

March 2018

Design and access statement

A roof with a view HLF Phase I

Open Hand Open Space Ltd. OHOS
Brock Keep
571 Oxford Road
Reading, RG30 1HL

Conservation* and minor amendments
of existing flat roof above third floor, two turrets, parapet walls, magazine
and ground floor glazed veranda

Brock Keep is a prominent Grade II Listed Building on Oxford Road, Reading, built in 1877 as a part of Brock Barracks following Sir Edward Cardwell's Army reforms. A number of these keeps were built throughout the UK to inspire local pride and promote recruitment to county regiments. They acted as gatehouses, armouries and secure regimental stores. Reading's keep is one of the surviving few that remain in nearly original condition and is of significant historic importance.
(see HLF Phase I Heritage Statement - March 2018)

1. Design principles

Brock Keep is a 4 storey building of regular square shape, with square stair towers on NE and SW corners, rising above the flat roof terrace and forming two turrets with cast iron water tanks.

External load bearing walls, with battered ground floor, are of red brick with yellow horizontal relief terracotta courses and Bath limestone window and door dressings.

On the top of the third floor and the turrets, Bath limestone corbels are projecting from a wall face as a support of the projecting stone course. Above this stone course are brick wall parapets with battlements and Bath limestone copings. Walls are robust and in a very good condition, considering the age of the building, but need conservation treatment.

- 1.1 An approach of minimal intervention and disturbance to the fabric as the fundamental principle of the good conservation of historic buildings will be implemented as much as possible. The stock of historic building is finite and every loss is significant.
- 1.2 Only appropriate materials and methods of conservation should be used for restoration of the original fabric of the building.
(see HLF Phase I Structural Report by Michael Aubrey Partnership)
- 1.3 The principle of the proposed works is to enable Brock Keep to remain in viable use as an art gallery and studios, providing additional heritage, education and community events.
(see HLF Phase I Masterplan by Ingrid Jensen)
- 1.4 All phases of work have to be properly documented by a conservation architect and well recorded by an appointed professional photographer.

***Conservation** is the process of looking after a place to retain its cultural significance. It includes preservation, restoration, reconstruction, adaptation and maintenance. Conservation also includes cultural resource management and the management of change.

2. The site

- 2.1 The site is bordered to the north by Oxford Road, by Brock Gardens residential area to the west and by Brock Barracks to the east and south.
(see HLF DWG A Location Plan)
- 2.2 The site uses the existing pedestrian access from Oxford Road and existing vehicle access from Brock Gardens, leading to 16 car parking spaces within the enclosed site of Brock Keep. The second existing vehicle and pedestrian access in the arched brick gate along Oxford Road are not in use at the moment, but it is hoped that reopening this gate will be the subject of the future development phase.
(see HLF DWG B Block Plan)
- 2.3 The site is well served by regular bus services and is within 20 minutes walk of a variety of amenities in Broad Street of central Reading. It also fits well with Reading Borough Council RBC long- term plan for improvement of Oxford Road for people and cyclists through this densely populated area with a wide ethnic and cultural diversity, in a mix of Victorian and new residential, retail, business premises and four schools, but very few cultural attractions.
- 2.4 To help those with physical access problems OHOS relocated the gallery space from the first floor to the ground floor in 2008 and installed a ramp, and in 2016 built an accessible toilet in one of the cells on the ground floor. The only accessible entrance is through the fire doors facing the car park. The upper floors can only be reached by stairs at the moment.
- 2.5 **Plans for future** improvement include installation of a lift in the SW stairwell, and using wi-fi to stream live events and studio tours happening upstairs to viewers on the ground floor. Improvements to the ground floor doors on the South side of the Keep will make it much easier for disabled visitors to arrive and enter independently. OHOS is always willing to accommodate visitors with other kinds of problems such as hearing and vision problems, learning difficulties and memory or mental health issues.
- 2.6 **Services:** Brock Keep has a telephone line, internet and wi-fi. Electricity is 3-phase, with separate meters for ground floor and upper floors. There is no current gas service, though some historic gas pipes remain. Water enters the building in the SE corner, so toilets and washing facilities are arranged in that corner on all floors.
- 2.7 **Fire safety:** The Keep was built to be fireproof, as a gatehouse, armoury stores and the fire engine house.
- There was a fire safety upgrade in 2010 that installed a new fire alarm integrated to serve all four floors and this is regularly tested and maintained. It will be necessary to extend the alarm to the rooftop café. Existing arrangements are thought to be satisfactory (fire doors, dorgard door closers, thumb turn locks on inside of main entrance etc), but a review of the new uses of floor 3 and the roof level will be needed.
- The Fire Safety survey commissioned by RBC in 2017 and done by Faithfull & Gould, Zurich, as well as the further insurance survey, found the arrangements safe.
- 2.8 **Car park and garden:** 16 car parking spaces need some surface repair and a better security system for the gates to protect the car park and garden at night. Removal of the existing scaffolding and installing an additional gate to protect the alley on the East side of the Keep, while retaining fire escape capability, will improve H&S and crime prevention.
- The garden is cared by volunteers and neighbours who grow shrubs, flowers and vegetables to enjoyment of all OHOS members and Brock Keep visitors.
- 2.9 **Maintenance:** studio rentals have been the economic engine that enabled OHOS to survive the 2007 recession and associated loss of core funding. The current plan is for two floors of studios and two floors of public space.
(see HLF Phase I Masterplan)

