

SPECIFICATION FOR GAS PROTECTION MEASURES

- Membrane
1.

Gas resistant membrane to be high performance loose lay membrane containing encapsulated aluminium core. Maximum methane permeability 1 x 10⁻¹⁰ m³/m²/s. (ACS Gas Resistant Membrane)
2.

Installation and protection in accordance with manufacturers recommendations. Membrane to be laid on bladed stone throughout.
3.

Individual membrane sheets to be lapped minimum 100mm and sealed with 30mm wide proprietary butyl tape (ACS Butyl Sealant Tape).
4.

All services and other penetrations to be sealed with self adhesive gas resistant membrane (ACS Adhesive Gas Membrane).
5.

Sub-Slab Diffusers

Sub - slab depressurisation with individual diffusers comprising a 1000mm length of perforated 100mm ID HDPE pipe backfilled with 10mm to 40mm no fines stone.
- Pipework

6.

Diffusers linked to external depressurisation unit via 100/150mm ID HDPE twin wall pipe.

7.

All pipework to be jointed with proprietary push - fit connectors.

8.

All pipework to have a minimum 150mm cover from underside of slab to top of pipe.

9.

Pipework to be laid within or below granular stone or hardcore layer.

10.

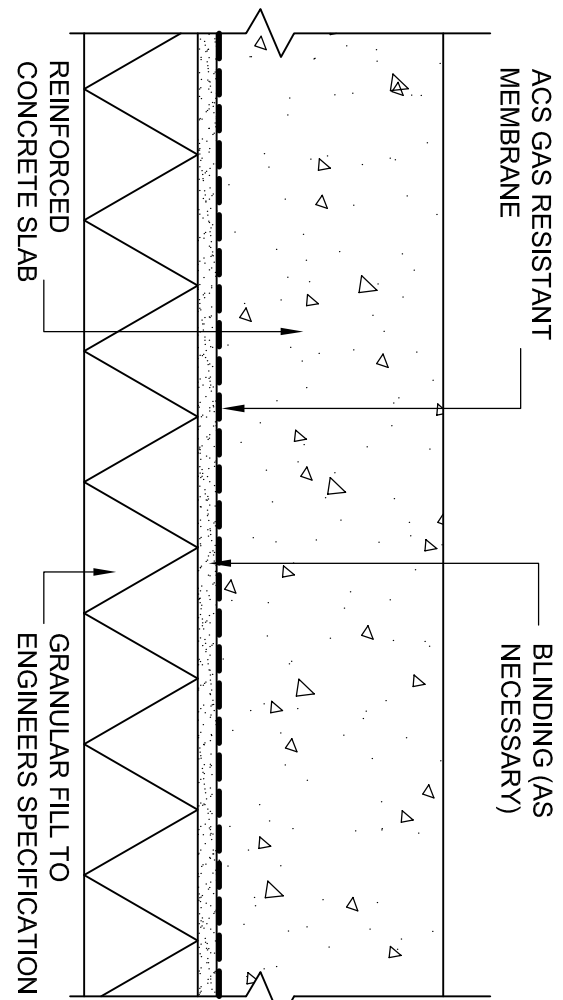
Excavation and backfilling for pipework to be carried out by MAIN CONTRACTOR.
- Depressurisation Units

11.

