

**Design and Access Statement & Heritage/Archaeology Statement for:
Proposed Brickwork repairs and General Maintenance**
(To be read in conjunction with Drawings & Documentation)



Battle Primary School, Cranbury Road, Reading, RG30 2TD

Introduction

Battle Primary School including Caretaker's house, Former Cookery School, Manual Instruction block and Boundary walls and Railings has been listed under the planning (Listed Buildings and Conservation Areas) Act 1990 for its architectural or historic interest. For reasons as described; Battle Primary School, built in 1891-3 by SS Stallwood, for its Architectural quality: A good example of a second-generation board school of 1900s, built in a lively and well-detailed Queen Anne style. Completeness: a good interior and ancillary structures including boundary railings, Caretaker's Cottage, Cookery School and manual instruction block illustrate the range of building types and functions on typical board school site.

The Site Battle Primary School is located within an area of residential neighbouring properties, bounded by an education centre building to the south and St. Mark's Church and hall to the north. The Primary school, Caretaker's house, former cookery school, manual instruction block (The Pottery Building) and boundary railings and gates have been listed Grade II in August 2010.

The School has two principal buildings, former infant school to the south and larger upper school to the north originally separate but now connected by modern glazed entrance block. Infant school has main hall surrounded on three sides by classrooms which open directly into it. The upper school has 'H' plan with main hall sandwiched between two corridor-access classroom ranges to east and west, with further classrooms to north and south.

External Materials are Red Brick with clay roof tiles. Queen Anne style with much moulded brickwork, shaped gables and dormers, tall ridged and corbelled chimney stacks and multi-pane sash and casement windows of painted timber (many now replaced with modern double glazed units). The two-school unified east elevations to Cranberry road each having a tall stepped and shaped gable in centre bays, flanked by recessed outer bays with lower pedimented gables and dormers, the latter having finely-moulded brick dentil courses. Northern return elevation has curved brick plaque bearing the date 1903, adjoining a raised pedimented doorway accessed via steps with ornamental railings; behind this is a half-octagonal projecting block overlooking rear playground. Upper school's west elevation to Kensington road has three tall scrolled and shaped half dormers flanked by recessed wings with triangular gables. Tall square chimney to rear of upper school, acting as exhaust and intake for 'plenum' ventilation system: three pilastered stages and octagonal louvred belfry-like top with pyramidal roof.



The Site Background & Historical/Archaeology Statement

Battle belongs to the second the second generation of schools built by the Reading School Board. In 1889 a parcel of land was acquired amid the rapidly expanding network of terraced streets to south of Oxford road, and the architect Spencer Slingsby Stallwood – Who earlier that year had won the limited completion to build Redlands school – was commissioned to build a pair of schools, one for 200 infants and another for 400 older children. In the event, it was decided so small a school would be uneconomic to build, and in 1891 Stallwood presented fresh plans for much larger complex comprising an infant school for 300 and a mixed upper school for 700, with a further block incorporating a cookery school and caretaker's cottage. Construction, carried out by Higgs & Son of reading, was completed in 1893. Around 1897, a manual instruction block was added at the northern end of the site. The school was used as a military hospital during first world war. In the late C20 a link block was built joining the two main buildings.

Proposal

Surveyors to Education were instructed by Battle Primary School to carry out a detailed condition survey of all external brick facades after prolonged issues of loose bricks falling from height which is now posing a major health & safety concern. Water ingress through defective brickwork is also apparent internally.

The report aims to clarify the cause of the defects and evaluates the facades overall condition and remaining life expectancy and recommendations for repair or replacement.

The existing school condition survey will be analysed in detail and used to support our findings to provide further independent advice.

The above condition survey covered all elements of the buildings and did not focus solely on the condition of the brickwork. The school have since carried out a more detailed analysis of the brickwork employing a specialist stone mason called Stone Technical Services. Their report has been included in this report.

