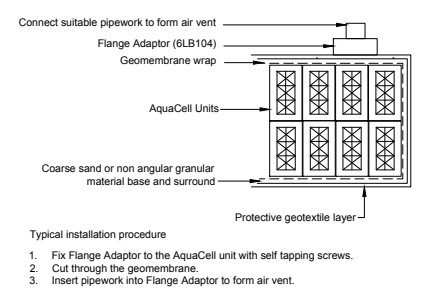


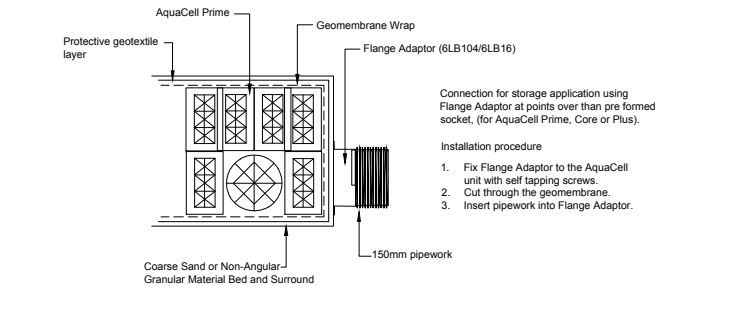
**AIR VENT DETAILS**  
SCALE 1:50

- TYPICAL INSTALLATION PROCEDURE**
- EXCAVATE THE TRENCH TO THE REQUIRED DEPTH ENSURING THAT THE PLAN AREA IS SLIGHTLY GREATER THAN THAT OF THE AQUACELL UNITS.
  - LAY 100mm BED OF COARSE SAND, LEVEL AND COMPACT.
  - LAY THE GEOTEXTILE OVER THE BASE AND UP THE SIDES OF THE TRENCH.
  - LAY THE GEOMEMBRANE ON TOP OF THE GEOTEXTILE OVER THE BASE AND UP THE SIDES OF THE TRENCH.
  - LAY THE AQUACELL UNITS PARALLEL WITH EACH OTHER. IN MULTIPLE LAYER APPLICATIONS, WHEREVER POSSIBLE, CONTINUOUS VERTICAL JOINTS SHOULD BE AVOIDED. AQUACELL UNITS CAN BE LAID IN A 'BRICK BONDED' FORMATION (I.E. TO OVERLAP THE JOINTS BELOW). FOR SINGLE LAYER APPLICATIONS USE THE AQUACELL CLIPS AND FOR MULTI LAYERS USE THE AQUACELL CLIPS AND THE AQUACELL SHEAR CONNECTORS (VERTICAL RODS).
  - WRAP THE GEOMEMBRANE AROUND THE AQUACELL STRUCTURE AND SEAL TO MANUFACTURERS RECOMMENDATIONS.
  - WRAP AND OVERLAP THE GEOTEXTILE COVERING THE ENTIRE AQUACELL STRUCTURE TO PROTECT THE GEOMEMBRANE.
  - LAY 100mm OF COARSE SAND BETWEEN THE TRENCH WALLS AND THE AQUACELL UNITS AND COMPACT.
  - LAY 100mm BED OF COARSE SAND OVER THE GEOTEXTILE AND COMPACT. BACKFILL WITH SUITABLE MATERIAL.
- NB: A STORAGE TANK MUST BE VENTED, AND IT IS RECOMMENDED THAT ONE VENT PIPE, 110mm IN DIAMETER IS PROVIDED PER 7,500 SQUARE METRES OF IMPERMEABLE CATCHMENT AREA ON A SITE



**TOP CONNECTION FOR AIR VENT**  
SCALE 1:50

- AQUACELL PRIME: CONSTRUCTION LOADS**
- CONSTRUCTION PLANT SUCH AS EXCAVATORS CAN IMPOSE SIGNIFICANT LOADS ON ANY AQUACELL UNIT. THE FOLLOWING GUIDELINES SHOULD BE OBSERVED:
- TRACKED EXCAVATORS (NOT EXCEEDING 21 TONNES WEIGHT) SHOULD BE USED TO PLACE FILL OVER THE AQUACELL UNITS WHEN THE GEOTEXTILE OR GEOMEMBRANE WRAPPING HAS BEEN COMPLETED
  - AT LEAST 300mm OF FILL SHOULD BE PLACED BEFORE THE EXCAVATORS OR TRUCKS DELIVERING THE BACKFILL ARE ALLOWED TO TRAFFIC OVER THE INSTALLED UNITS
  - COMPACTION PLANT USED OVER THE AQUACELL UNITS SHOULD NOT EXCEED 2300KG/M WIDTH. THIS WILL ALLOW THE COMPACTION OF TYPE 1 SUB-BASE IN 150mm LAYERS OVER THE UNITS IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAYS WORKS
  - ALL OTHER CONSTRUCTION PLANT SHOULD BE PREVENTED FROM TRAFFICKING OVER THE SYSTEM ONCE IT IS INSTALLED AND SURFACING COMPLETED, UNLESS A SITE SPECIFIC ASSESSMENT DEMONSTRATED THAT IT IS ACCEPTABLE
  - IN PARTICULAR CRANES SHOULD NOT BE USED OVER, OR PLACE THEIR OUTRIGGERS OVER THE SYSTEM