Conservation and minor amendments

- A Roof level**
- B Ground floor level**

A1 Conservation and minor amendments of stairwell towers

Two existing red brick square stairwell towers of the NE and SW corners of the building form two turrets rising above the flat roof terrace with 22 400 litres cast iron water tanks each, as a part of the Keep's original fire-fighting system.

NE stairwell tower

- A 1.1 Expert advice had been sought to make balanced judgements and final decision about water tanks removal from the turrets.
(see HLF Phase I Structural Report by MA)
- A 1.2 Removal of the corner part of the NE turret's parapet wall to establish the structural condition of the damaged load-bearing walls below will create an opening for an assisted public access to a "Crow's nest" viewing point via new spiral staircases from the roof level, replacing existing iron leaders which caused a lot of structural damage.
(see HLF DWG P14, HLF DWG P18 & HLF DWG P21)
- A 1.3 The construction beneath the water tanks has to be carefully inspected and appropriate conservation methods used to make them weathertight for the future use.
(see HLF Phase I Structural Report by MA)
- A 1.4 Walk-on glass panel in the middle of the new turret floor will provide more light to NE stairwell below. (see HLF DWG P14, HLF DWG P18)
- A 1.5 NE stairwell, the only existing access to the main roof, to be refurbished, including Victorian lift hoist and mechanism, and provide an attractive assisted public access to the roof.
(see HLF Phase I Heritage Statement and HLF DWG P18)

SW stairwell tower

- A 1.6 SW water tank removal and conservation of the turret with existing store room is a part of this Phase I. It has a great potential for a separate future project to provide lift to all floors and bring second stair access to the rooftop garden and café with significant potential to increase revenue and sustainability of Brock Keep.
(see HLF DWG P13 & P14 and HLF Masterplan)

A2 Conservation of parapets with battlements, Bath limestone copings & corbels

- A 2.1 **The brickwork** of the parapet needs limited re-pointing with an appropriate and approved matching lime mortar mix. Most of the previous re-pointing was reasonably well done, although in some areas with an inappropriate cement based mortar, but if it is not loose, should be left in place as removing may cause damage to the bricks. Repairs of existing brick chimney need special consideration.
(see HLF Phase I Structural Report by MA)
- A 2.2 **Some corbels and parapet Bath limestone copings** have weathered and fractured, due to material failure. Loose fragments should be removed and repaired with a carefully matched suitable bed of Bath limestone. In general terms, the stonework is in quite good condition, but some limited piercing for replacement stone and some filling of weathered joints with a suitable, well engineered and durable lime mortar mix will be required.
(see HLF Phase I Structural Report by MA)

A 3 Flat roof with new insulation, resin bound gravel finish and hardwood features

The waterproof asphalt roof covering is in a quite good condition, laid over the sloped insitu concrete roof slab and traditionally dressed up into the brick parapet. The asphalt waterproof membrane had been severely damaged by the insertion of numerous eye bolt fixings into the concrete roof slab to secure the scaffolding down to the roof. All eye bolt fixings have to be removed and damaged areas carefully inspected and repaired in an appropriate manner.
(see HLF Phase I Structural Report by MA)

Recently, tears and cracks in the asphalt membrane had been successfully repaired around the points where the iron ladders, leading up to the water tanks, are fixed to the concrete slab.