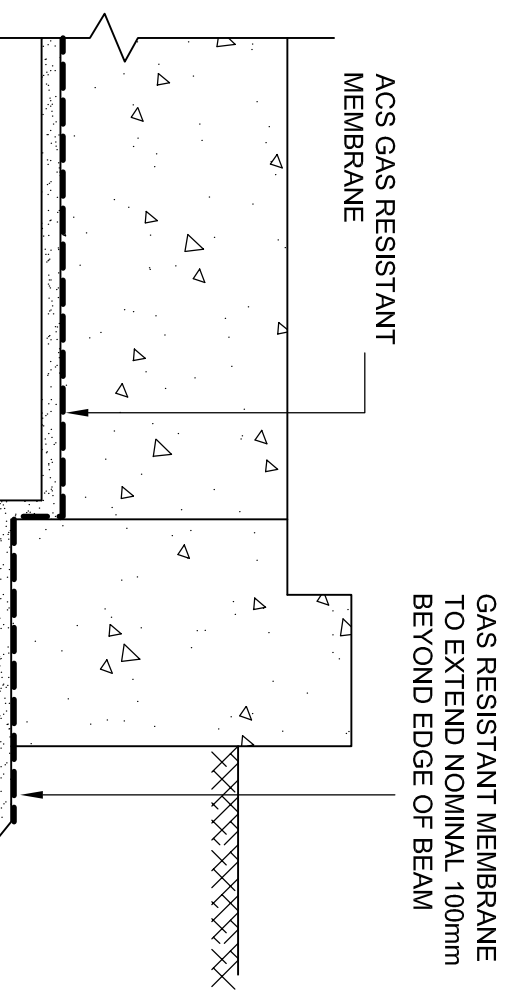
Depressurisation units to comprise 13A single phase flame-proof fans mounted in extract pipework. Fan housing by others and to Architects requirements. Location of depressurisation units to be agreed with contractor.

12.

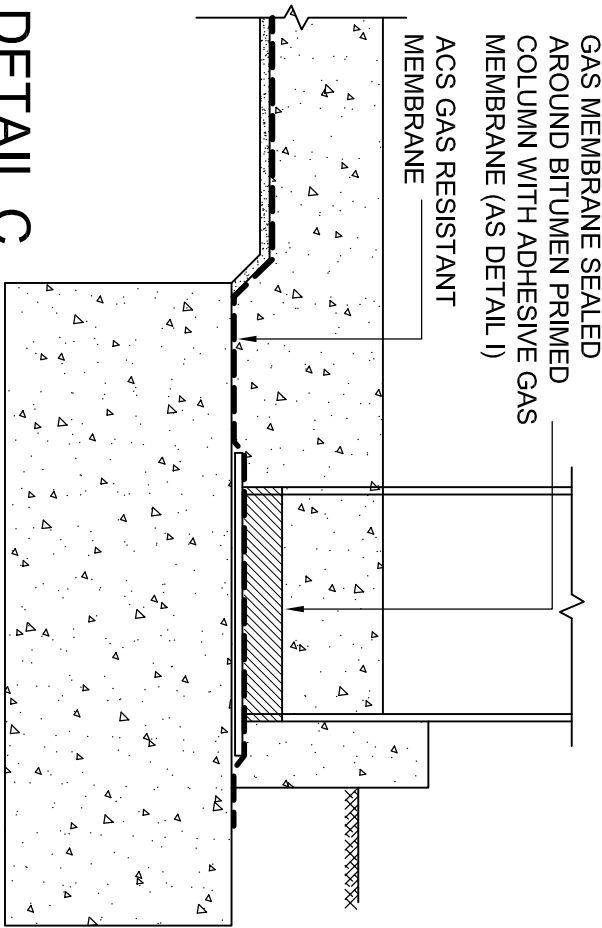
Extract pipework to comprise 150mm dia. grey uPVC pipe extending a minimum 2500mm above external ground level and filled with static vent cowl (ACS Cowl S150)



