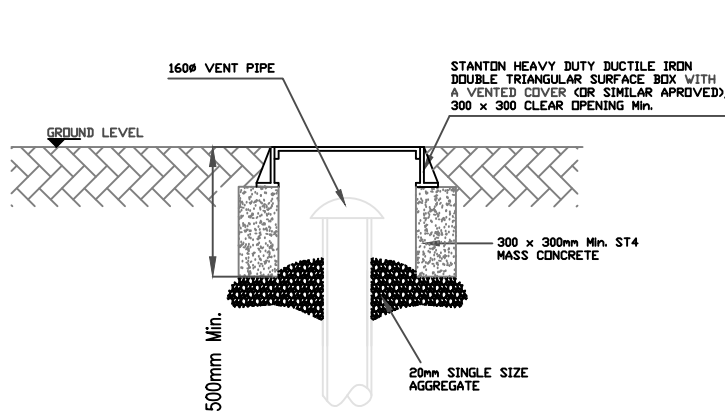
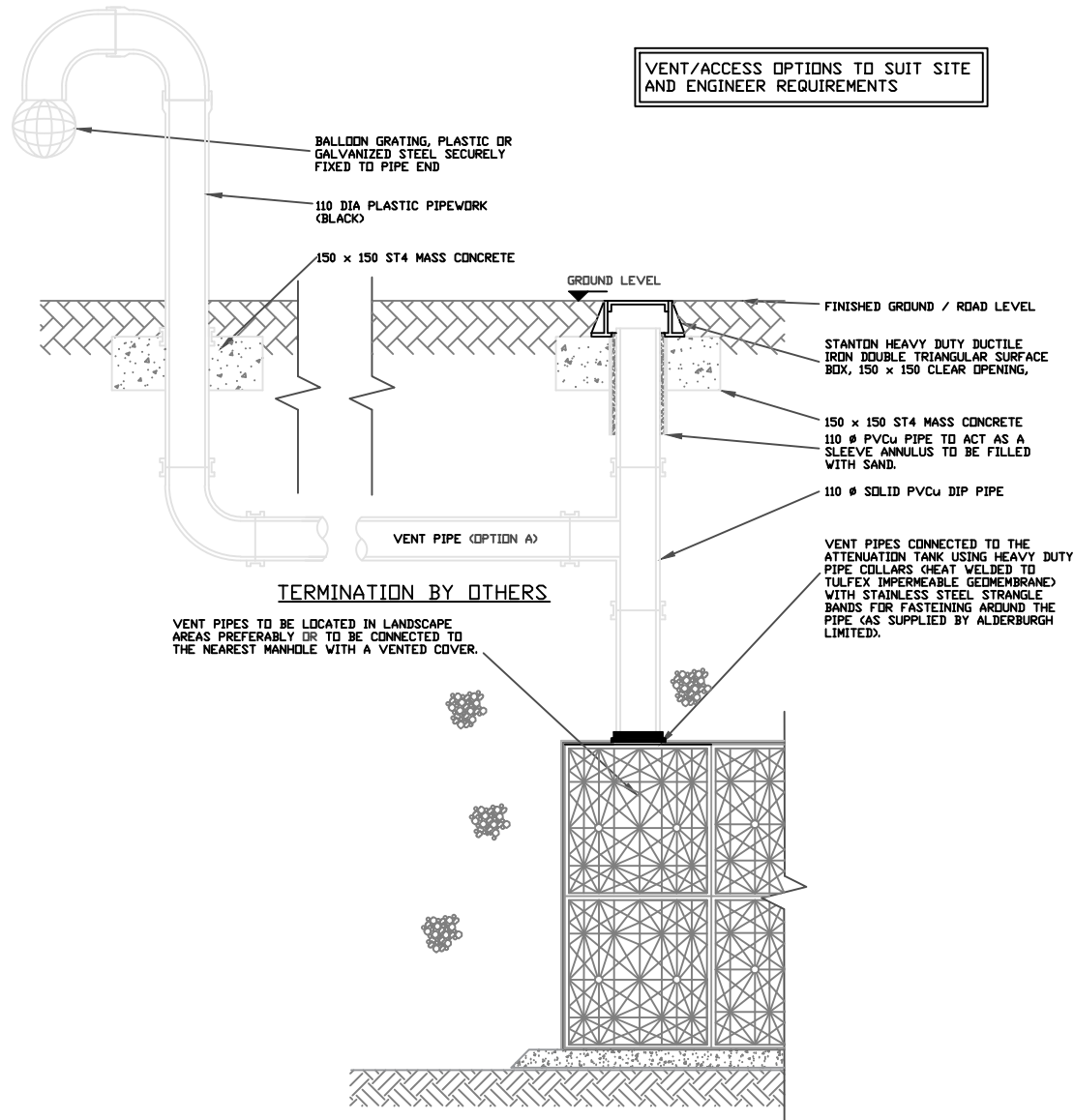




VENT BOX DETAIL
BY OTHERS
(OPTIONAL)

THE CONTRACTOR SHALL PROHIBIT THE MOVEMENT OF CONSTRUCTION PLANT ACROSS THE STORAGE TANK AND WHERE NECESSARY PROVIDE ADDITIONAL SUPPORT AND PROTECTION TO THE STRUCTURE. PARTICULARLY POST CONSTRUCTION, TEMPORARY FENCING CAN BE USED TO PROHIBIT TRADE STOCKS, PILING MATERIALS, HEAVY PLANTS ETC.,



TERMINATION BY OTHERS

VENT PIPES TO BE LOCATED IN LANDSCAPE AREAS PREFERABLY OR TO BE CONNECTED TO THE NEAREST MANHOLE WITH A VENTED COVER.

