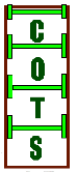
INSTITUTE OF CEMETERY & CREMATORIUM MANAGEMENT

CODE OF SAFE WORKING PRACTICE FOR CEMETERIES

Formulated in conjunction with the establishment of the Cemetery Operatives Training Scheme



Cemetery Operatives Training Scheme

ICCM *promoting safe working practice in cemeteries*

Drafted by Tim Morris, FICCM and amended and approved by the Board of Directors of the Institute of Cemetery & Crematorium Management on 20th September 1999

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Confederation of Burial Authorities
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Code of Safe Working Practice for Cemeteries

1. Introduction

The Code of Safe Working Practice for Cemeteries has been designed to assist Burial Authorities, Contractors and others in the provision of a safe method of approach to burial services which protects employees, persons attending and officiating at funerals, members of the public visiting a cemetery, memorial masons, contractors and others working in cemeteries.

It is not prescriptive but provides a framework for the management of health and safety in cemeteries. The procedural principles contained within this document can be modified to take into account risk assessments made by the user in respect of local conditions, soil type, customs etc.

The Code should be used in conjunction with other ICCM and CBA documents which are listed in the appendix. Further information can be obtained from the HSE publications mentioned within this Code.

This Code was formulated in conjunction with the establishment of the Cemetery Operatives Training Scheme provided by the ICCM. Details of the scheme are contained in appendix 5.

1.1. Accident Prevention

This Code assists with the identification of hazards and risks and, by suggesting ways of dealing with such hazards and risks, aims to encourage a process of thought that will assist with accident prevention.

1.2. Statutory Requirements

The obligations of employers and employees with regard to health and safety regulations are summarised in Appendix 3.

Where certain regulations are applicable to a section of this Code the title of the regulations appears in brackets against the particular section.

1.3. Disturbance of Human Remains

At the present time the law does not allow the removal or disturbance of buried human remains unless the proper legal authority has been obtained.
Nothing in this Code of Practice should be construed as authorising the removal or disturbance of previously buried human remains. The term "human remains" is deemed to include cremated remains.

1.4. Risk Assessment

The Management of Health and Safety at Work Regulations 1992 require employers to carry out risk assessments, make arrangements to implement necessary measures, appoint competent people and arrange for appropriate information and training.

This Code has been formulated by first considering the hazards that may be present within a cemetery.

Definitions of Risk and Hazard
The Health and Safety Executive define a **hazard** as something with the potential to cause harm. **Risk** is the likelihood of that potential being realised.

When assessing risk it is important to consider the health and safety of not only employees but also persons who use the cemetery.

In some instances the actions of persons other than employees need to be considered with measures being employed to control possible risk, i.e. regulations and procedures for controlling and monitoring the activity of memorial masons, and contractors. Security measures may need to be taken to attempt to reduce incidence of vandalism. The activity of vandals can give rise to hazards.

Method of Assessing Risk

For the purposes of constructing this Code of Safe Working Practice a list of hazards that may be encountered in most cemeteries was compiled.

Frequency ratings were then considered for each hazard with a figure being applied that reflects the probability of the potential of the hazard being realised.

Frequency
1. A highly improbable occurrence
2. A remotely possible but known occurrence
3. An occasional occurrence
4. A fairly frequent occurrence
5. A frequent and regular occurrence
6. A certainty

The Severity of the harm caused by the potential of the hazard being realised was next considered with a figure being applied.

Severity
1. Negligible injuries
2. Minor injuries
3. Major Injuries
4. Single fatality
5. Multiple fatalities
6. Multiple fatalities including ones off site

The risk rating for each hazard is calculated by multiplying the probable frequency rating by the severity rating.

The risk ratings highlight the areas of greater risk where added precautions, training and vigilance are required.

The risk assessments for the hazards associated with each section of this Code are contained in tables placed at the beginning of each section.

Further general risk assessments are included **in tables contained in Appendix 1.**

These lists are not exhaustive and hazards associated with local conditions can be assessed and added by the user.

The procedural examples contained within the grave digging section of this code demonstrate approaches for dealing with the most favourable and most unfavourable of soil types. These procedures can be modified by the users of this Code of Practice to take into account local soil types and conditions and the findings of local risk assessments.

The exercise of considering hazards and applying frequency and severity ratings is best carried out by a small group of people with representatives from management, supervisory and manual staff.

The ICCM and CBA recognise that proper training plays a vital role in accident prevention and enhances the health and safety culture within an organisation.
The Cemetery Operatives Training Scheme (COTS) provides training that reflects the principles contained within this Code of Practice.
The training professionals of the Berkshire College of Agriculture deliver all COTS training.

2. General Health and Safety Requirements

2.1 Tools and Equipment

Mechanical and Electrical Equipment must not be interfered with by unauthorised personnel. Any fault that should develop with any article of machinery or equipment must be reported immediately to a Supervisor/ Manager. The affected item must not be used until such time as a competent, authorised person has made full repairs. **(Provision and Use of Work Equipment Regulations 1998).**

Regular routine maintenance carried out by the operative will assist with identification of faults before they worsen and become hazards.

The operative must use the correct tools and equipment required to carry out a particular job.

Tools and equipment provided must be suitable for the purpose.

Care is to be taken in the use of and laying aside of tools with sharp edges.

2.2 Lifting (Manual Handling Operations Regulations 1992)

No person should attempt to lift or carry any item that they consider too heavy. Assistance should be called for if there is any doubt whatsoever.

The correct lifting technique is as follows:
Do not jerk or shove as twisting the body may cause injury. Lift in easy stages, i.e. from floor to knee then from knee to carry position. Reverse the lifting method when setting the load down.

Hold weights close to the body. Lift with the legs and keep the back straight. Grip load with the palms of the hands, not with fingertips. Do not change grip whilst carrying. Do not let the load obstruct view. Ensure that the route to be taken is clear of obstructions before commencement.

It is advised that staff receive specific manual handling training.

2.3. Tetanus.

Operatives are advised that there is a higher risk of contracting tetanus in the agricultural/horticultural industries. It is advised to ensure that tetanus inoculations are up to date.

2.4. Use of Ladders

Operatives using ladders must ensure that the ladder has a firm and level footing. Planks, boxes and the like must NOT be used to level a base on which ladder is to stand. Ladders must be prevented from slipping by tying at the top. Should this not be possible the ladder can be tied at the bottom to strong stakes previously placed in the ground. Where it is not possible to tie a ladder, a second person must steady the ladder from the top of the grave to prevent slipping.

When an operative is working in a grave the ladder may be the only escape route. It is recommended that the ladder should remain in position whenever a gravedigger is working in a grave in order to maintain an emergency escape route.
It is advised that when working at a depth greater than 3' (0.91m) a second person is present to give warning to the person working in the grave or to raise the alarm and instigate emergency procedures should an accident occur **(Confined Spaces Regulations 1997)**

The operative must arrange ways of carrying tools and materials up and down ladders so that both hands are free to grip the rungs. Ladders must not be placed in an area where there are overhead power lines. A ladder stay or similar device must be used when placing a ladder against a fragile surface. Extra care is required when cleaning windows. Ladders must NEVER be place directly against glass. This point is particularly important when cleaning stained glass chapel windows.

The above points regarding stability, carrying of tools etc. are applicable to step ladders.

Ladders must be inspected regularly for any sign of deterioration or damage. Damaged ladders must be destroyed so as to prevent use by any person.

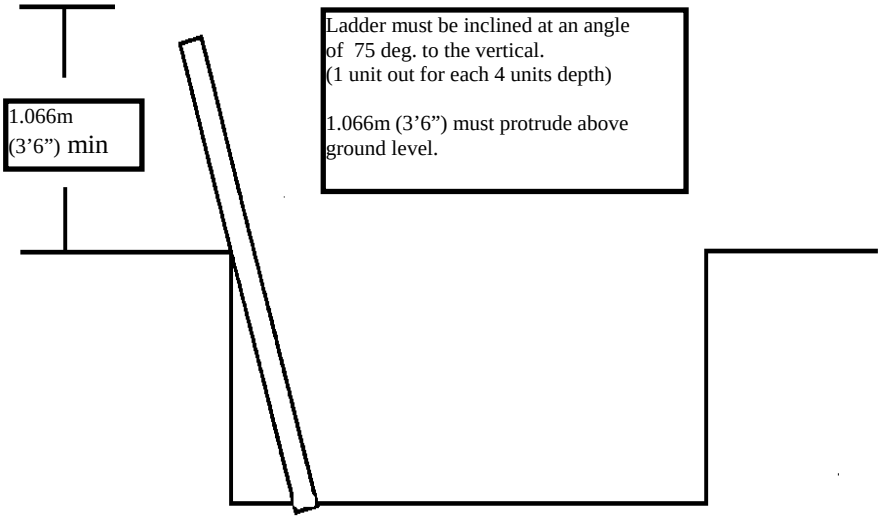
(Provision and Use of Work Equipment Regulations 1998)

Further information can be obtained from the Health & Safety Executive Guidance Note GS31 entitled Safe Use of Ladders, Stepladders and Trestles. ISBN 11 883594 7

BS 1129 : 1982 Specification for portable timber ladders, steps, trestles and lightweight staging.

BS 2037 : 1984 Specification for portable aluminium ladders, steps, trestles and lightweight staging.

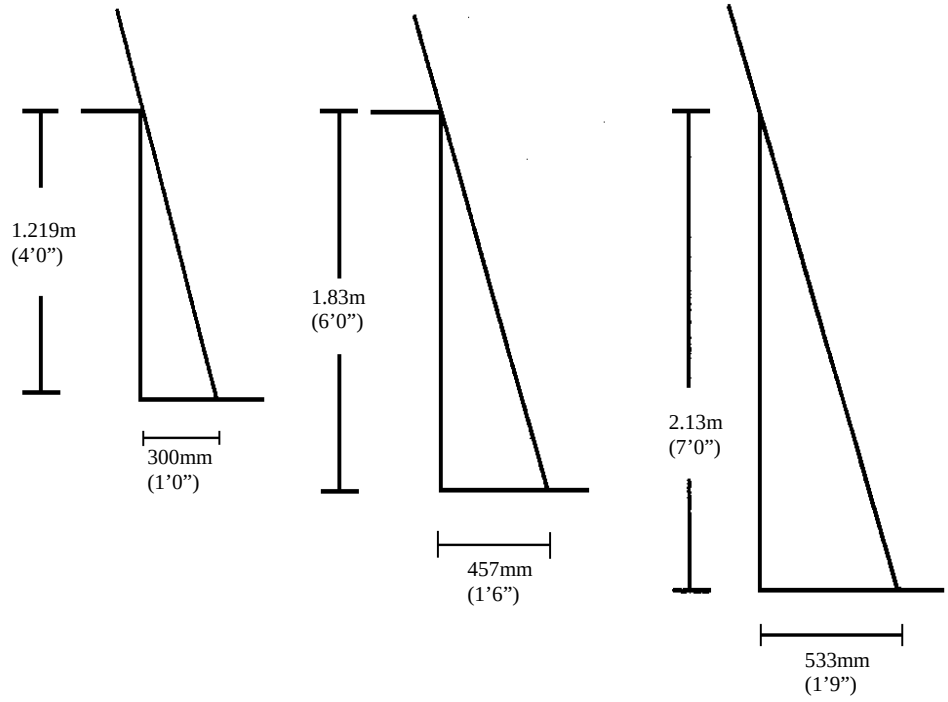
SAFE USE OF LADDERS



Ladder must be inclined at an angle of 75 deg. to the vertical.
(1 unit out for each 4 units depth)

1.066m (3'6") must protrude above ground level.

Foot of ladder dug in to provide stability and prevent slipping. Extra care must be taken when bottom of grave is uneven i.e. machine dug grave.



2.5 PROTECTIVE CLOTHING

(Personal Protective Equipment at Work Regulations 1992)
Steel toe capped boots must be worn when carrying out any operation in a cemetery.

The employer must provide all protective clothing that is required by each operative to carry out his/her duties. The employee must co-operate by using and caring for his/her protective clothing and reporting any loss of or damage to such items.

The correct protective clothing for a particular job must be used.

Before using ANY chemical, the operative must read the COSHH assessment form and data sheet for the particular substance. The operative must employ any recommendations made in such information with regard to protective clothing. Manufacturers recommendations may be regarded as minimum protection and the employer will provide on request, extra items of protective clothing to ensure peace of mind to the operative.

When not in use, personal protective equipment must be properly stored.

COSHH assessments and chemical data sheets should be made available to all operatives on request.

Ear Defenders must be worn when carrying out any operation that exposes the operative to high noise levels. 90dB (A) is the advised maximum limit for regular daily exposure of 8 hours. This limit is equivalent to the noise made by heavy street traffic. An increase of 10dB (A) increases the potential to damage hearing by 10 times. Ear defenders that comply with the Code of Practice for Reducing the Exposure of Employed Person to Noise should be supplied.

Under the Noise at Work Regulations 1989, it is the duty of the employer to provide ear defenders.

As far as is reasonably practicable the employer will provide items of protective clothing that conform with the Standards as set out in the following table **:**

PPE	**Description**	**Standard**
Boots	Steel toecap and steel sole plate.	**EN345** (200 Joules)
Gloves	Protection from abrasion, blade cut, punctures, tearing or impact cut and electrostatic discharge.	**EN388**
	Protection from heat/fire.	**EN407**
	Protection from contact cold.	**EN511**
	Protection from chemicals and micro organisms	**EN374**
Goggles and Face Shields	Protection from medium energy impact.	**EN166 - B**
	“ “ Large dust particles	**EN166 - 4**
	“ “gas and fine dust particles	**EN166 - 5**
	“ “ liquid droplets / splashes	**EN166 - 3**
Safety Helmet	Protection from impact	**EN397**
Ear Defenders	Noise protection	**EN352**

2.6 HAZARD REPORTING

It is the responsibility of every employee to report any hazard or potential hazard that he/she should notice. In the first instance the employee should, where it is safe to do so, remove the hazard or prevent any person from coming into contact with the hazard. Should it not be possible to remove the hazard immediately, the employee should report the fact to a supervisor/manager who will take the necessary action to remove the hazard.
A hazard report should be completed by a supervisor / manager to be used to evaluate risk and make any policy or risk assessment update.

2.7. ACCIDENT REPORTING

(Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 [RIDDOR])

All accidents and injuries, regardless of how slight, should be reported to a supervisor/manager, who will ensure that an entry is made in the Accident Book. All accidents should be investigated by a supervisor/manager, and where findings indicate, a change in working practice should be made to prevent recurrence.

All accidents causing an employee to be absent for more that 3 days must be reported to the enforcing authority using form number F2508.
Should a Doctor give notification that an employee suffers from a work related disease the employer must notify the enforcing authority using form number F2508A

Accidents that result in a fatality must be reported immediately by telephone to the enforcing authority. A completed form F2508 must be submitted within 10 days.

Dangerous occurrences (near misses) must be investigated by a supervisor/manager who will change working practices or take such action as is necessary to prevent a recurrence. Any change in working practice will be identified from the result of risk assessment. If it is considered that a near miss could have resulted in a reportable injury the enforcing authority must be notified immediately. Within 10 days a completed F2508 form must be submitted.

All persons who suffer threats from another person should report the matter immediately to a supervisor/manager. Should an employee be absent for more than 3 days as a result of physical violence whilst at work the incident should be reported as a work related injury using form F2508
(Forms F2508 and F2508A are available from HSE Books. The address is contained in Appendix 6)

2.8. EXHUMATION

The grave from which exhumation is required should be excavated in accordance with the grave digging section of this code. Specific information concerning the securing of the **proper legal authority** to carry out the exhumation, methods of removing previously buried remains and associated risks are contained in the **ICCM Exhumation Handbook**. Details concerning this *ICCM* publication can be found in Appendix 4.

2.9. PROTECTION OF THE PUBLIC

Employers and employees have a positive duty to protect the health and safety of members of the public who visit cemeteries.
Details are included in the general instructions which are designed to ensure that our actions do not pose a hazard to visitors i.e. use of machinery near to visitors, boarding over of unattended graves. Staff must be vigilant at all times and consider their actions and omissions in respect of the health and safety of visitors.

2.10 First Aid

(Details of the requirements of the Health and Safety (First Aid) Regulations 1981 are contained in Appendix 3.)

3. Grave Digging - General Requirements

Training. All grave digging staff should receive training in this operation. Any untrained staff involved in grave digging operations should be closely supervised at all times by a fully trained person.

It is recommended that gravediggers receive training under the Cemetery Operatives Training Scheme administered by the ICCM details of which are contained in Appendix 5.

Steel Toe Capped boots must be worn at all times.

A hard hat must be worn when working in an excavation.

Any grave that is left unattended for whatever reason must be completely boarded over in such a manner as to prevent any person falling into the grave. Some manufacturers of mechanical shoring equipment provide a lockable cover to ensure complete security.

Entry and egress from a grave must be by ladder. On **NO-account** must a gravedigger climb out of a grave by treading on any part of the shoring.

A ladder must remain in place whenever an operative is working in a grave in order to maintain an emergency exit. (**Confined Spaces Regulations 1997**)

All finished graves should be prepared using imitation grass matting. The matting will be laid out neatly on staging leaving no folds or gaps which may cause Funeral Director, members of the Clergy, mourners or member of staff to trip. Walkboards / staging must be laid along the length of the grave and supported at each end and must be capable of carrying the weight of the Pall Bearers and Coffin.

All graves must be dug centrally within the respective grave space to the exact dimensions indicated. Graves that are not dug centrally within the grave space will increase the risk of collapse, as the intervening wall of undug soil on one side will be of reduced thickness.

Any nearby / adjacent memorials which pose a hazard to the grave digger must be temporarily moved to a safe distance from the grave to be excavated and replaced immediately following the interment. It would be courteous to contact owners of such memorials informing them that your actions are intended to reduce risk to the grave digger and also protect their particular memorial from damage should the grave being prepared collapse and their memorial fall.

Protective goggles must be worn when using a pick.

Care must be taken when using a pick when shoring is in position so as to prevent striking and dislodging timber struts, screw jacks or acro struts. A damaged hydraulic ram may fail posing a hazard to the operative.

Any foul odours encountered should be reported immediately to a supervisor / manager.

The ICCM and CBA recommend that a second person is in attendance whenever work is being carried out in an excavation of a depth greater than 3' (0.91m) in order to comply with the requirements of the Confined Spaces Regulations 1997 and the Manual Handling Operations Regulations 1992.
The requirements of the above regulations are contained in Appendix 3.

All tools and equipment required to complete each grave must be available nearby before digging commences.

When hand digging, shoring must be incorporated as digging proceeds. It is advised that shoring should be incorporated as soon as a depth equal to the depth of shoring equipment panel / timber is reached.

Hydraulic shoring units must be inspected weekly to ensure that rams are in good condition. Any defects must be reported immediately. **DEFECTIVE UNITS MUST NOT BE USED.** Defects must only be rectified by a suitably qualified person. **Hydraulic equipment should be inspected and serviced by a qualified person in order to comply with the Provision and Use of Work Equipment Regulations 1998. (The requirements of the above regulations are contained in Appendix 3)**

Shoring timbers and struts should be inspected prior to use for any sign of deterioration. Defective timbers and struts should not be used and should be cut down to prevent use by any other person.

Acro struts should be regularly lubricated. The proper pin only must be used.

Lowering webbings and putlogs must be inspected prior to each burial to ensure that no deterioration has occurred and that they are capable of taking the weight of the coffin. Frayed webbings should not be used.

