

Peter Wilmott

From: Peter Wilmott
Sent: 23 October 2018 18:02
To: Raymond Proctor
Cc: Martyn.white@arun.gov.uk
Subject: Bridge Club, Sudley Road, Bognor Regis -
Attachments: 20181023185532935.pdf

Dear Ray

I refer to my inspections at the Bridge Club in August and last Saturday October 20th when some modest invasive inspection was made with Builder assistance. I am pleased to confirm as follows my observations and advice.

By way of general background and description I am repeating below the text of my e-mail to you of 22nd August.

I refer to my preliminary visit and inspection at the Bridge Club which is a listed grade 11 building understood to date from 1837 and according to the listing built as Assembly Rooms. The front wall facing Sudley Road exhibits outward bowing which is a maximum at mid height and approximately mid length of the wall. The bowing is visible externally with the inside face appearing to retain verticality. This is symptomatic of a phenomena known as skin separation in which the outer section of the wall has lost bond with the inner section and is bowing outward as a result of its slenderness.

I surmise that the wall which is rendered externally and lath and plaster lined internally comprises a brick inner section and flint outer with a loose core. The core in such construction can break down and lose its ability to afford a bond between outer and inner parts of the wall and as such is an age related deterioration. All this needs to be confirmed by invasive inspection. The wall provides support to first floor and roof structures and at first floor there are two timber cased beams probably wrought iron which take support at the central pier conveniently near to the position of bowing. I have in mind that the stabilization of the outer skin of the wall can be effected by the installation of anchor ties fixed externally to pattress plates (subject of listed building consent) and internally to the two beams noted above. In conjunction with this I would look to tie the outer part of the wall to the inner using stainless steel ties of specialist manufacture e.g. CemTie as per Messrs Helifix Ltd Manufacture (<https://www.helifix.com/products/retrofit-products/cementie/>). The methodology of all this will be subject to further builder assisted investigation to identify the following -:

- 1. The nature of construction of the front wall.*
- 2. The degree of bow of the front wall.*
- 3. The detail of the two beams resting on the front wall and the condition of masonry at their front wall bearings.*

All the above will require exposure of one beam close to its front wall bearing, careful exposure of the front wall possibly at a window reveal and by local removal of a small patch of front wall render, and measurement by plumbline of front wall bow. More accurately the front wall elevation with its plumb and indeed plan layout of the front rooms of the building could be plotted by digital survey by a company such as Shaw Colegate (no connection to us) unless you already have plans and elevations. This would be information useful to any dealings with Arun District Council. The investigatory works will need to be carefully handled and may necessitate some temporary shoring work but subject to builder discussion.

The opening up works on Saturday comprised an exposure of the north side of the north beam bearing. This enabled the full depth of beam bearing to be seen and also the inside surface of the outer "skin". As a result of my inspection I have established that the wall is entirely flint construction and is built with an inside "skin" 225mm thick, an outside "skin" of flint rendered to external face and a rubble core. The bowing movement of the external face of the wall is indeed skin separation with the outer "skin" moving away from the core having lost its initial

bond. The inner "skin" is restrained by the steel beams (not of the same age as the building) over the Billiards Room which bear on this part of the wall and is stable. The appearance of bearings is satisfactory and the beams are of robust section. All this is shown on the attached sketch 30058/sk/1 and photographs. The stability of the outer "skin" is not satisfactory and there is a likelihood that the outward movement will be progressive leading ultimately to a risk of collapse. The period of time for this to happen cannot be predicted with any certainty and as a result I am advising that the skin is anchored to the steel beams in the manner shown on my sketch. This will result in two pattress plates showing on the face of the wall a restraint detail commonly employed in such situations. By copy e-mail to Arun District Council I am asking if this proposal can be treated as an essential repair to be implemented as soon as possible. I am aware that ordinarily works to a Listed Building would be subject of Listed Building Consent but the process required to achieve this would take some time. The access tower erected by your builder has been left in place and given approval to progress the works in the near future this can be used for the installation process resulting also in cost savings for the club.

In addition to the above there will be reinstatement works to replace all elements of existing construction disturbed by inspection and installation.

On completion of the two anchors the external skin will be stabilized. I would then advise that the CamTies or equal are installed on a grid to be agreed approximately 450mm centres vertically x 900mm centres horizontally. This installation would be to improve the overall anchorage of the front skin of the front wall and to achieve some core grouting. There would need to be some consultation with the tie manufacturer regarding installation in flint construction. If found impractical I would look at other options.

The installation of the ties will need to be carefully undertaken to minimize vibration disturbance to the wall. Whoever undertakes the work should submit a method statement for consideration and this would deal with normal responsibilities under the CDM Regulations 2015. You as client need to be aware of these regulations details of which can be seen on the HSE Website. I would expect to advise further in liaison with your builder so do not worry too much on this score.