TYPICAL 160mm VENT/ACCESS PIPE CONNECTION

VENT/ACCESS OPTIONS TO SUIT SITE AND ENGINEER REQUIREMENTS

LEVELS AND PIPE SIZES TO BE CHECKED WITH THE LATEST DRAINAGE LAYOUT PRIOR TO INSTALLATION

INLET/OUTLET PIPES MUST BE SUPPORTED WITH CONCRETE TO PROTECT IT DURING BACKFILLING

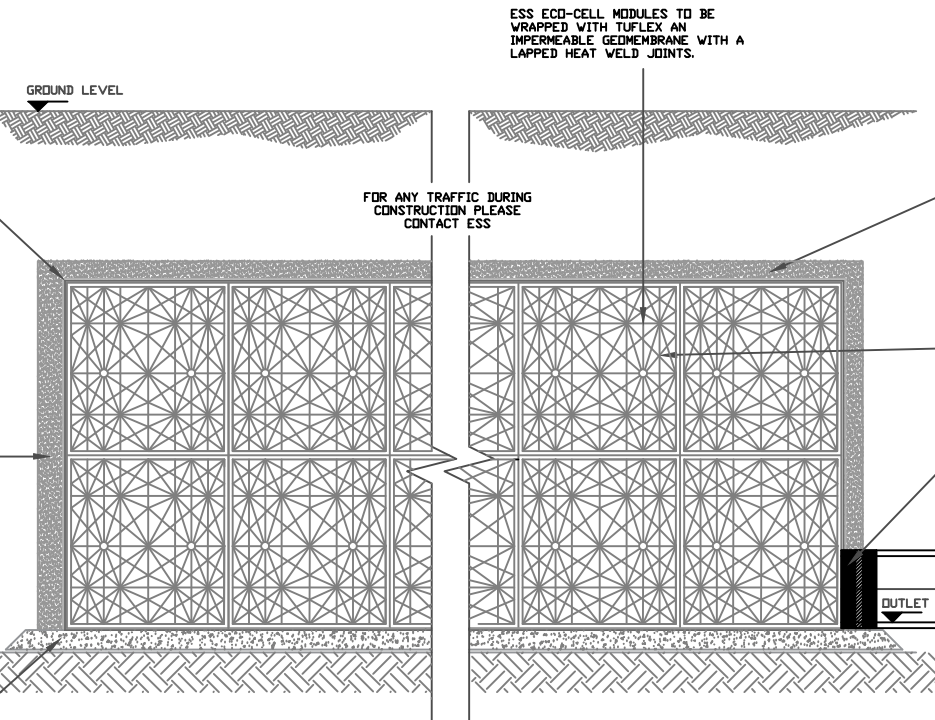
A 3 - 5% CBR HAS BEEN ASSUMED AT SUB-BASE LEVEL SHOULD THE CBR BE TESTED AND FOUND TO BE LESS THAN 3% THEN THE ENGINEER SHALL BE NOTIFIED. ALSO, ANY SOFT SPOTS FOUND AT SUB-BASE LEVEL SHALL BE REPORTED TO THE ENGINEER

TO PROTECT THE WATERPROOF GEOMEMBRANE DURING BACKFILLING OPERATIONS, OVERLAY THE TOP AND SIDES WITH A GEOTEX 300 PP NEEDLE PUNCHED NON WOVEN GEOTEXTILE WITH A LAPPED JOINTS

TOP OF TANK LEVEL

TANK BASE LEVEL

FLAT, LEVEL, SMOOTH BASE WITH NO UNDULATIONS AND HAS 3-5% CBR



TYPICAL INLET PIPE CONNECTION

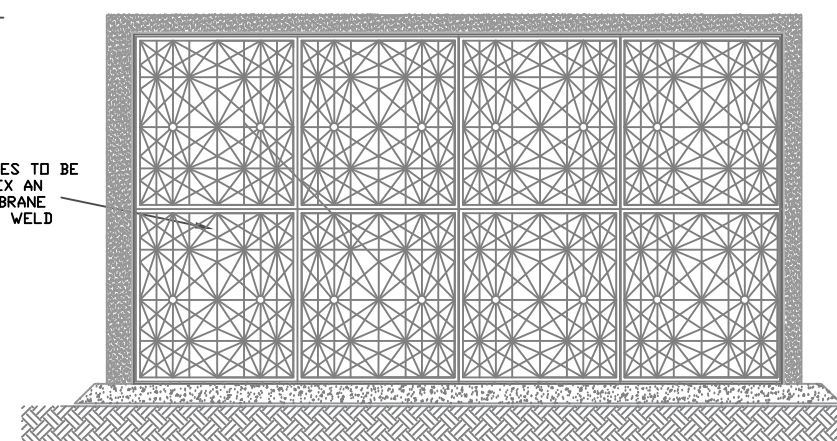
TYPICAL OUTLET PIPE CONNECTION

TYPICAL DETAILS OF ATTENUATION
TANK USING ECO-CELL MODULAR UNITS
(SIDE VIEW)

