

### Bath Abbey-Stained Glass Window

### INSTALLATION

The installation of the stained glass window will require scaffolding to both the inside and outside of the window for a period of three weeks maximum.

I am enclosing both a 'Draft Risk Assessment' and 'Process Method Statement' in Word documents that apply to the installation process.

The estimated cost of the complete installation (excluding scaffolding) will be between  $\pm 8000.00$  and  $\pm 10,000.00$  (+VAT). This will include the removal of the existing fourteen leaded windows and the complete installation of the new stained glass window.

We will use only the highest quality materials in the whole creation of the new stained glass window. This will include handmade cylinder glass (Lamberts) and limited small border areas of machine made glass. We use Heaps, Arnold and Heaps Limited lead came.

The installation of the stained glass into the stonework will be pointed in with the relevant St. Astier Natural Hydraulic Lime/aggregate and sharp sand mix. We will also be using saddle bars to support the overall design.

The ideal start date for the installation would be early 2025. This will depend on the start date for the stained glass commission, which I anticipate will take between six to eight months to create.

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Neil Ireson MA

Neilireson.com

### Intent and Introduction

The objective of this method statement is to provide and document a safe working procedure. Consideration has also been given in respect of persons who may be affected by our work.

This method statement encompasses the scope of work described below and outlined in the specification and earlier correspondence.

Commencement Date: To be confirmed Completion Date: To be confirmed.

### Location of Works: Position: To be confirmed

### Description of Works

The client shall provide adequate parking space, welfare facilities and any special arrangements in connection with our works. This also includes any special barriers and or exclusion zones as felt necessary for the control of the works.

This method statement must be read in conjunction with the associated risk assessments prior to commencement of work on site. Where there is a requirement to change the working method, for any reason. A copy of this method statement and any subsequent revisions will be always available.

The information contained in this method statement and associated risk assessment will be imparted to the site operatives. Thereafter will be reinforced as and when necessary, should a change to the method of work be required our workforce will be advised appropriately.

Due consideration has been given to the competency of our operative who we consider having adequate training, knowledge, experience and the appropriate personal qualities to carry out the work specified within the scope.

#### **Site Hours**

Working hours: 07:30hrs to 17:00hrs or as directed.

### Method of Site Work:

The first part of the process is to loosen the mortar that is securing the existing pa.els, after which the loose spoil will be raked out.

The tie wires on the internal saddle bars will then be cut and the internal mortar loosened so that the panels are free from the jamb and mullions.

Starting from the top, the panels will be removed in their sections, stacked on the scaffold and then taken down to ground level.

The stone grooves will then be cleaned out of any remaining old mortar in preparation to accept the new panels.

All stained glass panels and materials are to be offloaded from the vehicle and stored at the internal base of the scaffold in a safe area and then carried up by ladder to the relevant scaffold lift.

Each panel will be installed into its relevant position and adjusted line up with its neighbouring panel as appropriate, then blocked in to secure with lead came shims.

Where applicable saddle bars will be secured into the stone, and tied to the internal face of the panel. The stone mortar will be applied to both sides to the stone line to hold the panels in position. Any excess mortar will be cleaned off with dry brushes,

### People Involved in work

People who will carry out the work. Operative: Neil Ireson, John Mahoney, Maisie de Pulford

### Access and Egress

To be outlined and provided by the client

#### Tools and Equipment to be Used

Hand tools, including Hammers and Chisels, knives, Stopping Knife, tape measure, brushes, flat knives, pliers/wire cutter, trowels and pointing tool, battery powered drill and lime based mortar to match the existing stonework as applicable{ to be advised}

#### Housekeeping and Waste Disposal

Any debris/rubbish to be cleared and taken away by us. All necessary cleaning up will be undertaken, prior to leaving the site.

#### **Related Documentation**

Risk assessment covering the works will be available at the same time as this statement.

#### Location and protection of any services/facilities affected by works

Service location to be advised by the client as necessary for water, electric, communications and gas supplies are to be identified before commencement of work.

#### **Foreseeable Adverse Effects and Their Control**

If breakages occur or damage to surrounding areas this is to be assessed for any precautionary measures to prevent further breakage or damage and or safely removed from the work area. Injury to operatives or other persons to be reported to the supervisor and initial first aid will be provided from the first aid kit provided.

### **Safety Precautions**

First Aid equipment (first aid kit) will be available within the works van. Should a serious injury occur whilst on site and requires immediate attention the emergency services shall be contacted on 999.

Before work commences on site any operatives shall be issued with any appropriate personal protective equipment (PPE) and/or equipment relevant to their work, site conditions or rules and in compliance with the on-site risk assessment.