A Summary of the project issues have been identified below;

- High level brickwork has perished due to general age and constant freeze thaw cycles. The brickwork is now starting to fall off the building from height
- Protruding brick gable parapets above the existing roof line are leaning and require repointing and tying back into the existing structure
- Approximately 30% of existing brick and mortar above and below the DPC line has perished allowing water to ingress into the internal fabric of the building causing damp walls, and blown plaster
- To replace brickwork and repoint brick facades categorised as condition D1 and C2
- To address urgent condition needs and prevent falling brickwork from height that could result in a potentially serious incident
- To protect the wellbeing of pupils and building occupants
- To repoint existing brickwork that has perished
- To ensure pupils can be taught in a safe damp free environment
- To provide structural stability of high level gable parapets
- Make the building fit for purpose as required by the Workplace health, safety and welfare Regulations.

Design

The works will be done by a specialist brickwork specialist and in accordance with the conservation officers advice and recommendations.

The listed status means any repair work undertaken must be carried out in strict accordance with traditional craftsman techniques satisfying the Local Council Conservation Officer. This would include lime mortar to colour match existing and old weathered imperial reclaimed brickwork.

Conclusion

Battle Primary School is a Grade II listed building constructed in 1893 comprising of traditionally built solid brickwork with decorative features include brick gables, cornicing, external semicircle arches, tall inset brick chimneys with decorative features and verged intersections between roofing levels. The building has generally remained in a very good condition throughout.

The school is currently experiencing major health & safety concerns as a result of defective brickwork that has perished and lost its adhesion with existing mortar. Brickwork is now starting to work loose and fall from height. This has been identified in photograph 5 & 6.

The slender decorative brick gables that protrude beyond the existing roof line are a concern as they are now starting to lean. Access is very difficult to ascertain their true condition without expensive scaffolding however, it is imperative this is checked by a structural engineer. It is envisaged this brickwork will require repointing and tied back into the existing structure using stainless steel straps.

As a result of constant freeze thaw cycles, differential movement has caused the facing brickwork to spall and blow the surface coating increasing the porosity of the brick. Over time further saturation has gradually deteriorated the brick and mortar resulting in the mortar no longer providing an adequate bond with the brick. This is more prominent to the high level exposed brickwork particularly to the parapets and brick gable ends.

The mortar has started to perish in numerous locations exposing more of the solid brickwork. This is allowing rainwater to penetrate deeper into the existing brickwork increasing its porosity. This is now starting to saturate the wall and damp walls are evident internally resulting in blown plaster and defective internal painted brickwork.

Approximately 70% of the existing brickwork remains in fair condition and should only require reactive maintenance in the next 5 years. We have categorised this as condition B3 in accordance with DFE grading criteria.

The remaining 30% of brickwork has suffered from extensive deterioration since the buildings construction 120 years ago as a result of high level exposure to the elements, general orientation of the building and low level brickwork below the damp proof membrane. The south and east elevations are showing the worst of the deterioration. We have categorised the brickwork condition as C2 for 10% and D1 for 20%.

These areas will require attention immediately to safeguarding the wellbeing of building occupants and prevent brickwork from falling from height imminently.

If no action is taken now further deterioration will occur and will put the school at risk of an incident occurring.

The school are constantly battling with reactive patch repairs and localised making good of the defective brickwork and this is increasingly becoming extremely difficult to keep on top of particularly repairing brickwork at high level as access will be costly utilising purpose constructed scaffolding.

Programming of work & impact on school

S2e have evaluated all key tasks and timescales associated with the project to ensure the project can be delivered by the end of March 2018. Key dates have been highlighted on the enclosed project programme.

- The project has been scheduled with the school to commence 24th July 2017.
- It is estimated the contract duration will be 12 weeks completing 13th October 2017
- The School have requested the project is tendered to 4nr contractors to ensure appropriate accountancy procedures and audit trails are adhered to.
- It has been agreed the school will not be occupied during the summer holidays in 2017 to enable the scaffolding to be constructed.
- Project will have little disruption on teaching once scaffolding has been erected
- All high risk repairs to be carried out at the start of the summer holidays
- Detailed project programme provided
- Contingency incorporated into project programme