

Design and Access Statement

On behalf of



University of Chichester, College Lane, Chichester, West Sussex PO19 6PE

In respect of:

Proposed works to carry out structural repairs to rat trap bond wall due to cracked and root/ tree bow infiltration and structural repairs to degrading flint wall in one area of our flint wall boundary on the western side of the Bognor Regis Campus PO21 1HR.

Date:

January 2017

Ref:

BRC_LRCW_Design and Access Statement

1.0 Introduction

1.1 This design and access statement has been prepared to support a Planning application submitted to Arun District Council to carry out proposed works to two areas on the campus. Proposal 1, is to structurally repair poor brick work and extend the LRC Annexe wall east by a maximum of 2.5m and return south towards the pathway a maximum of 3.5m.

Proposal 2, is carry out works to structurally repair degrading flint work in one area of our flint boundary walls on the western side of the campus.

1.2 This document is to be read in conjunction with drawings:

- 1.2.1 BRC_Wall_Site_Location
- 1.2.2 BRC_Wall_Site_Block
- 1.2.3 BRC_LRC_RTBLM method statement
- 1.2.4 BRC_FW_LM method statement
- 1.2.5 BRC_FW_Scaff plan

2.0 Site Analysis

2.1 The site is located on University of Chichester Bognor campus land to the east of the centre of Bognor Regis.



Proposal 1: LRC rat trap bond wall – North Elevation



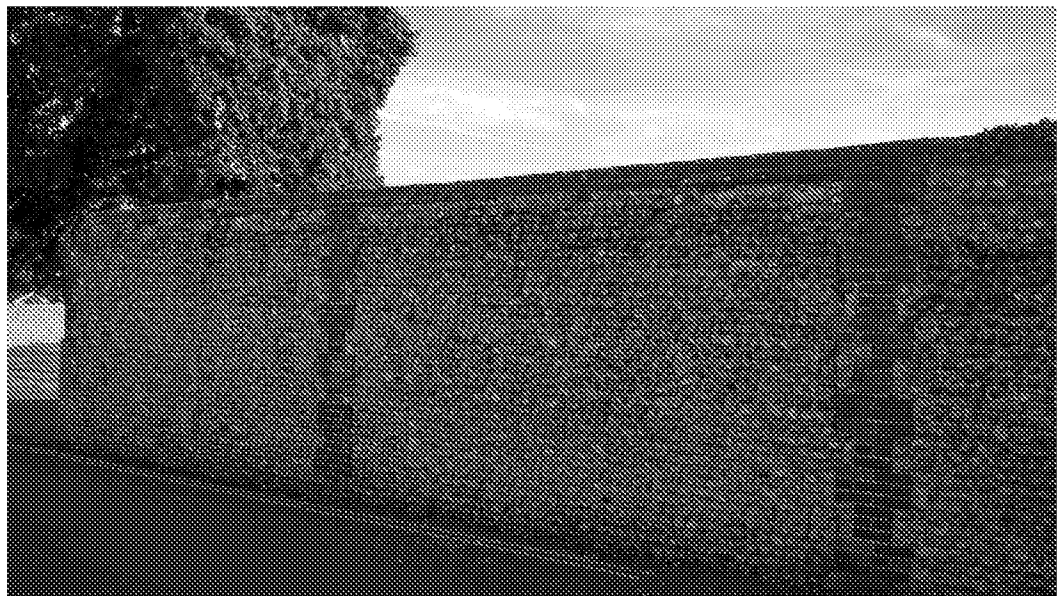
Proposal 1: LRC rat trap bond wall – North East Elevation



