

INNER CITY ENVIRONMENTAL

PLAN OF WORK

Site Address
Block 1
4 to 21 Fountain Place
Brixton
Lambeth
SW9 7RE



Section 1 Details of Contract

- 1.1 Name and Address of Client
- 1.2 CDM Co-ordinator
- 1.3 Other consultants
- 1.4 Supervisors and managers responsible for the works
- 1.5 Names of all personnel involved with job
- 1.6 Start date and working hours and days
- 1.7 Name and Address of Principle Contractors
- 1.8 Name of any other licence holders
- 1.9 Companies undertaking air monitoring

Section 2 Management of Works

- 2.1 How often will the supervisor, manager or director be on site
- 2.2 How and where will CCTV and viewing panels be situated
- 2.3 The names and contact telephone numbers of the Directors, Managers and supervisors responsible for conditions on site
- 2.4 Who will consider departure from the plan of work and how will it be communicated to operatives on site

Section 3 Scope of work and risk assessment.

- 3.1 Provide details of any survey Inc type date undertaken and company
- 3.2 Description of the works, its location and the proposed method of removal
- 3.3 Type of asbestos to be removed
- 3.4 Details of Access and fire risks
- 3.5 Details of all other risks and precautions

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- 4.1 Expected exposure
- 4.2 Describe reasonable steps to reduce exposure level.
- 4.3 Sketches

- 4.4 Types of hygiene and decontamination procedures.
- 4.5 Volume of enclosures
- 4.6 Types of Respirators
- 4.7 Air monitoring arrangements
- 4.8 Describe how control measures are maintained
- 4.9 Method of works
- 4.10 Dismantling of enclosures and completion of contract
- 4.11 Emergency procedures

1.0 Details of Contract

1.1 Name and Address of Client

Callaghan Demolition
 The Estate Office
 Waterhouse Lane
 Kingswood
 Surrey
 KT20 6HT
 Contact: Mr Michael Callaghan
 Phone: 07770 646 551

Site:-
 Block 1, 4 to 21 Fountain Place Brixton Lambeth SW9
 7RE

1.2 CDM Co-ordinator

Baily Garner (Health & Safety) Ltd
 Queenscroft
 150 Eltham Hill
 London
 SE9 5EA
 Paul Lennon 0208 294 1000

1.3 Principal Contractor

Higgins Construction Ltd
 1 Langston road
 Loughton
 Essex
 IG10 3SD

1.4. Names & Telephone Numbers Of all Supervisors and Managers Responsible for the Site	<p>Mr Anthony Richardson. (Director) 07585 967 412 Mr Jason Mcilpatrick (Ops Director) 07827 945 093 Mr Danny Rogers (Ops Manager) 07741 264 877 Mr Alan Nightingale (Supervisor) 07925 935 423 Mr Keith Cocking (Supervisor) 07847 815 058</p>
1.5 The Number and Names of All employees on the job.	<p>Danny Rogers Alan Nightingale Keith Cocking Harry Nightingale Scott Needham Dean Hargrave Neil Cribben</p>
1.6 Times and Days Which the Work is to Take Place, Inc Dates of Site Set Up	<p>Works will commence on the Monday 6th January 2014 and will take 20 days to complete; working hours are Monday to Friday 08.00 to 17.00 works will finish on the 31st January 2013</p>
1.7 Name, Address & Contact Details of Principal Contractor	<p>Higgins Construction Ltd 1 Langston road Loughton Essex IG10 3SD 0208 508 5555</p>
1.8 Names of any Other Asbestos License Holders	<p>None</p>
1.9 Name of Company's who is to Undertaken Air Monitoring And Issue the Reoccupation Certificate and Who Contracted to	<p>Clearway Environmental Ltd The Woodgrange 62-64 Southchurch Avenue Southend on Sea SS1 2RR 01702 465 539</p>

2.0 Management of Works

2.1 How often will the

- **Supervisor**
- **Manager**
- **Director**

Be on Site

Supervisor at all times who will enter enclosures
Director a minimum of once weekly.

2.2 How will the CCTV or Viewing Panel be situated

Vision panels will be attached to the third stage of airlock and to the enclosure itself.

