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GAS MEMBRANE VALIDATION

Site Name: Belle Vue Stadium	**Project Number: 12-123**
Company Name: Countryside	**Date: 24-01-2022**
Project Manager: O. Jackson	**E3P Engineer: J. Newall**
PM Qualifications: BSc FGS AMIEnvSc	**Engineer Qualifications: Verification of Gas Protection Systems Dec 2017**
Ground Gas Risk Assessment: **Amber 1**	

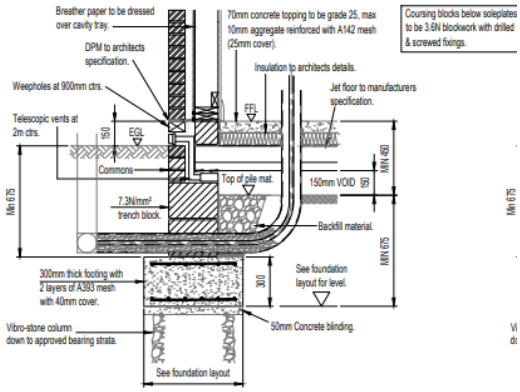
Overview:
The membrane comprised a Visqueen low permeability gas membrane (Yellow) resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection.

All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape.

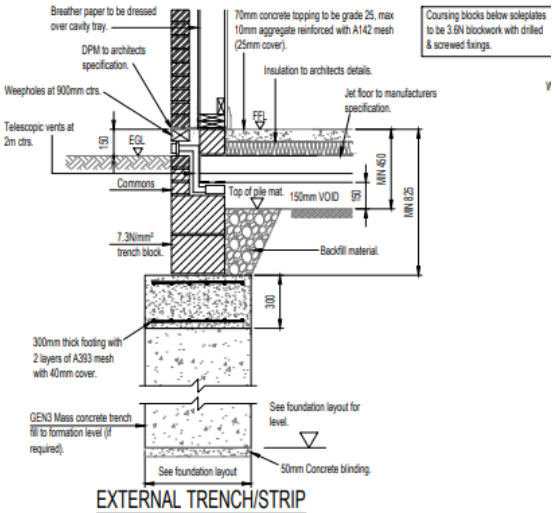
Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top-hats have been adequately sealed against the membrane.

Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that **Plots 236-239** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

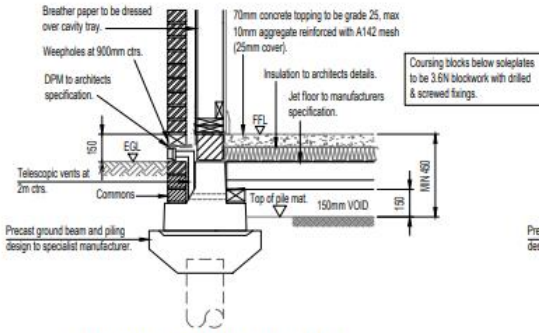
Membrane Specification: Visqueen Gas Membrane (Yellow)



EXTERNAL FOOTING VIBRO DETAIL
(PERPENDICULAR FLOOR)
(SCALE 1:20)



EXTERNAL TRENCH/STRIP
FOOTING DETAIL
(SCALE 1:20)

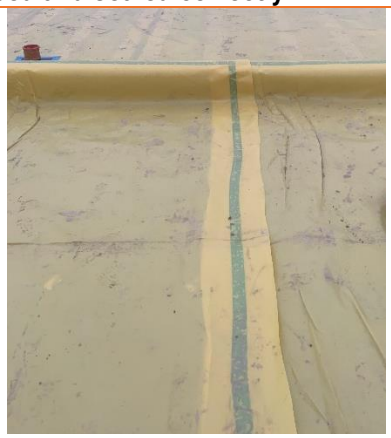


EXTERNAL FOOTING PILE DETAIL
(PERPENDICULAR FLOOR)
(SCALE 1:20)

Plot - 236

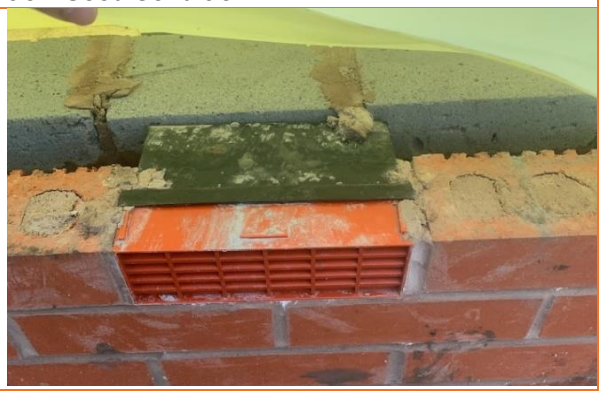
General Condition of Membrane-Good Condition

