

#### LLANELLI JOINT BURIAL AUTHORITY

# MEMORIAL SAFETY POLICY AND PROCEDURES

#### VERSION 12.0 DECEMBER 2012

#### 1 BACKGROUND AND APPLICATION

- 1.1 The memorial safety policy caters for inspection and testing procedures to assess the stability of memorials, kerbs and other memorial structures within the cemetery grounds and is based on a risk based assessment of the memorial structures and the immediate environment. The policy will be reflected in Method Statement and Safe System of Work documents.
- 1.2 Assessing the level of risk a memorial structure poses considers many factors, e.g., location in the cemetery, the size and proportions of the memorial, its material, construction method and age. Risk is a combination of hazard and probability and represents the likelihood of the hazard being realised.
- 1.3 It is important to assess the level of risk correctly, as routinely taking action on memorials that display movement to small degrees can dilute the integrity of the process and create unnecessary costs and distress for the public.
- 1.4 The procedures were developed as a result of the Authority adopting a report by the Secretary dated 16 July 2002 and have been further developed as a result of the following:
  - 1.4.1 A pilot study at the cemetery in May and August 2004.
  - 1.4.2 An audit in August 2004.
  - 1.4.3 Introduction of a new British Standard (BS8415) in 2005.
  - 1.4.4 The development of the National Association of Memorial Masons (NAMM) recommended code of practise for memorial masons.
  - 1.4.5 Development of the British Register of Accredited Memorial Masons (BRAMM)
  - 1.4.6 Developments by the Burial Authority Memorial Safety Group.
  - 1.4.6 A second pilot study at the cemetery in November 2005.
  - 1.4.7 Development of the Burial Authority's regulations for memorial masons.
  - 1.4.8 Re issue of BS8415 in April 2012
  - 1.4.9 Development of inspection criteria training 2012

- 1.5 This policy also provides for the procedures to cater for the administration functions; i.e. notification of the intention to inspect via cemetery signage, press adverts, recording the test results and contacting grave owners.
- 1.6 This policy provides for the Authority's course of action regarding unsafe memorials where the owner cannot be traced or is unable or unwilling to undertake remedial works.
- 1.7 The Burial Authority will maintain its memorial safety policy in line with BS8415.
- 1.8 The Burial Authority, in accordance with the provisions of the Local Authorities' Cemeteries Order 1977, following the appropriate periods of notification; reserves the right to dismantle unsafe memorials either fully or partially, and lay them flat on the graves.
- 1.9 The Burial Authority, in accordance with the provisions of Schedule 3 and Article 10 of the Local Authorities' Cemeteries Order 1977, upon expiry of the Exclusive Rights of Burial and following the appropriate periods of notification; reserves the right to consider removing from the grave any memorial that is unsafe or dilapidated by reason of neglect.

## 2 MANAGEMENT

- 2.1 Llanelli Joint Burial Authority aims to survey and inspect all memorials in the cemetery on a 5 year rolling programme. Planned inspection programmes will be conducted in the areas of greatest need and in accordance with the Burial Authority's resources.
- 2.2 To minimise the risk to staff and members of the public memorials will also be inspected in the immediate area when interments take place.
- 2.3 The surveys will record photographic and written information regarding the condition of the memorial and any action taken or advised.
- 2.4 The information will be recorded on the BACAS risk management software programme and maintained to create an auditable record of all surveys and actions.
- 2.5 The Burial Authority will utilise its own employees to inspect the stability of memorials and ensure employee training is periodically refreshed in line with latest industry standards and guidance.
- 2.6 The Burial Authority will continue to develop its employee's expertise in memorial construction and inspection procedures.
- 2.7 The Burial Authority will maintain its BRAMM Approved Business status and maintain an employee with a valid BRAMM memorial installers Licence or equivalent.
- 2.8 All surveys will be subject to a percentage audit to monitor consistency of the process. Any inspector discovered not achieving acceptable standards of inspection will be identified for further training.
- 2.9 The Authority will issue Safe System of Work and Method Statement documents.