2.3 The Names and Contact Telephone Numbers of the Supervisor, Manager or Director responsible for Conditions on Site

Mr Anthony Richardson. (Director) 07585 967 412
Mr Jason Mcilpatrick (Ops Director) 07827 945 093
Mr Danny Rogers (Ops Manager) 07741 264 877
Mr Alan Nightingale (Supervisor) 07925 935 423
Mr Keith Cocking (Supervisor) 07847 815 058

2.4 Who will consider departures From The Plan of Work and How Will they be communicated to Operatives on site

All small departures from the plan of work can be considered and changed by the site supervisor after discussions with the Contracts Manager or Director.

Major departures will be authorised and changed by the Director & HCL.

All changes will be conveyed to the operatives by means of a tool box talk and method briefing
And the appropriate register will be completed and signed by all operatives affected by the changes.

All works will cease until all changes have been made and the plan of work amended and all operatives understand and recognise the changes

3.0 Scope of Work and Risk Assessment.

3.1 Provide Details of any Survey inc Type, Date Undertaken and Company

There has been a Demolition and refurbishment surveys carried out by.

Kershaw Contracting Services Ltd

Units 2 & 3

Lewis Industrial Estate

Wheatley Terrace Road

Erith

Kent DA8 2AP

01322 336 917

Report Issue Date 19th December 2013

Reference CS 5619

Surveys updated on the 8th January 2014 version
2

3.2 Description of the Work its Location and the Method of Removal

The work consists of removal of Asbestos Insulating board approximately 2 sqm to kitchens, bathrooms and 1sqm to door headers, there is also approximately 1400 square metres of textured coatings to ceilings on plasterboard and concrete, approximately 1400 square metres of floor tiles, 18 fuse guards and approximately 400 square metres of Eternit slates to roof areas and bitumen adhesive as necessary.

Bag locks will not be used due to space limitations and the Decontamination unit will be sited as close as reasonably possible to dwellings.

Materials will be removed and a full enclosure will be erected with negative pressure and air/bag lock systems.

All materials will be sprayed with fibre suppressant delivered by hand held pump sprays already mixed at a ratio of 10 to 1 with water before removal. Shadow vacuuming will be undertaken using H type vacs. All fixings will be removed using hand held screw drivers. Boards are approximately 3 ft. by 2 ft.

All Notifiable works will be notified to the HSE via an ASB5 form of notification and all textured coatings will be notified via an ASB1 form to the HSE

**3.3 Type of Asbestos to be removed
With Quantity, Extent and
Condition**

The type of asbestos to be removed is asbestos insulation board with Amosite and Chrysotile (Brown and White Asbestos) content.

The type of asbestos in the textured coatings, floor tiles, Eternit slates, fuse guards and bitumen adhesive are Chrysotile alone

The asbestos is in a good condition

The panels will be removed, after fully soaking and removing screws whilst shadow vaccing and placing directly into waste sacks

**3.4 Details of Access and fire risk and
Precautions including safe places
Of Work How they will be provided
and maintained.**

A full fire plan and evacuation procedure will be sited in the site welfare by the principal contractor. Muster points etc, are shown and discussed during site inductions. All services are to be isolated and any loose combustible materials removed before any works commence. All areas of work will be securely barriered off with fire fighting equipment located adjacent to each working area.

**3.5 Details of All other Risks and
Precautions**

Slips, trips & falls.
Electrical Plant & Equipment
Cuts bruises and minor injuries
Fire

4.0 Control Measures

**4.1 The expected exposure using the
Controls Specified.**

The expected maximum exposure is 0.02fml

4.2 Describe Reasonable Steps to reduce Exposure to a level as low as Reasonably Practicable and to Control Release into the Environment

The Asbestos containing material will be removed in one piece; the structure of the building will be used to form the enclosure along with 2 x 2 timbers for framing if necessary. All polythene will be attached with 75mm cloth tape. Full negative pressure will be applied to the areas together with 3 stage airlocks/baglocks and where possible all asbestos materials will be sprayed with a mist of surfactant before and during the removal. Shadow vacuuming will be undertaken when unscrewing or prising of materials is undertaken. All areas will be smoke tested to ensure there are no leaks or breaches within the enclosure. See Gen Procedures 1.3 - 1.6

