Cellar Floor Joist Replacement

Design & Access Statement
Risk Assessment & Method Statement

2 London Road
Tetbury
Gloucestershire
GL8 8JL

Version Control:

Version Number:	*01*
Date:	*31 March 2024*
Author:	*Phil Seymour BEng MRICS MCICES*

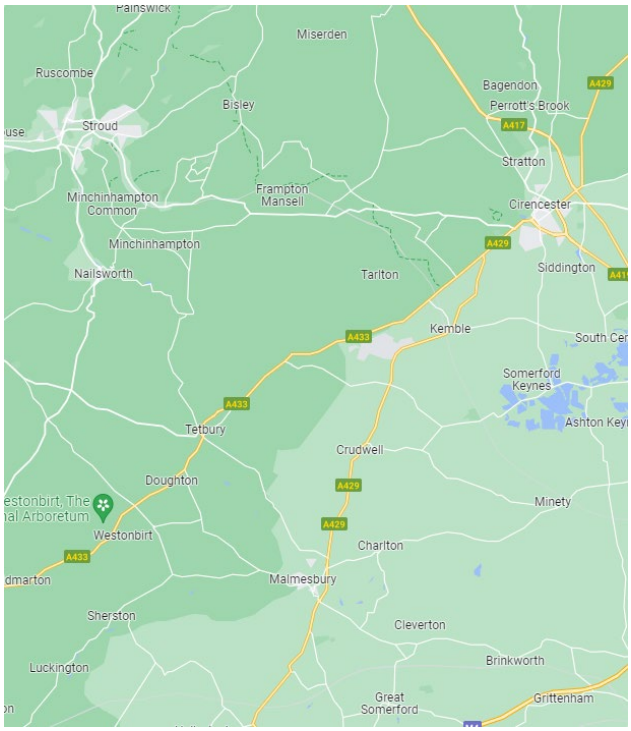
Contents

Introduction

The property has two addresses; 2 London Road and 1 Hampton Street, Tetbury. The building is split into two leaseholds, the basement and ground floor owned by the Philip Seymour Self Invested Pension Plan (PS-SIPP) and the upper two floors owned by Jorgen and Brit Poulsen. The freehold is owned by PS-SIPP who have the responsibility to maintain the fabric of the building. The ground floor is occupied by an Estate Agency with access via the door on London Road. Access to the upper floor property is gained by a separate door on Hampton Street. The basement is accessed via a wooden trap door.

Location

Tetbury is located 10 miles South-West of Cirencester, the building is at the corner of Hampton Street and London Road.