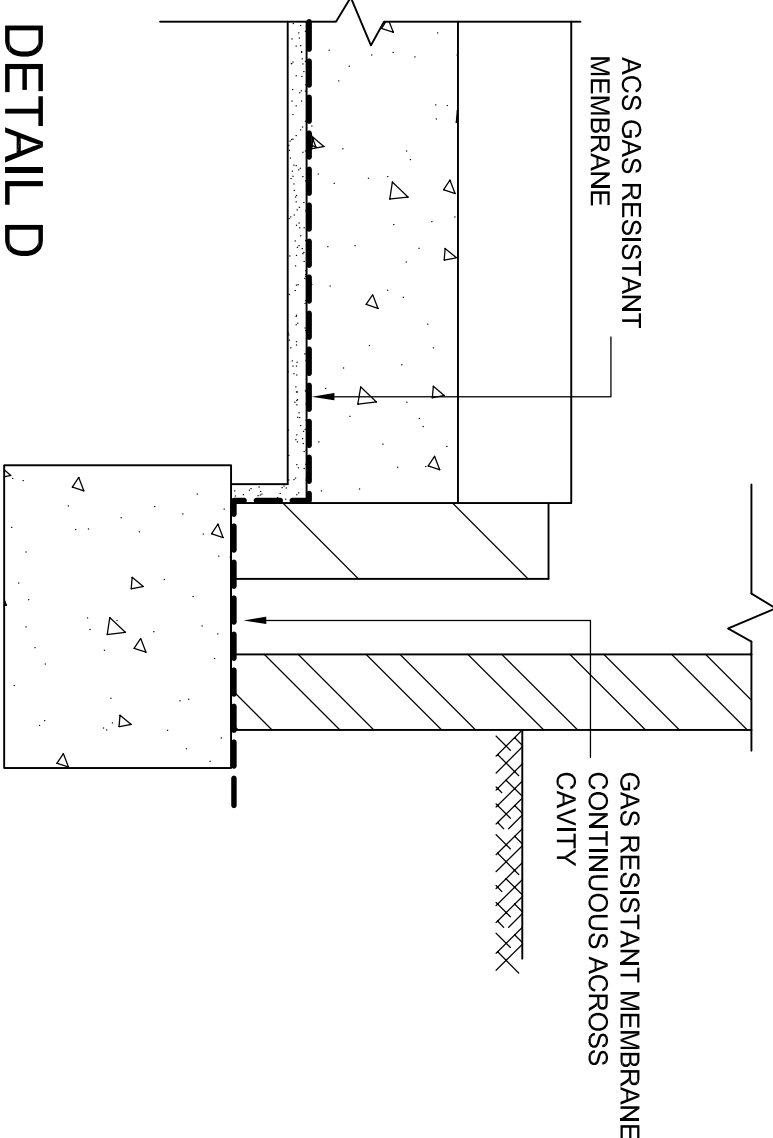
DETAIL A
TYPICAL SLAB SECTION
SCALE - 1:10