4.3 Provide Sketches Showing

- Size of Enclosure
- Location of Viewing Panels
- Location and Size of Air Extraction Units
- Hygiene Facility including the Location of Services
- Transit Routes if Applicable
- Waste Routes
- Air Locks, Bag Locks and Skips.
-

4.4 Type of Hygiene Unit and if Connected Directly and if Not Explanation Why

One double showered self-contained tow along unit will be used with a gas powered generator, gas powered water heating. The unit will have a 360 litre tank fitted which will be refilled at the end of every shift.

The unit will be sited as close as reasonably practicable to intended work area, unit will be checked to make sure it is in perfect working order before any work commences and all paperwork is correct and up to date.

See general Procedures section 1.16

4.5 Volume of enclosure inc Calculations, number of air changes per hour and size and quantity of air extraction units.

Areas

3m x 1m x 3m =9m³ + airlock 6m³ = 15m³

15m³ x 10 air changes per hour = 150 cmh.

1 no 500 cmh will be used, we will vent negs in rooms and carry out leakage testing sporadically.

Areas

3m x 3m x 3m =27m³ + airlock 8m³ = 35m³

35m³ x 10 air changes per hour = 350 cmh.

1 no 500 cmh will be used, we will vent negs in rooms and carry out leakage testing sporadically.

4.6 Type of Respirators to be used

Scott Phantom, Gemini, Kemira, full powered respirators.

Sundstrom half mask for waste removal and removal of Non notifiable items.

4.7 Describe all Air Monitoring Arrangements for Duration of The Works

On completion of works a full 4 stage reoccupation test will be carried out by Clearway Environmental Ltd. Sporadic personnel and background monitoring during works.

4.8 Describe how Control Measures Are to Maintained on Site and What Checks will be made

All items of plant will be checked on a daily basis and all findings including any defects will be documented in the applicable register. Spare items of plant will be readily available in case of failure.

4.9 Method of works

Method

Welfare will be supplied by Callaghan Demolition Ltd for use by our operatives and supervisors, power is in the form of a 60 KVA generator onsite and we will use onsite water supply

Pasma trained personnel will erect mobile towers and check before every use, these will be used to reach the intended work height, we will also use electric and diesel Mewps/booms to reach intended work height these will be operated by Ipaf/Pal trained personnel as PUWER 1998, these are recorded daily in the site file

The self-contained decontamination unit will be set up and checked to make sure it is in full working order before any work commences, this will be sited as close as reasonably practicable to the dwellings.

Areas

The works consists of the removal of Asbestos Insulating board panels to kitchen, WC and bathrooms along with door headers.

A pre clean to the intended work areas will be carried out by operatives wearing disposable blue type 5 overalls and sundstrom half face masks with H type vacs and Tak rags.

A full enclosure will be erected in accordance with GP section 1.3 using the structure of the building, we will be using 2 x2 timbers for framing (where necessary), and all exposed brickwork/plaster to area will be covered with a layer of polythene and fixed with 75mm cloth tape.

All tools & plant will now be brought into the working area before the final sheet is placed over the entrance door. The entrance door will be sealed using a sheet of 1000 gauge polythene fixed with 75mm cloth tape. Into the centre of this we will cut out in an oval shape large enough to allow entrance into the area. A weighted flap will be fixed over the opening on the enclosure side and will cover over the oval cut out with an overlap of a minimum of 150mm at each side and top and bottom.

We will now attach the negative pressure unit. This will be sited at the furthestest point from the airlocks to facilitate good air flow throughout the enclosure. A new filter will be fitted and the NPU will be switched on ensure it is in good working order

We will now commence the erection of the airlock; the airlock will be erected using cube systems approximately 750mm x 2 m, each cube will be wrapped in 1000 gauge polythene and will be constructed as per section 1.15 of the general procedures document.

We will now attach the airlock. Vision panels will be attached to the third airlock, and to the enclosure itself.