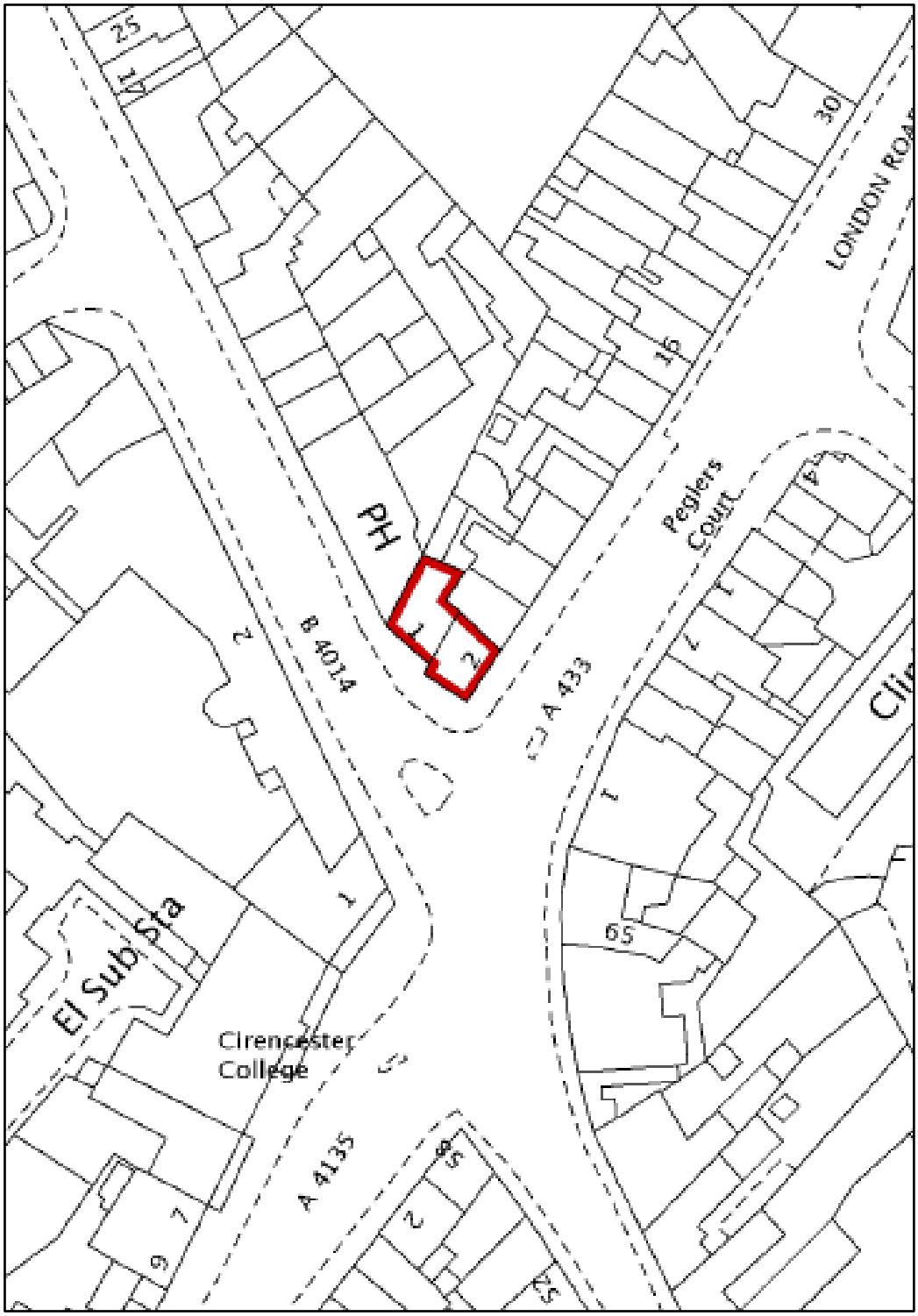


Listed Building Consent Application Ref. 22/04266/LBC

The Listed Building Consent referenced 22/04266/LBC was refused in December 2022 with remedial work identified. A decayed timber floor joist had been removed on safety grounds and replaced by a steel joist to support the office floor above. This was deemed unacceptable by the Cotswold District Council's Assistant Conservation & Design Officer. Consequently, it has been requested that the steel beam be removed and a timber beam of a similar nature to the original beam be installed in it's place.

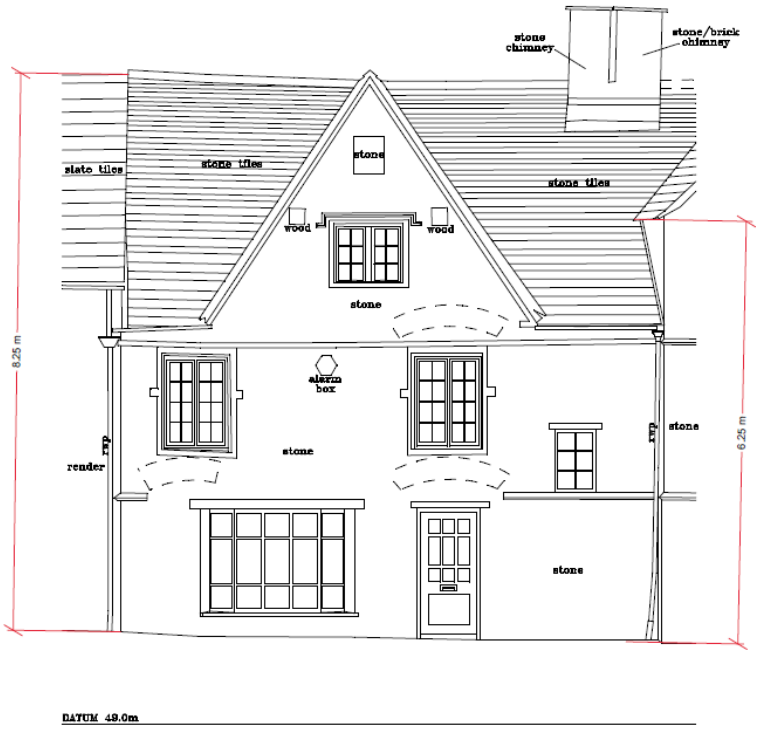
This statement identifies the work required to remove the steel floor joist and replace it with a timber beam.

