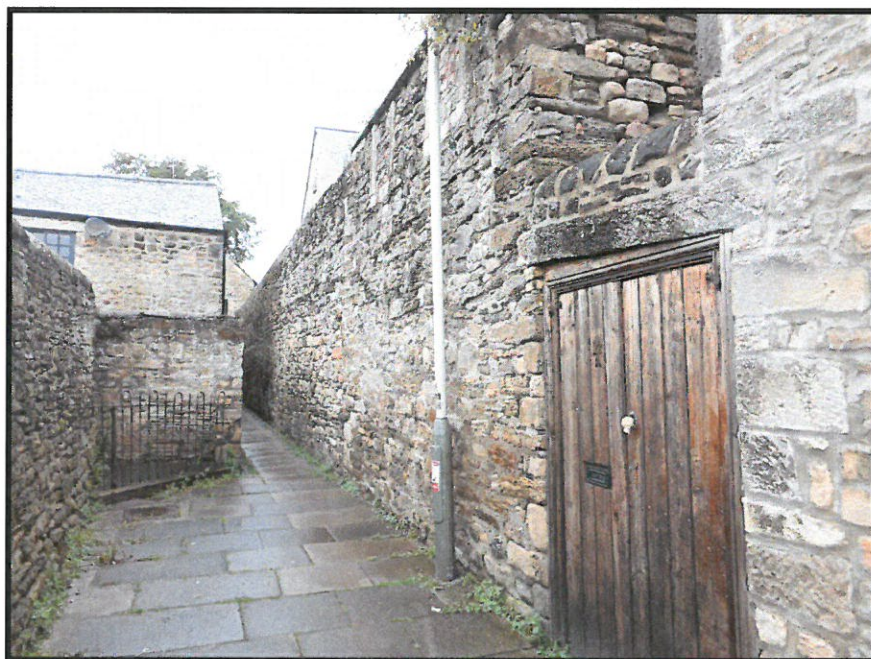


## Gloucester Place, Boundary Wall

Birch Road, Barnard Castle, DL12 8JA

July 2015



*Prepared By*  
Billinghurst George & Partners



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<b>Contents</b>	<b>Page No.</b>
<b>1.0 Introduction</b>	<b>3</b>
<b>1.1 Limitations</b>	<b>3</b>
<b>1.2 Brief Description</b>	<b>3</b>
<b>2.0 Observations</b>	<b>5</b>
<b>3.0 Conclusion &amp; Recommendations</b>	<b>9</b>

## **1.0 Introduction**

This report has been commissioned by Mr C Pearson of North Star Housing Group, Endeavour House, St Mark's Court, Thornaby, Stockton on Tees, TS17 6SA. Billinghurst George & Partners have been instructed to undertake an inspection of the western, stone boundary wall at Gloucester Place, Birch Road, Barnard Castle, DL12 8JA. The purpose of the survey was to investigate the structural condition of the wall in order to determine the extent of any necessary remedial works.

## **1.1 Limitations**

The survey has been predominantly visual. We have not inspected any parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the wall is free from defect.

The wall was examined from ground level, and accessible points around the site. No testing, or opening up of buried sections of the structure was made. Where such works are considered necessary to obtain better preliminary information this is indicated later in the report.

This report is not a comprehensive assessment of individual defects, but rather follows the brief, and is a document highlighting the major issues likely to affect the structure and stability of the wall. It does not involve an assessment of the steel supports, or the preparation of structural calculations.

Our comments on any causation of damage are based only on visual inspections that have been carried out at this stage and would be subject to review in the light of further information being made available at a later date.