All areas will now be inspected to ensure all joints are sealed and all areas have been securely taped.

We will now undertake a full visual inspection of all aspect of the enclosure firstly without the NPU running and then with it running. After the supervisor is happy with the integrity of the enclosures and the presence of negative pressure a smoke test will be carried out after the negative pressure unit has been switched off. The enclosure will be filled with smoke using a smoke generator in the presence of the supervisor and inspected and where required any leaks will be attended to. See GP section 1.6.

When all parties are happy with the integrity of the enclosure a smoke test witness form will be signed and a copy will be issued to the PC, See section 1.6 of the general procedures document.

The integrity of the enclosure will be thoroughly inspected and logged during the course of the works at the start and end of every shift.

A record of all inspections will be kept within the site office. If any leaks are found they will be immediately repaired and in the case of major repairs a further smoke test will be carried out. No works will continue until all necessary repairs have been made and a further smoke test has been carried out and a smoke test witness form has been signed and entered into the site file

When all of the above has been carried out we will commence the removal operation.

The negative pressure unit will be switched on and the enclosure will be re-inspected, we will be fitting a 500 negative pressure unit to each enclosure and it will be vented in room, we will carry out leakage testing sporadically.

Using the procedure for entry explained in the General Procedures Document section 1.4. Operatives will enter the enclosure transiting using the designated route as shown on attached sketches.

Areas

The material to be removed is in the form of Asbestos Insulating board, firstly the boarding will be sprayed with fibre suppressant delivered by hand held pump sprays, the boarding will be unscrewed using hand held screwdrivers and removed from their location whilst shadow vacuuming. When the materials are removed they will be wrapped in a double

layer of polythene this will be layed on the floor large enough to fully envelope the section of boarding. The polythene will now be carefully wrapped over the board and each join will be sealed using 75mm polycloth tape ensuring all joins are sealed. A red bag will be placed over the front of the parcel showing all UN warnings and codes. All of the waste will be treated as per GP section 1.19-1.21.

Any smaller debris will be bagged into a red bag and then double bagged and dealt with in accordance with GP 1.19-1.21.

When all of the asbestos materials have been removed, bagged or wrapped and taken to our sealed 35 yard skip sited within our compound), we will undertake a final clean of the working area.

All area of the enclosure will now be cleaned starting at the high levels, all ledges, cills etc will be vacuumed all polythene sheeting will be wiped. The whole area of the floor will now be vacuumed working back towards the airlock. This operation will continue until all areas are clean and free of all debris. All tools, vacuums etc will be bagged and sealed.

The site supervisor will now enter the enclosure and carry out a thorough visual examination of the whole of the working area. An operative will be in attendance with the supervisor to clean any small areas if they are deemed not to be clean. This operation will continue until the supervisor is satisfied that the area is clean and ready for the 4 stage clearance procedure.

The analytical company will now be called into carry out the clearance procedures in accordance with the current legislation and section 1.18 of the general procedures... The analyst will be UKAS accredited.

When all of the above has been carried out and to finalise the 4 stage clearance all sheeting and enclosure materials will be carefully removed and bagged into waste bags. All bagged waste will be taken to our sealed 35 yard skip sited within our compound for removal under consignment note to Pindens Ltd

Asbestos Insulating board door headers will be removed by taping the panel with cloth tape on both sides and cutting the wooden frame out, this process will be carried out whilst wearing a personal air monitoring pump and placed directly into UN approved waste sacks.

Non Notifiable Items

The removal of all Non Notifiable items will commence once all soft stripping and all rubbish has been removed, we will erect a 2 stage airlock to the entrance doorways and remove all textured coatings to ceilings either by Extex (gelling to ceilings or equivalent) or removing plasterboard ceilings whole (as far as reasonably practicable) and place all textured coatings directly into UN approved waste sacks and remove from dwellings and place directly into our 35 yard lockable skip fine cleaning will be carried out with Tak rags and H type vacs, all floor tiles will be removed by hand held mutt bars and placed directly into UN approved waste sacks, all fuse guards will be removed once we have received a copy of isolation certificates, these will be placed directly into waste sacks. All waste will be removed via transit routes these will be clearly marked with bunting tape and signage.