Title Plan

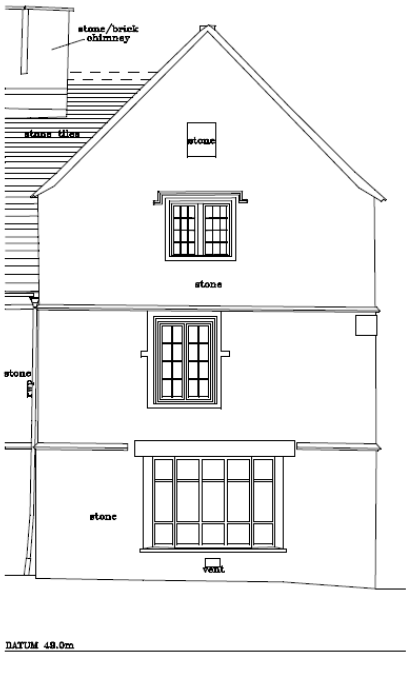

PH
B 4014
A 433
A 4135
Pegler's Court
LONDON ROAD
El Sub Sta
Cirencester College
25
17
30
16
2
1
65
7
9
5
2
25

Elevations - Front

SOUTH–EAST ELEVATION



SOUTH–WEST ELEVATION 1



SOUTH–WEST ELEVATION 2

Elevations - Rear

North-East Elevation

North-West Elevation

Floor Plans

Heritage

The following details are the listed building details.

Entry Name: 1, HAMPTON STREET (See details for further address information)
Listing Date: 6 September 1954
Last Amended: 21 March 1985
Grade: II
Source: Historic England
Source ID: 1153747
English Heritage Legacy ID: 128521
Location: Tetbury, Cotswold, Gloucestershire, GL8
County: Gloucestershire
District: Cotswold
Civil Parish: Tetbury
Built-Up Area: Tetbury
Traditional County: Gloucestershire
Lieutenancy Area (Ceremonial County): Gloucestershire
Church of England Parish: Tetbury St Mary the Virgin
Church of England Diocese: Gloucester
Latitude: 51.6395 / 51°38'22"N
Longitude: -2.162 / 2°9'43"W
OS Eastings: 388884
OS Northings: 193418
OS Grid: ST888934
Mapcode National: GBR 1P0.07H
Mapcode Global: VH95K.G2W0
Plus Code: 9C3VJRQQ+Q5

Corner house, unoccupied (October 1984), with entrances at No. 2 London Road and No. 1 Hampton Street. Mid C17. Rubble stone with Cotswold stone slate roof, one stone stack, and one double stack half stone and half brick. London Road elevation of 3 storeys has 2 windows, twin casements with continuous drip mould and bearing arch over left hand window on 1st floor. 2nd floor has two 2-light stone mullion windows with lead lights and square hoodmoulds. Ground floor has large shop front window and door to left with interrupted drip mould. Hampton Street elevation of 2 storeys and attic has 2 gables with small blocked oval windows. 3 windows, twin casements with moulded stone frames and continuous drip mould on first floor. Each gable has two 2-light stone mullion windows with lead lights and square hoodmoulds. Ground floor has 2 shop front windows and central door.

Original Timber Beam

The original beam is assumed to be oak, though this is not confirmed. It was approximately 3.15m long excluding the recess into the basement walls and with a cross section of approximately 200mm X 200mm. The beam was extremely decayed due to the damp conditions in the cellar and was supported by two scaffold planks, which it is believed were placed by a previous owner. See photo below.

Replacement Steel Beam

For safety reasons and in order to preserve the structural integrity of the ground floor the decayed timber beam was removed and replaced with a steel beam approximately 160mm high by 160mm wide, see photos below. To install the new beam it was cut and welded in-situ as the access via the cellar hatch did not provide sufficient access to allow the full length to be manoeuvred in to the cellar.