4. PRE EXCAVATION PREPARATION

4.1 SITE INSPECTION

HAZARD CHECKLIST - RISK ASSESSMENTS

HAZARD	TYPE OF HARM	Frequency Rating	Severity Rating	Risk Rating
Dilapidated / unstable adjacent memorials	Crushing / Trapping	3	4	12
Adjacent memorials on unstable ground causing collapse of grave	Crushing /Trapping	3	4	12
Grave not dug centrally within space causing narrowing of side wall and increasing risk of collapse	Crushing/ Trapping	3	4	12
Obstacles reducing ease of access causing trip or fall	Impact injuries	4	3	12
Uneven ground causing trip or fall	Impact injuries	3	3	9

When a grave is required to be excavated an initial inspection of the area must be carried out in order to establish the preliminary work required to ensure :

Safe and easy access for operatives and equipment
Safe access for persons attending and officiating at the burial service
The health and safety of operatives during the excavation process
The health and Safety of cemetery visitors

Preliminary work may include some or all of the following :

Inspect memorials in vicinity for stability and take appropriate action should any be unstable. Appropriate action would include laying flat any components that could fall and injure any person or placing stakes and warning tape around the immediate area of the memorial. A manager or supervisor should be informed so that notification can be sent to the owner of the memorial and amendment can be made to any memorial inspection programme.

Dangerous dilapidated memorials pose a serious hazard in many cemeteries. It is in the interest of all burial authorities to carry out a systematic risk assessment of all memorials and act to remove risks associated with unstable dilapidated memorials.
The Confederation of Burial Authorities has produced a code of practice for dealing with dangerous memorials details of which are contained in Appendix 4.

Remove memorial from grave to be excavated (if reopen) after inspection and any remedial action required. Remedial action would include removing lose or detached components independently.

Temporarily remove memorial(s) from adjacent grave(s) to relieve pressure on ground and so reduce risk of grave collapse. Note: All memorials that require removal should be placed in a position where they do not block access or pose any hazard. Temporarily removed adjacent memorials should be replaced on their respective grave spaces as soon as possible after the burial process is completed.
Removal of memorials is dealt with in detail in section 4.3

Measure and mark out grave to be excavated centrally within the respective grave space.

Fill any depressions in turf surface that are likely to cause persons to trip or fall.

Remove any tree debris or litter or other similar matter from area.

Note : Memorials removed from graves for reopening should not be replaced until settlement of the grave has ceased. Should a memorial be replaced before settlement of the grave has ceased the risk of the memorial subsiding or tilting is increased which could cause the memorial to become unstable and a hazard in its own right.

A similar requirement regarding settlement of the grave also exists for erecting memorials on new graves.

Undermining of Nearby Structures

Should a grave to be excavated be located near to a wall or other structure it may be necessary to provide support to such wall or structure to prevent it falling due to its foundations being weakened by the work in progress. It may be necessary to seek the advice of a qualified structural engineer and take the appropriate action in accordance with such advice that is given.

4.2. LOCATING GRAVES - MEASURING AND MARKING

All graves to be excavated should be located and identified by using the statutory grave plan. The location should be confirmed by a second person.

When a row of new graves is marked out it is important that their position on the ground is accurately reflected in the statutory grave plan.

All graves must be dug centrally within their respective grave spaces for the following reasons :

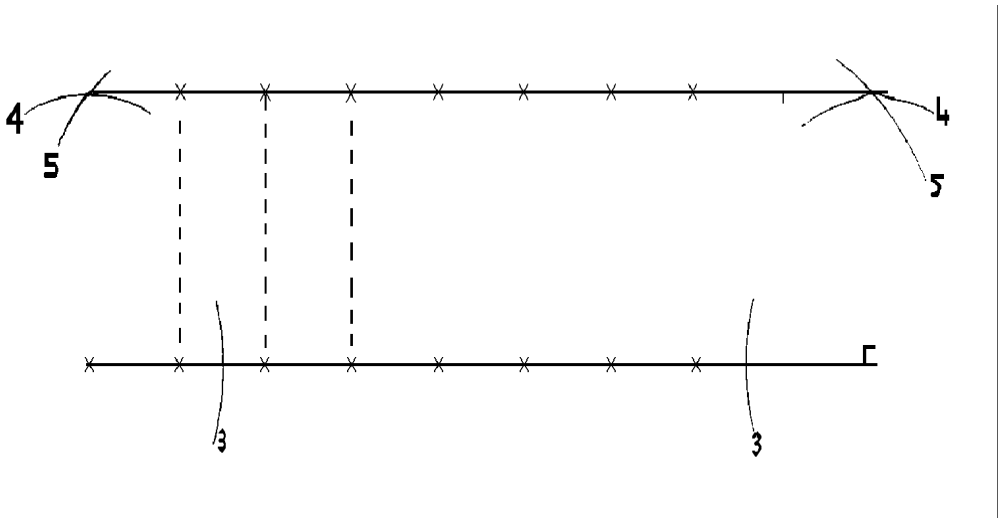
If grave is not dug centrally within its respective grave space one of the walls separating the adjacent grave will be of a narrower width and will increase the risk of collapse of that particular side of the grave.

When reopening a grave that was previously dug out of centre the risk of collapse is increased.

When a memorial is erected centrally on a grave that was dug out of centre the risk of the memorial subsiding and tilting is increased which in turn increases the risk of the memorial becoming unstable and a danger in its own right.

Measuring and marking a row of new graves.

8' (2.44m) x 4' (1.22m) grave spaces.



1. Lay down line ensuring line is straight. (Instructions will be given as to the position of the line dependent on whether row being marked out is adjacent to a path or subsequent row of grave spaces within a section)

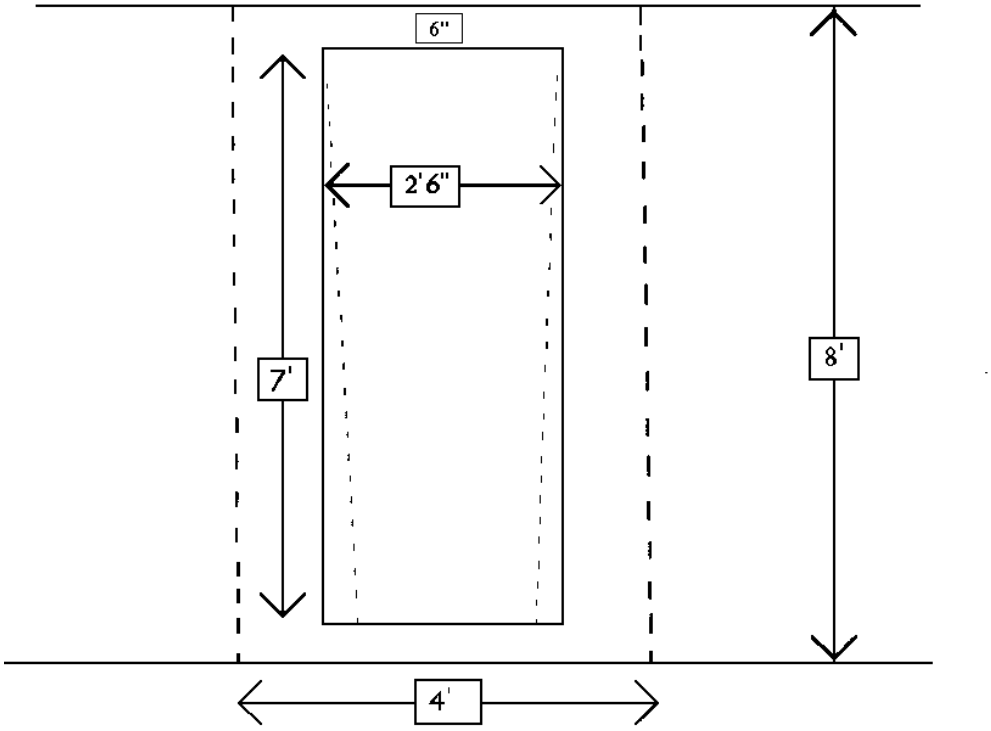
2. Lay tape measure along line and place pegs at 4' intervals to mark corners of grave spaces at head end.

3. Lay second line parallel to first at a distance of 8'. (3,4,5, method of squaring off at either end and at centre of first line should be carried out to ensure lines are parallel)

4. Lay tape measure along second line and place pegs at 4' intervals to mark corners of grave spaces at foot end.

5. Check that pegs on lines are opposite one another using Set Square or 3,4,5.

Measuring and Marking the Area to be excavated
Centrally Within Grave Space



The above diagram shows the measurements required to accurately mark out an area of 7'(2.13m) x 2'6" (0.76m) centrally within an 8'(2.44m) x 4'(1.22m) grave space.

1. *Lay line from each head end corner peg to its opposite foot end peg to identify boundary of grave space.*
2. *Place pegs 6" into grave space from head and foot ends and lay lines across grave space to form head and foot extent of area to be excavated.*
3. *Locate centres of head and foot end lines laid in 2.*
4. *Measure 1'3" either side of centres of lines and place peg, lay lines from head pegs to opposite foot pegs to identify the area to be excavated.*
(NOTE : ***Width of excavation*** *required is calculated by adding the width of coffin to be interred, the thickness of the shoring to be used on either side of the excavation plus sufficient clearance to allow free passage of the coffin. Length of excavation required is usually dictated by length of shoring units or timbers.)*

4.3 MOVING MEMORIALS

RISK ASSESSMENT

HAZARD	TYPE OF HARM	FREQUENCY RATING	SEVERITY RATING	RISK RATING
Insecure memorial components	Crushing Trapping	3	4	**12**
Insecure / wrongly placed pinchbar	Crushing/ Trapping	2	3	**6**
Manual Handling	Back injury Hernia Muscle strain	3	3	**9**
Wrongly placed rollers and boards	Back injury Hernia	3	3	**9**
Poor quality timbers	Cuts abrasions	3	2	**6**

REMOVING AND REPLACING MEMORIALS

Preliminaries

NOTE: Before attempting to remove any memorial the likelihood of any component parts of the memorial falling during the operation must be assessed by a competent person. Any loose or detached parts must be removed independently.

Care must be taken in selecting the location where a memorial is temporarily placed. The memorial must be placed in such a manner that it does not obstruct any access or present any hazard to members of the public or staff.

Kerbed Memorials on Concrete Landing

Kerbed memorials must only be lifted using the proper tool i.e. pinch bar / jack. Sound, good quality timbers and metal rollers must be used.

On commencement of the operation the operative will raise one end of the memorial using the proper tool i.e. pinchbar. Care must be taken to ensure that the end of the pinch bar is at a sufficient distance under the memorial that will prevent it becoming dislodged when lifting commences.

After safely lifting one end of the memorial a second person can place planks as far under the memorial, at either side along the length of the memorial, as is possible. Metal rollers can then be placed between the planks and the memorial.

Great care must be taken to ensure that at no time does the second operative place hands or feet directly beneath the memorial. The first must be vigilant whilst planks and rollers are being placed and give immediate warning should he believe that the pinch bar is becoming dislodged.

Once timbers and rollers have been safely placed, the memorial can be lowered onto the rollers and the pinch bar removed. The memorial can be moved, from the opposite end, by the use of the metal bars. The bars are inserted under the memorial and pressure applied to lever the memorial forward. Extra rollers and timbers may be required depending on the distance that the memorial is to be moved.

Care must be taken to place rollers beneath the memorial at intervals so preventing the memorial rocking backward onto the timbers. Ideally there should be no less than 2 rollers beneath the memorial at any given time.

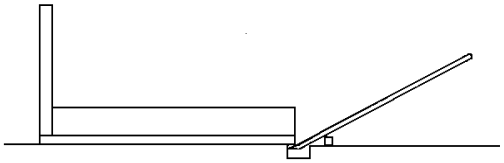
Once the memorial has been removed to its temporary position, rollers and timbers can be removed in the reverse order in which they were placed. Again, care must be taken not to place hands or feet beneath the memorial.

Should a roller become lodged beneath the memorial the operative can remove it by pushing it out using a second roller thereby removing the necessity to place a hand beneath the memorial.

This procedure is reproduced in diagram form on the next page.

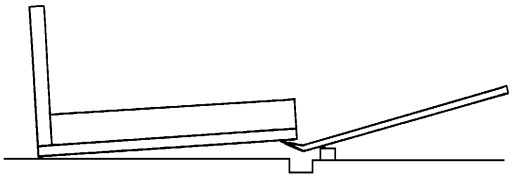
Removal of Kerbed Memorial on Concrete Landing

1.



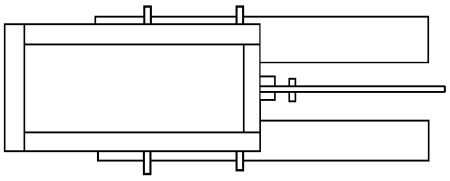
Excavate under memorial in order to safely insert pinch bar. Place block under pinchbar in order to lift memorial to a sufficient height.

2.



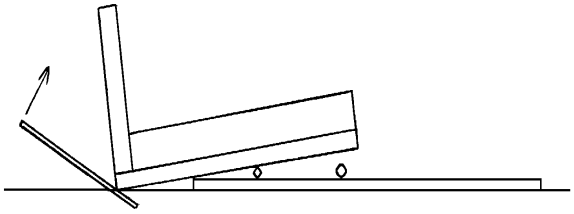
Lift memorial ensuring that legs/knees are not directly under pinch bar. Remain vigilant and lower memorial immediately should there be any doubt concerning the security of the placement of the pinch bar.

3.

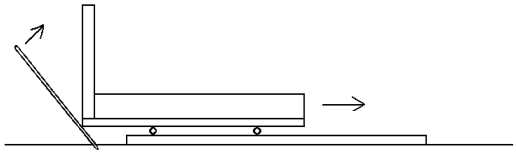


PLAN VIEW - Whilst memorial is raised a second person will place planks under the memorial at either side. A roller is placed as far back from the pinch bar as is possible under the memorial. A second roller is placed under the memorial near to the pinch bar.
When placing planks and rollers the second person must not place hands or feet beneath the planks or rollers.
When the rollers are in place the memorial can be lowered onto them and the pinch bar removed.

4.



Insert a metal bar under the memorial. Apply upward pressure to the bar to move the memorial forward. Care should be taken when the memorial reaches the point of balance so as to prevent the front end from coming down heavily onto the front roller.



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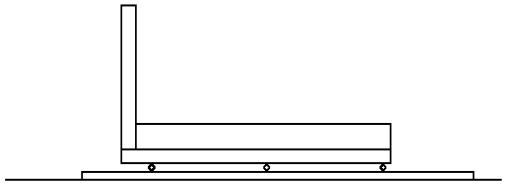


Ease the memorial forward and place a third roller under the memorial before the point of balance is reached.

Upon reaching the temporary location the memorial is lifted at the foot end and the rollers removed. The second person must not place hands beneath the memorial at any time. Should a roller become trapped it may be pushed out using another roller.
Whilst the memorial is lifted the planks can also be removed.

Kerbed Memorials on Corner Pad stones

This type of memorial will require dismantling by breaking the joints between components. Unless carried out by a qualified person severe damage can be caused to component parts.

The dismantled components must be safely stacked in a position where they do not pose a hazard.

Large Memorials

The removal of very large memorials should take place under the direct supervision of an experienced supervisor or manager. On such occasions heavy lifting gear such as cranes and winches may be required.
Where a supervisor / manager considers that a memorial cannot be moved by his own staff in a safe manner the assistance of a specialist outside company or organisation should be engaged.

Headstones

Headstones that are properly and securely fixed to concrete bearers should only be removed by a qualified person so as to avoid damage to the memorial.

Headstones erected on safety fixings approved by the National Association of Memorial Masons (NAMM) should be removed in accordance with the procedure stipulated by NAMM.

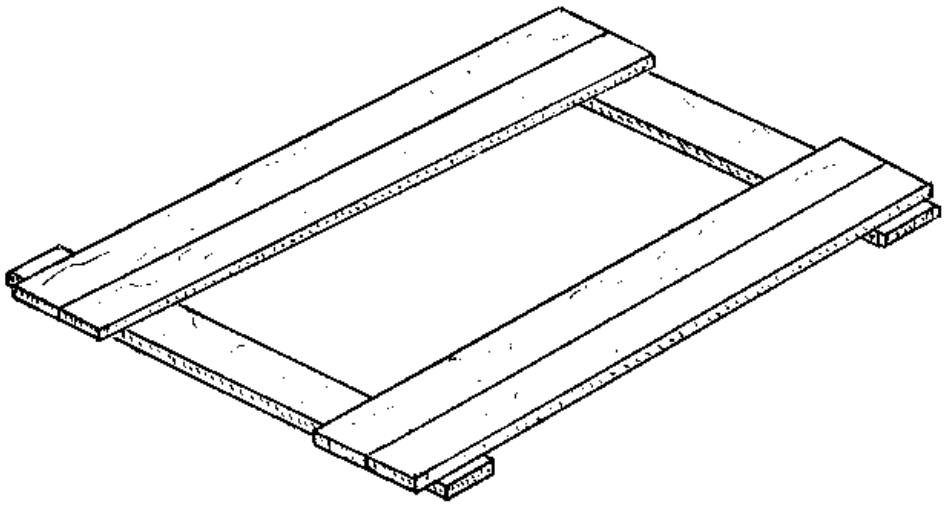
WALKBOARDS / WORK PLATFORM & SOIL BOX

Hazard Checklist and Risk Assessments

Hazard	Type of Harm	Frequency Rating	Severity Rating	Risk Rating
Unprotected grave edges	Impact injuries from fall	3	3	9
Insecure soil box	Crushing/Trapping	3	3	9
Material falling from soil box into grave	Impact injuries	3	3	9
Unstable Walkboards	Impact injuries from fall	3	3	9
Soil box to close to edge of grave	Impact from fall of soil/stones etc. into grave. Trapping/crushing in collapsed grave	3	4	12

4.4 Walkboards

Walkboards must be placed along each side of the grave to be dug that are supported on boards placed across the head and foot ends of the grave. This action will spread the weight of operatives and prevent falls due to crumbling surface edges. Walkboards should remain in place for the whole of the burial process, i.e. placed before excavation commences and not removed until after backfilling is completed.



Specification for Walk Boards

Two boards 4'6" x 1' x 1.5" (1.37m x 0.3m x 38mm)
Four boards 9' x 1' x 1.5" (2.74m x 0.3m x 38mm)

Work Platform

A work platform can be provided by replacing the head and foot boards with boards of
6'6" (1.95m) in length. This action will enable two more boards to be laid along the length of one side of the grave to create a platform 4' (1.22m) wide.

4.5. SOIL BOX

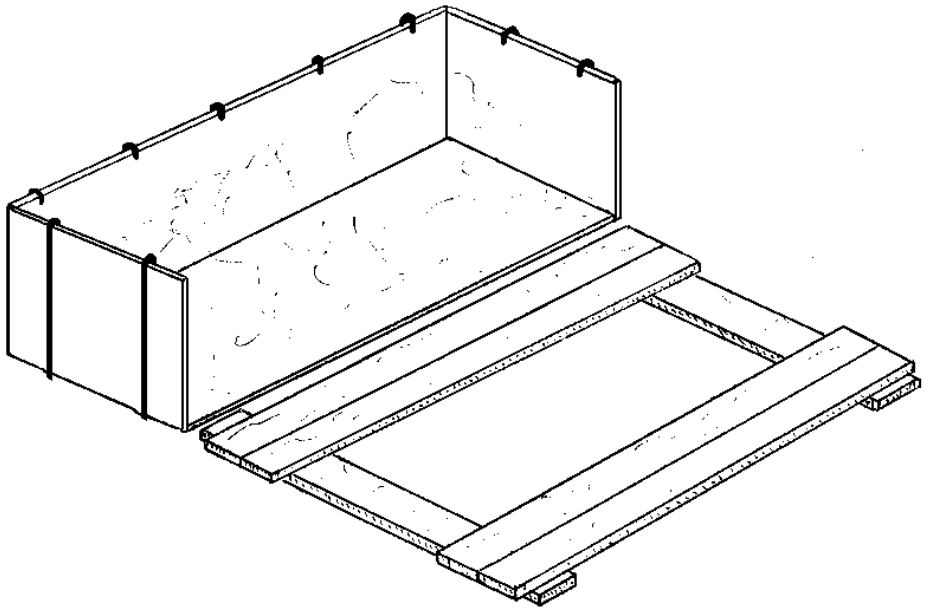
A Soil box (soil tidy) should ideally be erected to contain the excavated material. This structure must be securely erected so that pressure from the soil inside does not cause it to collapse.