- 2.10 Notices will be displayed throughout the cemetery grounds providing the public with information about the memorial testing programme.
- 2.11 Standard notices will be placed on any memorial that fails a stability test, providing information regarding the action that has been taken and what course of action the owner should take.
- 2.12 Memorials classed as unstable will only be laid down if the risk assessment classifies it as high risk, if temporary supports or fencing is unsuitable, or if the owner fails to carry out repairs following the appropriate periods of notification.
- 2.13 The Authority will make all reasonable efforts to contact the grave owner regarding an unstable memorial. A range of standard letters and notices will be used. Advisory letters will be bespoke.
- 2.14 Specific stages of notification will be used to contact and advise grave owners at their last known address before any final action is taken on an unstable memorial, i.e. letter to owner plus a notice placed on the grave and notices published in local press.
- 2.15 Local press or County Council Authority Newsletter will be utilised to place adverts when owners of unstable memorials cannot be located.
- 2.16 Commonwealth War Grave Commission headstones will be subject to the same inspection procedures. Appropriate action must be taken to make safe if necessary. However if a CWGC memorial is defective representations for remedial action must be made to the Head Office of the Commonwealth War Grave Commission. If the headstone is located on a family grave the Authority will make reasonable attempts to notify the grave owner of the action taken.
- 2.17 A work order will be issued to cemetery employees where remedial work is the responsibility of the Burial Authority, i.e. potholes, ground subsidence etc.

#### 3 SURVEY

- 3.1 The primary test for stability of a memorial will be the hand test. No further action will be taken if no movement is detected and the inspector has no other concerns regarding the stability or the structural integrity of the memorial structure.
- 3.2 A calibrated mechanical pressure test device will only be applied if the stability of the memorial is uncertain and its integrity cannot be determined via a hand test alone.
- 3.3 BS8415 dictates that a memorial must not be subjected to a test force exceeding 25kg.
- 3.4 A mechanical pressure device will not be reapplied to any memorial without reasonable cause within a 5 year cycle.
- 3.5 The mechanical pressure device will be inspected and calibrated annually.

- 3.6 Surveys will record the following information
  - Name of Inspector
  - Date of Survey
  - Digital Photograph imprinted with the date.
  - Grave Number
  - Name on memorial
  - Type of memorial
  - Height of memorial
  - Ground conditions
  - Condition of foundation
  - Condition of joints
  - Lean figure if > 5 °
  - Hand test PASS / FAIL
  - If required: 25Kg pressure test PASS / FAIL
  - Survey result; category 1,2,3 or 4
  - Action taken to make safe
  - Action to owner
  - Additional notes
- 3.7 The BACAS risk assessment software will be used to record the survey. A hand held computer containing a digital survey list downloaded from BACAS will be used. If the computer is not available pre printed inspection sheets that mimic the digital survey are to be used to record the survey. The survey must be updated onto BACAS as soon as possible.
- 3.8 Digital photographic evidence must be obtained recording the condition of the memorial prior to any physical contact. Additional photographs will be taken of any areas of concern.
- 3.9 **Visual Inspection:** The inspector will check for obvious danger and instability and record the condition of the foundations and memorial structure for open joints, cracks, damage, loose components and ground subsidence. A memorial leaning more than 5° from perpendicular will be considered for pressure testing and/or further monitoring. The lean angle must be recorded.
- 3.10 **Hand test:** If following the initial visual inspection the inspector has no reason to be concerned, he will apply a firm but steady hand pressure by placing the fingertips of one hand at the apex of the monument (or at 1.5m whichever is less). Pressure can be applied in all directions if necessary, taking into consideration factors such as the construction and type of memorial, its general condition, lean, ground conditions etc. Any memorial that presents imminent danger will be immediately laid flat or fenced off and a notice attached to it indicating why the action has been taken.