- A 3.1 New roof insulation is a vital and substantial conservation benefit, at this unique opportunity in the history of Brock Keep to improve sustainability and energy preservation.
(see HLF DWG P19 & HLF DWG P20)
- A 3.2 Design flexibility for the top surface of the main roof is the best option at this stage, determined by the roof slabs load capacity. Desired finish is a resin bound gravel surface on a new asphalt layers to provide a warm-coloured and seamless surface with low maintenance requirements and a non-slip surface flexible enough to resist cracking without obstructing existing rainwater flows. A composite deck or paving slabs are the alternative solutions.
(see HLF Phase I Structural Report by MA)
- A 3.3 A new hardwood timber frame with some plants, sitting area and lighting for heritage and art events, designed to provide a simple and effective space for imaginative installations is situated above the main load-bearing construction of the building.
(see HLF DWG P13 and proposed sections and elevations)
- A 3.4 All hardwood to be eco-friendly protected with a silver-grey hue over time, enhancing the timber's natural aesthetics.
- A 3.5 New railing along all parapet walls of the main roof 1.1 m above new resin bonded gravel surface

A 4 Reconstruction of roof magazine re-use as a café & meeting place

Existing reserve store/magazine is situated on SE corner of the main flat roof terrace, formed of brick walls and a monopitch concrete slab roof on iron beam, badly fractured. It is unsafe and must be removed with associated temporary works by a competent builder. After removal of all debris and ferrous metal, all existing masonry has to be preserved and made good.
(see Structural Report by MA) and HLF Phase I Risk Assessment)

- A 4.1. Contractor's detailed Risk Assessment is needed prior to any clearing works.
- A 4.2 Ten new brick courses above the existing doorway (1.8m high) in the North existing wall will increase the height to desirable eaves level of a new flat roof and a new glass panel door.
- A 4.3 Two new windows in the West existing wall will enable the café supervisor to have a clear view of entrants to the roof from both turret doors.
(see HLF DWG P20 and P21)
- A 4.4 New timber flat roof with lead code 6 finish and 2400 x 1200 mm roof light to provide durable low maintenance roof and good light to café.
- A 4.5 Internal layout of the café and meeting place is designed with consideration of existing windows to accommodate sitting area and kitchenette with external unisex wheelchair friendly toilet connected to existing system below. New door in the existing wall to have level access.
(see HLF DWG P13)
- A 4.6 A new flagpole is replacing the former one as a standard feature of the keeps.
(see HLF DWG P13 and proposed elevations and sections)
- A 4.7 New floodlights are planned for art and heritage events.

B Ground floor glass veranda

The original ground floor formed the gatehouse which contained the guardroom, detention room, three confinement cells, corridor, fire engine house, SAA (small arms, ammunition) store, external toilets and veranda. There is no internal access to upper floors.

One of the cells has recently been converted by OHOS into a unisex wheelchair friendly WC and a small kitchenette to serve public receptions and meetings.

Planning Application Number 131227/LBC

- B 1 Only the refurbishment of the original veranda is a part of this application.
- B 2 The iron structure of the currently unglazed veranda should be stripped back to metal, refurbished if need be and repainted.
- B 3 The glazing bars and wall fixing elements need to be carefully checked, upgraded or replaced like to like basis only if there is no other solution.
- B 4 Glass replacement should be in authentic style.
- B 5 A corner section of the water tank will be preserved and installed as a garden feature with the information boards about heritage values of Brock Keep's water tanks.

First, second and third studio floors

No changes of layout are planned for the first and second studio floors.

In 1980s all three floors were divided by temporary chipboard partitions into studios of various sizes, currently accommodating 17 artists. The partitions were painted with intumescent paint in 2010 to improve fire safety.

The first floor has two adequate but basic toilets and a small photographic darkroom.

The second floor has a washing basin & sink in a common room/kitchenette/office, shared by artists and the two part-time administrators.

The third floor has a basic toilet and two washing basins. Removal of some temporary chipboard partitions is planned but not funded by this HLF Phase I application.
(see existing floor plans)