



GEOSHIELD

Verification Report



PROJECT REFERENCE:

GEO101021

REPORT NUMBER:

002

REPORT DATE:

03/03/2020

PROJECT:

McAlear & Rushe

PROJECT ADDRESS:

101 Charles Street

Manchester

M1 6DD

MEMBRANE SPECIFICATION:

Gas membrane to specification BS8485 2015

Installed to CIRIA 735

Visqueen Geoseal Ultimate

Joints extrusion welded

Visqueen GR SAM



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MEMBRANE SPECIFICATION:

DESIGN DETAILS:

Details compiled in PV



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VERIFICATION OFFICER: Chris Ingham

VERIFICATION COMPANY: GeoShield Limited

Icon Business Park, 4100 Park Approach

Thorpe Park, LEEDS

West Yorkshire

LS15 8GB

CONTACT NUMBER: 07555214679

EMAIL ADDRESS: Cingham@geoshield.co.uk

ORDER NUMBER:

PER VISIT: YES:



NO:



PROJECT: YES:



NO:





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CLIENT DETAILS

CLIENT CONTACT:	Andy Collins
CONTACTS ROLE:	Prestige Air
MOBILE PHONE:	07789223116
EMAIL ADDRESS:	Andy@prestigeair.com



CLIENT CONTACT:	
CONTACTS ROLE:	
MOBILE PHONE:	
EMAIL ADDRESS	
NOTES:	
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APPLICATION TEAM LEADERS

APPLICATOR NAME: Phil Simmons, Dave Bennett, Kristoph

COMPANY: Prestige Air

APPLICATOR TEL:

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:

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AREA SURVEYED: Pile Cap on A10 and B6 and Cores D7 and D5

SITE CONDITIONS:

WEATHER: Overcast

TEMPERATURE: 8C

MEMBRANE TEMPERATURE: N/A

RELATIVE HUMIDITY: 68

TIME: 14:00 - 15:30 REPORT NUMBER: 002

DATE: 3rd March 2020

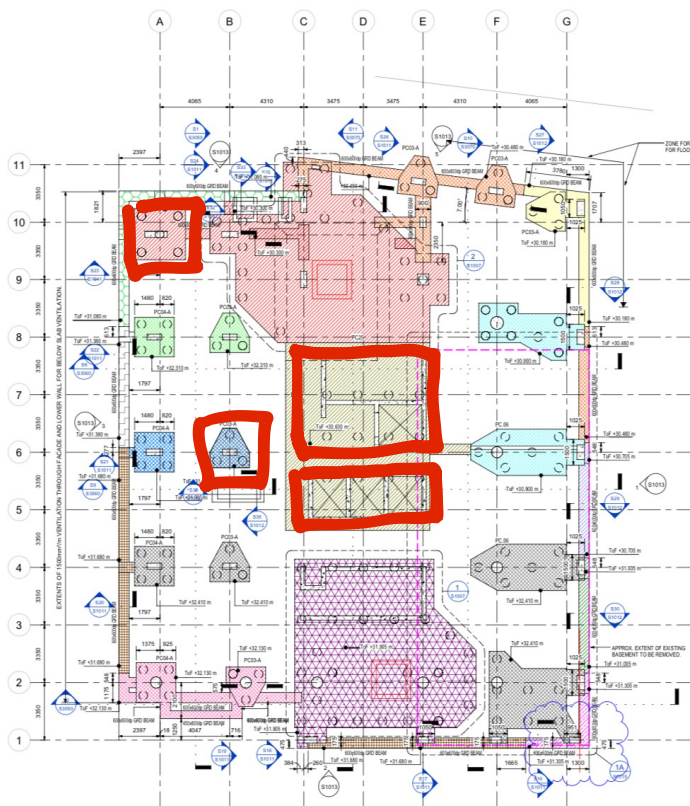
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VERIFICATION LAYOUT

1:20 Mon 16 Mar

1:20



Foundations GA.

Scale: 1:100

FOUNDATION HATCH KEY

PC100A	Taf +42.425m
PC100B	Taf +42.250m
PC100C	Taf +42.100m
PC100D	Taf +41.850m
PC100E	Taf +41.600m
PC100F	Taf +41.350m
PC100G	Taf +41.100m
PC100H	Taf +40.850m
PC100I	Taf +40.600m
PC100J	Taf +40.350m
PC100K	Taf +40.100m
PC100L	Taf +39.850m
PC100M	Taf +39.600m
PC100N	Taf +39.350m
PC100O	Taf +39.100m
PC100P	Taf +38.850m
PC100Q	Taf +38.600m
PC100R	Taf +38.350m
PC100S	Taf +38.100m
PC100T	Taf +37.850m
PC100U	Taf +37.600m
PC100V	Taf +37.350m
PC100W	Taf +37.100m
PC100X	Taf +36.850m
PC100Y	Taf +36.600m
PC100Z	Taf +36.350m