- 3.11 When applying pressure it is acceptable for a memorial with a structure that is inherently intact to move on its foundations up to 15° and then lock on its ground anchor **or** resist further movement by its mass. For a memorial to be classed as unstable it will be judged that if the inspector continues to apply pressure up to and not exceeding 25kg the memorial would continue to move beyond 15° and fall to the ground.
- 3.12 The 15° movement is <u>not permitted</u> when a rigid system is used to secure a memorial, as this would indicate possible failure or improper fitting of the rigid system and further detailed inspection and assessment will be required.
- 3.13 The limited movement of a memorial structure or any component must be assessed on an individual basis as to the level of risk it poses. The inspector may register a concern if its effect on the long term stability of the memorial is uncertain and record a requirement for re-inspection in 6, 12 or 24 months periods. An advisory letter will be sent to the owner.
- 3.14 A calibrated pressure test device will only be applied if the stability of the memorial is uncertain, i.e. the inspector is concerned that elements such as; open joints, loose components, cracks, unsuitable or damaged foundations, unstable ground, excessive lean or improper construction could have a detrimental impact on the stability of the memorial to BS8415 and that impact cannot be determined via a hand test alone.
- 3.15 Pressure test results will be recorded as Pass or Fail. Except in the case where a component or joint of the memorial fails during the pressure test, then the pressure being exerted via the pressure device when the failure occurred will be recorded.
- 3.16 Calibrated pressure devices shall not be used on memorials less than 500mm high. The risk to personal injury from small memorials is minimal and pressure testing could be considered disproportional to the perceived risk.
- 3.17 Calibrated pressure testing will only be used on memorial structures where the device can be effectively and safely applied at a maximum height of 1.1m.
- 3.18 Pressure testing equipment should not be used on memorials over 1.5m. Memorials over 1.5m should be visually and hand tested only.
- 3.19 If concerns arise regarding a memorial over 2.5m high, a specific risk assessment will be produced based on the size and complexity of the memorial and further advice will be sought from a suitably qualified professional, i.e. a qualified licensed memorial mason, structural engineer or the Authority's Technical Services Officer.
- 3.20 Memorials passing a stability test but are leaning greater than 5° from perpendicular will have the lean figure recorded for further monitoring. The memorial will be considered for re-inspection in 6, 12 or 24 months. The inspector selects the applicable period by considering all the factors before him and the level of risk posed.
- 3.21 Memorials displaying excessive lean of more than 20° from perpendicular that pass a stability test will be referred for a detailed specific risk assessment and professional

inspection by a qualified licensed memorial mason, structural engineer or the Authority's Technical Services Officer.

## 4 SURVEY CATEGORIES and ACTION

4.1 Certain memorials pose immediate danger with a high risk of injury, whilst others may display a degree of instability without the same degree of risk because of their design, construction, size or location. The following are intended to categorise the risk and assess the following actions.

## 4.1.1 **Category 1**

- The memorial or a major component is inherently unstable and is an immediate danger to the public or staff.
- The probability of a memorial or component falling to the ground is **high** and the risk of personal injury is **high**.
- <u>Immediate action</u> is required to make the memorial safe or to stop the public accessing the memorial.

#### Action

- Immediately cordon off, install a temporary support or lay flat.
- Caution/advice notice displayed at the grave.
- Standard letter sent to registered owner.

## 4.1.2 **Category 2**

- The inspector has concerns regarding movement of a component or stability of the structure beyond 15°.
- The inspector has concerns regarding the anchor system.
- The memorial is not fully stable, but does not pose immediate danger to the public or staff. The probability of a memorial or component falling to the ground is **medium** and the risk of personal injury is **medium/high.**

#### Action

- On the same working day, cordon off or install a temporary support.
- Caution notice and advice/action notice displayed at the grave.
- Standard letter sent to registered owner.
- If a calibrated pressure test is considered necessary a failure could result in reclassification to Category 1.

## 4.1.3 **Category 3**

- The inspector has concerns regarding minor movement of the structure or a component.
- The inspector has minor concerns regarding an anchor system, or the inspector has observed minor issues with open joints or cracks.
- The memorial is leaning greater than 5° but is still inherently stable.

• The probability of a memorial or component falling to the ground is **low** and/or the risk of personal injury is **low**.

#### Action

- Make safe a minor component, or-
- Re inspect in 6, 12 or 24 months to assess any further deterioration.
- Advisory letter to registered owner.
- If a calibrated pressure test is applied a failure would result in reclassification to Category 1 or 2.

