

This form is intended for completion as a WORD document.
Sections should be expanded as required to suit the intended project.
(For further information see HSE Construction Information Sheet 43)

Project Description and Nature of works (include time scale)	This project is for the cleaning out and minor repairs to Tewitfield Locks by-wash channels on the remainder length of the Lancaster Canal. The works are to be undertaken by volunteers during a 2 week canal camp which is to take place between 7 th August 2004 and 21 st August 2004.
Location	Tewitfield Locks, Lancaster Canal
Grid Reference	SD 519738 to SD519748

Client Contact	Rob Anderson
Representing	North West Region Engineering Department

Principal Contractor	Rick Barnes
Representing	Waterway Recovery Group

HSE F10(rev) First notification:	Not Required
Updated on:	N/A
Notification made to HSE Area Office	Marshall House, Ringway, Preston. PR1 2HS Tel : 01772 836200

This HEALTH AND SAFETY PLAN has been prepared to detail the organisation and arrangements necessary to meet the health and safety requirements for the construction phase of the above project.

Signed on behalf of Principal Contractor	(Name)	Date
Accepted on behalf of Client Representative	(name)	Date

1	General
1.1	<p>Principles for Health and Safety to be followed</p> <p>Operations will be conducted in accordance with the method statements and risk assessments written for the project and in accordance with the guidelines and procedures defined in the Practical Restoration Handbook (PRH). A copy of the PRH is held centrally by Health and Safety office of British Waterways (BW) at Watford and a copy will be available for consultation on the work site. Copies of the Risk Assessments and Method Statements will also be available on site, attached to this document.</p> <p>For the purposes of this project and the Construction Health and Safety Plan, the site for which WRG will act as prime contractor will be referred to as the Work Site or Site. The boundaries of the Site are defined as the areas surrounding each lock and will include the length of the towpath used for the manual supply of tools and materials between locks from the top of the flight and lock 5.</p>
1.2	<p>Health and safety goals for the project. Describe goals of BW, Principal contractors and others.</p> <p>Safe completion of the project with no injuries to volunteers, BW staff, sub-contractors and members of the public</p>
1.3	<p>Neighbourhood Risks</p> <p>The locks are not on a navigable section of canal so no risk will be posed to boaters. Limited manual operations only will take place on the towpath unless specifically covered by risk and method statements and agreed by the Principal Contractor (e.g. Scaffolding company). Normal operations on the towpath will be limited to pedestrian movement, supply of hand tools and equipment and movement of materials using standard wheelbarrows. Resulting hazards to pedestrians will be minimised through limiting vehicle movements on the towpath to those associated with erection of edge protection and pedestrian footbridges by the scaffolding sub-contractor. Where the scaffolding company requires vehicle access, banksmen will be deployed to minimise any hazard to members of the public and of inadvertently driving into the canal. Following searches it is not believed that there are any utility services in the area to be worked on. Some vehicular access may be required through a working farm, whose staff will be aware of our presence. Volunteers will also be made aware of the hazards due to access through a working farm.</p>

2	Management
2.1	<p>Responsibilities and structure</p> <p>Waterway Recover Group (WRG) will act as Designer and Principal Contractor and will provide Site Leadership / supervision that will be responsible for satisfactory completion of the project. There will be a site leader and an assistant site leader, one of which will be on site at all times. Volunteers may be split into groups of approximately ten people, each group will have an appointed work gang leader who will be responsible to the site leaders.</p> <p>Suitable risk assessments and method statements will be made available by the site leader prior to the camp (where possible). Risk assessments and method statements will be reviewed during the project and discussed with the Planning Supervisor should any changes be required..</p> <p>Contacts: Rob Anderson – Project Engineer (Planning Supervisor and Client) Warrington Office 01925 847000</p> <p>Stephen Pugmire – North West Engineering Manager (Client) Warrington Office 01925 847000</p>
2.2	<p>Subcontractors and others</p> <p>L&H Scaffolding will be appointed as a subcontractor subject to submission of suitable Risk Assessments and Method Statements to install lock edge protection and pedestrian bridge access over locks 6 and 7 to the Client's satisfaction. It is believed that the aforementioned company has experience of working with similar situations for the Environment Agency, which may prove to be useful supporting experience. Lancaster Canal Trust will also be engaged to support supervision of L&H Scaffolding at the start of installation work prior to the arrival of WRG volunteers. If resource is available, it may be beneficial for the client to supply a stonemason to support the project and offer guidance and such resource will be offered a suitable site induction brief.</p>