Eternit tiles will be removed on the back sections by operatives in cherry pickers with safety harness attached, these will only be operated by Ipaf/Pal trained personnel; they will spray slates with fibre suppressant fluid delivered by hand held pump sprays before removing by hand and placing directly into UN approved waste sacks, on the first floor court yard we will remove slates from the front of dwellings via mobile scaffold towers erected by Pasma trained personnel and again slates will be sprayed with fibre suppressant fluid and carefully removed, all timber beams will be wiped down with Tak rags and H type vacs all waste will be removed via the transit route to our lockable 35 yard skip sited in our compound, all waste will be taken to a registered landfill under consignment note.

Bitumen adhesive will be removed by using a blastrac triple headed floor grinder with a H type vac attached to collect all dust as far as reasonably practicable, we will use a hand held portable 110 volt grinder with diamond tips on edges and stair treads as necessary, doorways will be sheeted with a flap attached, operatives will be wearing Blue type 5 overalls and sundstrom half face masks and we will carry out sporadic personnel, background and leakage testing during works.

All edge protection to sloping roofs will be erected by Callaghan Demolitions specialist scaffold contractor and will not be used until signed off fit for use.

4.11 Emergency Procedures.

There will be three main areas of concern.

- Elevated Fibre Levels
- Illness or Injury
- Fire or Explosion.

Depending on the type of emergency different approaches must be made. In the case of fire or explosion we would evacuate the area as quickly as possible which may require the cutting and breaching of the enclosure.

Where live services are present, and if possible, they must be isolated immediately especially in the case of electricity. This will not be undertaken if it poses a health risk to any person carrying out the isolation. All personnel should evacuate the area removing all contaminated clothing but leaving their respirators on. If the hygiene unit is not connected to the area and the transit procedure is in operation local decontamination must be carried out using water sponges etc. and as soon as possible after full decontamination should be carried out.

All emergency services attending the incident should be immediately warned of all risks on their arrival.

Injuries or medical conditions occurring within the working area should be assessed. In the case of minor injuries they will be treated normally by the first aider after full decontamination. Where major injuries occur we will remove the operative as quickly as possible from the working area which may require the breaching of the enclosure. When removed we will remove RPE as quickly as possible after locally decontaminating with clean water and a sponge. Where required operative assisting in the evacuation will carry out local decontamination changing their overalls and cleaning respirators. The victim will be placed in the recovery position and await the arrival of the emergency procedures

Where the enclosure has to be breached immediately after the removal of the victim measures will be put into place to repair all breaches and to clean up any residue from the surrounding areas. If required further smoke testing will be undertaken. The area will remain out of bounds until an air clearance has been carried out as is shown to be below 0.01f/ml before reoccupation is allowed.

If the emergency services are required to enter the working area due to type of injury. The time between calling and their arrival should be used to clean the area of all dust and debris.

In the event of elevated airborne fibres being found outside of the working area all work will stop immediately and inspections will be made to locate any leaks and the source of the contamination. If necessary a smoke test will be carried out to locate and leaks which are not found visibly. All repairs will be made and all areas in question will be fine cleaned. Finally Re assurance testing will be carried out to ensure the area is clear for re occupation.

Records of all incidents will be documented and copies taken and kept at office.

Equipment Schedule

Equipment Type		Supplier
Negative Pressure Units	6 no 500 cfm	ICE
Decontamination Units	Double shower self-contained shower unit	ICE
Fibre Control Equipment	Fibre suppressant delivered by hand held pump sprays	ICE
Respirators	Sabre Phantom/Gemini/ Kemira/Sundstrum	ICE
Vacuums	6 Numatic HZ350	ICE
Cherry Picker	1 no	Hired
Mobile tower	2 no	ICE

Materials Schedule

Material Type		Supplier
1000 gauge polythene		AMS
Foil/Cloth Tape		AMS
Disp coveralls Type 5/6		AMS
Spray Glue		AMS
Expanding Foam		AMS
TMP3 Filters		AMS
NPU Filters		AMS
Disp Towels		AMS
Shower Gell/Shampoo		AMS
Vac Bags		AMS
Waste Bags		AMS
Surfactant		AMS
Waste		ICE

Location of Nearest A&E Hospital.