TOP OF TANK LEVEL

ESS ECO-CELL MODULES TO BE WRAPPED WITH TUFLEX AN IMPERMEABLE GEOMEMBRANE WITH A LAPPED HEAT WELD JOINTS.

TANK BASE LEVEL



TYPICAL DETAILS OF ATTENUATION TANK
USING ECO-CELL MODULAR UNITS
(FRONT VIEW)

- SUGGESTIONS OPTIONS ABOVE THE ECO-CELL MODULAR UNIT TO PROTECT THE UNITS AND MEMBRANE DURING BACKFILLING OPERATIONS:
- SELECTED EXCAVATED MATERIAL IF SEEN SUITABLE BY THE SITE ENGINEER.
 - BACKERBOARD HD (IS A PREMOULDED BOARD FOR USE AS PROTECTION AGAINST BACKFILL)
 - 100 mm THICK COARSE SAND OR CLASS 6H SELECTED GRANULAR MATERIAL.

ESS ECO-CELL MODULES (685 mm LONG x 410 mm WIDE x 900mm HIGH) ARRANGEMENTS AS SHOWN (AS SUPPLIED BY ALDERBURGH). MODULES CAN BE SECURED AS A 'HOUSE KEEPING' MEASURE WITH PLASTIC PROPRIETY CABLE TIES.

PIPES CONNECTED TO THE ATTENUATION TANK USING HEAVY DUTY PIPE COLLARS HEAT WELDED TO THE TUFLEX IMPERMEABLE GEOMEMBRANE WITH STAINLESS STEEL STRANGLE BANDS FOR FASTENING AROUND THE PIPE.

IN/OUTLET PIPE(S) DIA VARIES WITH CLASS 5 BEDDING

Notes :-

- ALL STORAGE TANK DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS, METHOD STATEMENTS AND RECOMMENDATIONS OF ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED, LITTLEBOROUGH.
- THE LOCATION, SIZE AND DEPTH OF ALL EXISTING DRAINAGE / SEWERS AND SERVICES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE PUBLIC UTILITIES.
- THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN-OFF INTO EXCAVATIONS AND FROM GROUNDWATER BY MEANS OF SUMPS, PUMPING AND DE-WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.
- ALL LEVELS AND DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS IN LINE WITH CURRENT LEGISLATION WHEN WORKING IN / NEAR CONFINED SPACES, DEEP EXCAVATIONS AND MACHINERY.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY TO PROTECT PEDESTRIANS AND VEHICLES FROM THE WORKING AREAS.
- TO PROTECT THE ESS ECO-CELL MODULAR ATTENUATION / STORAGE TANK FROM CONSTRUCTION SITE DEBRIS, THE CONTRACTOR SHALL ENSURE THAT STOPPERS ARE SECURELY PLACED IN ALL CONNECTIONS IMMEDIATELY UPSTREAM OF THE TANK UNITS. ONLY TO BE REMOVED ONCE THE FINAL CLEANING OF THE ROADS / DRAINAGE HAS BEEN COMPLETED.
- UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL CLEAN ALL DRAINAGE BY JETTING, REMOVING ALL DEBRIS FROM SITE, NO DEBRIS SHALL BE PERMITTED TO ENTER THE TANK STORAGE SYSTEM.
- NUMBER OF VENT UNITS DEPENDS ON THE SIZE OF THE TANK (REFER VENT DRAWING)
- REFER SEQUENCE OF WORK DOCUMENT FOR DETAILED INSTALLATION METHODOLOGY (CONTACT ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED)

R0 26/10/21 TANK 2 AMENDED TO SUIT REQUIREMENTS

Notes :- All the Dimensions by Millimeters

Y-ESS
ENVIRONMENTAL SUSTAINABLE SOLUTIONS LTD
ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED
SOLUTIONS HOUSE
DANE STREET
ROCHDALE
OL11 4EZ
TEL: 01706 374416
FAX 01706 376785
EMAIL: TECHNICAL@Y-ESS.COM

PROJECT
BELLE VUE CO-OP ACADEMY
ATTENUATION TANK - DETAILS

TITLE
ATTENUATION/STORAGE TANK
DETAILS USING ECO-CELLS MODULE

Scale N.T.S.	Drawn MI	Checked AY
Date 15/09/2021	Drawing No. ECST - 2.1	Revision R0