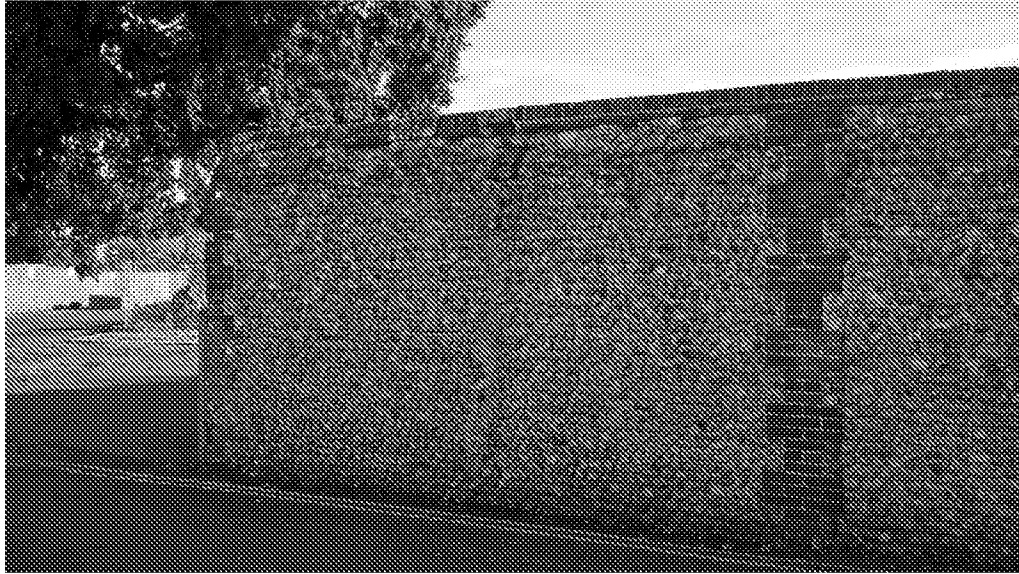
Proposal 1: LRC rat trap bond wall – North East Elevation



Proposal 1: LRC rat trap bond wall – South Elevation



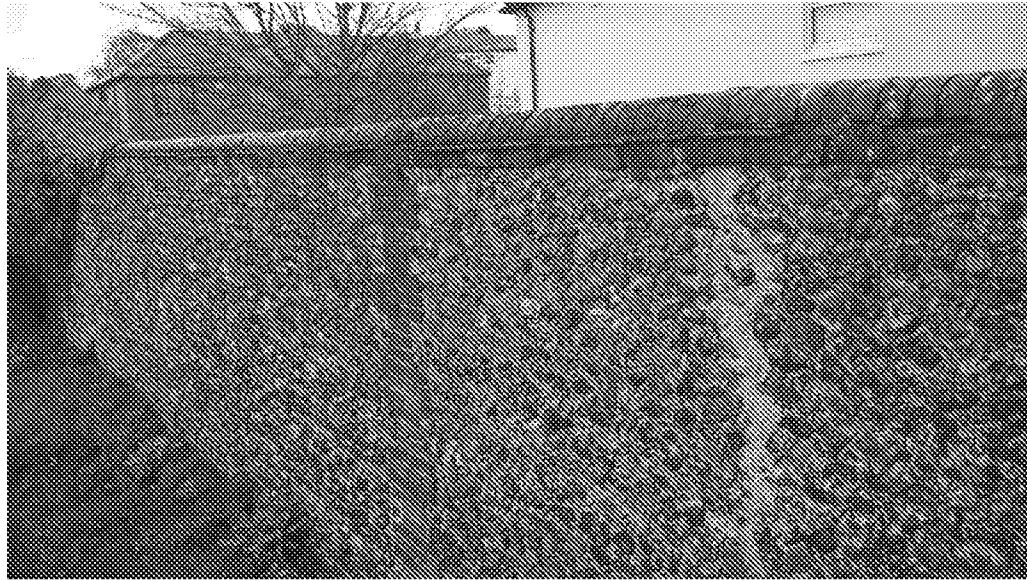
Proposal2: Boundary Flint Wall, From Mead Lane



Proposal2: Boundary Flint Wall, From Mead Lane



Proposal2: Boundary Flint Wall, From Campus



Proposal2: Boundary Flint Wall, From Campus



Proposal2: Boundary Flint Wall, From Mead Lane

2.2 For Proposal 1, the rat trap bond wall in question is situated towards the centre of the campus, next to the LRC/ Main Reception Annexe, accessed from the main carpark on campus off of Mead Lane, Bognor Regis.

The proposed area of wall can be accessed from the footpath from the main carpark off of Mead Lane leading to the LRC/ Main Reception. Root and tree box infiltration have broken apart the brick work and mortar with the walls load is now supported which is situated on the North side of the Bognor Regis Campus.