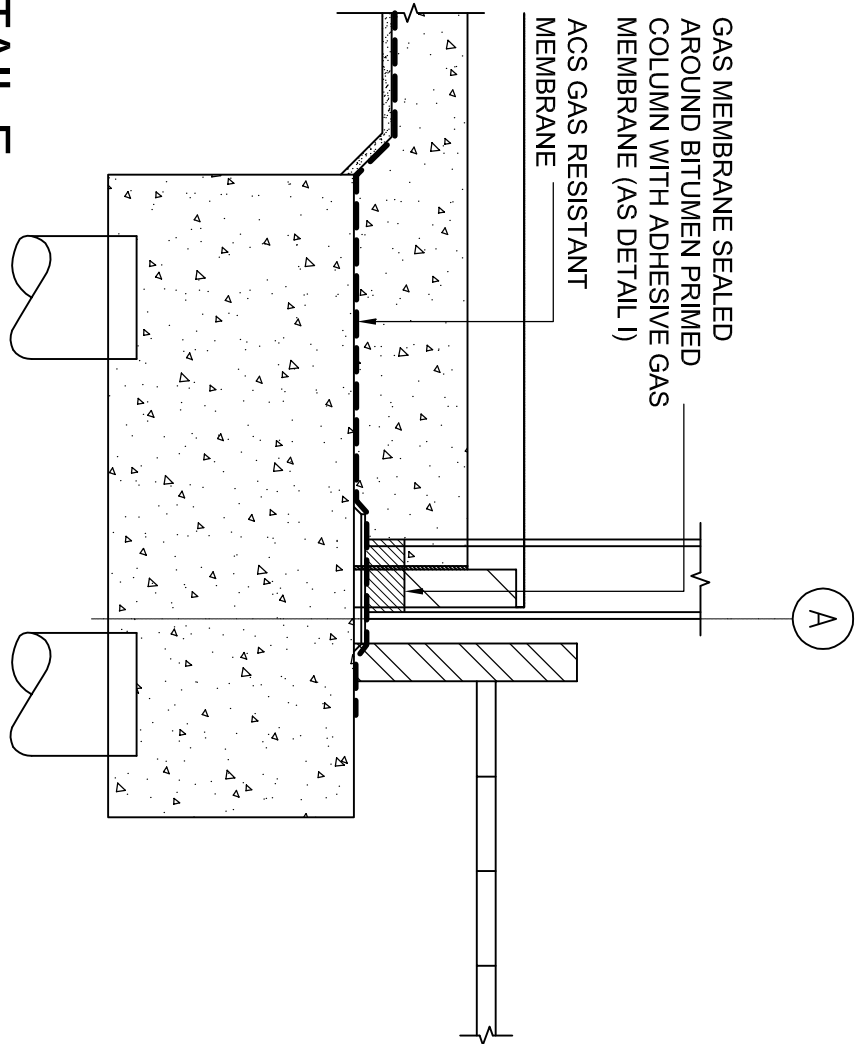
DETAIL B
TYPICAL PERIMETER SECTION
(WAREHOUSE)
SCALE - 1:10



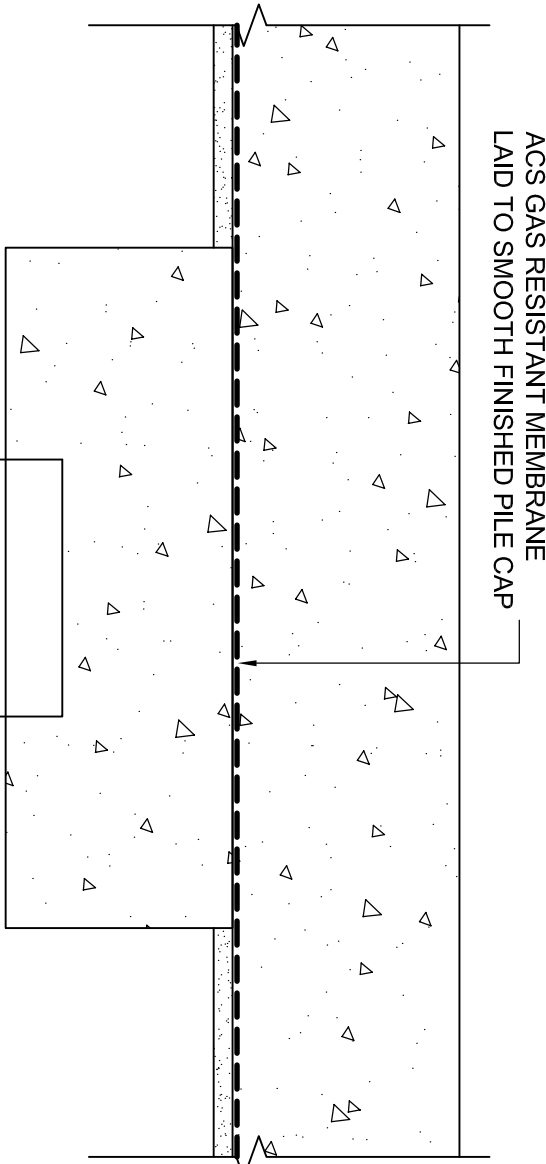
DETAIL C
TYPICAL PERIMETER SECTION AT