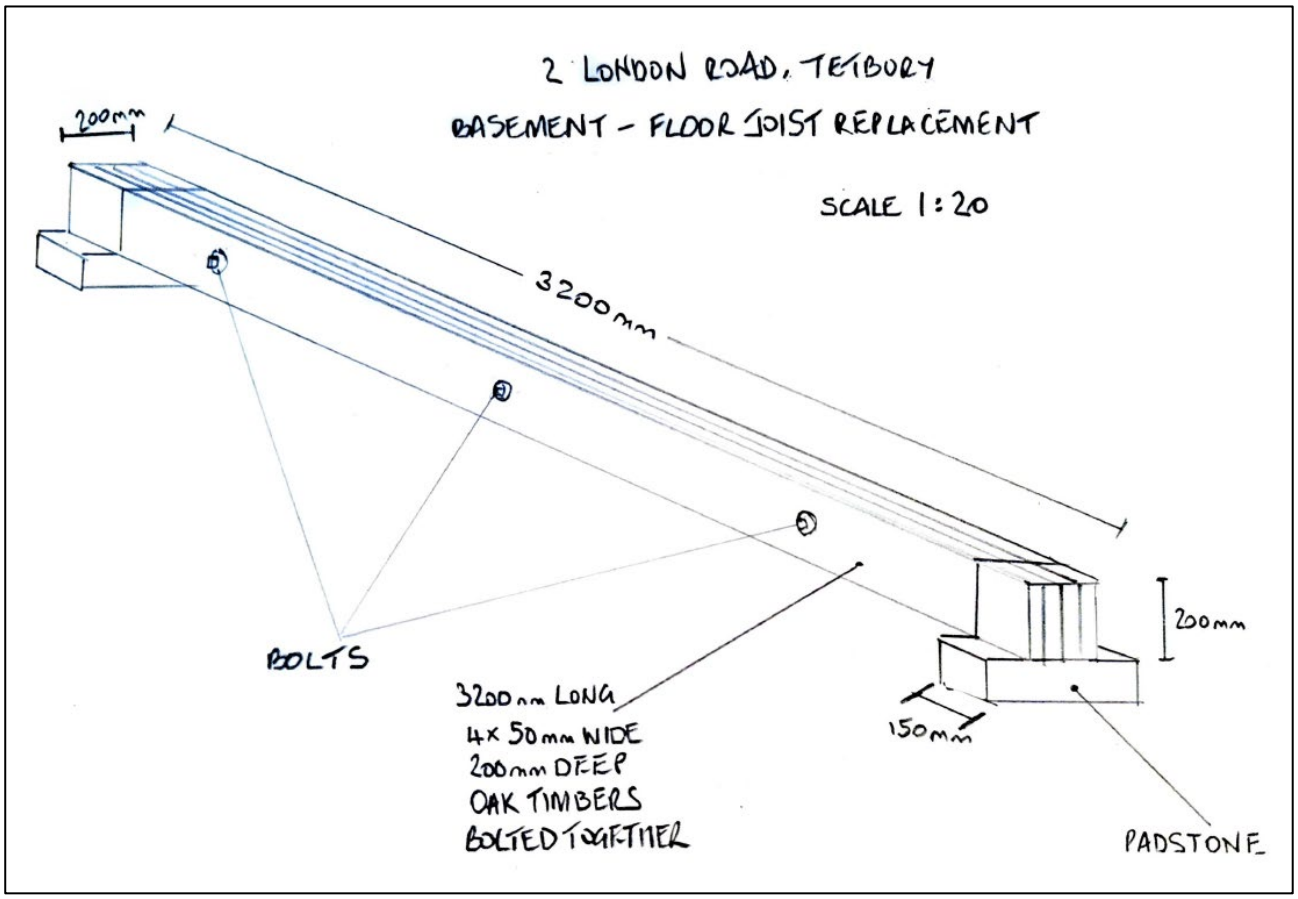
Access To Cellar

The stone steps from the ground floor office down to the basement turn around 90 degrees, the opening is approximately 700mm x 900mm which significantly restricts access to the cellar. See photos below.

Replacement Timber Beam

It is impossible to manoeuvre a new timber beam with dimensions 3.5m long and cross section 200mm x 200mm into the cellar through the existing access hatch and there is no other access to the area. As such, an alternative solution is required. The proposal, as shown in the diagram below

is to cut the 200mm x 200mm in to four sections lengthways each 50mm wide. This will allow the narrower beams to be manoeuvred into the cellar through the existing hatch. Once in place they 4nr 50mm beams will be connected together by bolts.



Method Statement

1. Update the risk assessments in advance of the works.
2. Carry out inductions to operatives working on the project dealing with issues of access, fire safety, health and welfare, noise and dust.
3. Work will be carried out at times to limit the disruption to the public and to occupiers and visitors to the building.
4. Operatives will wear appropriate PPE for the task.
5. Materials include: 4nr 50mm wide 200mm deep and 3200mm long oak beams (source to be confirmed), 2nr 300mm x 140mm x 102mm padstones (supplier: Travis Perkins), 250mm long M20 steel bolts & washers (supplier: Travis Perkins).
6. Materials will be delivered by van to the front of the building, off loaded by hand and carried into the building and the cellar.
7. A small section of the cellar wall will be excavated by hand located adjacent to the insitu steel beam to provide a recess for either end of the new beam and the padstones, care will be taken not to affect any of the existing structures.
8. A padstone will be installed in one of the recesses.