The soil box should be situated no less than 2' (0.61m) from the edge of the excavation so as to reduce pressure near to the edges of the grave and therefore reduce the risk of collapse. Consideration should be given to increasing the distance of the box from the edge of the grave where unfavourable ground conditions exist.

The soil in the box should be sloped (battered) away from the grave so as to reduce the weight at the side nearest to the grave. A front board can be placed across the front of the box to stop soil, stones etc. from rolling off of the soil stack and onto any operative who may be working in the grave. (*Diagram of front board fixing over leaf*)

It is advisable to estimate and remove excess soil from the grave (i.e. soil that would remain after backfilling is completed) before the soil box is used. This action will keep the amount of soil placed in the box to a minimum and will reduce pressure within the box and subsequently the risk of the box collapsing.

An example of a soil box is given in the following diagram

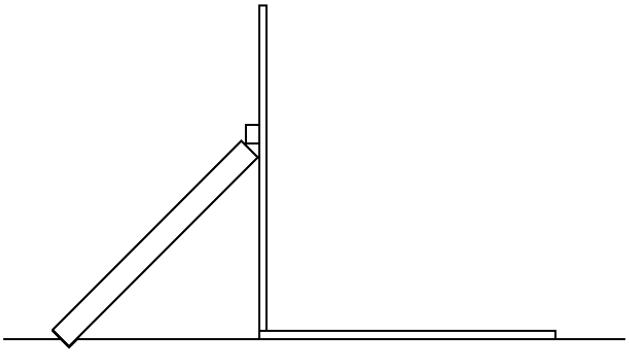


Specification for Soil Box – Suitable for grave 5' (1.5m)
(Depth of base and width of end sheets increased for deeper excavations)

One sheet marine ply 8' x 4' x 0.75" for base (2.44m x 1.22m x 19mm)
" " " " 8' x 3' x 0.75" for back (2.44m x 0.91m x 19mm)
Two " " " 4' x 3' x 0.75" for ends (1.22m x 0.91m x 19mm)
One front board 8' x 1' x 1.5" (2.44m x 0.3m x 38mm)
Two wooden pegs 18" x 4" x 2" to secure front board (0.46m x 102mm x 50mm

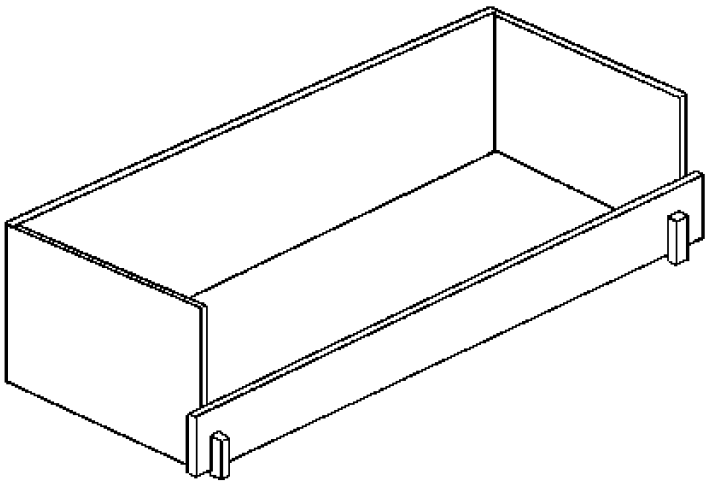
Strengthening the Soil Box

Heavy, wet clay soil placed in the soil box can increase the risk of it collapsing. To reduce the risk of collapse the sides can be supported with wooden struts fixed as shown in the following diagram.



To reduce the risk of the soil box collapsing a length of 4” x 4” (102mm x 102mm) timber can be screwed / bolted horizontally along the width of the back / sides. Lengths of 4” x 4” timber can then be used to prop the back / sides.

The Use of a Front Board



A front board can be fixed using pegs across the front of the soil box. This action reduces the risk to gravediggers from debris rolling off of the stack and into the grave.

5. Excavation and Ground Support

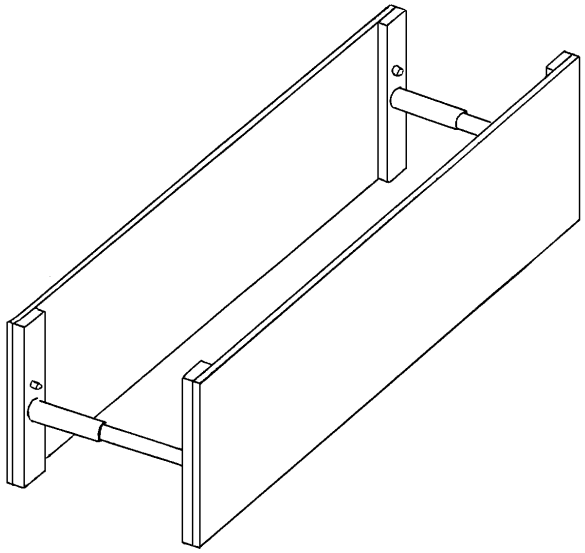
5.1 Preliminaries and Preparation

All tools and equipment required to complete the excavation process must be available at close proximity to the grave to be excavated before digging commences.

The amount of shoring equipment required should be assessed according to the required depth of excavation, soil type and weather conditions and the depth of shoring timbers / hydraulic units.

5.2. Types of shoring

5.2.1. Hydraulic Shoring



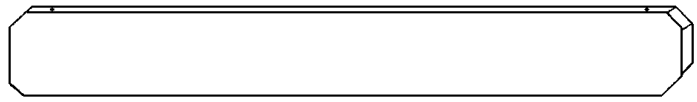
The above hydraulic unit consists of two reinforced aluminium panels with a hydraulic ram fixed at either end. A pump is attached to the rams via flexible hoses. The hoses are of sufficient length to enable a unit to be lowered into an excavation and pressure applied to the rams via the pump from surface level.

Hydraulic units are available in varying sizes so that all requirements can be accommodated. Coffin and wedge shaped units are also available.

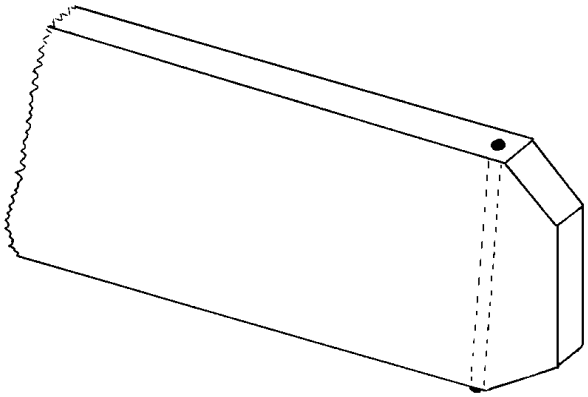
The fluid in the pump is a special emulsion of vegetable oil and water. Anti freeze should be added in winter, if not already added by manufacturer, to prevent freezing and subsequent damage to the hydraulic rams.
Rams must be pressurised in strict accordance with the manufacturers instructions. Over pressuring of rams will weaken the walls of a grave and increase the risk of collapse during backfilling operations. Over pressuring may also cause damage to seals within the ram.

5.2.2. Timber Shoring

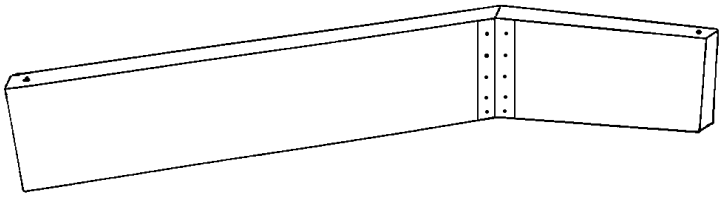
Timber used for grave shoring should be good quality, seasoned and knot free. Timber showing any sign of damage or splitting should not be used.



Shoring Timber 7'6" x 12" x 1.5" (2.29m x 0.3m x 38mm) Thickness increased to 2"(50mm) in heavy wet clay soil.



Timbers must be bolted across the ends to prevent splitting when cross member is fixed in place.



Coffin shaped timbers. Joint secured with steel plate on both sides bolted through.

Timber shoring is fixed in position in the grave by using struts or cross members. These can take the form of wooden struts, acro props, hydraulic jacks or screw jacks.

Mechanical struts must not be over tightened in an attempt to force the ground back. This action will weaken grave walls and increase the risk of collapse during backfilling operations. Mechanical struts should be expanded to exert holding pressure only so as to provide support to the walls of the grave. Over tightening of mechanical struts will increase the risk of timbers splitting.

Wooden struts should be knocked into place using a club hammer. Struts should be of such a length that undue force is **not** required to position them between shoring timbers. The use of force will increase the risk of timbers splitting.

Wooden struts should be bolted vertically across their ends to reduce the risk of splitting as they are knocked into place.

5.2.3. Proprietary Shoring Equipment

Various types of proprietary shoring equipment are available on the market such as cage type shoring, Telescopic shoring and metal panels incorporating screw jacks. All proprietary shoring not dealt with in detail within this code must be used in accordance with the manufacturers safety procedures and instructions.

5.3. Identification of Shoring Requirements

When assessing the amount and type of shoring required to support a grave the following need to be considered :

a. Type of ground

a.1. Cohesive ground
Cohesive ground such as rock and heavy clay may be considered as the most stable.

However, the cohesive properties of heavy clay can be affected by weather conditions.
Hot, dry weather can cause the clay to dry and contract so causing lumps to break away. Contraction of clay can also cause shoring to loosen and fail.
Wet weather can cause the clay to swell and again give rise to lumps breaking away or complete collapse of the grave. Dry followed by wet weather can greatly increase the risk. The freeze/thaw action of frost increases the risk of a breakdown of soil structure.

Excavated graves should be checked regularly until the interment takes place. Graves that are excavated and left open for any length of time must be inspected on a daily basis to establish if any deterioration in the security of the shoring has occurred. Any deterioration should be rectified immediately. (Any prepared or partially prepared graves must be securely boarded over whenever work ceases and operatives leave the vicinity in order to remove the risk of persons falling into an open excavation)

Sound rock generally needs little support however shoring is required to prevent any loose pieces falling and injuring an operative working in the grave. The freeze/thaw action of frost can increase the risk of pieces falling.
Other rock types are considered under the heading **stratified ground.**

a.2. Non-cohesive ground

Examples of soil type contained in this category are sand, gravel, sandy clay, marl and overfilled ground.
The above soil types are unpredictable and require close shoring or piling.
Shoring must be installed as digging proceeds.
A change in weather conditions can very rapidly affect the properties of non-cohesive ground.

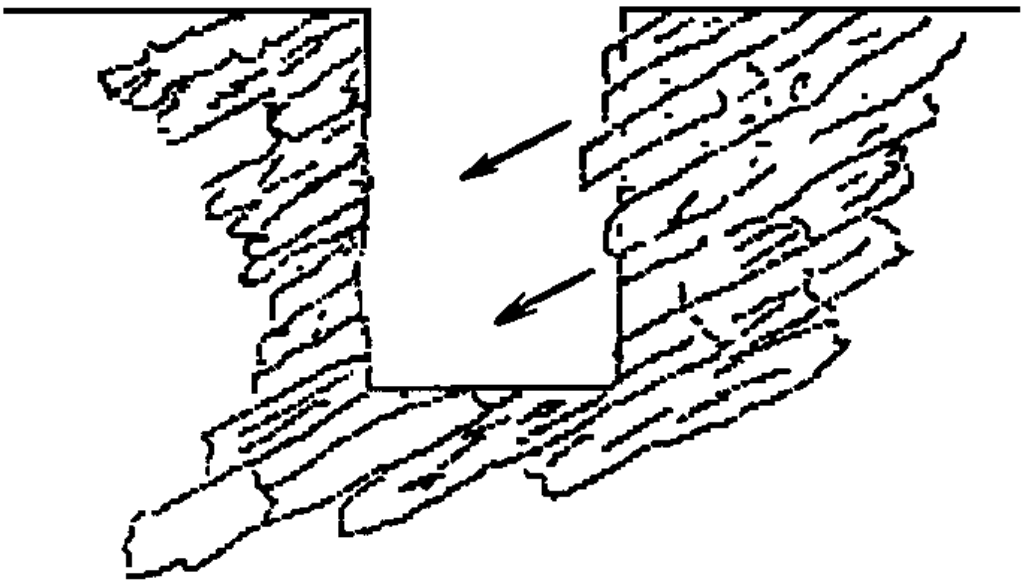
It is safer to over compensate with shoring when unstable ground is encountered.

a.3. Stratified Ground

Stratified ground is a natural formation of definable layers usually of rock but sometimes of rock and clay or sand and clay.

Greater stability exists where the strata lie horizontally.

Strata that are at an angle to the horizontal pose a greater hazard, as the upper strata will tend to slide downhill causing collapse of the grave. The risks from this hazard can be increased during wet weather. Water will act as a lubricant between the strata and facilitate slipping.



Shoring must be incorporated into stratified ground to protect the gravedigger from pieces becoming dislodged and falling. Particular care must be taken when strata are at an angle to the horizontal.

a.4. Overfilled Ground

Overfilling of ground to create depth is a common practice particularly in urban cemeteries where new space is limited. Usually old common grave areas are overfilled with imported soil in order to create depth in which new burials may take place.

Overfilled ground should be treated in the same manner as unstable, non-cohesive ground.

The length of time that overfilled ground has been left to settle before using it for burial will affect the risk of collapse of graves excavated.

b. Depth of excavation

As previously stated the amount of shoring required should be on hand close to the excavation before work commences.

The amount of shoring equipment required can be calculated by considering the ground type, depth of excavation and depth of shoring timbers/hydraulic units/panels.

5.4. MACHINE EXCAVATION

HAZARD	TYPE OF HARM	FREQUENCY RATING	SEVERITY RATING	RISK RATING
Weight of machine on ground causing collapse of grave	Crushing / Trapping	3	4	12
Vibration of machine causing collapse of grave	Crushing /Trapping	3	4	12
Impact with moving boom	Impact injuries	3	4	12
Impact with moving machine	Impact injuries	3	4	12
Fumes entering grave	Asphyxiation	3	4	12
Noise from machine	Tinnitus/deafness	2	3	6

Machine Digging

Only authorised trained persons should be permitted to operate grave digging machines.

Training and certification in the safe use of grave digging machines is provided by the ICCM under the Cemetery Operatives Training Scheme. Unlike other excavator operators courses the COTS course focuses on the hazards, implications and problems specific to the cemetery environment. Details of the Scheme courses are contained in Appendix 5.

The machine operator must ensure that no person stands within the area of the radius of the machine boom or bucket.

When moving a digging machine within a cemetery the driver must adhere to the cemetery speed limit.

When a machine is not in use, it must be parked on hard Standing in such a manner that it does not cause an obstruction to traffic or pedestrians. When parked the boom must be lowered with the bucket resting on solid ground. The ignition key must be removed. The blade on tracked machines must be in the down position whenever the vehicle is parked.

The machine operator must ensure that the machine is safely manoeuvred into the digging position. Legs/stabilisers must be correctly positioned as far away as is practicable from the grave to be excavated. Placing stabilisers on purpose built bearers can spread the weight of the machine.
The blade on a tracked machine must be in the down position at all times when digging is in progress.

The operator must ensure that the machine is level before digging commences so as to ensure that the sides of the grave are vertical. The level of the machine can be adjusted using the legs/stabilisers. An unlevelled machine will cause one side of the grave to be under dug, which will increase the risk of grave collapse.

The machine must be switched off whilst shoring is being installed into a part dug grave. This action will reduce the risk of collapse caused by vibration of a running machine. The bucket must be rested on solid ground to the side and as far away as is possible from the grave being excavated.

It is possible that exhaust fumes from the engine can collect in the bottom of the grave. Wherever possible the machine should be positioned down wind of the excavation to reduce the risk of this occurring. The risk is increased on days when there is no breeze.
(Control of Substances Hazardous to Health Regulations 1999)

Care must be taken when excavating a grave whilst shoring is in place so as to avoid striking any part of the shoring equipment with the machine bucket.
Striking or dislodging shoring will not only increase the risk of collapse of the grave but will also increase risk to the gravediggers who are required to rectify the situation.

Digging machines must be operated in accordance with manufacturers instructions.

Machines should be regularly serviced by a qualified person.

Machine operators should be trained to carry out pre-start checks and routine maintenance. This action will increase familiarity with the machine and assist in identifying faults before they worsen and become hazards. Training in routine maintenance and pre-start checks is included in the Cemetery Operatives Training Scheme details of which can be found in Appendix 5.

5.5 HAND EXCAVATION

Shoring must be incorporated as digging proceeds. Adequate shoring will be incorporated so as to prevent the collapse of the sides of the grave. Soil type and weather conditions will affect the requirements for each particular grave.

Particular care must be taken during periods of wet weather when it is advisable to close shore graves to full depth.

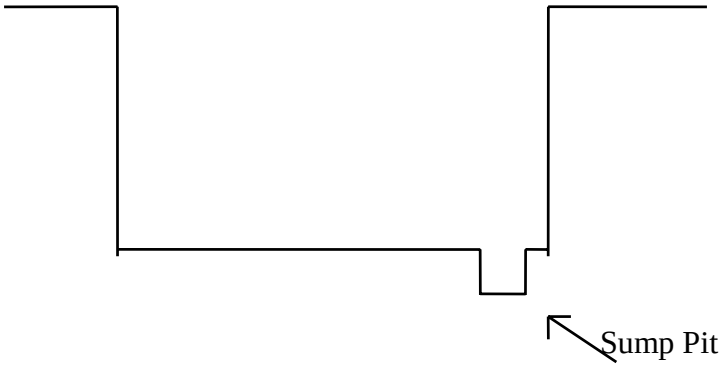
On completion of each excavation the gravedigger must ensure that the sides and ends of the grave are vertical and that the bottom of the grave is level. Shoring units must be level.

The *ICCM* recommends that a second person is in attendance whenever work is being carried out in an excavation of a depth greater than 3' (0.91m) in order to comply with the requirements of the Confined Spaces Regulations 1997.
The second person will be in a position to give warning to the gravedigger, raise the alarm in an emergency and commence emergency procedures.

5.6 Dealing With Ground Water

Should water collect in a grave it should be removed prior to the interment. Ideally a motorised pump should be used, as this action will not require a gravedigger to enter the grave. The hose from the pump can be lowered into the grave from surface level.

When conditions indicate that water may collect in a grave a sump pit can be dug in the bottom of the grave towards one end.



The hose from the pump can be placed in the sump pit and as water is pumped out of the pit the remaining water in the grave will be drawn towards the pit thus leaving the greater part of the bottom of the grave dry.

When hand digging a sump pit can be kept open at one end with the gravedigger working away from it. This action will assist in reducing the amount of mud created on the bottom of the grave.

