIS PLAN.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXECUTE THE WORKS AT ALL TIMES IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE HEALTH AND SAFETY AT WORK ACT 1974, AND CDM REGULATIONS 2007.
 - ALL LEVELS SHOWN ARE BASED ON LEVELS RELATIVE TO THE FINISHED FLOOR LEVEL.
 - SOAKAWAYS SHOULD NOT BE PLACED WITHIN 5m OF STRUCTURAL FOUNDATIONS, INCLUDING THE BASE OF RETAINING WALLS, NOR SHOULD THEY IDEALLY BE WITHIN 2.5m OF A NEIGHBOURING BOUNDARY WITHOUT FIRST CONSULTING THE OWNER OF THE ADJACENT LAND. ATTENUATION TANKS ARE PERMITTED WITHIN THIS AREA PROVIDED THE IMPERMEABLE MEMBRANE IS SUITABLY SEALED TO PREVENT LEAKAGE INTO THE SURROUNDING SOIL.
 - THE DRAINAGE LAYOUT SHOWN IS INDICATIVE. FINISHED LEVELS HAVE BEEN ASSUMED BASED ON SECTIONS PROVIDED BY THE CLIENT. FALLS ACROSS THE SURFACE OF THE LAND WILL NEED TO BE CONSIDERED AND DRAINAGE FEATURES SUCH AS LINEAR DRAINS AND GULLYS MOVED ACCORDINGLY.
 - THE COVER LEVELS SHOWN ARE INDICATE OF WHAT IS ANTICIPATED TO BE THE FINISHED COVER LEVELS. IF THE ACTUAL COVER LEVELS ARE SIGNIFICANTLY LOWER THAT THOSE SHOWN, THIS MAY ADVERSELY EFFECT THE DRAINAGE DESIGN.
 - IF ANY LEVELS ARE CHANGED, THE ENGINEERS SHOULD BE CONSULTED TO DETERMINE THE EFFECTS OF THE CHANGES AND MINIMISE THE SUBSEQUENT IMPACT ON THE DESIGN
 - FOR THE PURPOSE OF THIS DRAWING, PLOTS 1 AND 2 ARE ASSUMED TO HAVE A FFL OF 100.00m AOD. A CORRECTION FACTOR EQUAL TO THE DIFFERENCE BETWEEN THIS ARBITRARY LEVEL AND THE ACTUAL FFL RELATIVE TO THE SELECTED DATUM SHALL BE SUBSEQUENTLY APPLIED TO ALL DRAINAGE AND LEVELS WHEN SETTING OUT FOR DRAINAGE.
 - PLANS DIGITISED FROM OS MAP DATA AND HAND DRAWN PLANS. THE LAYOUT AND POSITION OF ANY FEATURES SHOWN IS INDICATIVE ONLY AND SHOULD NOT BE RELIED UPON FOR SCALE OR ACCURACY
 - ALL EXISTING DRAINS FOUND ON SITE TO BE ABANDONED BY EITHER EXCAVATING OR FILLING WITH CONCRETE

D	GF Building Layout Shown for Clarity. Attenuation Moved to Allow 5m Easement offset from C/L of Existing TW Sewer Asset	28/10/2016
C	Car Parking changed to permeable construction and removed from runoff calcs	14/09/2016
B	Single Attenuation Tank. General Modifications to drainage layout	07/09/2016
A	First Issue	04/09/2016
Revision:	Reason:	Date:



Sustainable Drainage Centre

Client:
MDC London

Project:
134 Cromwell Road
Whitstable, CT5 2AA
Drawing:
Storm and Foul Drainage
Layout Plan (Option B)

Scale: 1:100 1:200	@ A1 @ A3	Revision: D	Date: April 2016
Drawing Reference: 2130/2016/003	Drawn by: KJP	Checked by: SPM	