Personal protective equipment provided and worn as necessary:

- Safety Footwear.
- Safety Gloves. (EN 388 general protection and EN374 Nitrile Chemical Protection)
- Safety helmet.
- Hi visibility jackets / vest
- Other items of PPE shall be worn as identified in the Risk Assessment
- Dust masks. (Type used FFP3)
- Eye protection Light Eye Protection

### **Monitoring systems**

A continuous appraisal of the works shall be undertaken as necessary by operatives when any work procedure either changes or circumstances present.

### Further information/observations

Operatives involved in undertaking this activity are to acknowledge confirmation at and through any site induction.

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

Item No	Activity/ Task (1)	Hazard (2)	Likelihood/Consequenc es What/Who & How (3)	Primary Risk Level (4)	Control Measures (5)	Residual Risk Level (6)	Team Members responsible (7)
1	Welfare	<ul> <li>Insufficient Toilet Facilities (Male &amp; Female).</li> <li>Dirty / untidy Facilities.</li> <li>Insufficient water (hot &amp; cold).</li> <li>Inadequate facilities for rest, eating meals and drying clothing.</li> </ul>	<ul> <li>Probable/3 day LTA.</li> <li>Site Operatives; staff &amp; all contract personnel.</li> <li>General health would suffer, unhealthy working environment.</li> </ul>	High	<ul> <li>Ensure all adequate welfare facilities are available and in good condition.</li> <li>Appoint cleaner/attendant.</li> <li>Connect to mains power and water.</li> </ul>	Low	Site Agent, Forman
2	Access/ Egress	<ul> <li>Site traffic/plant operation in access routes.</li> <li>Roof edge protection</li> <li>Bad lighting</li> <li>Untidy approach to site and compound = trip hazards.</li> <li>Holes/openings in floors</li> </ul>	<ul> <li>Likely /major Injury</li> <li>Site Operatives; staff &amp; all contract personnel as well as client and visitors</li> <li>Slip, trips, falls and collisions</li> </ul>	High	<ul> <li>Segregate compound from working area.</li> <li>Ensure safe walking routes.</li> <li>Protect open edges and holes.</li> <li>Keep routes clean, clear and well lit.</li> <li>Ensure adequate signage in place</li> </ul>	Low	Site Agent, Forman

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

Item No	Activity/ Task	Hazard (2)	Likelihood/Consequenc es What/Who & How	Primary Risk Level	Control Measures (5)	Residual Risk Level	Team Members responsible (7)
	(1)		(3)	(4)		(6)	
3	Ladders	<ul> <li>Bad/unsafe condition</li> <li>Unsecured</li> <li>3 points of contact</li> <li>Wrong angle of ladder and insufficient length</li> <li>Soft ground at base of Ladder</li> </ul>	<ul> <li>Likely /major Injury</li> <li>Site Operatives; staff &amp; all contract personnel</li> <li>Falls from height</li> </ul>	High	<ul> <li>Regular inspection prior to use and during use.</li> <li>Secure and foot ladders</li> <li>Hoist materials and tools</li> <li>Use stairs were possible</li> <li>Prepare ladder base as necessary</li> </ul>	Low	Site Agent, forman and all sub-contractors.
4	Scaffolds	<ul> <li>Unstable ground conditions</li> <li>Scaffold erected by incompetent person.</li> <li>Scaffold loaded out of design criteria.</li> <li>Lack of inspection by competent person.</li> <li>The use of incomplete &amp; unsafe scaffolding</li> </ul>	<ul> <li>Likely /major Injury</li> <li>Site Operatives; staff &amp; all contract personnel</li> <li>Falls from height and crushed by scaffold and materials</li> </ul>	High	<ul> <li>Prepare base before erection.</li> <li>Scaffolds to only be erected by competent, certified, personal.</li> <li>Inspect scaffolds daily with thorough inspection weekly.</li> <li>Make sure scaffold is loaded out correctly as per its design criteria.</li> <li>Install signs on incomplete scaffolds and remove ladders.</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