FOUNDATION NOTES:

1. CONCRETE MEMBERS ARE TO BE POSITIONED CENTRALLY ABOUT THE GRID UNLESS NOTED OTHERWISE.
2. ALL TOP SOIL AND EXISTING FILL SHALL BE REMOVED WITHIN THE BUILDING AREA AND THE GENERAL FORMATION LEVELS APPROVED BY THE ENGINEER THE FORMATION LEVELS INDICATED ARE PROVISIONAL AND ARE SUBJECT TO THE APPROVAL OF THE LOCAL AUTHORITY AND THE ENGINEER.
3. WHERE IT IS NECESSARY TO EXCAVATE BELOW THE PROVISIONAL FORMATION LEVELS TO REACH AN APPROVED BEARING STRATUM ANY ADDITIONAL EXCAVATION IS TO BE BACKFILLED WITH M20 CONCRETE IN ACCORDANCE WITH THE SPECIFICATION.
4. WHERE EXISTING FOUNDATIONS ARE ENCOUNTERED DURING EXCAVATIONS TO FORMATION LEVELS OF NEW FOUNDATIONS THE EXISTING FOUNDATIONS MUST BE REMOVED UP TO ALLOW THE NEW FOUNDATION TO BEAR ONTO THE FOUNDATION STRATA.
5. THE PERMISSIBLE DEVIATION LEVELS OF THE TOP OF BURENED CONCRETE SHALL BE BETWEEN 10mm AND 20mm. ALL CONCRETE WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH BS 8110 PART 1:1985.
6. CONCRETE TO FOUNDATIONS TO BE GRADE RICHES IN D. THREE CORNER BASES TO BE SCOUT REFER TO SPECIFICATION CLAUSE 5.10 FOR CONSTRUCTION.
7. THE QUANTITY OF TEST CUBES CAST BY THE GENERAL CONTRACTOR AND THE AGE AT WHICH THEY ARE TO BE TESTED SHALL BE AS DIRECTED BY THE ENGINEER AND ALL AS THE SPECIFICATION.
8. A MESH REINFORCEMENT TO BE MEASURED AND ORDERED AS REQUIRED BY THE MAIN CONTRACTOR.
9. SLOPE FORM REINFORCEMENT TO BE SHOWN WITHIN THE TOLERANCES OF THE SPECIFICATION.
10. ALL SUBSTRUCTURE REINFORCEMENT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 48.3 N/mm² AND A WATER ABSORPTION RATE NOT EXCEEDING 1% AND MUST BE SET IN A 1:3 CEMENT SAND MORTAR. WALL TESTS BELOW D.C. LEVELS SHALL BE FINISHED WITH 10mm MINIMUM FINISHES OF FINISHES IN EACH CASE OF WALL. ANY DEVIATION TO BE AGREED WITH THE ENGINEER.
11. NOTE WATERPROOFING, TANKING & INSULATION DETAILS ALL TO CONSTRUCTORS DESIGN. CON. FILL.
12. REFER TO ARCHITECTS AND SERVICE ENGINEERS DRAWINGS FOR LOCATION, ORIENTATION AND SIZE OF PIPES, TRUNCAL MANHOLES, PENETRATIONS, LIGHTNING PROTECTION ETC.
13. ABBREVIATIONS:
R1 - FORMATION LEVEL
TAF - TOP OF FOUNDATION
SIL - STRUCTURAL SLAB LEVEL
FILL - FINISH OF FLOOR LEVEL
G.L. - GROUND LEVEL
14. PILING TYPE TO BE BASED ON ASSURED PILES (SEE NETWORK AND NOTE BELOW).
15. PILING LOADING ASSUMPTIONS TO BE REVIEWED BY PILING CONTRACTOR. PILING CONTRACTOR SHALL BE RESPONSIBLE TO CHANGE FOLLOWING PILING SUB-CONTRACTOR INPUT. SUPPLY ALLOWANCES FOR DESIGN DEVELOPMENT SHOULD BE MADE.
16. MAIN CONTRACTOR AND SUB-CONTRACTOR TO NOTE ALL PILING PROPOSALS WILL REQUIRE APPROVAL WITH NETWORK. DUE TO THE ADJACENT SITES ALL SUB-CONTRACTOR TO TECHNICAL APPROVALS PROCESS NOTING UNLESS OTHERWISE DATE APPROVAL PROCESS FOR REVIEW (TYPICALLY 10-14 DAYS).
17. NOTE: 100% MONITORING OF THE ADJACENT UNDOCT WILL BE REQUIRED BY NETWORK AND WILL BE THE RESPONSIBILITY OF THE MAIN CONTRACTOR. NETWORK MAIL LIMIT 5 MINUTES.