Proposal 2, is located on the boundary wall adjacent Mead Lane and can be accessed from the University's Mead Lane carpark also.

3 Proposals

3.2 As shown on drawings:

3.2.1 BRC_LRC_Wall_Site_Location

3.2.2 BRC_LRC_Wall_Site_Block

3.2.3 BRC_FW_Scaff plan

Proposal 1, is in conjunction with ongoing routine maintenance works that essential and urgent structural repairs to the rat trap bond wall to bring up to a state of repair and extend east by 2.5m and then return south 3.5m to meet the existing footpath. This is due to roots of an established fig tree effecting the structural integrity of the foundations causing heave and subsequently caused substantial cracking to the super structure of the wall, which is currently supported by two braces.

The lime mortar mix is to be sampled and analysed to ensure that the correct lime mix is used to keep with the existing (E.g. Ratio 1:3). The wall is to be taken down 2-3m from the eastern end corner and the south return section and bricks to be set aside for re-use.

Four pairs of mini piles are to be inserted, as advised after structural calculations, to support the existing foundations and provide suitable foundations for the new section of wall ensuring that the roots of the fig tree are undisturbed in the process.

The set aside bricks are to be re-used to construct an extension to the existing wall in rat trap bond style to match existing east 2.5m in length. The wall will then be returned 3.5m south toward the existing footpath in line to match with the existing wall located opposite. The construction of this wall will be using a trench foundation in keeping with the existing wall opposite the footpath alternating courses of brick stretchers and flint with similar coping stones.

Proposal 2, is in conjunction with ongoing routine maintenance works that essential and urgent structural repairs to the flint walls to bring up to a state of repair that can be managed. Within our proposal we will require scaffolding to be erected to access the highest points of the flint wall. We would require 1.2m wide scaffolding with appropriate traffic calming measures to be used to provide safety to the contractor but leave enough access (Min 4m width) to not obstruct the road users.

Once scaffolding erected, we propose that the top 5 to 6 courses of each flint wall panel need taking off and rebuilding removing coping stones and flints setting aside for re-use were possible and carry out remedial work to the lower sections of the panel as advised by the specialised flint mason as high risk areas.

We propose re-using the sound flints previously removed, bedding in the same mortar mix as stated previously in keeping with the existing wall.

The mortar mix is to be as close to existing as stated (For example Ratio 1:3 based on NHL3.5 hydraulic lime binder) but to be confirmed after mortar analysis undertaken in advance of works commencing.

4 Appearance

- 4.2 Proposal 1: The existing rat trap bond brick work including mortar is to be mixed and constructed in a like for like design as existing and agreed with the conservation officer so not to alter the look of the wall in anyway. A mortar analysis will be undertaken before works commence to ensure this. The mortar mix is to be as close to existing as possible as stated from the resulting analysis (E.g. ratio 1:3). The return 3.5m section of the wall will mirror the existing situated opposite the pathway with the alternating brick stretcher and flint courses (as below).



Adjacent wall to footpath, to be mirrored.

Proposal 2: The flint work including mortar to be made and constructed in a like for like design either finished in either flush or weather struck design as agreed with the conservation officer so not to alter the look of the wall in anyway.

A mortar analysis will be undertaken to ensure the mortar mix is to be as close to existing as possible as stated (E.g. Ratio 1:3 based on NHL3.5 hydraulic lime binder) to be carried out in advance of works commencing and agreed with the conservation officer.

We will also re-use sound materials where possible and have flint available on campus to use where required.

5 Conclusions

- 5.2 This application proposes two proposals for the Bognor campus; Proposal 1, the essential urgent repairs and replacement of sections of the LRC Annexe rat trap bond wall, to bring up to a state of repair and extend east by 2.5m and then return south 3.5m to meet the existing footpath.

Proposal 2, is carry out works to structurally repair degrading flint work in one area of our flint boundary walls to bring up to a maintainable standard on the western side of the campus.

- 5.3 We are proposing to re-use all suitable materials that are currently in situ and constructed in a like for like design for both proposals, including mortar mix once

analysis has been received for both areas, in order to not alter the appearance of the walls.

- 5.4 Visual impact would be in keeping with the campus and surrounding area and kept to a minimum due to the re-usage of materials.