When machine digging a sump pit can be dug when final hand levelling of the bottom of the grave is carried out.

Should water be removed from a grave using a petrol driven pump no gravedigger should be working in the grave while the pump is running as exhaust fumes may enter the grave and collect at the bottom. (Exhaust fumes are heavier than air)
Ideally the pump should be positioned as far away from the grave as is possible and positioned down wind.

Water removed from a grave should ideally be pumped into the nearest soak away or sewer.

Should foul odours be encountered a supervisor should be informed immediately.

Phenolic disinfectant should be used if required.

[Attention is drawn to the Local Authorities Cemeteries Order 1977 which states “no person.....shall remove therefrom any soil which is offensive” (Part 1 of Schedule 2)]

5.7 Lifting Equipment

(Lifting Operations and Lifting Equipment Regulations 1998)

When excavating deep graves by hand a point will be reached where the grave digger cannot throw the soil out of the grave without the risk of stones, debris etc. falling back. In order to remove this risk it will be necessary to employ lifting equipment such as a winch and bucket. The bucket is lowered to the bottom of the grave and is filled by the gravedigger. When the bucket has been filled a second person will operate the winch.

When using lifting equipment for this purpose such equipment must be securely set up at one end of the grave so that the gravedigger in the excavation can stand at the opposite end during the lifting operation. Should the bucket fall or debris fall from the bucket during lifting the risk to the gravedigger from being struck by falling objects is reduced. To eliminate this risk entirely the gravedigger can exit the grave before the lift commences and return after the emptied bucket has been lowered.
A hard hat must be worn whenever a gravedigger is working in a grave.

The person operating the lifting equipment should swing the bucket clear of the grave and as far away as is possible and rest it down before detaching the rope / hook. Ideally the bucket should be emptied onto the back of the soil box in order to reduce the risk of stones or debris rolling off of the spoil heap and onto the grave digger in the excavation.

The requirements of the Lifting Operations and Lifting Equipment Regulations 1998 are summarised in Appendix 3.

5.8 Dumper Trucks

Dumper trucks should be regularly serviced and maintained by a suitably qualified person.

The driver must carry out daily pre start checks and report any faults however minor in order to prevent such faults worsening and becoming hazards.

The employer and driver have legal obligations to ensure that a dumper truck is not only safe to use under health and safety legislation but complies with other statutory provisions in relation to road worthiness i.e. lights, tyres, road fund licence if used on public highway etc.

The driver must ensure that the dumper truck is not overloaded in terms of weight as this can dramatically affect the handling / steering of the truck.

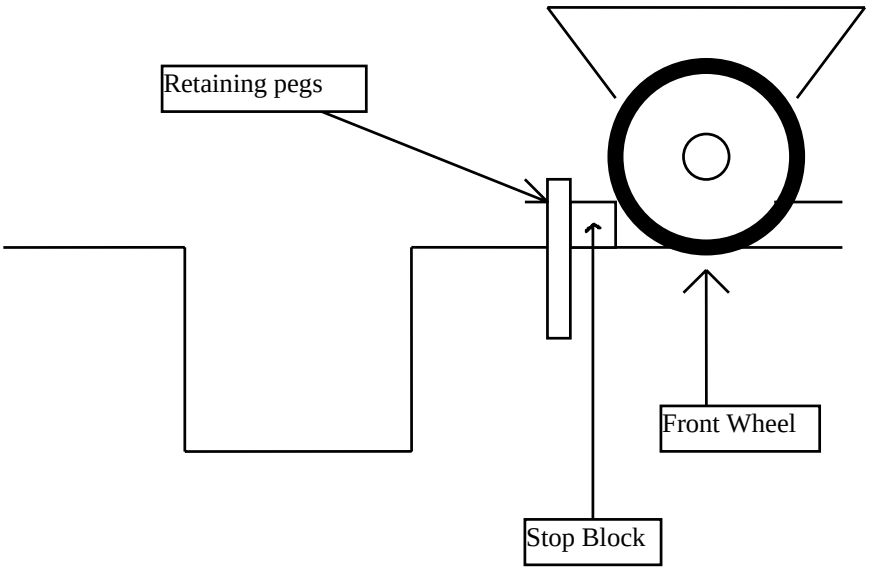
Load should not be so high as to obstruct the all round view of the driver.

The driver must adhere to the speed limit when within the cemetery and to the appropriate speed limit when driving on the public highway. The driver must hold the appropriate licence.

When a dumper is being used to remove excess spoil from a grave great care must be taken when manoeuvring into place. The dumper should be stopped as far away as is practicable from the grave so as to minimise the risk of collapse of the grave caused by the weight or vibration of the machine.

No person should be working in a grave when a dumper is being manoeuvred into position, being filled with soil or being driven away.

A stop block can be placed at a pre-determined distance from the excavation to prevent the dumper truck from being driven too close. The stop block will reduce the risk of accident should a driver error / misjudgement occur or if the breaks fail.



Further information is available from the health and safety executive's publication entitled Safe Working With Small Dumpers. 1983 ISBN 0 11 883693 5

6. Ground Support

The example procedures contained within this section demonstrate approaches for dealing with the most favourable and most unfavourable of soil types.

These procedures can be modified by the user according to the results of local risk assessments covering local soil type and conditions.

For the purpose of clarity the diagrams contained in the procedures do not show walkboards in position. It is stressed that walkboards should be placed in position before digging commences and not removed until after backfilling is completed.

Hazard Checklist and Risk Assessments

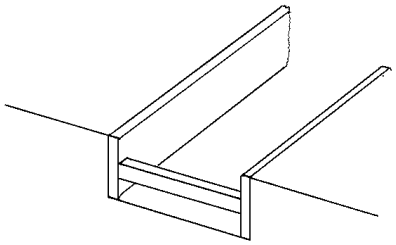
Hazard	Type of Harm	Frequency Rating	Severity Rating	Risk Rating
Unshored grave	Crushing / Trapping	3	4	**12**
Insecure shoring	"	3	4	**12**
Inadequate shoring	"	3	4	**12**
Defective shoring	"	3	4	**12**
Unstable non cohesive ground	"	3	4	**12**
Falling material and objects including nearby unstable memorials	Impact injuries	3	4	**12**
Foul water	Infection	2	4	**8**
Manual handling	Back strain / hernia	3	3	**9**
Repetitive strain	Arthritis	3	3	**9**
Unprotected grave edges	Impact injuries from tripping / falling	3	3	**9**
Unattended open graves	Impact injuries from falling	2	4	**8**

NOTE : The above risk assessments were considered in respect of an operative working in or near to a grave of 7' (2.13m) in depth.
Risk is increased for graves of greater depth.

6.1. Timber Shoring in Stable Cohesive Ground

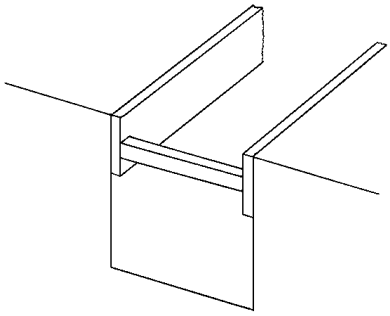
Timbers 12” (0.3m) depth. Grave depth 7’ (2.13m)

1.



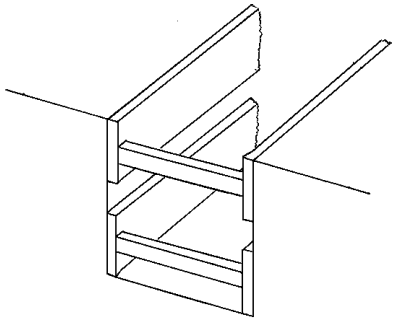
Excavate to first depth and install first set of timbers

2.



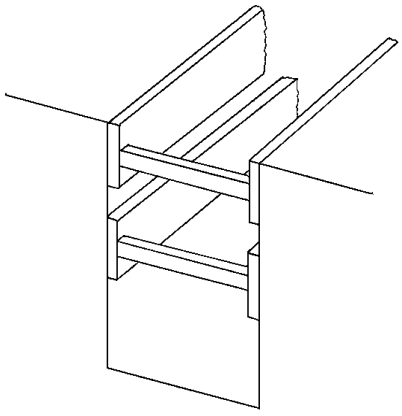
Excavate to second depth

3.



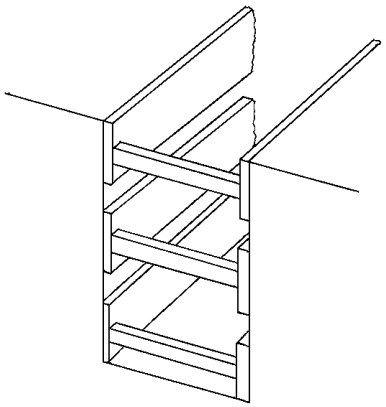
Install second set of timbers

4.



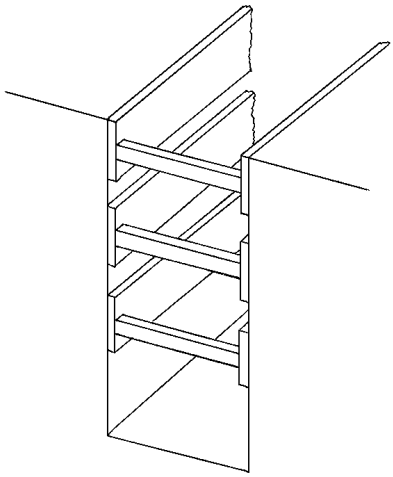
Excavate to third depth

5.



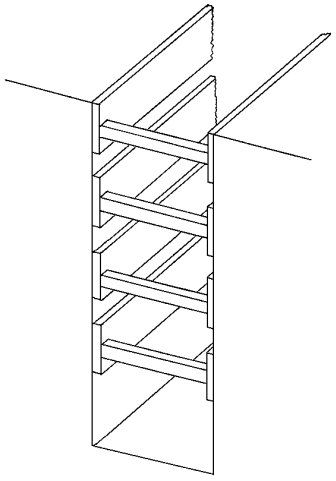
Install third set of timbers

6.

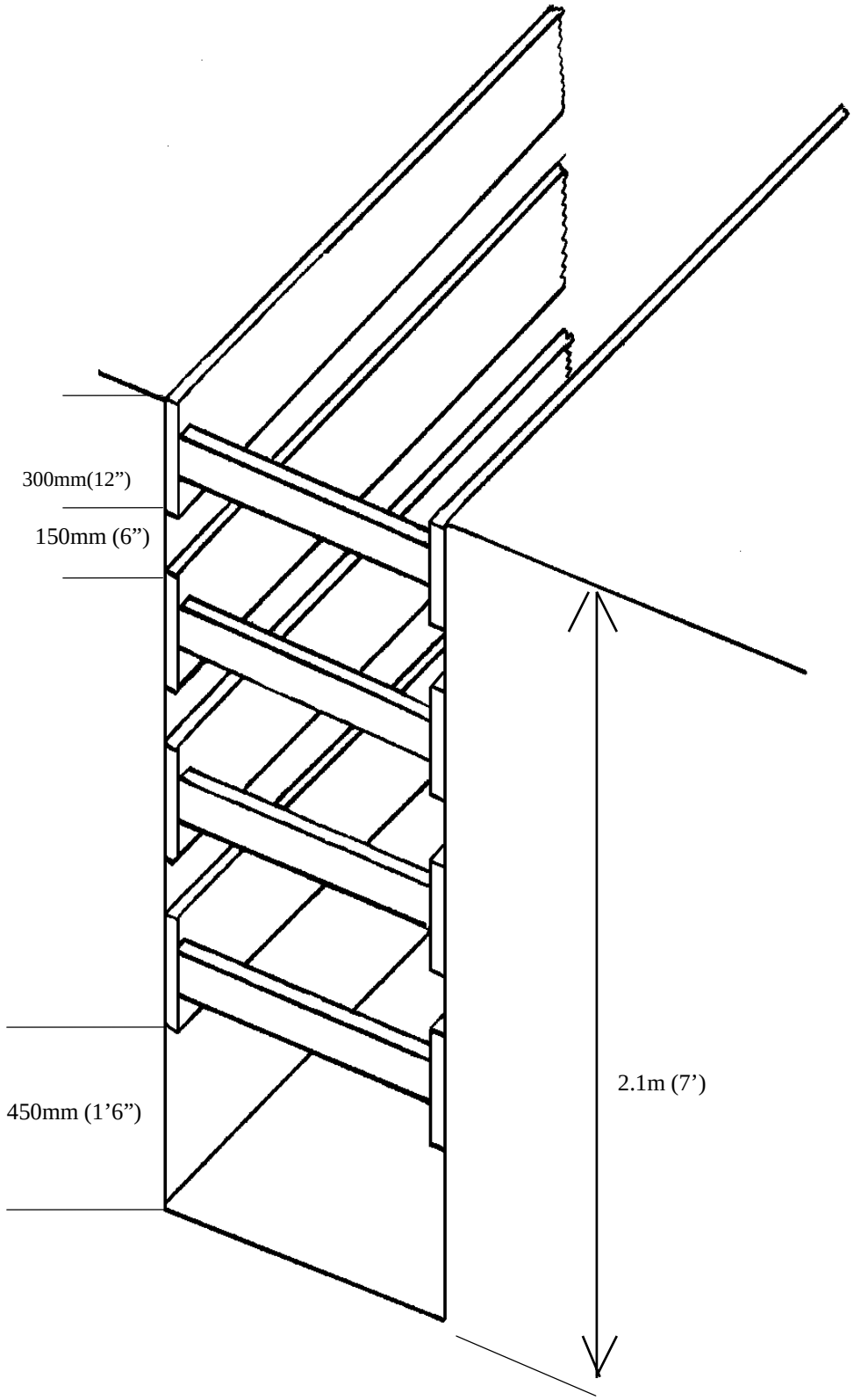


Excavate to fourth depth

7.



Install fourth set of timbers before completing excavation.



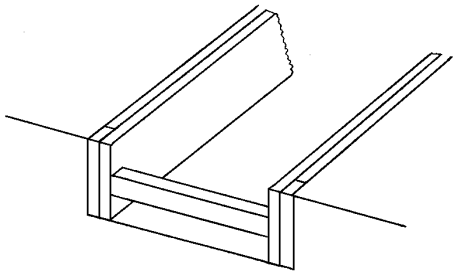
The above model should only be adopted in stable cohesive ground.
Should the grave be required to be kept open for more than 24 hours or adverse weather conditions are forecast a fifth set of timbers should be installed in the bottom of the grave.

6.2. Timber Piling / Poling in Unstable, Non-Cohesive Ground

The following procedure describes the installation of timber piling to a depth of 7' (2.13m). The principles described can be modified to take into account local soil type and conditions and results of local risk assessment.

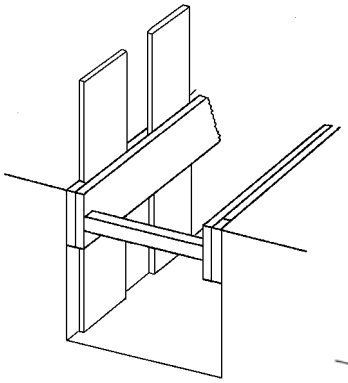
1.

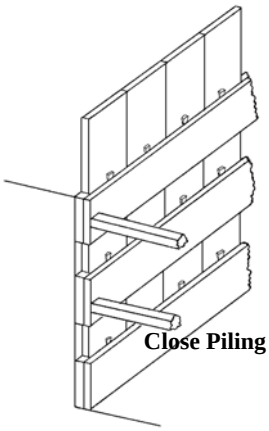
Excavate to depth of shoring timber.
Place piece of packing timber in each corner of the excavation.
Fix two shoring timbers with struts, acros or screw jacks.
Packing timber can be fixed to shoring timbers to aid ease of handling and installation.
(Dimensions and specification for timber components are detailed over leaf)



2.

Excavate further (depth dependent on local soil conditions) inserting 4' (1.22m) piling timbers vertically and **insert wedges as described over leaf.**
Distance between piling timbers will depend on local soil type and conditions and results of local risk assessment.
CLOSE PILING SHOULD BE INCORPORATED IN RUNNING SAND / GRAVEL SOIL TYPES

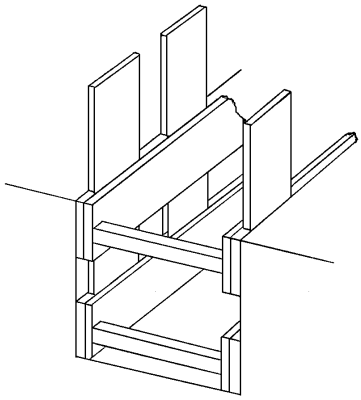


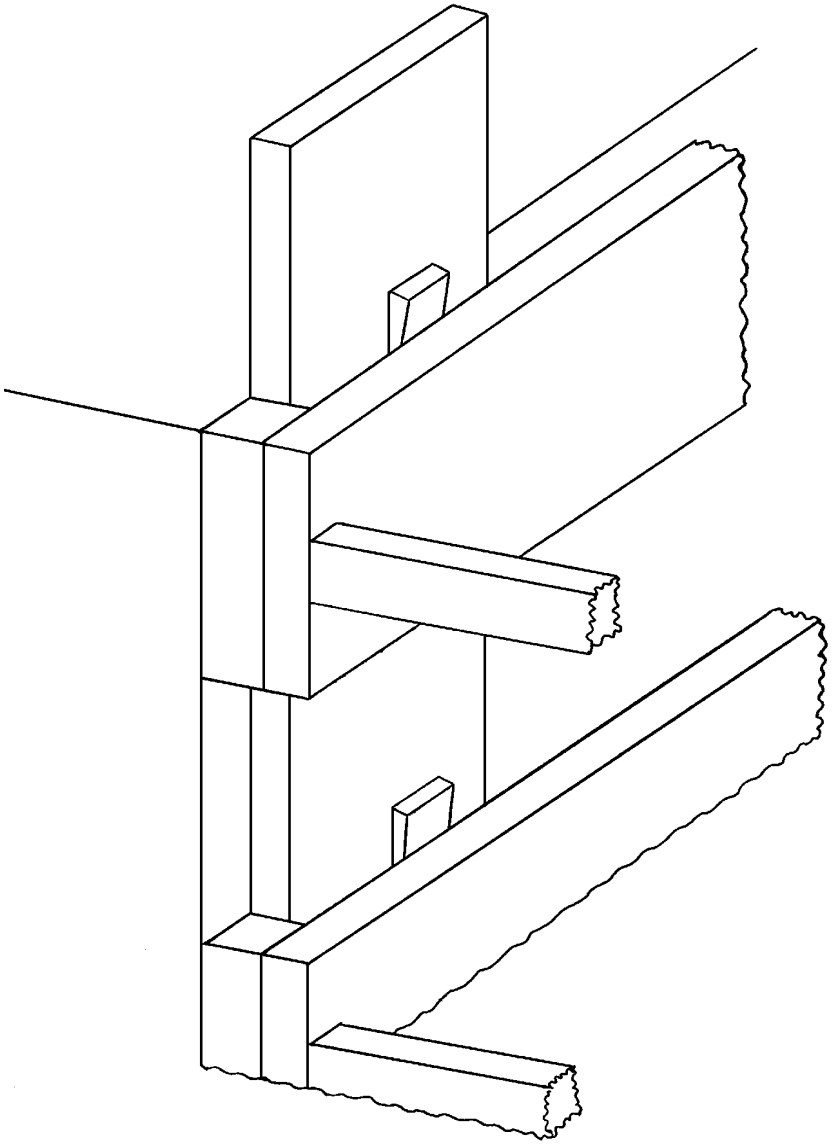


Close Piling

3.