9. The beams will be placed on the recessed padstone with the other end located in the opposite recess.
10. The beams will be drilled and bolted together to form one single beam with a 200mm x 200mm cross-section.
11. The second padstone will be installed so that the new beam is as close to the existing floor joists as possible.
12. Timber shims will be installed between the floor joists and the new oak beam to fill any gaps.
13. Once the oak beam is in place and it is confirmed that it is adequately supporting the floor joists then work to remove the steel beam may start.
14. Acroprops will be placed at either end of the steel beam to support the weight of the beam.
15. The steel beam will be cut using an angle grinder at each end close to the padstones.
16. The steel beam will be lowered using the ratchet system on the acroprops.
17. Care will be taken to ensure there is no movement in the floor joists during the lowering process.
18. The steel beam will be lowered to the floor and the cut ends and padstones removed.

Example of acroprops currently in use in the front cellar

Proposed Contractor

Aesum Limited of Chippenham, Wiltshire are the proposed contractor for the works.

Aesum BUILT TO PLEASE YOU	**Brief description of work:** **Start and end date:**	**Aesum Ltd are taking out the steel beam and replacing it with an oak beam** **The start of the works TBA**
	Name of Client Company: **Site address:**	**2 London Road Tetbury GL88JL**
Monitoring and review: ▪ Completion of the sections below will ensure that the method statement is both appropriate and complete. Whenever this task is undertaken the attached risk assessment must also be reviewed to ensure that all significant hazards and their risks have been identified and controlled. ▪ The person reviewing this statement should sign off as control in place below.		
Site adaptations implemented	▪ ***None*** ▪ ▪ ▪	

Site Contact Details	**Supervision**	
Name: Jake Fisher **Job Title: Project Manager** **Contact No: 07860800074** **Date:30/10/23**	**Competency level:**	SMSTS, CSCS, CPCS, CISRS, CCNSG, IPAF. **Other:**

Name of Personnel	**Position**	**Competence Details**
	Site Supervisor	
Those who are attending site	Jake Fisher & Clive Fisher	

Risk Assessment

Contractor documentation is included below:

Emergency Arrangement Details	
Fire/Evacuation	**If fire is discovered, then the alarm will be raised by shouting. The muster point will be on the front entrance to the property**

First Aid	**Report to site office.**
Pollution/Spill	**Waste created during the project will be removed by hand and transported by van to an appropriate recycling centre.**
Other	**N/A**
Description of Safe Method of Work	
Access/Egress It has been agreed between Aesum Ltd. and the client that the work vans are to be parked in near-by parking areas. They will be parked up sensibly to ensure they are not blocking other residents' driveways, blocking pathways for members of the public or stopping vehicles from being able to pass. **Structural Openings** All structural openings will be cut out using an angle grinder if needed and the new oak beam sat on the new pad stones. **Completion/Handover of site** All certificates that will be needed for insurance purposes will be handed over at the end of the job.	
Plant/Equipment and Inspection Dates	
Hand Tools	**All visually inspected before use**
110v and Battery Pack Power Tools	**240V PAT stickers applied and tested every three months, always visually checked**
Disc Cutter	
Chop Saw	

Risk Assessment

Address	**2 London Road, Tetbury, GL8 8JL**							
Work activity	**Replace floor beam in cellar**							
Persons at risk	Employee	✓	General Public		Others	✓	Client Personnel	✓
Supporting requirements	Method Statement	✓	COSHH Assessment		PPE	✓	Permit to Work	
Calculation of risk								

Consequences (C)	Likelihood (L)				
	Rare 1	Unlikely 2	Possible 3	Likely 4	Certain 5
1 - Negligible	1	2	3	4	5
2 - Low	2	4	6	8	10
3 - Medium	3	6	9	12	15
4 - Very High	4	8	12	16	20
5 - Extreme	5	10	15	20	25

CONSEQUENCE (C)