The nearest accident and emergency centre is

King's College Hospital (Denmark Hill)

Telephone: 020 3299 9000

Address: Denmark Hill, London, SE5 9RS

Website: <http://www.kch.nhs.uk>

REVISIONS TO PLAN OF WORK.

Date	Revision Number	Revision	Name of supervisor	Signature

EMPLOYEE DECLARATION:

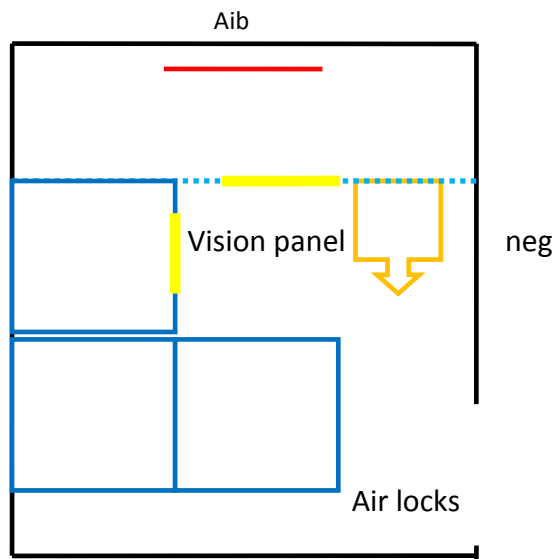
I HAVE READ AND UNDERSTOOD THIS PLAN OF WORK, AND WILL FOLLOW IT ACCORDINGLY.

SHOULD THE METHOD OF WORK CHANGE THEN I SHALL REPORT TO MY SITE SUPERVISOR FOR FURTHER INSTRUCTION.

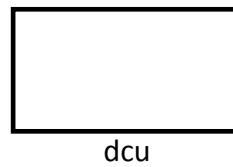
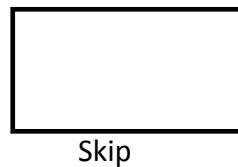
DATE	NAME (PRINT)	NAME (SIGNED)



Kitchen areas



transit route and waste route will be defined with bunting tape and signage, these will clear of waste, these routes will be as short as possible to DCU and skip.



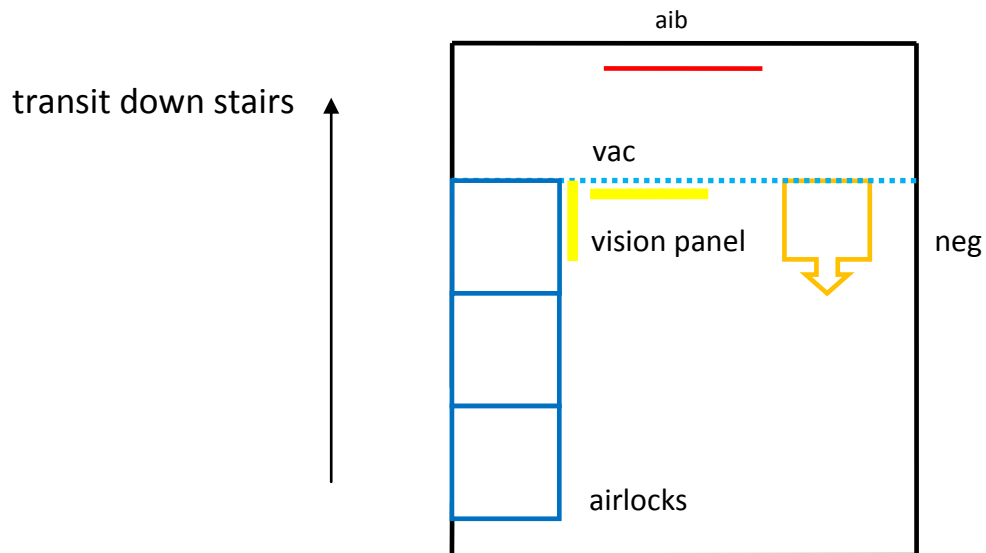
Area

$3\text{m} \times 1\text{m} \times 3\text{m} = 9\text{m}^3 + \text{airlock } 6\text{m}^3 = 15\text{ m}^3$

$15\text{m}^3 \times 10 \text{ air changes per hour} = 150 \text{ cmh}$.