Item	Activity/	Hazard	Likelihood/Consequenc	Primary	Control Measures	Residual	Team Members			
No	Task		es	Risk		Risk	responsible			
		(2)	What/Who & How	Level	(5)	Level	(7)			
	(1)		(3)	(4)		(6)				
5	Roofwork (working at Heights)	<ul> <li>Fragile roof construction</li> <li>Displacement of materials from roof. High winds and rain</li> <li>Material falling off roof</li> <li>Over loading of roof during loading out</li> <li>Sharp edges of material</li> <li>Open edges</li> </ul>	<ul> <li>Likely/ Major-Fatal</li> <li>Roofers and operatives below as well as public.</li> <li>Falls from height and struck by falling materials.</li> </ul>	High	<ul> <li>Make sure all roofers are aware of their relevant method statements prior to the commencement of works.</li> <li>Indicate/sign fragile roofs.</li> <li>All materials are to be tied down when not in use.</li> <li>Install edge protection &amp; toe board to prevent falling materials.</li> <li>Distribute loads across the roof structure.</li> <li>Make sure operatives wear PPE. (gloves, harness, etc)</li> <li>Keep off roof during periods of severe inclement weather.</li> </ul>	Low	Site Agent, Forman and trade sub-contractors			

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

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6	Mobile Elevated Working Platforms	<ul> <li>Lack of inspection /maintenance</li> <li>Unstable/uneven ground conditions</li> <li>Incompetent operators</li> <li>Lack of fall protection</li> <li>No protection to base of machine.</li> </ul>	<ul> <li>Likely /major Injury</li> <li>Site Operatives; staff &amp; all contract personnel</li> <li>Falls from height, crushed by machine, machine failure and incorrect use</li> </ul>	High	<ul> <li>Make sure all relevant test certificates are received prior to use. Inspect at regular intervals(weekly)</li> <li>Make sure all operatives are certified to use machines.</li> <li>Prepare ground before use</li> <li>PPE – harness fixed to basket</li> <li>Protect base of machine prior to use to avoid crushing of personnel.</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
7	Lifting equipment/ Accessories	<ul> <li>No planning of lifting operations</li> <li>Access/egress to and from lift location</li> <li>Unstable ground conditions</li> <li>Rigging/craning/slinging and banking by incompetent people</li> <li>Unsecured loads</li> <li>Incorrect/no certification for lifting appliance</li> </ul>	<ul> <li>Likely/major Injury</li> <li>Site Operatives; staff &amp; all contract personnel</li> <li>Fall or collapse of equipment. Falls of materials being lifted. Mechanical failure. Incorrect use</li> </ul>	High	<ul> <li>Make sure site staff have planned/organized for the correct use of lifting equipment.</li> <li>Prepare ground/base &amp; check for under ground voids and services.</li> <li>Ensure use by competent personal. Check certification (slinger/banksman/drivers)</li> <li>Make sure plant/machine is tested correctly under LOLER and certificates are in place.</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

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8	Plant/ Equipment	<ul> <li>Dangerous moving plant/equipment</li> <li>Exceeding Site speed limit</li> <li>Used by Unauthorized personal</li> <li>Emissions from plant</li> <li>Untrained personal using plant/equipment</li> <li>Plant not suited for task</li> <li>No certification for plant</li> </ul>	<ul> <li>Likely/major Injury</li> <li>Site Operatives; staff &amp; all contract personnel</li> <li>Personal been hit by plant. Mechanical failure, tipping, rolling and collision.</li> <li>Sickness through emissions</li> </ul>	High	<ul> <li>Separate designated plant and personal work areas.</li> <li>Site speed limit</li> <li>Certification for personal and test examination certification for plant</li> <li>Making sure plant is suited for task by scrutinizing relevant method statements. PUWER</li> <li>PPE – High visibility vests</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
9	Abrasive wheels	<ul> <li>Unsafe state and improper use</li> <li>Lack of PPE</li> <li>Harmful Emissions</li> <li>Plant not suited for the task</li> <li>Wheels mounted incorrectly by untrained staff</li> <li>Poor maintenance</li> </ul>	<ul> <li>Probable/3 day LTA.</li> <li>Site Operatives</li> <li>Injury by moving parts or plant failure. Injury by incorrect use or no PPE. Sickness through harmful emissions/products</li> </ul>	Medium	<ul> <li>Ensure full examination of plant by trained personal prior to use and regularly there after.</li> <li>Only suitably trained personal to use</li> <li>Make sure area is suitable for use of abrasive wheel. If needed issue Work Permit</li> <li>Sub-contractors risk assessment</li> <li>Make sure appropriate PPE is used</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