COLUMN (WAREHOUSE)
SCALE - 1:20



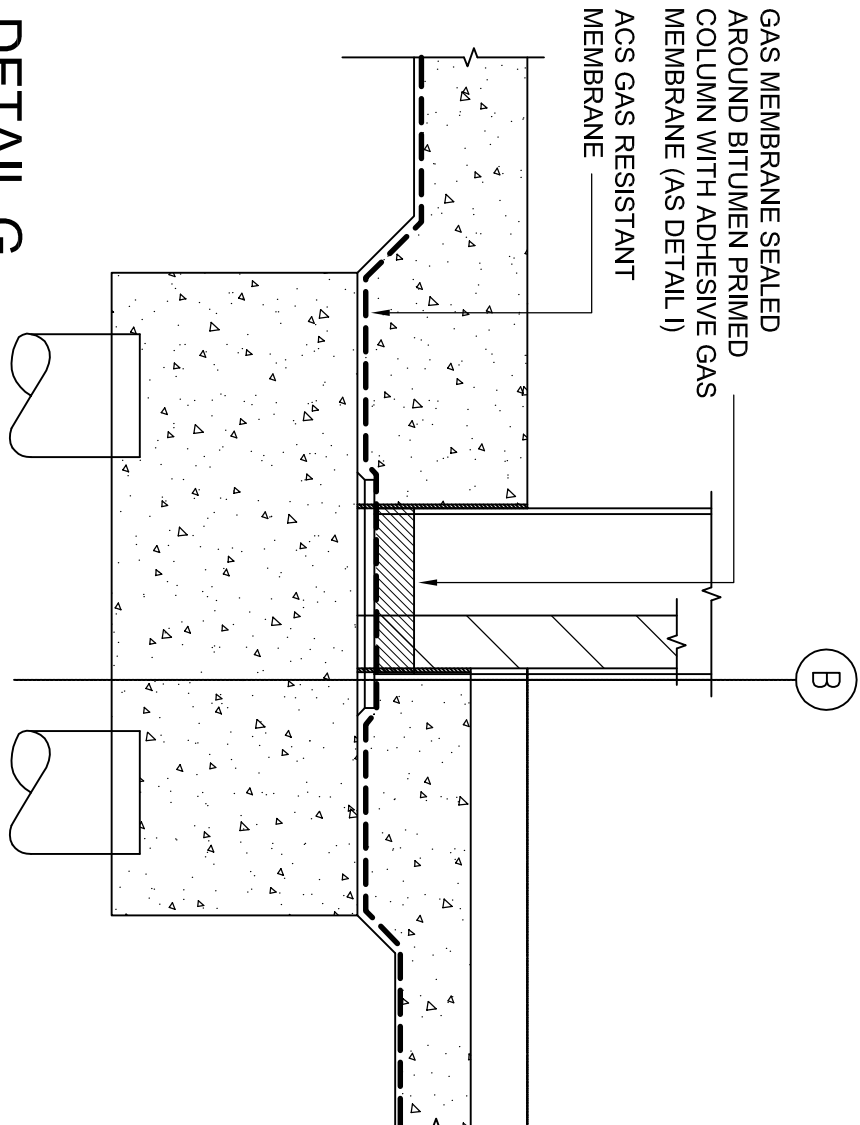
DETAIL D
TYPICAL PERIMETER SECTION (OFFICE)
SCALE - 1:10



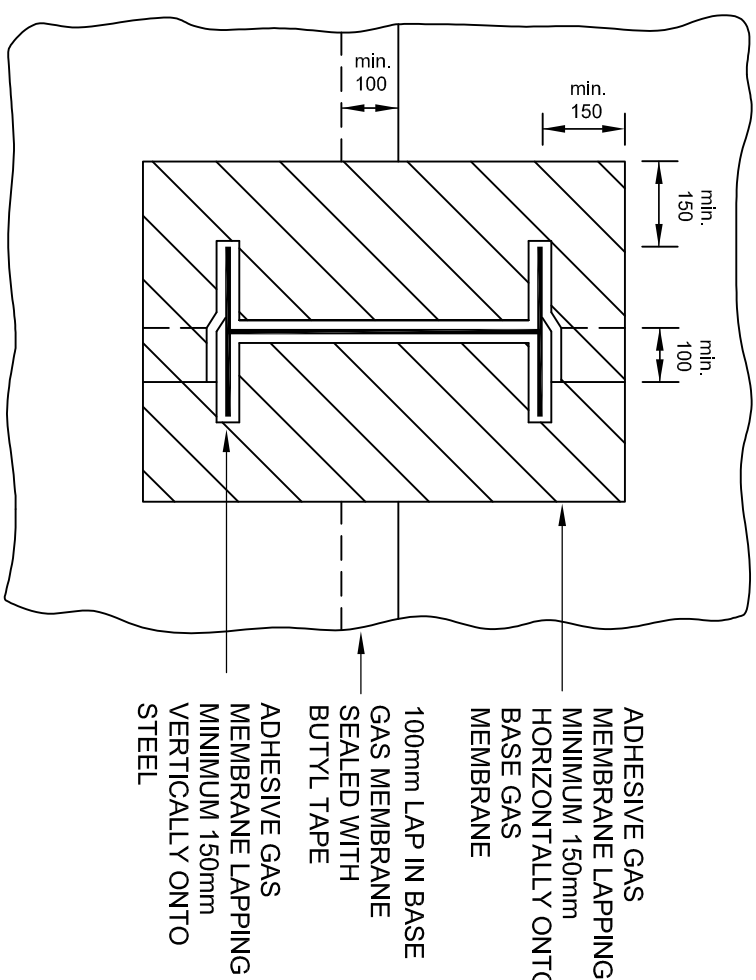