3	Standards for Health and Safety
3.1	<p>Essentials of Construction Safety</p> <p>It is a requirement of British Waterways that all construction work shall be conducted in accordance with the Health and Safety Executive Guidance HSG 150. A copy will be kept available for reference on site along with the PRH and Method Statements and Risk Assessments</p>
3.2	<p>Relevant BW Standards</p> <p>Volunteers will be asked to read the BW booklet 'Volunteers Working Safely' which is underwritten by WRG which will be supplied to WRG by BW</p>
3.3	<p>Additional Standards:</p> <p>The BW Booklet 'Volunteers Working Safely' is expanded on in the PRH which will be the primary reference document for the project. The PRH has been reviewed and a copy is also held centrally by BW Watford.</p>

4	Selection Procedures
4.1	<p>Sub Contractors :</p> <p>L&H Scaffolding will be appointed as a subcontractor subject to submission of suitable Risk Assessments and Method Statements to install lock edge protection and pedestrian bridge access over locks 6 and 7 to the Client's satisfaction. It is believed that the aforementioned company has experience of working with similar situations for the Environment Agency, which may prove to be useful supporting experience. A copy of this document (the Construction Phase Health and Safety Plan) and other suitable project information will be supplied to the subcontractor prior to the commencement of works.</p> <p>Lancaster Canal Trust will also be engaged to support supervision of L&H Scaffolding at the start of installation work prior to the arrival of WRG volunteers and to assist with provision of plant and materials.</p> <p>If stonemasonry resource becomes available from the Client organisation, they will be required to report to the WRG Site leader / assistant leader for a briefing on the arrangements set out in this Health and Safety Plan. A signed record of induction will be kept for each subcontractor.</p>
4.2	<p>Hazardous materials</p> <p>All safety information will be available on site, including suitable COSHH assessments covering the materials likely to be encountered on site. Such Information will be included in the site copy of the project paperwork, the exact location of such information will be included as part of the site safety brief.</p> <p>Flammable substances will be held in suitable sealed containers away from flame sources, out of direct light and in a position to minimise potential injury to the work group and minimise damage to the environment.</p> <p>Corrosive substances (lime and cement) will be kept in the BW compound at the bottom of the flight in a secure container or in a WRG vehicle. Such materials will only be transported to site as and when it is required for use. Volunteers will be provided with PPE (gloves, goggles and dust masks) to wear whilst handling these materials.</p>
4.3	<p>Plant and Machinery</p> <p>All users of plant will be responsible for ensuring the suitable condition of the plant and will identify to the leader any deficiencies, which will be rectified prior to use. All operators must hold a WRG Driver Authorisation card and the WRG Site leaders will be informed of all authorised operators prior to commencing the project.</p>

