

Method Statement for Ram pit repairs at Fort Augustus

On Fort Augustus flight there are 12no ram pits, shown on the top view map, which are currently covered using heavy steel sheets. There are some safety issues with this material which include slips, trips and falls, manual handling, and corrosion. Image 5975 shows the location of the ram pit which houses the hydraulic ram and pipe work that controls the lock gate. The purpose of these covers is to provide a secure platform to the walkway crossing the canal and to the edge of the lock while still allowing essential maintenance access.



5975

The proposal of works is to replace the heavy steel ram pit covers, highlighted on the top view map, with a fibre grate material. This material has already been successfully used throughout the canal. The fibre grate will require support frames secured on to the walls. The ram pit walls are currently constructed of lime bricks which have become eroded and weak. To ensure the new covers are secure the ram pit walls need to be stabilised. Also as the fibre grate is thicker than the current steel covers, the walls would need to be set at a lower height to eliminate any trip hazards.

The proposal is to place shuttering around the current wall area and pour a new concrete wall as shown on the engineers drawing, ref CC002. These works would not affect the historic structure as they are set back from the chamber walls. Any works carried out will not be invasive of the structure merely a stabilisation.

The work will be carried out during the winter closure so there is minimal interruption to boat traffic. The lime bricks will be removed using hand tools or mechanical chisels. Once the area has been cleared of debris the wooden shuttering can be secured in place. This will be fixed into the original concrete base and if necessary will be fixed into mortar joints not the masonry. The concrete mix will be carried out onsite by operatives using appropriate PPE. Once the concrete has been poured the area will remain cordoned off until the shuttering can be removed.

The new supports will be secured using stainless steel fixings and a chemical resin into the new concrete walls.