DETAIL E
TYPICAL PERIMETER SECTION AT COLUMN (OFFICE)
SCALE - 1:20



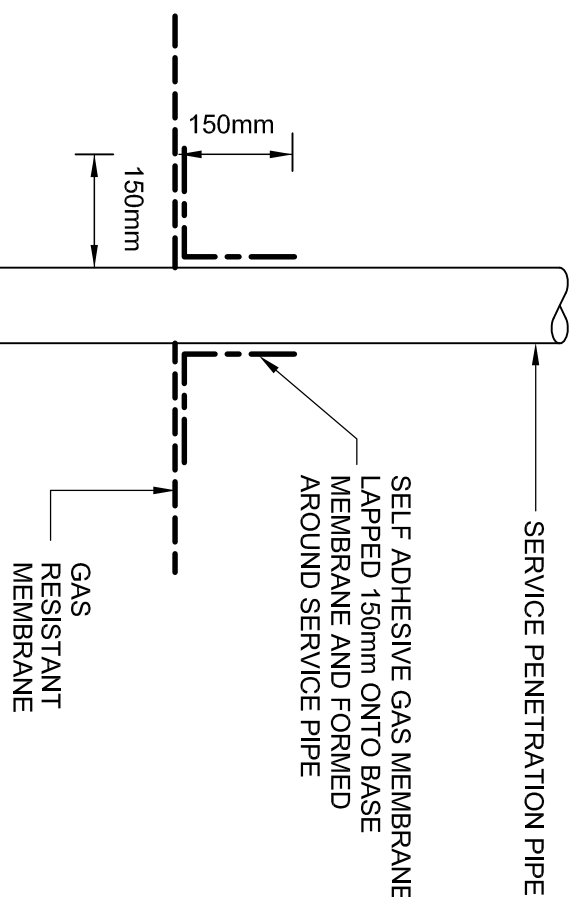
DETAIL F
SECTION AT FLOOR SLAB PILE
SCALE - 1:10