5	Site Organisation
5.1	<p><u>Vehicular traffic</u></p> <p>Vehicular access to site will across a farmer's field for lock 1. No vehicular access will be possible for transit vans to locks 4, 5, 6 and 7 and wheeled vehicles must not be used on the towpath section of the site. Materials will be delivered to the work site by using a dumper from the off-side of the locks across the farmers field so eliminating any towpath hazards. No dumper access will be possible to lock 7 and the dumper is not to be taken onto a public highway. Materials for lock 7 will be delivered to lock 6, loaded into wheelbarrows and transported manually up the towpath making use of the pedestrian bridges over locks 6 and 7. WRG Vehicles may be used to deliver lime and cement to the farm for use along the flight and for delivering volunteers to the top of the flight if desired. It is not now currently planned to store materials on the towpath, materials will instead be stored on the off-side of the canal adjacent to each by-wash. Unloading of material for Lock 5 will be from the green lane that runs down to the accommodation bridge and for Lock 6, materials will be delivered from the field.</p> <p><u>Pedestrians</u></p> <p>Pedestrian access will for the bottom 3 locks be from the BW compound, under the motorway, turn immediately right across the culvert and up the right hand side of the flight across the farmers field. For locks 4 and 5, pedestrian access will be via the towpath from either top or bottom, crossing the accommodation bridge between locks 4 and 5. For locks 6 and 7 from bottom, pedestrian access bridges over the head of the locks will be utilised, crossing from the towpath and will be accessed from either the top or bottom of the flight. It will not be necessary to close the towpath to members of the public.</p> <p><u>Moorings</u> Not Applicable</p>
5.2	<p>Loading and Unloading</p> <ul style="list-style-type: none"> • Loading of plant will be completed manually. Unloading of supplies will utilise the tip functions of the plant at dispersed material storage sites. • A banks-man will be appointed for operations in tight spaces and in close proximity to the volunteers. • As all plant operations are on the off-side, plant and material access should no-longer be required via access off Cinderbarrow Lane.
5.3	<p>Layout and Storage areas</p> <p>Storage of flammable materials will be minimised and such substances must be stored in suitable containers away from flame sources and in an area that is well ventilated and out of direct sunlight. Volunteers will be made aware of the hazards associated with the use and storage of flammable substances and storage locations will be made known on site.</p> <p>Materials will be stored in the locality of the individual work sites and will be tipped onto polythene sheet and covered at the end of each day. On completion of the project all sheeting and excess materials will be removed from the flight.</p> <p>Lime and cement will not be stored on site and will be removed from site at the end of each working day.</p>
5.4	<p>Electrical distribution, Shared Mechanical Plant</p> <p>One small electrical generator will be available for use on site for dedicated supply to a 110v electrical cement mixer. It is not anticipated that any other contractor will be operating on site at the same time so no other distribution network will be in use.</p>
5.5	<p>Scaffolds and Falsework</p> <p>Scaffold pedestrian bridges are to be utilised to cross the head of locks 6 and 7. A professional scaffold contractor will be engaged to install the scaffolding bridges and edge protection structures at locks 5, 6 and 7.</p> <p>It is not envisaged that any other scaffold structures will be required.</p>

5.6	<p>Trenching and excavations</p> <p>It is not anticipated that deep trenching / excavation operations will be conducted that would require edge support.</p>
5.7	<p>Permits to Work, Commissioning</p> <p>Permission from the Client will be gained prior to the commencement of work and will be available on site for inspection. Operation of WRG vehicles will only be permitted for those holding a full UK Driving Licence and a suitable WRG Driver Authorisation Card. No plant will be operated without the instruction or permission of the leader / assistant leader. Any volunteer can ask to see a Driver's Authorisation Card.</p>
5.8	<p>Site Security</p> <p>The actual work sites are located away from public access on the off-side of the canal. Site will be cleared of tools and harmful substances at the end of each working day and left in a safe and tidy manner.</p> <p>Planned visitors to site will be received at the accommodation bridge over the tail of lock 5 on the towpath. Access will be as detailed under Pedestrian Access in section 5.1 of this plan. Visitors to site will be kept a short distance away from the working groups to enable the volunteers to continue operating in a safe manner and all volunteers will be obliged to wear a hard hat if venturing from the towpath side of the flight.</p> <p>There is a public right of way passing over the accommodation bridge between locks 4 and 5. Whilst work is being conducted in this area, visitors who show an interest will be engaged on the bridge.</p> <p>No access will be sought across the steel bridge over lock 1 at the bottom of the flight or over the steel ridge over lock 8 at the top of the flight.</p>
5.9	<p>Welfare facilities</p> <p>The volunteers will be able to utilise the welfare facilities available at the bottom of the flight. The use of the BW mobile facility at the top of the flight will be investigated if it is deemed suitable.</p>
5.10	<p>Control and disposal of waste</p> <p>All spoil from the area surrounding locks 5, 6 and 7 will be placed locally and landscaped. All wood / brash will be collected to a central site at the farmer's direction for later disposal. If no alternative site can be found on advice of the farmer, then brash will be deposited on the plateau adjacent to lock 4 awaiting disposal.</p> <p>If clearance of the plateau next to lock 4 is able to progress, then a separate arrangement will need to be found for disposal and may involve the hire of skips or identification of alternative disposal sites on the surrounding land. This situation will be addressed if the situation arises but does not form part of the current firm work plan.</p>
5.11	<p>Arrangements for controlling other significant site health and safety risks (eg falls, services, ground conditions, hazardous materials, existing structures, land use, contamination, manual handling, noise and vibration, maintenance of plant and equipment.)</p> <p>Risk assessments will be available to cover the operations to be conducted on site during the project. Copies will be held along with copies of all other paperwork and will be offered to the client prior to commencing the project for approval and volunteers briefed accordingly.</p>