Level	Descriptor	Description
1	Negligible	First-aid treatment. Small environmental damage. Moderate financial loss. Decrease in morale. Some security implications.
2	Low	Medical treatment required. Moderate environmental damage. High financial loss. Moderate loss of reputation. Security implications limit business
3	Medium	Excessive injuries or 7 day lost time injury. Major environmental damage. Major financial loss. Major loss of reputation. Security implications restrict business.
4	Very High	Single death of any person. Environmental damage restricts business. Massive financial loss. Damage to reputation restricts business. Security implications severely restrict business.
5	Extreme	Multiple deaths involving any persons. Environmental damage threatens business viability. Crippling financial loss. Damage to reputation threatens business viability. Security implications threaten business viability

LIKELIHOOD (L)

Level	Descriptor	Description
1	Rare	The event may occur only in exceptional circumstances.
2	Unlikely	The event could occur at some time.
3	Possible	The event will probably occur at some time.
4	Likely	The event will occur in most circumstances.
5	Certain	The event is expected to occur in all circumstances.

Risk Factor Before Putting Control Measures in Place
3 x 2 = 6

Control Measures

1. Access/Egress - Safe means of access and egress into the property and working areas will be discussed and decided by Aesum Ltd. and the client during the planning stages. These routes will be reviewed regularly to ensure that they are the safest means as work progresses.
2. Unauthorised Access - Aesum Ltd. will erect barriers around the working areas to prevent unauthorised persons from entering the working area. The client will be informed of the work taking place and will be advised when not to be near the working area.

4. Housekeeping – Any waste that is generated is tidied up as the work progresses and is disposed of in the vans that are parked close to the site. Only equipment that is needed on the job are out in the working area. All cables and work material are kept to the side of the working area and secured.
5. Electricity – Aesum will check where the electrical supply enters the building and will turn off any supply before working on or near cables. There is no electrical installation work required.
6. Equipment – All equipment is visually checked by operatives before and after every use. Any defective equipment is reported to the site supervisor and is taken out of use until it is repaired or replaced. All equipment that is hired are used from competent companies that service all the equipment. These are also visually inspected before and after every use and are stored in a safe manner, as agreed between Aesum and the Hire Company. Any machinery this is not in use is parked up safely and the key is removed to ensure it is not used unauthorised.
7. Manual Handling – All materials or equipment that is over 20kg will be carried by two operatives. Any manual handling aids are used such as wheelbarrows or sack trucks. Operatives are reminded of safe manual handling techniques when moving equipment and machinery. Operatives will rotate jobs as well to ensure sufficient amount of rest is attained and to reduce the risk of musculoskeletal injuries.
8. Slips, Trips and Falls - Keep walkways, stairs and work areas clear and free from obstructions such as trailing cables, rubbish and materials. Cables will be secured down if it is a necessity for cables to go across walkways. Operatives will only have equipment out that is needed at that time of work and will tidy the work area as the job progresses. Cellar opening will be barriered to prevent accidental access or falls.
9. COSHH – All operatives will wear correct PPE when handling hazardous substances and will rotate jobs if it is envisaged that substances will be used for a period of time. The working area will be ventilated as well to maintain fresh air at all times. The SDS sheets will be kept on site at all times in the works van and operatives will adhere to manufacturers guidance in how to use the substances.
10. PPE – Operatives must wear hi viz, safety footwear and gloves whilst on site at all times. When any cutting is taking place operatives must wear hearing protection and a face mask to the standard of FFP2.
11. Enclosed Spaces – Clear access/egress to the cellar will be maintained at all times. The cellar hatch will be secured open and the open steps will be fenced off. Loan working will not be permitted.
12. Struck from falling objects – Operatives will make sure that equipment and materials are not stored at a height that could be easy for something to be knocked off. All walkways will also be kept clear.
13. Fire – fire suppression equipment will be provided at working areas. Flammable materials will be kept away from the working area. Cutting areas will be protected from hot sparks.
14. Dust – dust will be kept to a minimum, all areas will be cleaned periodically, eye protection & masks will be worn by operatives during cutting operations.
15. Noise – ear defenders are to be worn during cutting operations.

Risk Factor After Controls Measure Implemented
i.e. 2 x 2 = 4

Protective equipment / Systems

Type	Overalls	Permit	Gloves	Face mask	Harness	Hearing	High vis	Head	Eye	Feet
Required			✓	✓		✓	✓	✓	✓	✓
Symbol										

Notes and additional information

Gloves: EN388
Face Mask: FFP2
Hi-Viz
Safety Goggles: EN166
Safety Footwear: EN23045

END