Item	Activity/	Hazard	Likelihood/Consequenc	Primary	Control Measures	Residual	Team Members
No	Task		es	Risk		Risk	responsible
		(2)	What/Who & How	Level	(5)	Level	(7)
	(1)		(3)	(4)		(6)	
			1	n			
10	Structural Steel	<ul> <li>Unsafe erection sequence</li> <li>Incorrect lifting appliance/equipment</li> <li>Untrained erection personnel</li> <li>Unsafe access provision.</li> <li>Unsuitable working area</li> <li>Heavy materials</li> <li>Failure to establish stability at end of shift</li> <li>High winds and inclement weather</li> </ul>	<ul> <li>Likely/Fatality</li> <li>Site Operatives</li> <li>Structural collapse. Personnel been hit by falling materials/ plant. Mechanical failure, tipping. Falling from heights. Injury through lifting and handling</li> </ul>	High	<ul> <li>Ensure suitable hardstanding</li> <li>Work to agreed sub-contractor method statement and risk assessment</li> <li>Make sure all personnel are aware of sequence of work and method statement</li> <li>Make sure all personnel are trained and certified to use equipment</li> <li>Maintain site access and egress and keep site tidy.</li> <li>Stand down erection, lifting and fixing in severe inclement weather</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

Hazard

CONTRACT: CONTRACT NO:

Activity/

Item

ISSUE NO:

Likelihood/Consequenc Primary

DATE OF ASSESMENT:

Residual

Team Members

001

Control Measures

ļ	No	Task (1)	(2)	es What/Who & How (3)	Risk Level (4)	(5)	Risk Level (6)	responsible (7)
	11	Excavations	<ul> <li>Failure to inspect excavations for potential collapse</li> <li>Unsuitable plant/ operator</li> <li>Unprotected edges</li> <li>Ground water</li> </ul>	<ul> <li>Likely /Major Injury</li> <li>Site operatives, staff</li> <li>Liable for crush injuries, breaks, muscle-skeletal injuries if excavation collapses or plant/equipment falls into excavation</li> </ul>	High	<ul> <li>Issue permit to dig</li> <li>Use certified operatives for excavation</li> <li>Stoplogs and edge protection</li> <li>Use correct support system or batter back excavation</li> <li>Work to agreed sub-contractor method statement.</li> <li>Ensure excavation kept free from groundwater</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
	12	Buried /Overhead services	<ul> <li>Failure to identify the presence/location of services</li> <li>Failure to make operatives aware of position of services</li> <li>Failure to protect exposed services</li> </ul>	<ul> <li>Likely/Fatality</li> <li>Operatives</li> <li>Strike/damage services. Electric Shock, Explosion causing burns. Service failure</li> </ul>	High	<ul> <li>Obtain current service layout drawings. Locate, mark services on site</li> <li>Carry out further CAT survey</li> <li>Issue permit to dig</li> <li>Hand dig if necessary</li> <li>Work to approved Sub-contractor method statements</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

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13	Confined Spaces	<ul> <li>Unsafe atmosphere and environment</li> <li>Poor access and egress</li> <li>Untrained/incompetent operatives</li> <li>Failure to provide safe system of work (hot work permits)</li> <li>No emergency procedures</li> </ul>	<ul> <li>Likely/Fatal</li> <li>Operatives</li> <li>Entrapment/failed escape. Sickness through disease. Poisoning. Explosion</li> </ul>	High	<ul> <li>Issue permit to work</li> <li>Set emergency procedures and make all operatives aware of procedures</li> <li>Make sure only trained opratives work in confined spaces</li> <li>Work to agreed sub-contractors method statements</li> <li>PPE</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
14	Falsework/ formwork	<ul> <li>Lack of suitable design/works method</li> <li>Incomplete works when loaded or over loaded</li> <li>No inspections of works</li> <li>Insufficient planning</li> <li>Inadequate access/egress</li> </ul>	<ul> <li>Probable/Fatal</li> <li>Operatives</li> <li>Collapse of system.</li> <li>Falls from height.</li> <li>Cuts grazes</li> </ul>	High	<ul> <li>Use designed and approved system.</li> <li>Work to agreed sub-contractors method statements</li> <li>Ensure suitable access/egress and guard rails</li> <li>Make sure works are inspected regularly to avoid risk of collapse</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
15	Manual Handling	<ul> <li>Failure to access loads</li> <li>Failure to provide mechanical handling were practical</li> <li>Failure to make operatives aware of risks when lifting</li> </ul>	<ul> <li>Probible/3 Day</li> <li>Operatives</li> <li>Materials to heavy, unstable or damaging causing strains, breaks, and musco skeletal problems.</li> </ul>	Medium	<ul> <li>Making sure all sub-contractors asses loads prior to delivery to site.</li> <li>Work to agreed sub-contractors method statements and assessments</li> <li>Use of mechanical handling where possible.</li> <li>PPE</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

CONTRACT:

ISSUE NO:

DATE OF ASSESMENT:

CONTRACT NO:

001

Item Activity/ Hazard Likelihood/Consequenc Primary Control Measures Residual Team Members No Task Risk Risk responsible es (2)What/Who & How Level (5) Level (7) (1)(3) (4) (6) Probable/ Minor Ensure that COSHH assessments are in 16 Health of Lead Medium Low Site Agent, Employees/ Noise All employees Forman and trade \_ place Brief operatives on Risks, COSHH and Operatives Vibration sub-contractors relevant sub-contract method on Site Sunshine Exposure \_ Dust statements Issue PPE Fumes Chemicals. Resins Instruct workforce on vibration tool use Concrete & road breaking 17 Noise & Definite/Minor High Ensure that COSHH assessments are in Site Agent, Low -Timber Sawing Vibration place Forman and trade Brief operatives on Risks, COSHH and **Driving Dumpers** sub-contractors Un-silenced Plant relevant sub-contract method Vibration Pokers statements Wacker Plates Issue PPE **Confined Space Working** 240V plant and equipment Likely/Fatal The use of 110V tools only High 18 Electricity Low Site Agent, Insufficient protection of Operatives and Forman and trade PAT tested with visual inspection Beau Sejour center electrical services before use. sub-contractors Indicate power points during site Poor condition of hand Shocks and burns tools and leads induction. Overloading circuits Work to approved sub-contractor Method statements.

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

Item No	Activity/ Task (1)	Hazard (2)	Likelihood/Consequenc es What/Who & How (3)	Primary Risk Level (4)	Control Measures (5)	Residual Risk Level (6)	Team Members responsible (7)
19	Fire	<ul> <li>Storage of fuels and other flammable materials</li> <li>Electrical equipment</li> <li>Smoking in prohibited areas</li> <li>Lack of awareness by operatives</li> </ul>	<ul> <li>Likely/Fatal</li> <li>Operatives, staff and Beau Sejour structure</li> <li>Burns and inhalation</li> </ul>	High	<ul> <li>Control over the storage of flammable materials and fuels</li> <li>Control of electrical equipment as above</li> <li>Designated smoking areas</li> <li>Making sure all opratives and staff are aware of presence of flammable materials and fuels by induction</li> <li>Issue of hot work permits</li> <li>Making sure all works are programmed correctly and are carried out in accordance with agreed method statements.</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
20	Eyes/Hands/ Feet/Skin	<ul> <li>Cuts, burns, vibration equipment, use of chemicals, flying materials and irritants</li> <li>Lack of PPE</li> </ul>	<ul> <li>Likely/Major</li> <li>All opratives, site personnel and public</li> <li>All personnel could be affected directly or indirectly</li> </ul>	High	<ul> <li>Make sure work areas are securely cornered off from public making sure no contamination can reach public</li> <li>Ensure correct PPE is used and COSHH assessments are carried out.</li> <li>Carry out tool box talks as necessary to brief opratives</li> <li>Make sure all sub-contractors work according the to the relevant approved method statements.</li> </ul>	Low	Site Agent, Forman and trade sub-contractors

CONTRACT: CONTRACT NO:

ISSUE NO:

DATE OF ASSESMENT:

001

Item No	Activity/ Task (1)	Hazard (2)	Likelihood/Consequenc es What/Who & How (3)	Primary Risk Level (4)	Control Measures (5)	Residual Risk Level (6)	Team Members responsible (7)
21	Unauthorise d Persons on Site	<ul> <li>Insufficient site boundary fencing</li> <li>Access to public with out induction and appropriate PPE</li> </ul>	<ul> <li>Likely/3 Day LTA</li> <li>Visitors to site authorized and Unauthorised.</li> </ul>	High	<ul> <li>Fence off site works and site compound</li> <li>Erect sufficient signage signaling construction site limited access.</li> <li>Make sure all visitors announce themselves and sign in/receive induction</li> </ul>	Low	Site Agent, Forman and trade sub-contractors
22	High Winds	<ul> <li>Loose materials blown around site and neighboring areas.</li> <li>Danger to personnel working at height</li> <li>Site accommodation blown over</li> </ul>	<ul> <li>Likely/Fatal</li> <li>All opratives staff and public</li> <li>Falls, cuts, bruises, people been hit by flying object</li> </ul>	High	<ul> <li>All operatives are to be inducted and made aware of risk of wind.</li> <li>Wind speeds to be monitored for all high level works.</li> <li>Works to be carried out in accordance with approved sub-contractor method statements.</li> <li>Bolt and tie down accommodation, plant and equipment as necessary</li> </ul>	Low	Site Agent, Forman and trade sub-contractors