6	Operational Requirements
6.1	<p>Use of BW Premises</p> <p>Please see section 5.9 of this Health and Safety Plan</p>
6.2	<p>Use of navigation & towpath</p> <p>There is no navigation in the locale of the site. Use of the towpath will be limited to pedestrian access for volunteers and visitors and delivery of materials utilising normal and motorised wheelbarrows. All operations on the towpath will be conducted with a banksman and operators will make members of the public aware of a hazard and / or give way.</p>
6.3	<p>Commissioning Phase/Defects Period</p> <p>The client will be invited to visit site and inspect the works during the project. Rectification work will be conducted during the fortnight as applicable. WRG will not return to the site (with the exception of potential future working parties) to rectify emerging faults after the end of the project.</p>

7	Site Rules to be communicated to all persons working on site
7.1	<p>Emergency Procedures <i>Detail the procedures to be followed for :</i></p> <ul style="list-style-type: none"> • Injuries and Provision of First Aid Injuries and First Aid will be dealt with in accordance with the PRH. A First Aider will be nominated at the start of the week and will be made known to all volunteers. A First Aid kit will be available on site and the location made known to all volunteers. All accidents (however trivial) will be recorded in a standard HSE Accident Book (Form B1510) and will be located in the first aid kit • Fire and Evacuation (also COMAH) Unless it is absolutely certain that the fire can be tackled safely, the Fire Brigade will be called. The nearest Public Phone is at the Longlands Hotel adjacent to the bottom of the flight and plant access route. The site Grid reference is SD 519738 to SD519748 The nearest road is the A6070 These details will be written on a card and located in the site file. • Drowning Incidents or Falling into Water All incidents of persons falling into the waterway will be reported to the site leader and recorded as a near miss. Fencing will be erected where possible to minimise the risk of such occurrences. All incidents will be reported to the Client <p>All major incidents will be reported to the Client using the BW emergency telephone service 0800 4799947</p>
7.2	<p>Accident Reporting</p> <p>All accidents and dangerous occurrences / near misses will be entered into the accident book / and or the near miss forms which will be located centrally on site. All accidents will be reported to the client.</p>
7.3	<p>Permits to Work</p> <p>No specialist permits to work are required for this project other than confirmation from the client that permission to begin the project has been granted.</p>
7.4	<p>General Site Rules</p> <p>The site will be run in accordance with the rules laid out in the PRH.</p>
7.5	<p>Specific Site Rules</p> <ul style="list-style-type: none"> • No fences shall be crossed / climbed. • When using hand tools for the mixing and removal of mortar or concrete, suitable eye protection will be worn as defined in the Risk Assessments. • No smoking will be permitted in area used for storing fuel.

8	Communications
8.1	<p>Consultation with people on site</p> <p>The leaders will in the course of their duties talk informally with volunteers and each volunteer will be told at the start of the week to raise any concerns that they may have. Each working group will have a gang leader who will hold responsibility for ensuring that the team works in a safe manner. Additionally, whilst the site leaders are walking round site they will be looking for any potential problem areas and will rectify such instances on discovery.</p>
8.2	<p>Information, Training and Management Initiatives</p> <p>Training will be conducted 'on the job'. If stonemason resource can be made available then this would add to the project benefit.</p> <p>Volunteers will be briefed at the start of the week and will be required to sign to say that they understand the policy to be operated. During the camp we will run a policy of One Firm Warning, failure to heed the warning will result in removal from the project. Update briefs will be held at the end of each working day and in exceptional circumstances during the day.</p> <p>The client will be appraised of progress every couple of days and will be welcome to inspect the work being conducted on site.</p>
8.3	<p>Design work during construction phase (including modifications and temporary works)</p> <p>Any modifications required to the design during the construction phase will be discussed and agreed with the client prior to work commencing.</p>

9	Monitoring and Liaison
9.1	<p>Reactive</p> <p><i>Identify changes that are significant for health & safety and the means for investigating</i></p>
9.2	<p>Routine monitoring and review</p> <p><i>Specify arrangements to be made for routine inspections and reviews by site supervision and Regional Safety Adviser</i></p>
9.3	<p>Health and Safety File</p> <p><i>Specify responsibilities and arrangements for collection and retention of information for inclusion in the Health and Safety File. Specify layout and format. State extent and location of existing records and plans.</i></p>
9.4	<p>Project Review</p> <p><i>Specify arrangements for reviews throughout the project, as different trades complete their work and at its conclusion.</i></p>