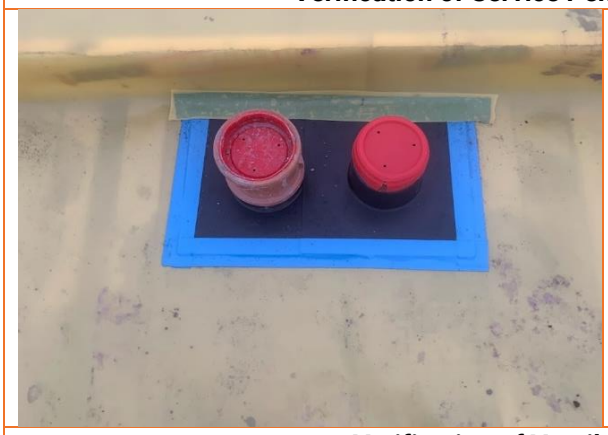
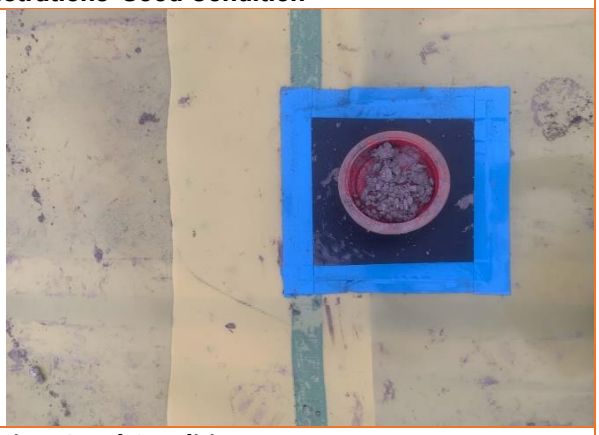
Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition

Verification of Ventilation-Good Condition

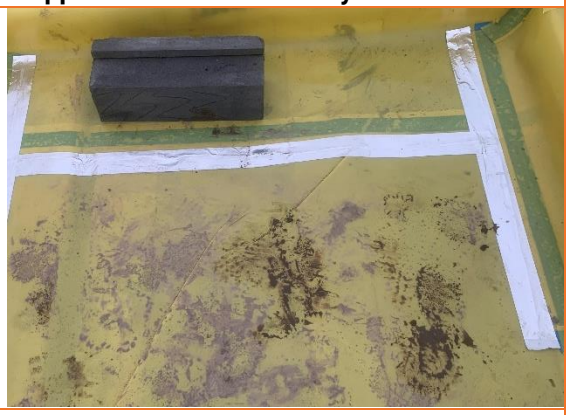


Plot - 237	
General Condition of Membrane-Good Condition	
Verification of Joints and Seals- Overlapped and sealed correctly	
Verification of Service Penetrations-Good Condition	
	
Verification of Ventilation-Good Condition	

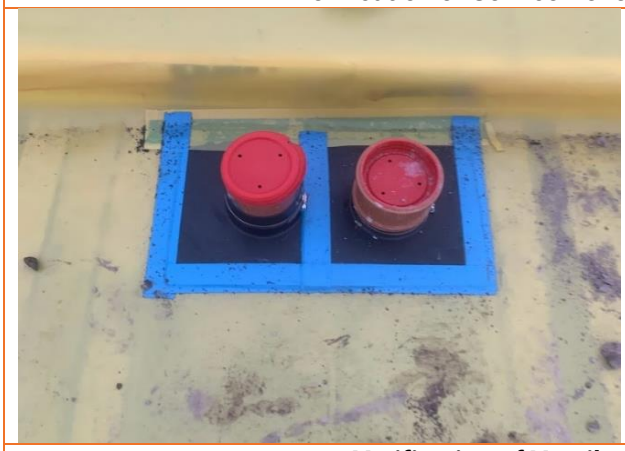
Plot - 238

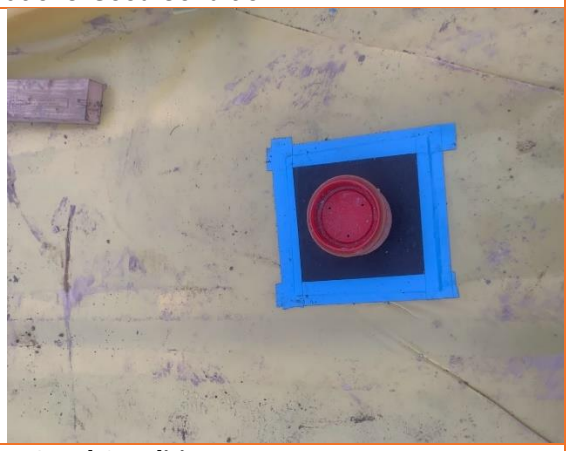
General Condition of Membrane-Good Condition