1 no 500 cmh will be used, we will vent in room and carry out leakage testing sporadically

Bathroom ground floor Right



transit route and waste route will be defined with bunting tape and signage these will clear of waste, these routes will be as short as possible to DCU and skip.



Skip



dcu

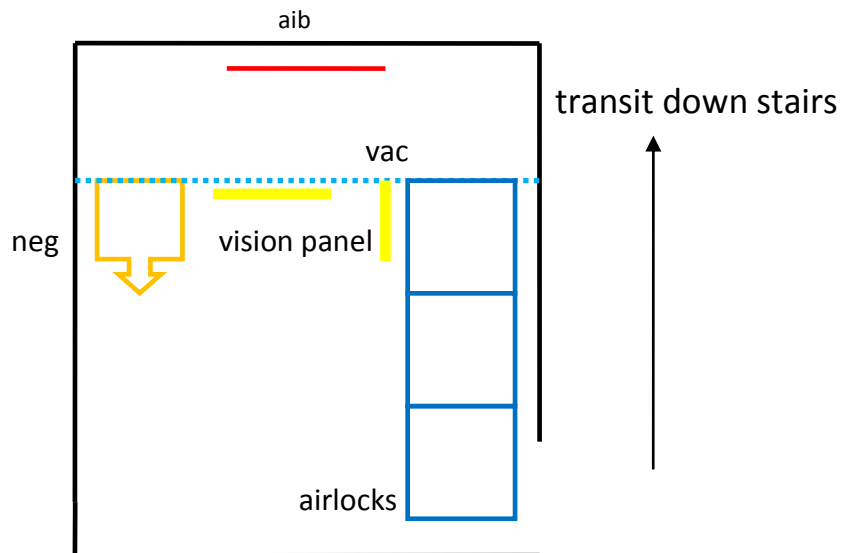
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$3\text{m} \times 1\text{m} \times 3\text{m} = 9\text{m}^3 + \text{airlock } 6\text{m}^3 = 15\text{ m}^3$

$15\text{m}^3 \times 10 \text{ air changes per hour} = 150 \text{ cmh}$.

1 no 500 cmh will be used, we will vent in room and carry out leakage testing sporadically

Bathroom ground floor left



transit route and waste route will be defined with bunting tape and signage these will clear of waste, these routes will be as short as possible to DCU and skip.



Skip



dcu

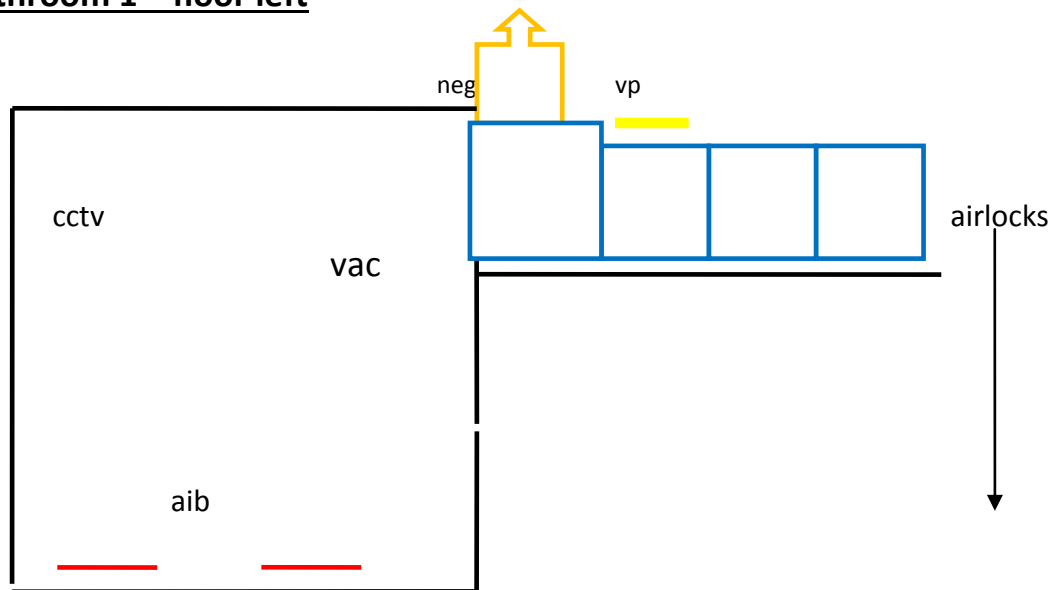
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$15\text{m}^3 \times 10 \text{ air changes per hour} = 150 \text{ cmh}$.