**CONNECTIONS TO AQUACELL UNITS**  
SCALE 1:50

- GENERAL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
  - ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT UTILITY SURVEYS.
  - NOT ALL EXISTING SERVICES ARE SHOWN ON THIS DRAWING. REFERENCE SHOULD BE MADE TO ALL EXISTING CLIENTS DRAWINGS, UTILITY SURVEYS AND TRIAL HOLE INFORMATION.
  - RECESSED STEEL MANHOLE COVERS TO COMPLY WITH BS EN1449:1991 AND GALVANISED TO COMPLY WITH BS EN ISO 1461
  - REFER TO MANHOLE SCHEDULE ON DRG No. STA-MAE-EX-FN-DR-D-0002.

- PIPEWORK NOTES:**
- ALL BELOW GROUND PIPEWORK TO BE SAINT GOBAIN CAST IRON 'TIMESAVER' SYSTEM TO BS 437 TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
  - ALL JOINTS, NUTS AND BOLTS TO BE DENSO WRAPPED AND KEPT FREE OF DEBRIS.

- CONCRETE NOTES:**
- CONCRETE WITHIN FOOTPATHS BE PAV2 TO BS:8500
  - CONCRETE WITHIN NEW SLABS AND FOUNDATIONS TO BE AS NOTED
  - ALL CONCRETE TO BE CURED AND PROTECTED FROM FROST FOR A MINIMUM OF 7 DAYS AFTER CASTING
  - ALL EXPOSED VERTICAL AND HORIZONTAL EDGES OF CONCRETE SHALL HAVE A 25x25mm CHAMFER
  - REINFORCEMENT TO BE HIGH YIELD STEEL TO BS:4449, OR STRUCTURAL MESH FABRIC TO BS:4483
  - NORMAL LAP LENGTHS TO BE ACHIEVED WHEREVER POSSIBLE TO BE:
    - H10 - 400mm
    - H12 - 500mm
    - H16 - 600mm
  - MINIMUM COVER TO REINFORCEMENT TO BE 40mm
  - CONCRETE TO RECEIVE A BRUSHED FINISH WITHIN SLABS WITH TROWELLED MARGINS.

- WREKIN PRODUCTS:**
- GEOMEMBRANE - LLDPE 0.75mm
  - GEOTEXTILE WRAP - MULTI TRACK SNW40 UV
- ALL JOINTS IN GEOMEMBRANE TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

- REFERENCE DRAWINGS:**
- STA-MAE-EX-FN-DR-D-0001
  - STA-MAE-EX-FN-DR-D-0002
  - STA-MAE-EX-FN-DR-D-0004
  - STA-MAE-EX-FN-DR-D-0005
- BELOW GROUND DRAINAGE LAYOUT  
MANHOLE DETAILS  
CONNECTION TO EXISTING MAINS SEWER  
MISCELLANEOUS DETAILS

ISSUED FOR CONSTRUCTION				
REV	DESCRIPTION	DATE	BY	CHKD
C02	L.E.	20/5/19	K.H.	-
ISSUED FOR CONSTRUCTION				
C01	LE	10/5/19	K.H.	-
ISSUED FOR APPROVAL				
P02	LE	9/4/19	K.H.	-
ISSUED FOR COMMENT				
P01	L.E.	12/3/19	K.H.	-
REV	DRAWN	CHECKED	APPROVED	DATE

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Project: **ST ANNES CHURCH RESIDENTIAL**

Revision: **C02** Dwg Title: **SURFACE WATER ATTENUATION SYSTEM SECTIONS AND DETAILS**

Scale: **1:25** Dwg No: **STA-MAE-EX-FN-DR-D-0003**

Sheet: **1 OF 1** Purpose of Issue: **ISSUED FOR CONSTRUCTION**

Internal Proj Ref: - Client Ref Number: -