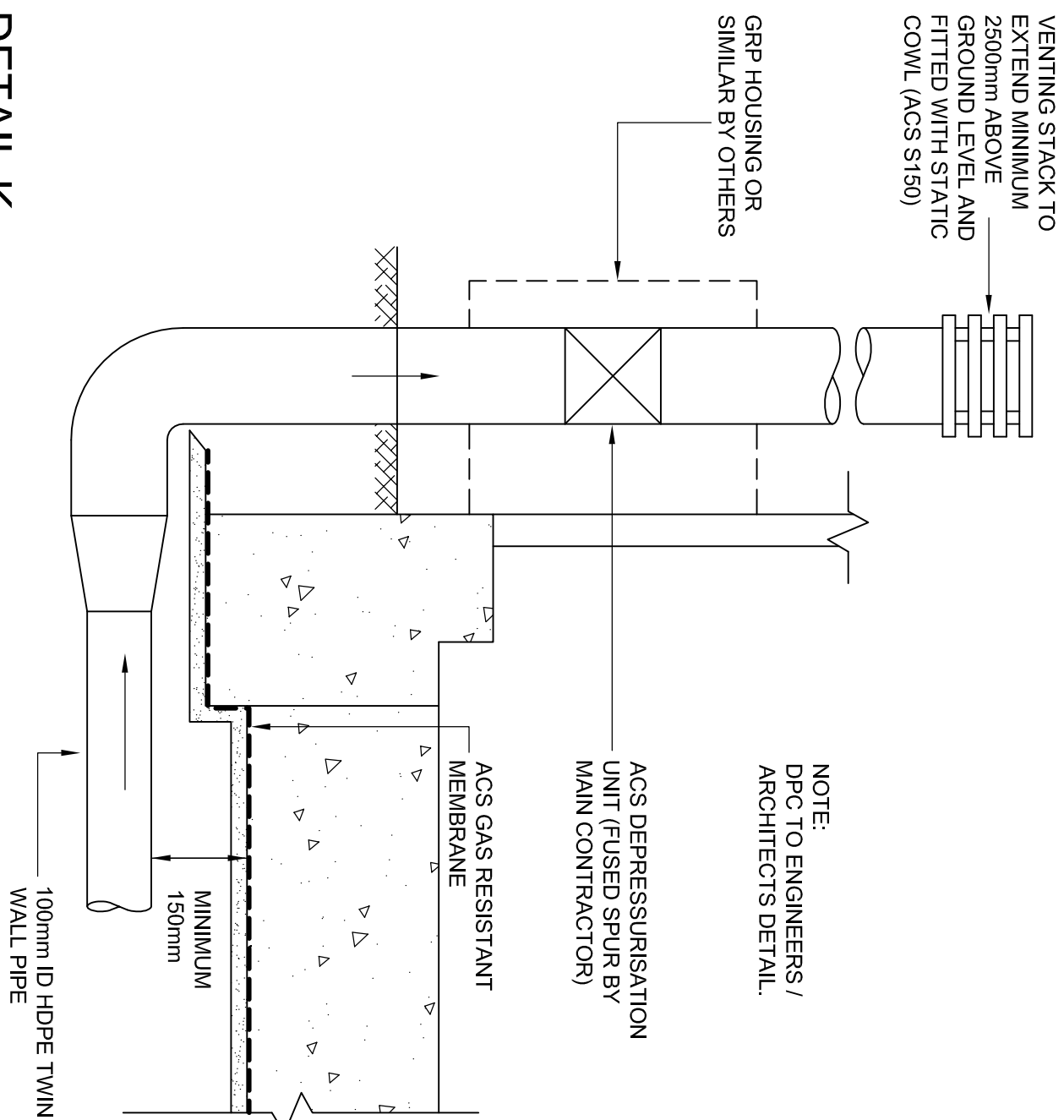
DETAIL G
SECTION AT GRIDLINE B (WAREHOUSE)
SCALE - 1:20



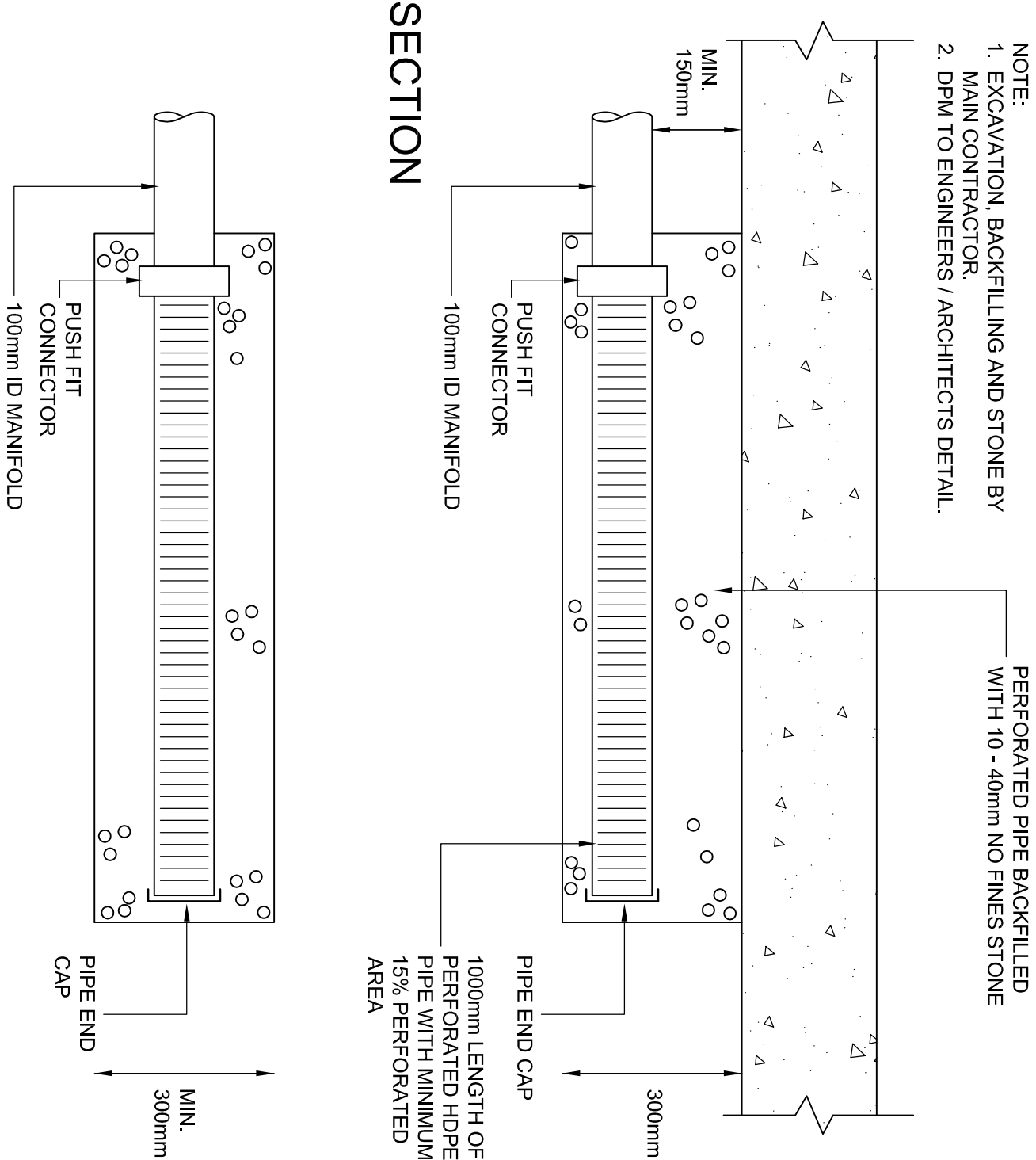
DETAIL I
STEEL COLUMN FLASHING
N.T.S



DETAIL J
SEAL TO SERVICE PIPE
NOT TO SCALE



DETAIL K
TYPICAL PERIMETER SECTION AT DEPRESSURISATION UNIT
SCALE - 1:10



SECTION

PLAN

DETAIL H
SUB - SLAB GAS DIFFUSER
SCALE - 1:10

CONSTRUCTION STATUS				
REVISION				
A	Minor amendments.	CHECKED	APPROVED	06/05/05
CLIENT				
MARBANK CONSTRUCTION LIMITED		TITLE		
SCHEME		GAS PROTECTION MEASURES		
BEAM REACH 8, RAINHAM		(DETAILS - SHEET 1 OF 2)		
DRAWN	CHECKED	APPROVED	SCALE	
SAHB	HDS	HDS		
DATE	SCALE	DRAWING No.		
APRIL 2005	J05033	J0503302		



ACS Business Centre, 2/4, Middleton Road, Heywood, Rochdale OL10 2HT

Tel: 01706 623924 Fax: 01706 623918