1 no 500 cmh will be used, we will vent in room and carry out leakage testing sporadically

Bathroom 1st floor left



transit route and waste route will be defined with bunting tape and signage these will clear of waste, these routes will be as short as possible to DCU and skip.



Skip



dcu

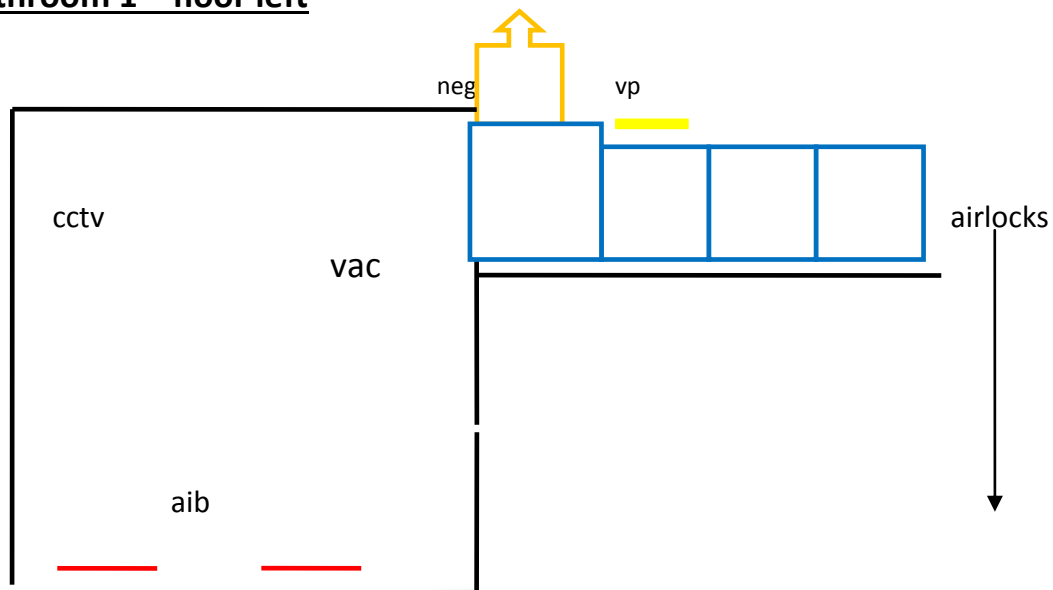
Area

$3\text{m} \times 3\text{m} \times 3\text{m} = 27\text{m}^3 + \text{airlock } 8\text{m}^3 = 35\text{m}^3$

$35\text{m}^3 \times 10 \text{ air changes per hour} = 350 \text{ cmh}$.

1 no 500 cmh will be used, we will vent in room and carry out leakage testing sporadically

Bathroom 1st floor left



transit route and waste route will be defined with bunting tape and signage these will clear of waste, these routes will be as short as possible to DCU and skip.



Skip



dcu

Area

$3\text{m} \times 3\text{m} \times 3\text{m} = 27\text{m}^3 + \text{airlock } 8\text{m}^3 = 35\text{m}^3$

$35\text{m}^3 \times 10 \text{ air changes per hour} = 350 \text{ cmh}$.

1 no 500 cmh will be used, we will vent in room and carry out leakage testing sporadically

Plan of work written by Jason Mcilfattrick

Dated 16/01/2014 revision 5