shed

SS-4 Cellulose ground beam supporting column adjacent GL, G1 setting not amended
SS-3 Entrance beams added as checked
SS-2 Issue 4 updated. Taf levels added to foundations on 100G, B/F & A/F for clarity.
SS-1 Stage 5 - Issued for Construction

REVISIONS ALL TOLERANCES

STATUS	stage 5	PROJECT	Charles Street, Manchester
DATE	16/03/20	CLIENT	Molnar and Raths
DESIGN	ap	ARCHITECT	Stangerhouse Architects
ENGINEER	pm	DRAWING	Foundations G.A.
CHECKED	pm	APPROVED	SS-4
DATE	07/01/20	SCALE	As indicated
CHECKED	pm	REVISIONS	SS-4
DATE	07/01/20	DRAWING NO.	B1010

Areas verified highlighted above

Pile Cap on A10 and B6 and Cores D7 and D5

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OVERVIEW PHOTOGRAPHS



Overview of site

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OVERVIEW PHOTOGRAPHS



Overview of pile cap sealed

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BGA
British Geomembrane Association



VERIFICATION ITEM ONE

LOCATION/GRID LINE: Pile cap on A10

NOTES: Pile cap on A10 wrapped with Visqueen Ultimate

Geoseal with joints hot welded and extrusion welded. Correct spacers used and membrane lapped under pile cap 200mm as per design detail.



1. Steel rebar covered with tric trac spacers before being wrapped

2. Pile cap wrapped with Geoseal and sealed with extrusion welds

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VERIFICATION ITEM ONE



3. Close up of extrusion weld completed from exterior of pile cap. Joint hot welded

before being extrusion welded.



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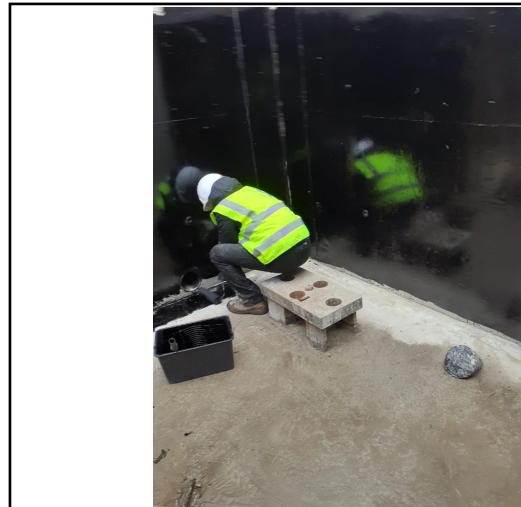
VERIFICATION ITEM TWO

LOCATION/GRID LINE: Core D7 and D5

NOTES: Core D5 is now complete. Core D7 is on going and

requires water removing from the base to allow a good seal with the GR SAM.

Further prep works required on D7 as done with D5



1. Base of D5 swept clear of standing water and dried with a blow torch.

2. Base of D5 dry enough for bitumen primer before GR SAM applied.

D5 core is now complete

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VERIFICATION ITEM TWO



3. D7 core has standing water on the base. GR SAM applied to walls

but the base requires the same prep as carried out on D5 before being

sealed



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VERIFICATION ITEM THREE

LOCATION/GRID LINE: Pile cap B6

NOTES: Pile cap on B6 complete to good standard. Geoseal

wrapped around steel cage with spacers on the vertical. Joints hot welded and

extrusion welded with pegs installed to grip concrete. Passed and verified.



1. Overview of Pile Cap B6 complete

2. Pegs installed to grip concrete and ensure solid bond to pile cap

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VERIFICATION ITEM THREE



3. Minimum 200mm beneath the pile cap, as per the design detail, has
been achieved. Passed and verified.

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ADDITIONAL PHOTOGRAPHS



Pick and probe test carried out to D7

core



D5 core is now complete



Final corner of D5 complete



Good overlaps used in D7 core



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VERIFICATION SUMMARY

Report 002 is for Pile Cap on A10 and B6 and Cores D7 and D5.

Both pile caps have been installed and sealed to an excellent standard and

as per design detail. All joints extrusion welded, pegs installed and minimum

200mm beneath the cap maintained.

Core D5 is not complete, protected with protection board and backfilled.

Works to Core D7 is on going. Standing water at the base is preventing

installation of GR SAM. This is to be prepped as in Core D5. D7 core requires

further works to the walls and base.

Pile Cap on A10 and B6 and Cores D5 are now passed and verified in accordance

with BS8485:2019 and CIRIA 735.