Verification of Joints and Seals- Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition





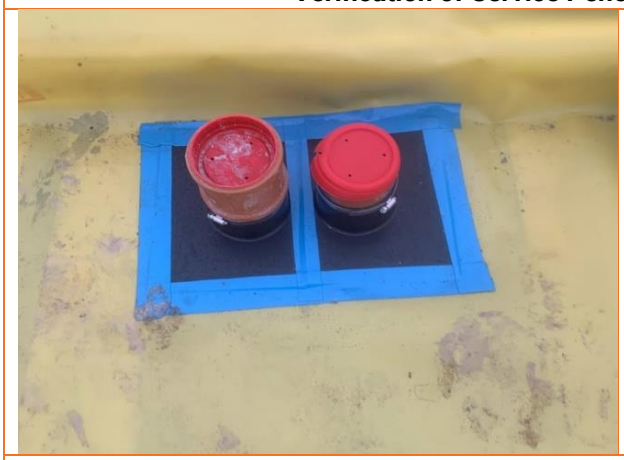
Verification of Ventilation-Good Condition

Plot - 239

General Condition of Membrane-Good Condition

Verification of Joints and Seals- Overlapped and sealed correctly

Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition

Gas Protection Validation Site Record

Bed VUP

Inspection date/time:	24/01/22	**Inspected by:**	JNewall	**Photographed:**	✓/×
Type of development:		**Plot number:**	236	**Developer:**	

Notes/recommendations	Comments
Membrane Type	Yellow visqueen
Extent of Coverage	full coverage
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	clear
Type of joints	☑ Tape Joint ☐ Welded Joint ☐ Other (please state)
Service entries – Jubilee clips, Top hats installed correctly	yes
External Wall Air bricks Present?	yes
Corners inspected?	yes
Membrane joints inspected has Double –sided butyl tape been used?	yes
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has PASSED/FAILED* inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form). An additional inspection visit IS/IS NOT* required for this Plot.

Inspection by: JNewall Signed: [redacted]

Gas Protection Validation Site Record

Bellvue

Inspection date/time:	24/01/22	**Inspected by:**	JNewall	**Photographed:**	☑ x
Type of development:		**Plot number:**	237	**Developer:**	

Notes/recommendations	Comments
Membrane Type	yellow visqueen
Extent of Coverage	full coverage
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	clear
Type of joints	☑ Tape Joint ☐ Welded Joint ☐ Other (please state)
Service entries – Jubilee clips, Top hats installed correctly	yes
External Wall Air bricks Present?	yes
Corners inspected?	yes
Membrane joints inspected has Double –sided butyl tape been used?	yes
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has ~~PASSED~~/FAILED* inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form). An additional inspection visit IS/~~IS NOT~~* required for this Plot.

Inspection by:.....JNewall.....Signed:.....[redacted].....

Gas Protection Validation Site Record

Belvue

Inspection date/time:	24/01/22	**Inspected by:**	JNewall	**Photographed:**	✓ x
Type of development:		**Plot number:**	238	**Developer:**	

Notes/recommendations	Comments
Membrane Type	yellow visqueen
Extent of Coverage	full coverage
Underside of Membrane	clear
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Inspection by:.....JNewall.....Signed:.....[redacted].....

Gas Protection Validation Site Record

Inspection date/time:	24/01/22	**Inspected by:**	J Newall	**Photographed:**	✓x
Type of development:		**Plot number:**	239	**Developer:**	

Notes/recommendations	Comments
Membrane Type	Yellow Visqueen
Extent of Coverage	Full coverage
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	Clear
Type of joints	☑ Tape Joint ☐ Welded Joint ☐ Other (please state)
Service entries – Jubilee clips, Top hats installed correctly	yes
External Wall Air bricks Present?	yes
Corners inspected?	yes
Membrane joints inspected has Double –sided butyl tape been used?	yes
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Inspection by: J Newall Signed: [redacted]