Fix second set of shoring timbers and lower piling timbers to bottom of excavation.
Insert wedges between each piling timber and shoring timber in order to push piling timbers back against wall of excavation thus providing support.





Specification :

Timbers - 7'6"x12"x1.5"
(2.29m x 0.3m x 38mm)
Piling - 12" x 1.5"
(0.3m x 46mm)
Various lengths required depending on depth to be excavated.
Packing - 2"x2"x12"
50mm x 50mm x 0.3m)
Wedges - 4" wide x 6" long 2" Thick (102mm x 152mm x 50mm)
Struts - 4" x 4" x length dependent on dimensions of grave required.

Note : Timber struts can be substituted with acro props, screw jacks or hydraulic rams.

All timbers should be bolted across ends to prevent splitting.

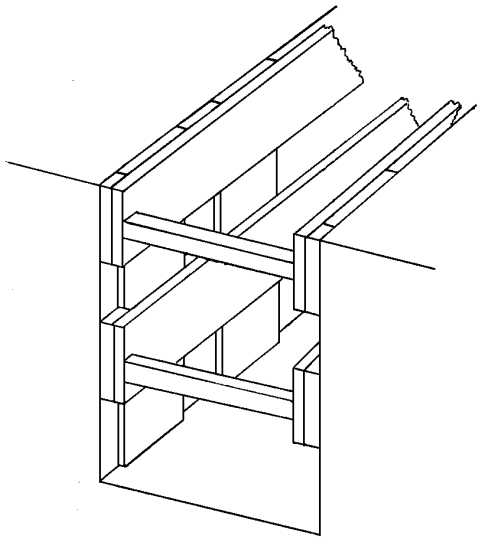
The use of wedges fulfils three functions **:**

1. The wedges push the piling timbers back against the wall of the excavation to provide essential support.

2. The wedges will hold the piling timbers in place when excavation is continued past their lower edges.

3. Lowering the piling timbers further into the excavation as digging proceeds is eased by removing wedges from **ONE PILING TIMBER**, lowering it to the bottom of the excavation and re-fixing the wedges before moving on to the next piling timber. **It must be stressed that piling timbers must be lowered frequently as digging proceeds. The depth excavated below the bottom edges of piling timbers will depend on local soil type and conditions and the results of local risk assessments.**

4.

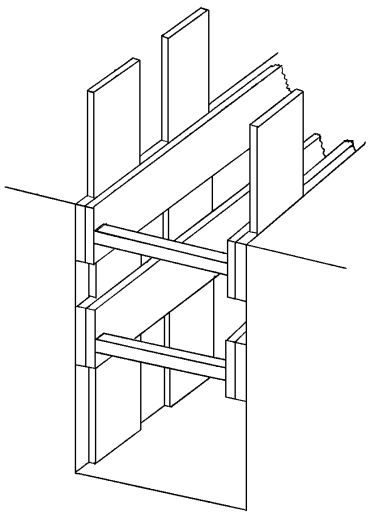


Excavate further depth moving piling timbers down one at a time as digging proceeds.

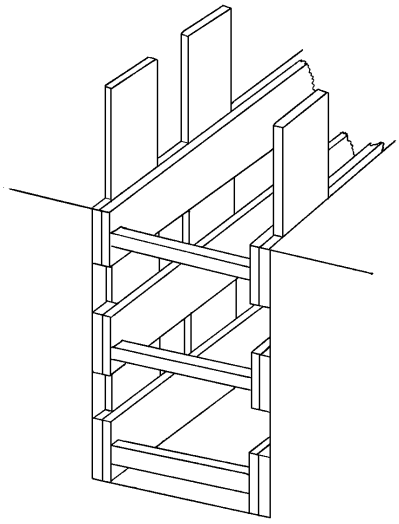
5.

The 4’ (1.22m) piling timbers can be replaced **one at a time** with 7’ (2.13m) or 8’ (2.44m) piling timbers at this stage in order to achieve support to full depth. The substitution of piling timbers at this stage will also prevent an excessive length of timber protruding above ground level.

Continue excavation and lowering of piling timbers until depth is reached where a third set of shoring timbers and packing pieces are required. This depth is dependant on local soil type and conditions and results of local risk assessment.



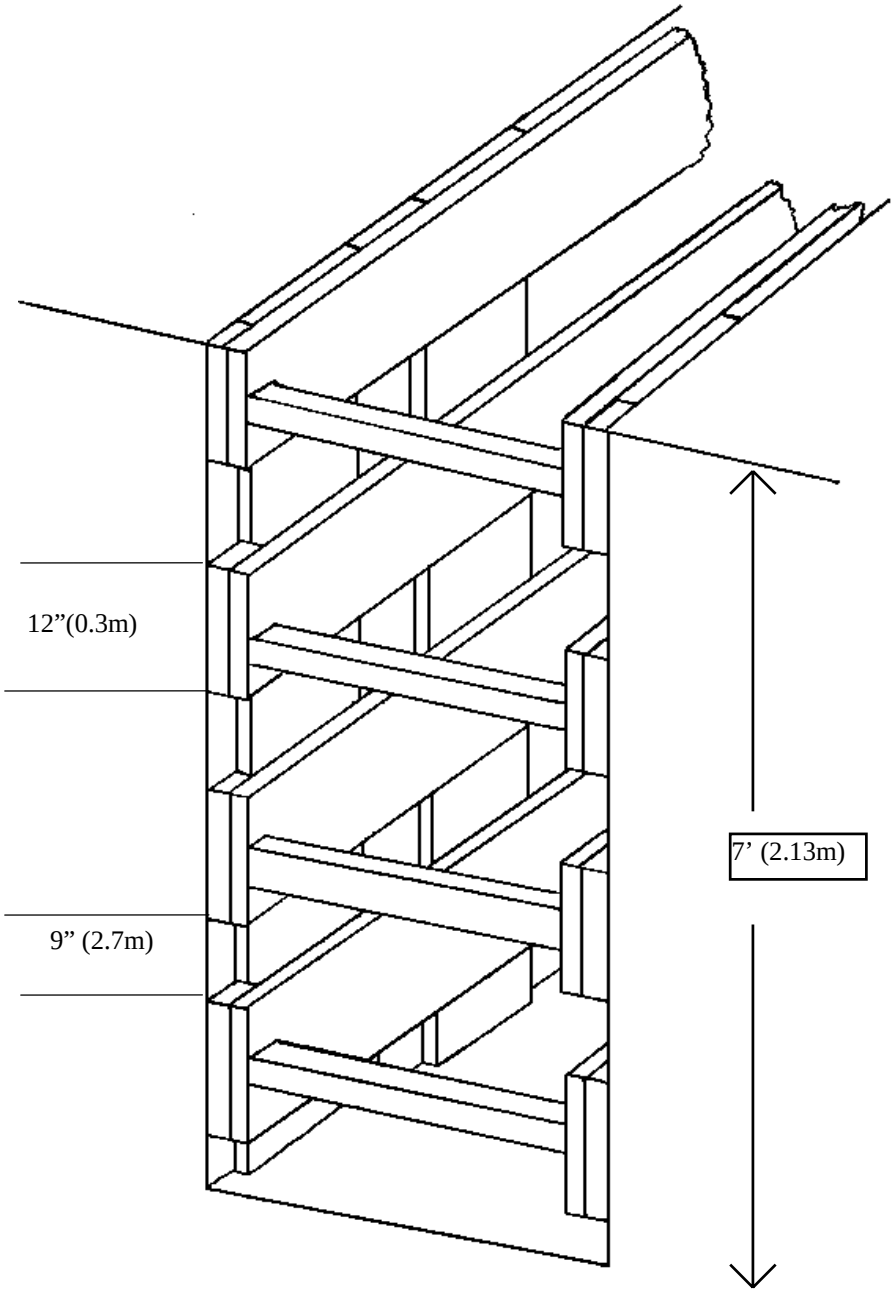
6.



Install third set of shoring timbers and packing pieces using struts, acros or screw jacks.

7.

Excavate further depth lowering piling timbers periodically until full depth is reached.

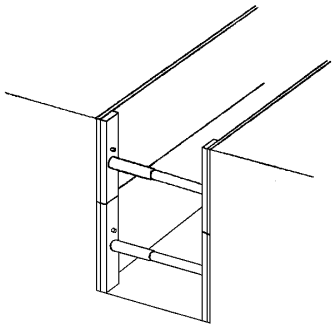


6.3. Installation of Hydraulic Shoring in Stable Cohesive Ground Using 2’ (0.81m) units. Depth of 7’ (2.13m)

MACHINE EXCAVATION ONLY

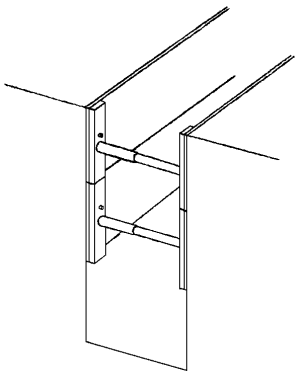
Where local risk assessment results indicate that it is safe to do so the grave can be machine excavated to full depth and the units lowered into position and pressurised to holding pressure. This approach can only be adopted if it is possible to install units from surface level. No gravedigger must enter the grave until units are properly installed. Should risk assessments indicate that it is not safe to excavate to full depth before installing shoring from surface level the following procedure should be adopted.

1.



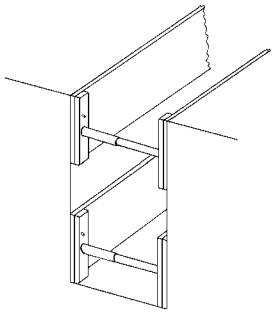
Excavate to depth of 4’ (1.22m).
Lower first hydraulic unit to bottom of excavation and pressurise rams.
Lower second hydraulic unit to rest on top of first and pressurise rams.

2.



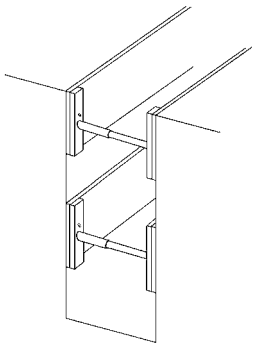
Excavate a further 18” (0.46m) and trim sides to allow free downward passage of first unit.

3.



Connect two-way hose to rams of first unit.
Release pressure from rams of first unit by turning valve on pump.
Lower first unit to bottom of excavation and pressurise rams.

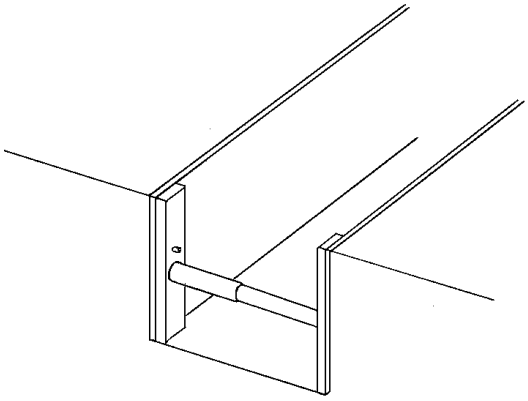
4.



Excavate a further 18” (0.46m) to achieve a depth of 7’ (2.13m).

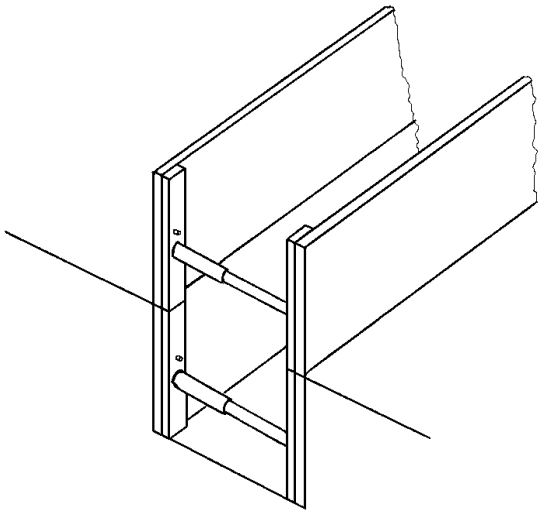
6.4. Installation of Hydraulic Shoring
Unstable, Non-Cohesive Ground
2’ (0.61m) Unit Depth. 7’ (2.13m) Grave Depth

1.



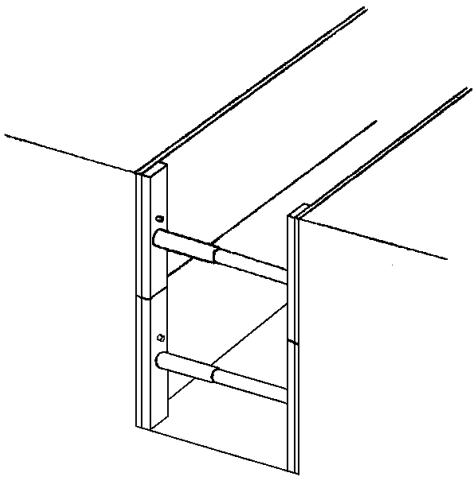
Excavate to first level and install first Hydraulic Unit leaving hoses connected to rams.
First level depth is equal to depth of shoring unit.

2.



Place second unit on top of first ensuring that hoses pass behind rams of second unit.

3.



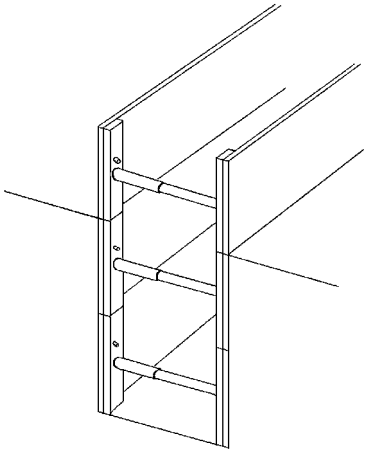
Excavate further in stages releasing pressure on first unit to allow both units to be lowered to the bottom of the excavation and repressurise rams of lower unit. Leave two way hose coupling connected to first unit and disconnect main hose at tee joint. Connect main hose to one ram on second unit and pressurise ram to holding pressure.

Note 1 : On particularly unstable ground the units can be lowered in stages i.e. excavate 6” (152mm) further depth and lower units. Repeat until top of second unit is at ground level.

NOTE : No gravedigger should be in the excavation when pressure is released and units lowered.

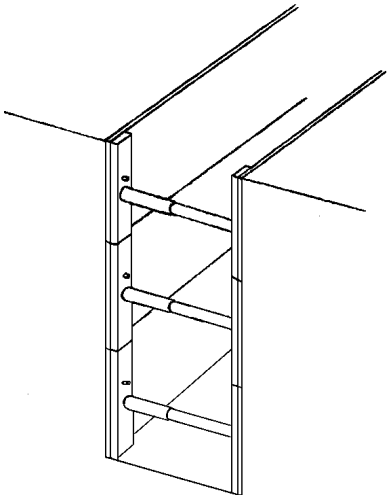
When machine digging it will be necessary to trim sides of excavation by hand beneath lower unit to allow free passage downward. This should be carried out in stages as described in the NOTE 1 above.

4.



Place third unit on top of second unit.

5.

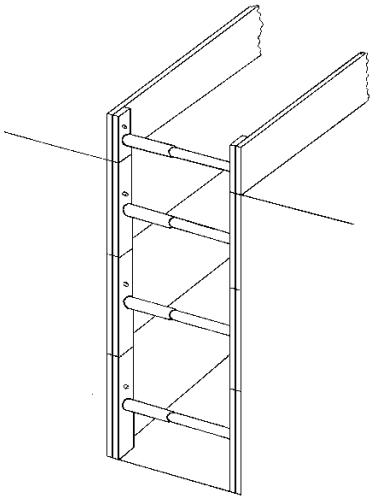


Excavate further depth in stages. At each stage release pressure on second unit and then first unit to allow all three to be lowered into excavation. Connect main hose to tee joint and repressurise rams of first unit. Remove main hose from tee joint, connect to one ram of second unit and pressurise. Remove main hose from ram of second unit, connect to one ram of third unit and pressurise. Repeat this procedure to pressurise rams at opposite ends of second and third units.

NOTE : Ideally employers will make available more than one 2 way hose coupling so that a coupling can remain connected to all rams during the excavation procedure.

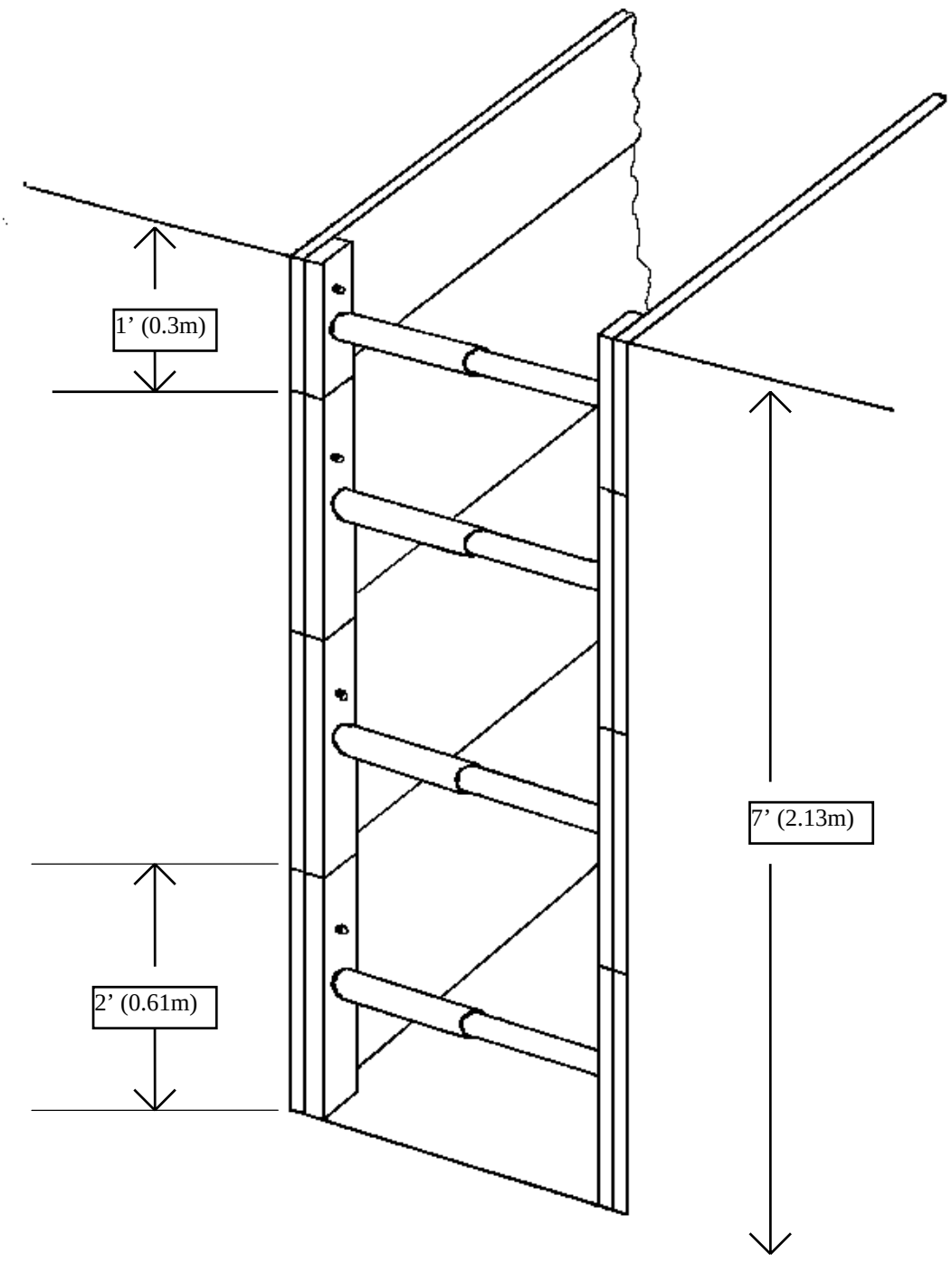
Where soil type and ground condition will allow a further 1' (300mm) can be excavated to achieve an overall depth of 7' (2.13m).
In unstable conditions a further unit should be added to achieve close shoring to full depth.