# 4.1.4 **Category 4**

- The memorial is perfectly stable.
- No concerns recorded.
- Re-inspection in 5 years time.
- No action to owners.
- 4.2 If a memorial is required to be laid flat, timber batons must be utilised to securely support the memorial on its foundations to avoid damage to the memorial/foundation. Laying flat must not create a trip hazard or any unstable conditions.
- 4.3 If a temporary support is required only the 'Makesafe' support system will be used.
- 4.4 After installing a temporary support a hand test is applied to the memorial to check the support is secure and effectively installed.
- 4.5 Temporary support or cordoning measure will not remain in place for more than 12 months before the memorial is laid flat following the standard notification procedures.
- 4.6 At the management's discretion, a temporary support may remain for more than 12 months. There are traditional kerb style memorials within the cemetery that are maintained with supports and banding because it is impractical to lay them flat due to the risk of causing further damage or creating a more dangerous situation. In these circumstances annual inspection and assessment of the memorials and the supports is required until they can be repaired or removed from the grave.
- 4.7 The risk of serious injury is minimal from small memorials. Temporary supports will not be fitted to memorials less than 500mm high and less than 100mm thick. Memorials below 500mm but with a section greater than 100mm thick may be considered for temporary support pending a further risk assessment. In all cases warning notices will be securely attached to the memorials and letters sent to owners as per procedure.
- 4.8 Memorials under 500mm will not be laid flat unless seriously dilapidated and in immediate danger of collapse. Warning notices will be securely attached to the memorials and letters sent to owners as per procedure.

- 4.9 Special care is required when assessing book or tablet style memorials set on vertical or sloping rests, even those under 500mm high. These must be immediately laid flat if discovered unstable to category 1 or 2 as it is impractical to fit temporary supports to this type of memorial. The tablet can fall without warning and cause serious crush or shearing injury if dislodged from their supports.
- 4.10 If laying flat or fitting temporary supports to a memorial is not practical, the area will be fenced off with Heras fence structures manufactured to HSE G67/HSG 151 (child climbing resistant).
- 4.11 Photographs will be taken of all memorials where action has been taken to make safe.
- 4.12 To allow adhesive materials/cement etc to achieve acceptable strength; new, reinstated, repaired or refurbished memorials will not be subjected to physical inspection less than 8 weeks following completion of the installation.

## 5 NOTIFICATION PROCEDURES FOLLOWING INSPECTION

- 5.1 Category 1 and 2 initial letters will be issued when any of the following actions has been taken; lay memorial down, fence off or fit a temporary support. The letters will detail why the action has been taken and request that the memorial is repaired within a prescribed time. Appropriate notices will be placed on the memorials at the time of the inspection.
- 5.2 The letters will include an acknowledgment slip that clearly states the course of action that can be taken if repairs are not instigated, i.e. laying flat of memorials after a prescribed time limit and possibly removal of the memorial from the cemetery at the expiry of the Exclusive Rights of Burial.
- 5.3 Category 3 letters will be advisory only. They will inform the owners of the individual areas of concern, the requirement for ongoing monitoring and provide advice on refurbishment or maintenance as applicable.
- 5.4 Category 1 and 2: Standard letter advising of action taken and the potential action that can be taken.
  - Completion of repairs required within 8 weeks.
  - The letter is issued within 5 working days of the inspection.
  - If no response or a negative response is received a follow up letter is issued 2 weeks after the initial period of repair has lapsed advising of subsequent action. A further 4 week period is provided to complete repairs.

For Category 1: If no response is received after the 4 week period stated in the follow up letter a final letter is issued and a notice placed on the memorial advising of the Authority's right to consider removing the memorial following expiry of burial rights.

For Category 2: If no response is received and the 4 week period stated in the follow up letter has expired, a notice of intention to lay flat is placed on the memorial.

If repairs have not been instigated and all attempts to contact owners have failed, notices are then periodically placed in the local press advising of the Authority's intention to remove temporary supports and lay unsafe memorials flat.

- 5.5 Category 3: Letter to owner sent within 7 days of inspection explaining the inspection process, providing details on the areas of concern and advice on the ongoing care of the memorial. Where applicable, recommendations regarding appropriate repair or refurbishment by an approved memorial mason as well as notification regarding further monitoring.
- 6.0 The Appendices detail the standard notices and letters employed in the execution of this policy.
  - Appendix 1 Cemetery grounds information notice
  - Appendix 2 Standard fail letter / memorial immediately laid flat
  - Appendix 3 Standard fail letter / temporary support fitted
  - Appendix 4 Standard memorial notice
  - Appendix 5 Standard final letter / memorials already laid flat
  - Appendix 6 Standard final letter / notice of intent to lay flat
  - Appendix 7 Standard memorial notice / notice of intent to lay flat
  - Appendix 8 Example letter Advisory
  - Appendix 9 Example press notice