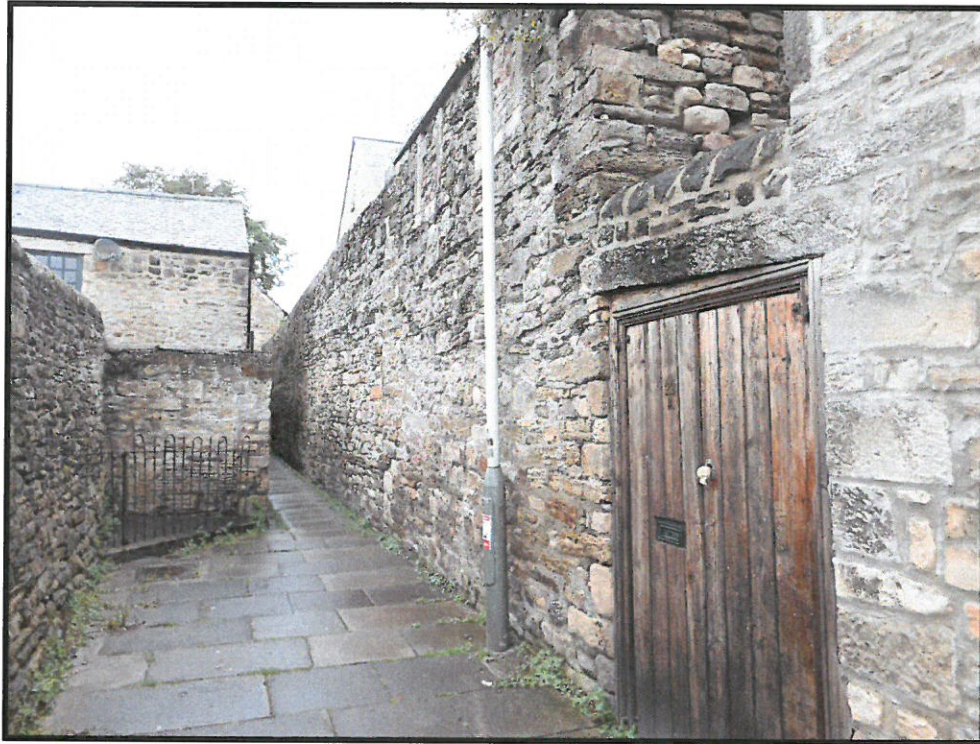
The report shall be for the benefit of the addressee only. We accept no liability to any other party who may seek to rely upon the whole, or any part of this report.

The inspection was undertaken on the 28<sup>th</sup> July 2015.

## **1.2 Brief Description**

The western boundary wall is constructed in random stone, which is generally in the region of 4000mm high from path level, and is approximately 500mm thick. The inner face of the wall has been provided with a number of 205mm x 205mm steel universal columns, which are secured to it, as a means of lateral restraint. There is a 500mm thick stone buttress to the inner face, near to the southern corner. It is clear, that the wall previously formed part of a building, that has long since been demolished, which is evident by stone dressings to window openings.





**Photograph 01 Showing a general view of the outer face of the boundary wall**



**Photograph 02 Showing a general view of the inner face of the boundary wall**



## 2.0 Observations

Generally, there was no evidence to suggest that any serious structural movement, leaning or bulging had occurred to the wall structure, which could have an effect on its overall stability.

The stone masonry is generally in a fair to reasonable condition, bearing in mind the period of time it has been exposed to the elements, and the standard of repair to which it has been subjected. Erosion of masonry and joints, unsympathetic repairs, and re-pointing in inappropriate materials and styles are the principal defects.



**Photographs 03 & 04 Showing eroded stone & typical deterioration of mortar joints**



The most significant area of deterioration to the mortar joints, occurs mostly along the upper 1000mm section of the wall. Deterioration was also noted to most sections of the wall, where previous openings have been infilled.



**Photographs 05 Showing typical deterioration of mortar joints to infill sections**

As seen from the garden area, sections of coping were either missing or displaced, which will no doubt have allowed moisture to penetrate and cause deterioration of the inner core material of the wall.



**Photograph 06 Showing deterioration of mortar joints to upper wall section**



Within the inner section of the wall, there are embedded timbers, which were presumably installed as lintels over previous window openings. These were noted to have decayed, resulting in some disruption of the support masonry above.



**Photographs 07 & 08 Showing deterioration of embedded timbers and disruption of supported masonry**



There is evidence of some slight movement to the outer section of the stone buttress, as evident by the diagonal cracking to the central section. However, we are of the opinion that this is most likely historic in nature, and unlikely to be progressive. Localised repair and repointing is all that is deemed necessary.



**Photograph 09 Showing deterioration cracking to stone buttress**



### 3.0 Conclusion & Recommendations

Based on our inspection of the issue highlighted to us, we are of the opinion that on the whole the wall structure appears to be in reasonable structural condition with no evidence of any significant defects that could affect its overall stability.

In respect of the necessary remedial works, we recommend the following:-

- Carefully taking down and rebuilding the upper sections of the wall as necessary. Include for consolidating the core.
- Replacement of decayed embedded timbers with new sections of stone to match existing.
- Repair of cracking to stone buttress. Rake out mortar to cracking, slate pack and repoint.
- Replacement of deteriorated stone as required.
- Rake out and repoint areas of walling as necessary

In respect of the mortar pointing, we are of the opinion that a lime based mortar be used. This should be an NHL 3.5, and coarse sand, 1:3 mix.

We trust that we have correctly interpreted your instructions and have accurately reported on this property; however, should you require any further clarification of any details, please do not hesitate to contact the writer.



A Crosby MRICS C Build E MCABE  
Chartered Building Surveyor  
For and on behalf of Billingham George & Partners