6.



Place fourth unit of 1' (300mm) depth on top of third unit.
Excavate further depth.

7.

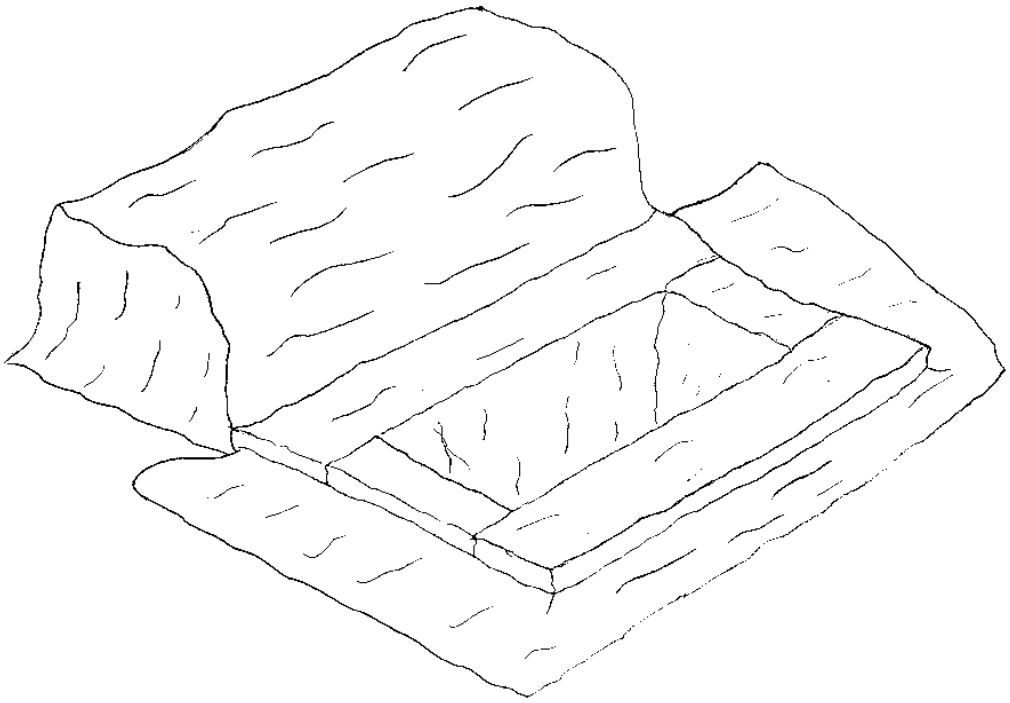


7. Preparation for Interment

HAZARD	TYPE OF HARM	FREQUENCY RATING	SEVERITY RATING	RISK RATING
Limited access	**Impact injuries from Trip / Fall**	**3**	**3**	**9**
Unstable walkboards	**“ “ “**	**3**	**3**	**9**
Folded or torn grass matting	**“ “ “**	**3**	**3**	**9**
Frayed webbing breaking	**Back / muscle strain. Injuries from falling.**	**3**	**3**	**9**
Insecure nearby memorials	**Injuries from Crushing / Trapping**	**3**	**4**	**12**

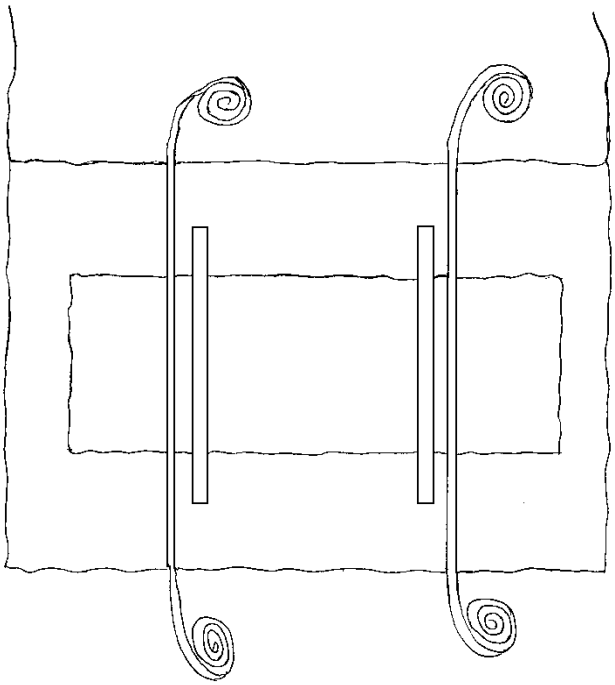
Prior to preparing / dressing the grave the surrounding area should be examined to ensure as far as is reasonably practicable a safe, unobstructed access for Funeral Directors staff, clergy and mourners. Any trip hazards that may be present must be removed.

Walkboards must be checked for stability with adjustments made as required. Unstable walkboards may cause a pall bearer (s) to fall whilst placing a coffin onto putlogs.



Grass matting can be draped into the grave to cover the internal walls and shoring equipment. The soil box, walkboards and immediate surrounding area can then be covered.

Care must be taken to avoid trip hazards caused by folds in the matting.
Torn or holed matting must not be used.



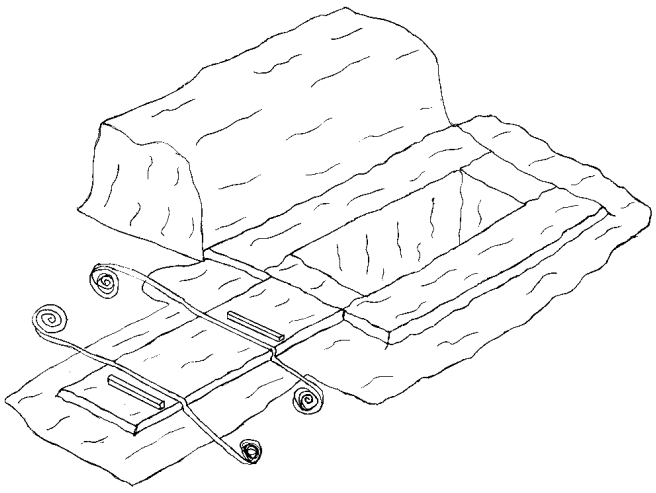
PLAN VIEW

Two putlogs should be placed across the grave onto which the coffin may be placed prior to the committal. Putlogs should be 4'6" x 4" x 4" (1.37m x 102mm x 102mm) and of good quality knot free planed timber.

The distance between the putlogs should be no less than 3'6"(1.07m).

Two lowering webbings are placed as shown in the diagram. Care must be taken to ensure that sufficient webbing is placed on either side of the grave to enable each pallbearer to lower the coffin to the bottom of the grave.

Webbings should be checked for signs of deterioration or fraying before each burial service. Frayed or damaged webbings must not be used and should be cut down to prevent use by any other person.



In some instances there may be insufficient space to the side of the grave for the pallbearers to safely carry the coffin and place it on putlogs directly over the grave.

A safer method for this situation is to place a board at either the foot or head end of the grave covered with grass matting on which to place the coffin. Two putlogs are placed across the board so that the coffin can be rested down with no risk of pallbearers trapping fingers. The lowering webbings are also placed across the board. At the appropriate time during the committal service the pallbearers can lift the coffin using the webbings and walk along the walkboards and safely lower the coffin into the grave.

8. BACKFILLING

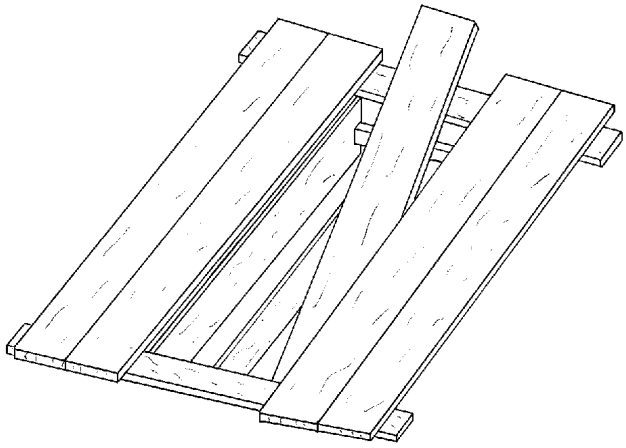
8.1. General Requirements and Considerations

Backfilling should commence immediately after all mourners have left the cemetery and be completed fully on the same working day.

Webbings and grass mats must be removed before backfilling commences.

Walkboards should be left in place during the whole of the backfilling procedure so as to prevent persons walking on any unprotected grave edge.

Protection of the coffin



When backfilling large flints, pieces of rock or lumps of clay may damage the coffin when they impact from height. To reduce the risk of coffin damage a timber can be placed into the grave as shown in the above diagram. Backfill material will strike the timber, break its speed of fall and deflect to the sides of the grave.

Mourner Participation

Some ethnic and religious groups require carrying out the backfilling of the grave themselves.

There is a conflict between health and safety and customer care in this situation and it is for the individual burial authority or Cemetery Company to assess the risk involved and decide whether to permit mourners to backfill.

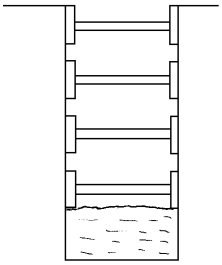
Should it be decided to permit mourners to backfill the manager or supervisor in charge must take control of proceedings and stop backfilling at the relevant stages in order that gravediggers can remove shoring equipment.

It is vital to the health and safety of mourners that co-operation between cemetery staff, mourners and the Funeral Director conducting the funeral is established.

8.2. Backfilling Removing Timber Shoring. Stable, Cohesive Ground

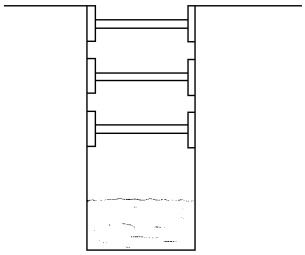
Timbers 1’ (0.3m) in depth. Grave depth 7’ (2.13m)

1.



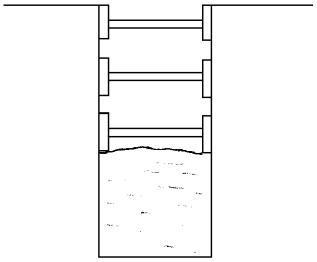
Backfill and consolidate to underside of lowest set of timbers.

2.



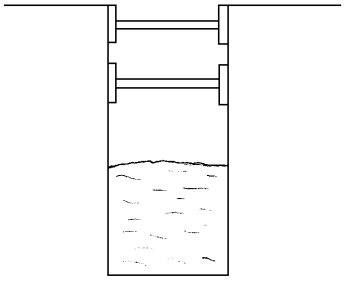
Remove lowest set of timbers.

3.



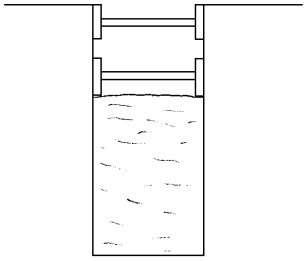
Backfill and consolidate to underside of next set of timbers

4.



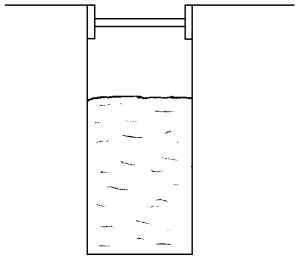
Remove next set of timbers

5.



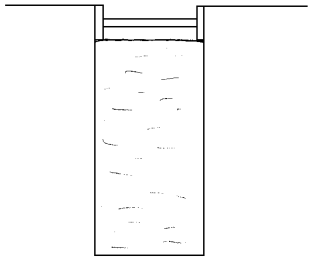
Backfill and consolidate to underside of next set of timbers.

6.

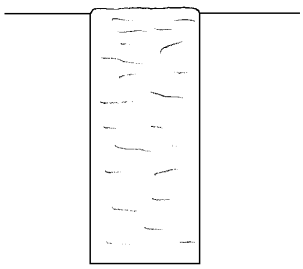


Continue process of backfilling and consolidating

7.



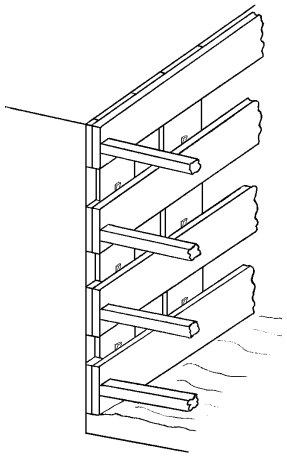
8.



Complete backfilling and consolidation.

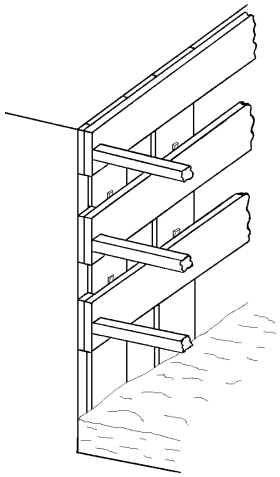
8.3 Backfilling Removing Timber Piling / Polling
Unstable, Non Cohesive Ground

1.



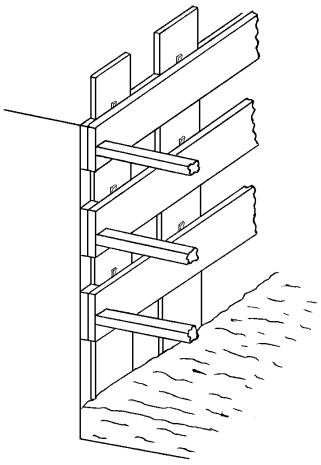
Backfill to underside of lowest set of horizontal timbers.

2.



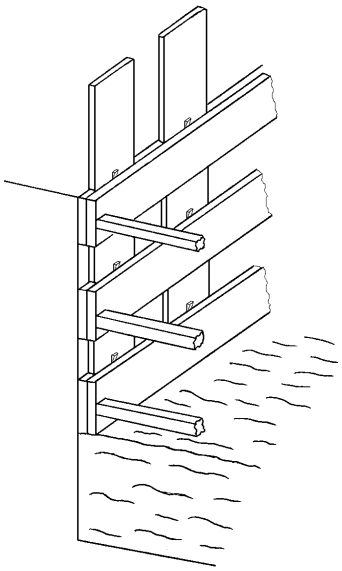
The bottom of the piling timbers can be covered with soil at this stage.
The soil in the bottom of the grave can be consolidated before the lowest set of horizontal timbers is removed.
The consolidated soil will provide additional support to the piling timbers while a gravedigger enters the grave to remove the lowest set of horizontal timbers.

3.



The piling timbers can be lifted one at a time so that their bottom edges are level with the top of the previously consolidated soil.
The wedges are removed from **one** piling timber before it is lifted and are replaced immediately after repositioning.

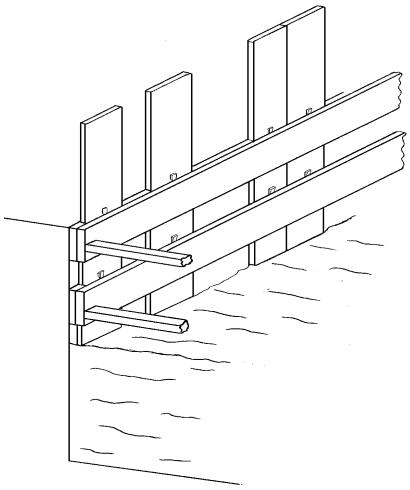
4.



Backfill grave to underside of next set of horizontal timbers.

The process described in 1, 2, and 3 is repeated until the grave is completely backfilled.

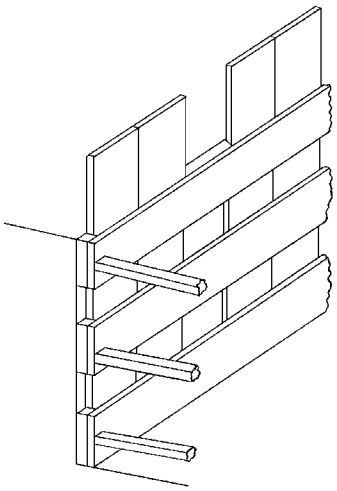
5.



During backfilling operations the poling timbers will protrude from the grave to a height where difficulty may be encountered attempting to shovel soil over the tops of the piling timbers.

To ease this situation **one** piling timber may be repositioned so that it is butted up to the next piling timber. Soil can be shovelled through the gap created.

6.



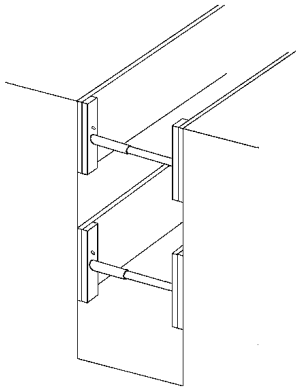
When close piling is incorporated **one piling timber** can be removed to aid ease of backfilling. This timber should only be removed to carry out the final stages of backfilling.

Unstable soils such as running sand and gravel may *run* through the gap. This should be minimal however should a large quantity of soil begin to move a shorter piling timber can be inserted to stem flow.

8.4. Backfilling Removing Hydraulic Shoring in Stable Cohesive Ground

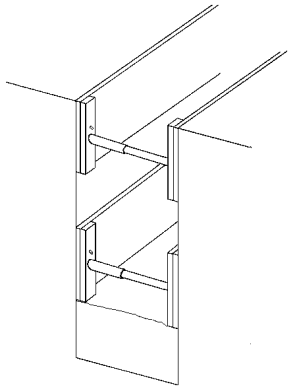
Unit Depth 2’ (0.61m). Grave Depth 7’ (2.13m).

1.



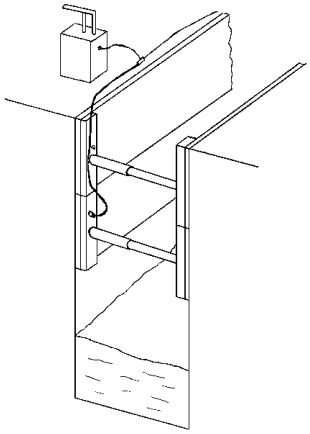
Remove grass matting and webbings.

2.



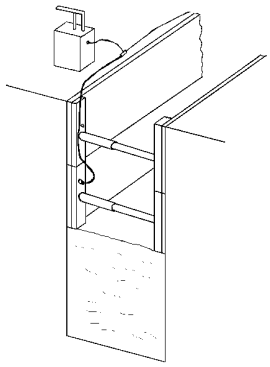
Backfill and consolidate to underside of bottom unit.

3.



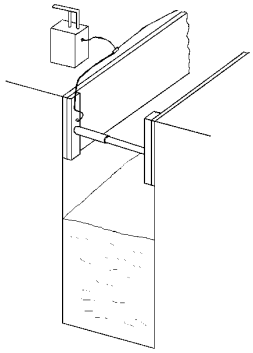
Connect two-way hose to rams of bottom unit placing hoses behind rams of top unit.
Attach lifting ropes to bottom unit and release pressure from rams of bottom unit.
Raise bottom unit to underside of top unit and pressurise rams to holding pressure.

4.



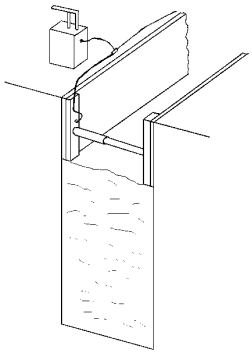
Backfill and consolidate to underside of bottom unit.

5.



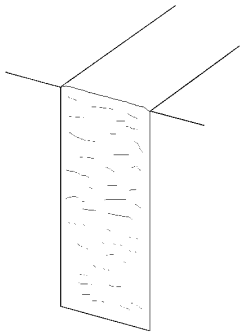
Release pressure on rams from top unit using the release tool and lift top unit from grave.
Release pressure from rams of remaining unit by turning valve on pump.
Raise bottom unit to ground level, realign pump valve and pump out to holding pressure.

6.



Backfill and consolidate to underside of remaining unit.

7.

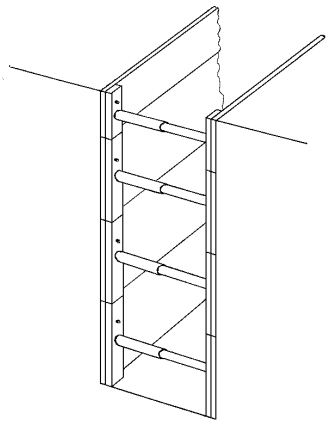


Release pressure from rams of remaining unit, remove hoses from rams using release tool and lift the unit from the grave.
Backfill and consolidate leaving the grave slightly mounded.

8.5. Backfilling : Removing Hydraulic Shoring from Unstable, Non - Cohesive Ground.

The following procedure describes the removal of 1 x 1’ (0.3m) and 3 x 2’ (0.61) hydraulic shoring units from a grave of 7’ (2.13m)depth.

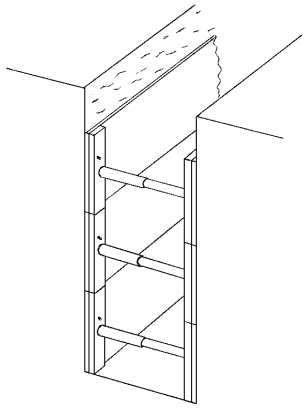
1.



Remove webbings and grass matting from the grave.
Walkboards are not shown in the following diagrams but they must remain in position throughout the whole of the backfilling process.
To enable ease of removal of hydraulic units the walkboards can be repositioned.

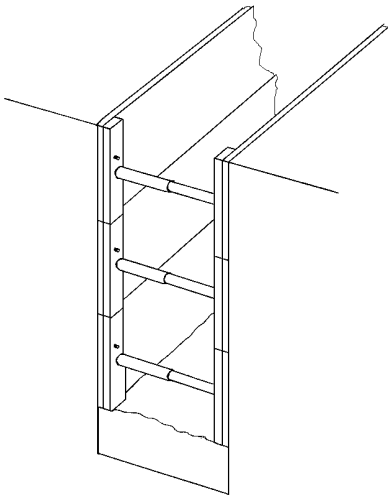
Release pressure from rams of top unit using the release tool and remove from the grave.

2.



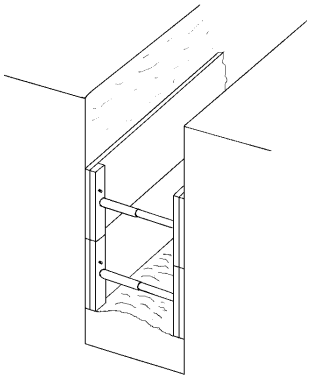
Connect hoses and lifting ropes to next unit.

3.



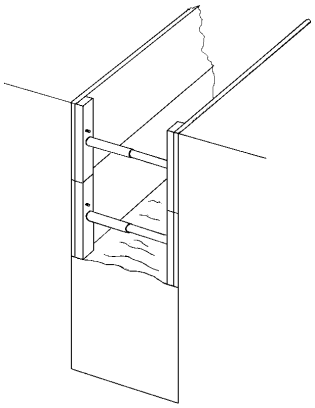
Release pressure from rams of uppermost unit by turning the valve on the pump, lift unit so that its top edge is level with the surface and re-pressurise rams to holding pressure.
Connect hoses to rams of next unit and repeat the above process for the next unit lifting it to the underside of the uppermost unit and re-pressurising rams.
Repeat process again for lower unit.
Backfill and consolidate to underside of bottom unit.
Ideally employers will make available sufficient hoses so that hoses can remain connected and dedicated to all rams throughout the process. This action will make it unnecessary for a gravedigger to enter the grave to connect hoses to the lower units. The time taken to backfill the grave will be reduced which may reduce the risk of collapse during backfilling.
Release pressure from rams of uppermost unit and remove from the grave.

4.



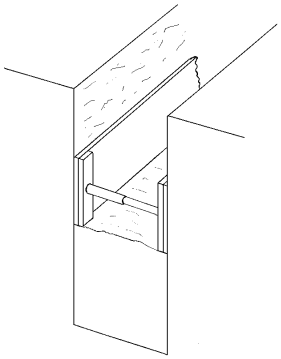
Attach lifting ropes to next unit and connect hoses to rams (if not already connected to dedicated hoses).

5.



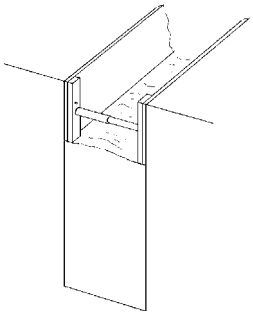
Release pressure from rams of uppermost unit by turning valve on pump, lift unit until its top edge is level with the surface of the grave and re-pressurise rams to holding pressure.
(NOTE : where local conditions and results of local risk assessments indicate, it may be necessary to raise units in stages so as to reduce the risk of collapse of exposed areas of the grave walls)
Repeat this process for lower unit lifting it to underside of uppermost unit before re-pressurising rams.
Backfill and consolidate to underside of lower unit.
Release pressure from uppermost unit and remove from the grave.

6.



Attach lifting ropes to remaining unit and connect hoses to rams (if dedicated hoses not already connected).

7.



Release pressure by turning valve on pump and lift unit until its top edge is level with the surface of the grave. Re- pressurise rams to holding pressure.
Remove hoses from rams.
Backfill and consolidate to underside of remaining unit.
The remaining unit can be removed from the grave by releasing the pressure from the rams using the release tool and lifting it from the grave. Backfilling and consolidation can then be completed.

APPENDIX 1

RISK ASSESSMENT - Hazard Checklist
Frequency and Severity Ratings
Risk Assessments
Actions to Reduce Risks

The following tables contain the information from which *general* assessments of the risks common to most cemeteries were made.

Users of this Code of Safe Working Practice must identify and assess risks, which are specific to their own workplace.

TABLE 1 - HAZARD CHECKLIST

CATEGORY	TYPE OF HARM	EXAMPLES OF HAZARD	AGENCY
Working with or near	Impact	Collision with other person(s)	Physical
Machinery		" " Obstacles	Physical
	Entanglement	Drive belts and pulleys	Physical
		Rotating cylinders	Physical
	Ejection	Debris thrown out by strimmer/blower	Physical
	Contact	Rotating blades and cylinders	Physical
		Hot exhaust system	Physical
	Burn	Fuel and oil	Chemical
		Exhaust systems	Physical
	White finger	Vibrating machinery	Physical
Workplace	Tripping and falling	Dilapidated memorials	Physical
		Broken drain covers	Physical
		Uneven ground	Physical
		Uncovered graves	Physical
		Damaged floors	Physical
		Debris	Physical
		Wet grass	Physical
		Oil spills	Physical
		Loose carpet edges	Physical
		Wet floors	Physical
		Trailing cables	Physical
	Impact from falling materials	Insecure stacks	Physical
		Insecure racks and shelves	Physical
		Broken tree branches	Physical
		Loose roof tiles	Physical
	Cuts / abrasions / puncture wounds	Laying aside of sharp tools	Physical
		Miss-use of tools	Physical
	Infection	Discarded hypodermics	Biological
		Contact with foul water	Biological
	Electrocution	Faulty electrical appliances	Physical
	Poisoning	Unmarked chemical spraying areas	Chemical
Manual handling	Back injury, hernia	Lifting and lowering	Physical
		Carrying	Physical
		Pushing/pulling	Physical
Grave digging and	Impact	Moving boom	Physical
Moving memorials	Trapping, crushing, suffocation	Unshored grave. Inadequate shoring	Physical
		Adjacent memorials on unstable ground	Physical
	Falling	Unprotected grave edges. Inadequate shoring.	Physical
	Falling material	Working below ground level	Physical
		Insecure nearby memorials	Physical
		Insecure shoring	Physical
	Cuts / abrasions	Rough timber	Physical
		Dilapidated memorials	Physical
		Broken vases and jars	Physical
		Defective equipment	Physical
	Crushing	Wrongly placed pinchbar / rollers	Physical
Working out of doors	Sunburn	Unprotected skin	Natural
	Sunstroke		Natural
	Burns/electrocution	Lightning strike	Natural
	Insect bites and stings		Biological
General Grounds	Tetanus	Vaccination expired	Biological
Maintenance	HIV	Discarded hypodermics	Biological
	Infection	Foul water	Biological
Cleaning (including	Chemical Burns	Wrong use of materials	Chemical
windows)		Unlabelled containers	Chemical
	Tripping and falling	Insecure ladders	Physical
		Trailing cables	Physical
		Wet Floors	Physical

TABLE 2 - FREQUENCY / SEVERITY RATINGS

CATEGORY	TYPE OF HARM		FREQUENCY RATING	SEVERITY RATING
Working with or near machinery	Impact	Collision with other person(s) " " Obstacles	2 3	4 3
	Entanglement	Drive belts and pulleys	2	3
		Rotating cylinders	2	3
	White finger	Vibrating machinery	2	2
Workplace	Tripping and falling	Dilapidated memorials	3	3
		Broken drain covers	2	3
		Uneven ground	3	3
		Uncovered graves	2	4
		Damaged floors	2	3
		Debris	3	3
		Wet grass	2	3
		Oil spills	2	3
		Loose carpet edges	2	3
		Wet floors	2	3
		Trailing cables	2	3
	Impact from falling	Insecure stacks	1	5
	Materials	Insecure racks and shelves	2	5
		Broken tree branches	2	3
		Loose roof tiles	2	4
	Cuts / abrasions / puncture wounds	Laying aside of sharp tools	2	3
		Miss-use of tools	2	3
	Infection	Discarded hypodermics	2	4
		Contact with foul water	3	3
	Electrocution	Faulty electrical appliances	2	4
	Poisoning	Unmarked chemical spraying areas	1	3
Manual handling	Back injury, hernia	Lifting and lowering	3	3
		Carrying	3	3
		Pushing/pulling	3	3
Grave digging	Impact	Moving boom	2	4
and moving memorials	Trapping, crushing, suffocation	Adjacent memorials on unstable ground. Unshored grave. Inadequate shoring.	3 3	4 4
	Falling	" " " "	2	4
	Falling material	Working below ground level	2	3
		Insecure nearby memorials	3	4
		Insecure shoring	3	4
	Cuts / abrasions	Rough timber	3	2
		Dilapidated memorials	3	4
		Broken vases and jars	3	2
		Defective equipment	2	3
	Crushing	Wrongly placed pinchbar / rollers	3	3
Working out	Sunburn	Unprotected skin	3	3
of doors	Sunstroke		2	2
	Burns/electrocution	Lightning strike	1	4
	Insect bites /stings		4	2
General Grounds	Tetanus	Vaccination expired	2	4
Maintenance	HIV	Discarded hypodermics	2	4
	Infection	Foul water	2	4
Cleaning (incl	Chemical Burns	Wrong use of materials	1	4
windows)		Unlabelled containers	2	4
	Tripping and falling	Insecure ladders	2	4
		Trailing cables	2	3
		Wet Floors	2	3

TABLE 3 - RISK ASSESSMENT

CATEGORY	TYPE OF HARM	EXAMPLES OF HAZARD	RATING
Working with or	Impact	Collision with other person(s)	8
near machinery		" " Obstacles	9
	Contact	Rotating blades and cylinders	6
	Burn	Fuel and oil	6
		Exhaust systems	6
	White finger	Vibrating machinery	4
Workplace	Tripping and falling	Dilapidated memorials	9
		Broken drain covers	6
		Uneven ground	9
		Uncovered graves	8
		Damaged floors	6
		Debris	9
		Wet grass	6
		Oil spills	6
		Loose carpet edges	6
		Wet floors	6
		Trailing cables	6
	Impact from falling materials	Insecure stacks	5
		Insecure racks and shelves	10
		Broken tree branches	6
		Loose roof tiles	8
	Cuts / abrasions / puncture	Laying aside of sharp tools	6
	wounds	Miss-use of tools	6
	Infection	Discarded hypodermics	8
		Contact with foul water	9
	Electrocution	Faulty electrical appliances	8
	Poisoning	Unmarked chemical spraying areas	3
Manual handling	Back injury, hernia	Lifting and lowering	9
		Carrying	9
		Pushing/pulling	9
Grave digging and	Impact	Moving boom	8
moving memorials	Trapping, crushing, suffocation	Adjacent memorials on unstable ground. Unshored grave. Inadequate Shoring.	12 12
	Falling	" "	8
	Falling material	Working below ground level	6
		Insecure nearby memorials	12
		Insecure shoring	12
	Cuts / abrasions	Rough timber	6
		Dilapidated memorials	12
		Broken vases and jars	6
		Defective equipment	6
	Crushing	Wrongly placed pinchbar / rollers	9
Working out of	Sunburn	Unprotected skin	9
doors	Sunstroke		4
	Burns/electrocution	Lightning strike	4
	Insect bites and stings		8
General Grounds	Tetanus	Vaccination expired	8
Maintenance	HIV	Discarded hypodermics	8
	Infection	Foul water	8
Cleaning (incl.	Chemical Burns	Wrong use of materials	4
windows)		Unlabelled containers	8
	Tripping and falling	Insecure ladders	8
		Trailing cables, Wet floors	6 6

TABLE 4 - ACTION TO REDUCE RISK

CATEGORY	TYPE OF HARM	EXAMPLES OF HAZARD	ACTION TO REDUCE RISK
Working with or near machinery	Impact	Collision with other person(s)	Experienced, trained operatives only
		" " Obstacles	" " " "
	Entanglement	Drive belts and pulleys	Regular maintenance and checking of guards
		Rotating cylinders	" " " " " "
	Ejection	Debris thrown by strimmer	
	Contact	Rotating blades and cylinders	Remove HT lead before adjusting
		Hot exhaust system	Regular checking of guards
	Burn	Fuel and oil	Proper storage. Fill tanks in open air. No smoking
		Exhaust systems	Regular checking of guards
	White finger	Vibrating machinery	Monitoring length of period of use
Workplace	Tripping and falling	Dilapidated memorials	Regular inspection of grounds/removal of items
		Broken drain covers	Regular inspection. Temp cover pending repair
		Uneven ground	
		Uncovered graves	Board over unattended graves
		Damaged floors	Tape off area pending repair
		Debris	Regular inspection and removal
		Wet grass	
		Oil spills	Cover spill with sand/soil immediately
		Loose carpet edges	Tape off pending repair
		Wet floors	Prevent access
		Trailing cables	Use cable covers/signs
	Impact from falling	Insecure stacks	Keep stacks low. Ensure max. weight at bottom
	materials	Insecure racks and shelves	Regular inspection. Secure racks to walls
		Broken tree branches	Report immediately. Rope off area.
		Loose roof tiles	" " " " "
	Cuts / abrasions /	Laying aside of sharp tools	Sharp edges downward.
	puncture wounds	Miss-use of tools	Ensure correct tools for job.
	Infection	Discarded hypodermics	Regular inspection. Remove to sharps container.
		Contact with foul water	Vigilance. Use disinfectant.
	Electrocution	Faulty electrical appliances	Regular inspection
	Poisoning	Unmarked spraying areas	Certificated operators only
Manual handling	Back injury, hernia	Lifting and lowering	Adopt proper procedure. Lift manageable weight only
		Carrying	" " " " " " "
		Pushing/pulling	Only attempt manageable weights. Seek assistance
Grave digging	Impact	Moving boom	Keep out of boom radius. Vigilance of operator
and moving Memorials	Trapping, crushing suffocation	Unshored grave Inadequate shoring. Adjacent memorials on Unstable ground	Never enter Unshored grave. Training in proper use of shoring equipment. Temporary removal.
	Falling	" "	" " " "
	Falling material	Working below ground level	Use hard Hat
		Insecure nearby memorials	Inspect and secure/remove nearby memorials
		Insecure shoring	Regular maintenance of hydraulic rams
	Cuts / abrasions	Rough timber	Use protective hand wear. Dispose of splintered timber.
		Dilapidated memorials	Regular inspection. Making safe broken memorials
		Broken vases and jars	Inspection. Removal of glass containers
		Defective equipment	Regular Maintenance/replacement
	Crushing	Wrongly placed pinchbar	Specific training. Experienced operators only
Working out of	Sunburn	Unprotected skin	Protective clothing
doors	Sunstroke		" "
	Burns/electrocution	Lightning strike	Do not shelter under trees during storm.
	Insect bites/stings		Vigilance. Report wasp nests
General Grounds	Tetanus	Vaccination expired	Management advice to all staff
Maintenance	HIV	Discarded hypodermics	Regular inspection. Removal to sharps container
	Infection	Foul water	Vigilance. Use of disinfectant
Cleaning (incl.	Chemical Burns	Wrong use of materials	Training. Use safest chemical available
windows)		Unlabelled containers	Regular Checks.
	Tripping and falling	Insecure ladders	Maintenance of equip. Trained operators only
		Trailing cables	Cable covers, signs
		Wet Floors	Prevent access. Use signs

APPENDIX 2. Sample Forms :

Hazard Report
Health and Safety Inspection

HAZARD REPORT

LOCATION

DATE HAZARD IDENTIFIED

DESCRIPTION OF HAZARD

ACTION TAKEN BY OPERATIVE ON SITE

ACTION TAKEN BY SUPERVISOR / MANAGER

SIGNED.....**Supervisor / Manager. Date**.....

OFFICE USE ONLY
HAZARD / RISK ASSESSMENT

CATEGORY OF HAZARD

FREQUENCY RATING **SEVERITY RATING**

RISK RATING

HEALTH & SAFETY POLICY UPDATE i.e. add or alter procedures / equipment

TRAINING REQUIREMENTS i.e. change of working practice

ASSESSED BY.....
DATE.....

Health and Safety Inspection

Cemetery : **Date:**

Hazard and Location on Site	Action Required	Action Target Date	Action by :	Hazard Report No.	Risk Assessment Carried out by :

Inspection carried out by :...../...../...../...../.....

APPENDIX 3. Summary of Health and Safety Regulations

The summaries contained within this section were extracted from health and safety regulation in force at 1st August 1999.
Readers and users of this Code of Safe Working Practice are advised to familiarise themselves with any amendments or additions made to health and safety regulation after the above-mentioned date.

STATUTORY OBLIGATIONS

Health and Safety at Work Act 1974.

Duties to Employers

Section 2(1) - It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees

Section 2(2) - Further provides that, "without prejudice to the generality of the above, the matters to which that duty extends include in particular" :

Section 2(2)(a) - "the provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health". (This general requirement covers all plant, machinery, equipment and appliances and goes beyond specific provisions covering certain equipment contained in existing legislation by requiring a more wide ranging assessment of risk)

Section 2(2)(b) - "arrangements for ensuring, so far as is reasonably practicable, safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances". (See COSHH)

Section 2(2)(c) - "the provision of such information, instruction, training and supervision as is necessary to ensure, as far as is reasonably practicable, the health and safety at work of his employees".

Section 2(2)(d) - "so far as is reasonably practicable as regard to any place of work under the employer's control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks".

Section 2(2)(e) - " the provision and maintenance of a working environment for his employees that is, so far as is reasonably practicable, safe, without risk to health and adequate as regards facilities and arrangement for their welfare at work".

Section 2(3) - "It shall be the duty of every employer who employs five or more employees to prepare and as often as may be appropriate revise a written statement of his general policy with respect to health and safety at work of his employees and the organisation and arrangements for the time being in force for carrying out that policy, and to bring the statement and any revision of it to the notice of all his employees".

Section 3(1) - "It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health and safety".

Section 3(3) - places a duty on an employer to give information about such aspects of the way in which he conducts his undertaking to persons who are not his employees as might affect their health and safety.

Duties relating to Premises

Section 4 - " It shall be the duty of each person who has, to any extent, control of premises or of the means of access thereto or egress there from or of any plant or substance in such premises to take such measures as it is reasonable for a person in his position to take to ensure, so far as is reasonably practicable, that the premises, all means of access thereto or egress there from available for use by persons using the premises, and any plant or substance in the premises or, as the case may be, provided for use there, is or are safe and without risks to health".

Duties of Employees

Section 7 - “It shall be the duty of every employee while at work :

(a) to take reasonable care for the health and safety of himself or of other persons who may be affected by his acts or omissions at work; and

(b) as regards any duty or requirement imposed on his employer or any other person by or under any of the relevant statutory provisions, to co-operate with him so far as is necessary to enable that duty or requirement to be performed or complied with”.

Section 8 - “ No person shall intentionally or recklessly interfere with or misuse anything provided in the interests of health, safety or welfare in pursuance of any of the relevant statutory provision”.

Management of Health and Safety at Work Regulations 1999

Regulation 3 - Requires all employers to assess risk to employees and to any other person who may be affected. Other persons would include the public, mourners, Funeral Directors staff, contractors, memorial masons and any other person who may enter a cemetery.

Regulation 4 - Requires employers to make proper arrangements for all aspects of health and safety in order that it will become a normal management duty.

Regulation 5 - Concerns health surveillance. This may be a simple process such as monitoring sickness records for signs of absences due to a work related cause i.e. back or joint problems.

Regulation 6 - Requires employers to appoint a competent person to assist with appliance of and compliance with the regulation. A competent person would be a Safety Officer or Adviser or a person with knowledge, skill, experience and understanding of cemetery practice. Employers may see the benefit from training a suitable and competent person to NVQ level.

Regulation 7 - Requires employers to establish procedures for dealing with serious incidents that may arise. In the cemetery environment this may include emergency rescue procedures to be adopted should a person become trapped in a collapsed grave. The employer must provide employees with information and training with regard such procedures.

Regulation 8 - Strengthens the requirements under the Health & Safety at Work Act 1974 to provide employees with information concerning health and safety.

Regulation 9 - Should more than one employer be working in the workplace they should co-operate with each other in the interest of health and safety.

Regulation 10 - 11 - would be applicable to contractors or others who work on other people's premises. These regulations require that the occupier be provided with details of risks which should specify that employees have appropriate capabilities / qualification to carry out the work required.

Regulation 12 - Requires all employees to use all tools and equipment safely in accordance with training and instruction received.

Manual Handling Operations Regulations 1992

Regulation 2 - Contains definitions :

Injury - any injury caused by manual handling including back and muscle strain, cuts and abrasions from sharp edges of the load or injuries caused by dropping a load onto feet, hands etc.

Load - any moveable object.

Manual Handling - Lifting, supporting, setting down, transporting, pushing, pulling, moving or carrying anything by hand or use of bodily force.

Regulation 4 - Requires employers to avoid manual handling operations wherever possible. Where manual handling cannot be avoided there is a requirement to carry out risk assessments and provide instruction and training.
Training should include the ergonomic approach to safe manual handling.

Regulation 5 - places a duty on employees to make full and proper use of systems and equipment provided by the employer.

Provision and use of Work Equipment Regulations 1998

Equipment is generally defined as any equipment that is used by an employee at work.

The regulations apply to all employers and self employed persons who provide equipment for use at work or have control of the use of equipment.

The regulations require that you must ensure that equipment is:

- Suitable for its purpose
- Safe for use
- Maintained in a safe condition and in certain circumstances inspected to ensure that this remains the case
- Used only by people who have received adequate information, instruction and training
- Accompanied by suitable safety measures such as markings, warnings, protective devices

You must also ensure that risks, created by the use of the equipment, are eliminated where possible or controlled by measures such as :
Suitable guards or protection devices, markings and warning devices, system control devices such as safety stop buttons, personal protective equipment, and provision of safe systems of work, instruction, information and training.

The Management of Health & Safety at Work Regulations 1992 contain the duty to carry out risk assessments to identify measures that can be taken to eliminate or reduce the risks presented by particular hazards in the workplace.

Further information can be obtained from the Health and Safety Executive publication entitled :

Safe use of work equipment. Provision and use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and Guidance L22 HSE Books 1998 ISBN 0 7176 1627 4

Personal Protective Equipment at work Regulations 1992

Regulation 4 - requires that suitable protective equipment be provided where a risk cannot be adequately controlled in some other manner.

Regulation 5 - requires that when more than one item of protective equipment needs to be worn at any time that they re compatible. i.e. when working in an excavation an operative may need to wear head and eye protection together. The head protection should not interfere with the eye protection and vice versa.

Regulation 6 - requires that assessments to be made of the nature of the risks involved with the task and the suitability of the protective equipment employed to reduce risk.
This regulation specifically encourages a process of thought that will lead the person assessing the risks to choosing the correct protective equipment for the correct reasons.

Regulations 7, 8 and 9 - Requires that all personal protective equipment is properly maintained, cleaned, replaced when appropriate and adequately stored when not in use.
Employees must receive information, instruction and training regarding the use of personal protective equipment and the risks being controlled.

Regulations 10 and 11 - require employees to comply with instructions and training received and to report loss of or damage to any item of personal protective equipment.

Health and Safety (First Aid) Regulations 1981

Further information can be found in :
Approved Code of Practice for the Health and Safety (First Aid) Regulations 1981

Employers should appoint and train an appropriate number of First Aiders and/or Appointed Persons, taking into account the number of employees in the workplace, the types of hazards and the layout of the workplace

Where fully qualified First Aiders are required, their certificates will be renewed every three years.

The location of First Aid equipment and the names of Appointed persons and/or First Aiders should be publicised in the workplace and this information given to new staff at their induction.

First Aid supplies must be kept in accordance with the Regulations.
A competent person should be appointed to take responsibility for maintaining an adequate and clean supply of First Aid equipment, including carrying out regular checks of first aid boxes.

First Aiders are not qualified to dispense Aspirin; paracetamol etc., Supplies of such items should not be kept in the First Aid box.
Employees who are in need of these items must be responsible for their own supplies, as the Regulations do not permit them to be dispensed from First Aid supplies

Confined Spaces Regulations 1997

Regulation 8 - This regulation refers to excavations as confined spaces and further states that the application of these regulations will depend upon the presence of a reasonably foreseeable risk of serious injury.

Regulation 12 - The Confined Spaces Regulations apply in all premises and work situations subject to the Health & Safety at Work Act 1974.

Duties to comply with the Regulations are placed on :
Employers in respect of work carried out by their own employees and work carried out by any other person (e.g. contractors) insofar as that work is to any extent under the employers' control

Regulation 19 - Where employers have duties in relation to people at work who are not their employees then the duty is to do what is 'reasonably practicable' in the circumstances. In many cases, the employer will need to liaise and cooperate with others (e.g. other employers) to agree the respective responsibilities in terms of the regulations and duties. It is also necessary to take all reasonably practicable steps to engage competent contractors. In this way, those in control can be clear about what they can reasonably do to ensure that those undertaking the work in the confined space comply with these and other relevant regulations.

Regulation 20 - reinforces the requirement under the Health & Safety at Work Regulations which require employers to identify the measures they need to take by means of a suitable and sufficient assessment of all risks to workers and any others who may be affected by their work activities.

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

BI 510 Accident Book (DSS) in which the details of all accidents should be inserted.

Form 2508/2508A, used for reporting to the Environmental Health Department any incident or occupational disease, as required under the above Regulations

All accidents, however minor, including violence and members of the public being sent to hospital, should be reported so that they may be investigated and recorded in the Accident Book.

Employer should identify any incidents that are reportable under the RIDDOR Regulations, and make the report on form F2508 to the enforcing authority.

Where a significant incident occurs, the employer must carry out an investigation of any accident, near miss or dangerous occurrence in order to:

a) Make safe any equipment or substances involved

b) Prevent any recurrence

c) Obtain full details of the circumstances of the incident to enable a report to be compiled, or to assist an investigating HSE Inspector

d) Update any risk assessment or make new risk assessment and use the results to update policy and procedures.

Control of Substances Hazardous to Health Regulations 1999

Employers are required to :

1. Identify the hazardous substances that employees and ***others*** might come into contact with.

Hazardous substances include :

a) Those used in work activities such as pesticides, certain cleaning materials. These substances are classified under the Chemicals (Hazard, Information and Packaging for Supply) Regulations 1994 and will be identified by a warning label. Suppliers of such chemicals must provide a safety data sheet to the user for use during the risk assessment process.

b) Substances generated from work activities such as fumes from petrol or diesel engines or fumes from paint.

c) Naturally occurring substances such as bacteria, microorganisms and dust.
e.g. Tetanus, risk of infection from foul water.

Note : Lead and asbestos are subject to their own particular regulations.

2. Assess the risks to health arising from the hazardous substances identified.

3. Decide what precautions are required.

4. Prevent or adequately control exposure.

5. Maintain control measures and ensure that they are properly used.

6. Provide employees with proper information, training and supervision.

7. Monitor exposure where necessary.

8. Carry out health surveillance where an assessment indicates that this is necessary or where it is a specific requirement under COSHH.

Lifting Operations and Lifting Equipment Regulations 1998

Lifting equipment includes any equipment used at work for lifting or lowering loads. Also included are accessories such as chains, eye bolts etc.

The general requirements are as follows.

Employers must ensure that :-

Lifting equipment is suitable and strong enough for its purpose, stable in relation to its proposed use and marked with information regarding safe use such as maximum safe working load.

Lifting operations are planned and carried out by competent persons in a safe manner.

Lifting equipment and accessories are inspected at least annually by a competent person with the appropriate action being taken by the employer to repair or replace equipment as advised by the competent person in his report.

Workplace (Health, Safety and Welfare) Regulations 1992

Sanitary conveniences must be provided and must also be suitable and accessible. The number of conveniences required in a workplace is dependent on the number of persons employed in the particular workplace. i.e. 1-5 employees, 1 water closet. 6-25 employees, 2 water closets. (Reg. 20)

An adequate supply of drinking water must be available and readily accessible to employees. The employer must provide cups or containers unless the water supply is in the form of a drinking fountain. (Reg. 22)

Suitable accommodation i.e. Lockers must be provided for employees clothing that is not worn at work. Separate facilities for work clothing such as overalls etc. must be provided including drying facilities. (Reg. 23)

Suitable changing facilities must be provided where employees are required to change into work wear. Separate facilities for male and female employees should be provided. (Reg. 24)

Suitable and sufficient rest facilities must be provided which include the suitable facilities for eating meals. Rest facilities must include arrangements for protection of non-smokers. Sufficient seats and tables must be provided for the number of persons employed together with the facilities for preparing a hot drink and heating their own food. (Reg. 25)

Noise at Work Regulations 1989

Regulation 4 requires employers to make an assessment of risk, which must be carried out by a competent person, where it is considered that a noise problem may exist.
A problem may exist in circumstances where people have to shout or have difficulty being understood by someone about 2 meters away.

Regulation 5 requires that a record of assessments must be kept until a new assessment is made.

Regulation 6 requires that the risk of hearing damage must be reduced to the lowest level reasonably practicable.

Regulation 7 requires that employers ensure that exposure is reduced to the lowest level reasonably practicable other than by the provision of ear protectors.

Regulation 8(1) requires that when employees are likely to be exposed to a noise level that is below 90dB(A) the employer provides suitable and efficient ear protection equipment to any employee who may request it.
Regulation 8(2) requires that when an employee is exposed to a noise level at or above 90dB(A) suitable ear protectors must be provided.

Regulation 9 requires employers to designate any part of their premises where employees are likely to be exposed to noise levels above 90dB(A) as an ear protection zone and to demarcate and sign such areas.

Regulation 10(1) requires employers to take reasonable steps to ensure that ear protectors and other devices are properly maintained in an effective state and are properly used.
Regulation 10(2) requires employees to make full and proper use of ear protectors and any other item or device that the employer is required to provide. Employees are required to report any defects in equipment provided to the employer.

Regulation 11 requires that every employer must provide employees who are likely to be exposed to a noise level of 85 dB(A) or above with adequate information, training and instruction on the risks of damage to hearing that exposure to noise may cause. Such information, training and instruction must include the actions required to minimise or eliminate risks.

Regulation 12 extends the obligations already placed on manufacturers, designers, suppliers etc. of equipment and machinery for use in the workplace to provide adequate information concerning health and safety when the equipment or machinery is likely to expose the user to noise levels of 85dB(A) or above.

Health and Safety (Safety Signs and Signals) Regulations 1996

These Regulations apply to all workplaces (Regulation 3)

Safety and / or warning signs must be provided and maintained where a risk cannot be controlled by any other means. Such risk will be identified from risk assessments carried out under the Management of Health and Safety at Work Regulations 1992. Where risks from traffic in the workplace exist the appropriate sign required under the Road Traffic Regulation Act 1984 must be used.
(Regulation 4)

Employers must ensure through instruction and training that employees are aware of the meaning of safety signs placed throughout the workplace and the actions that they need to take in connection with such safety signs. (Regulation 5)

Most good suppliers of safety equipment will provide a comprehensive brochure of safety signs indicating the colour and shape of sign required for areas of risk specified under the regulations.

Further information can be obtained from the HSE publications entitled :
The Health and Safety (Safety Signs and Signals) Regulations 1996 ISBN 0 7176 0870 0.
Leaflet IND(G)184L Signpost to the Health and Safety (Safety Signs and Signals) Regulations 1996.

APPENDIX 4. ICCM / CBA Publications

Exhumation Handbook

This practical guide for cemetery managers covers all aspects of exhumation from securing the proper legal authority to the removal of remains.

Contact : Peter Mitchell, F.Inst.BCA(Dip)
Technical Officer
The Lodge
Surrey & Sussex Crematorium
Balcombe Road
Crawley
RH10 3QN

Code of Practice for the Management of Memorials

Following extensive research concerning the health and safety implications of dilapidated memorials and memorial fixing the CBA has formulated and produced a Code of Practice designed to assist burial authorities deal with and manage memorials in cemeteries under their control.

Contact : Angela Dunn M.Inst.BCA(Dip)
Walton Lea Crematorium
Chester Road
Warrington
Cheshire
WA4 6TB

Charter for the Bereaved

Contact : Ken West, F.Inst.BCA(Dip)
Charter Organiser
Bereavement Services
Cemetery Office
Richardson Street
Carlisle
CA2 6AL

CBA Directory of Cemeteries and Crematoria

A comprehensive directory of all UK cemeteries and Crematoria containing full addresses and contact persons. Available from:
Robert Coates, F.Inst.BCA (Dip)
Chief Executive CBA
The Gatehouse
Kew Meadow Path
Richmond
TW9 4EN

APPENDIX 5. Cemetery Operatives Training Scheme

The ***ICCM*** recognises that trained cemetery operatives are vital to the provision of an efficient, effective and safe service to the bereaved.

Health and Safety law places a positive duty upon burial authorities to provide a safe workplace and safe systems of work that will protect the health & safety of employees, persons attending and officiating at funerals, visitors and any other person that may use a cemetery.

The Scheme has been designed in partnership with the training professionals at the Berkshire College of Agriculture to train, assess and certificate operatives in safe working practice and to encourage a process of thought that will assist with accident prevention.

The scheme will be of benefit not only to employees new to the burial service but also those with long service by enabling such operatives to demonstrate ability and gain the certificate of competence.

The benefits to employers from staff that are trained and certificated include :

Proven competence of staff
Creation of a safer workplace
Evidence for Investors in People
Enhanced quality assurance
Credibility in company profiles
Improved Customer Care

The Scheme links with the ***ICCM*** **Charter for the Bereaved** by training operatives to provide a safe, trouble free and dignified service within the **Code of Safe Working Practice for Cemeteries** which provides the framework for the management of health & safety in cemeteries.

Course 1. Health and Safety and the Burial Process

The first section of this 5-day course involves practical demonstrations with candidate participation. The college Instructors will build on the knowledge of safe working practice already possessed by candidates to enable them to successfully complete the assessments carried out in the second section of the course.

Candidates will be assessed on their competence to carry out the following tasks using safe practice :

Initial Preparations -
Measuring and marking new grave site(s)
Erecting soil box and work platform
Moving kerbed memorials and assessing stability
Excavation -
Safe use of excavator
Excavation and backfilling using Timber shoring
Excavation and backfilling using Hydraulic shoring
Excavation and backfilling using telescopic shoring
Preparation for Interment -
Grave dressing
Providing safe access
Machinery Maintenance -
Routine maintenance of digging machine and associated equipment including fault identification.

The course also encompasses **Ethics and Customer Care** so as to identify a standard that is acceptable to the bereaved.

Course 2. Excavator Operation

Unlike other excavator operators training courses the COTS course focuses on the implications and problems specific to the cemetery environment. The course is designed to train, assess and certificate excavator operators to the ***ICCM*** **safety standard**.

Course 3. Advanced Ground Support

The Advanced Ground Support course will train and assess cemetery operatives to deal with particularly dangerous soil types. Ground support techniques using hydraulic, telescopic and traditional timber piling are covered during the course.

Course 4. Management Awareness

This course has been designed to assist those with the responsibility for health and safety in cemeteries by demonstrating the ***ICCM*** **safety standards** covered in courses 1 to 3.
The safety standards are linked to the **Code of Safe Working Practice for Cemeteries, which** provides the framework for the management of health and safety in cemeteries.
The course leads the candidate toward the identification of hazards and risks connected to the whole of the burial process. Subsequent assessment of the risks identified lead the candidate to suggesting ways of removing or reducing risk in order to protect the health and safety of all who work in or visit a cemetery.
This course will be of particular use to those who are studying for the ***ICCM*** **Diploma**.

For further information and application forms contact :

Tim Morris, F.Inst.BCA
COTS Secretary
107 Parlaunt Road
Langley
Slough
SL3 8BE

APPENDIX 6. Useful Contacts

Institute of Cemetery & Crematorium Management (ICCM)
Tim Morris, F.Inst.BCA
National Secretary
107 Parlaunt Road
Langley
Slough
Berks
SL3 8BE

For information Concerning:
***ICCM* Diploma courses**
Charter for the Bereaved
Cemetery Operatives Training Scheme
Crematorium Technicians Training Scheme

Tel: 01753 771518
Fax : 01753 770984
email: tmlg03882@blueyonder.co.uk

Confederation of Burial Authorities (CBA)
Robert Coates, F.Inst.BCA(Dip)
Honorary Chief Executive
The Gatehouse
Kew Meadow Path
Richmond
TW9 4EN

HSE Books
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Queen Anne's Gate
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