Kind regards

Peter

Peter Willmott CEng;FIStructE
Consultant
Archibald Shaw
One Little London
Chichester
West Sussex PO19 1PP



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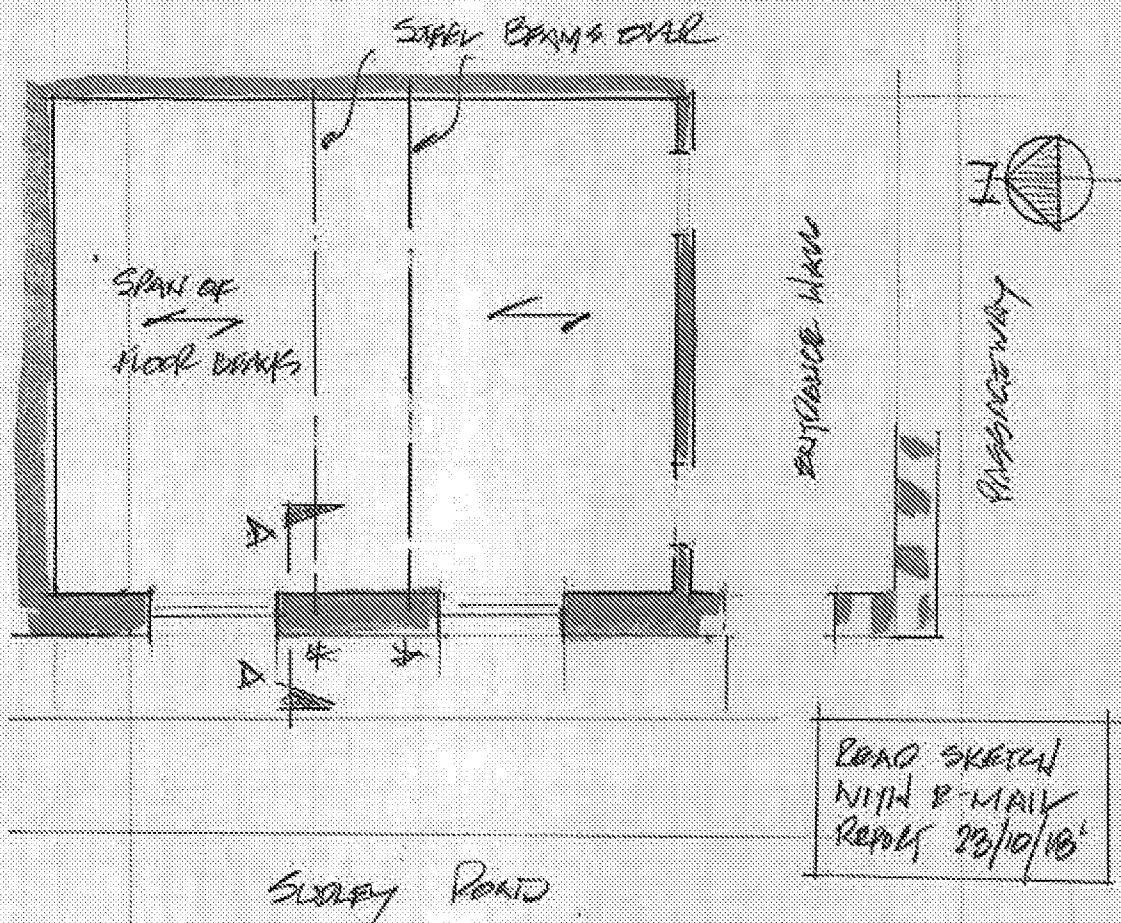
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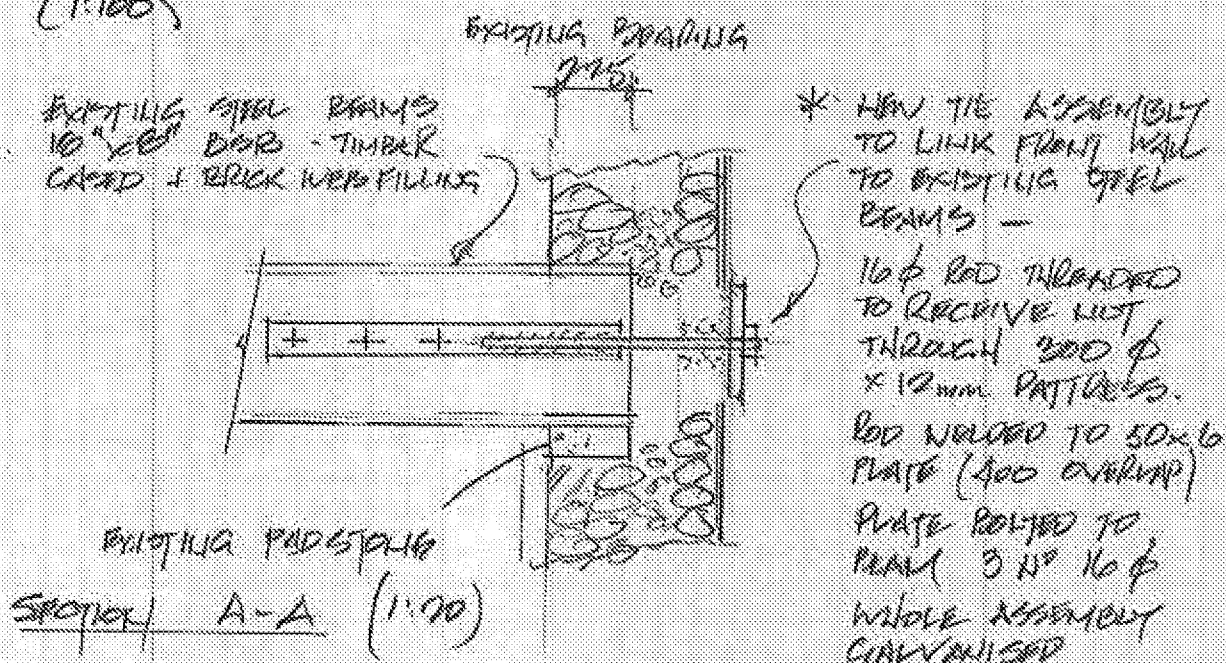
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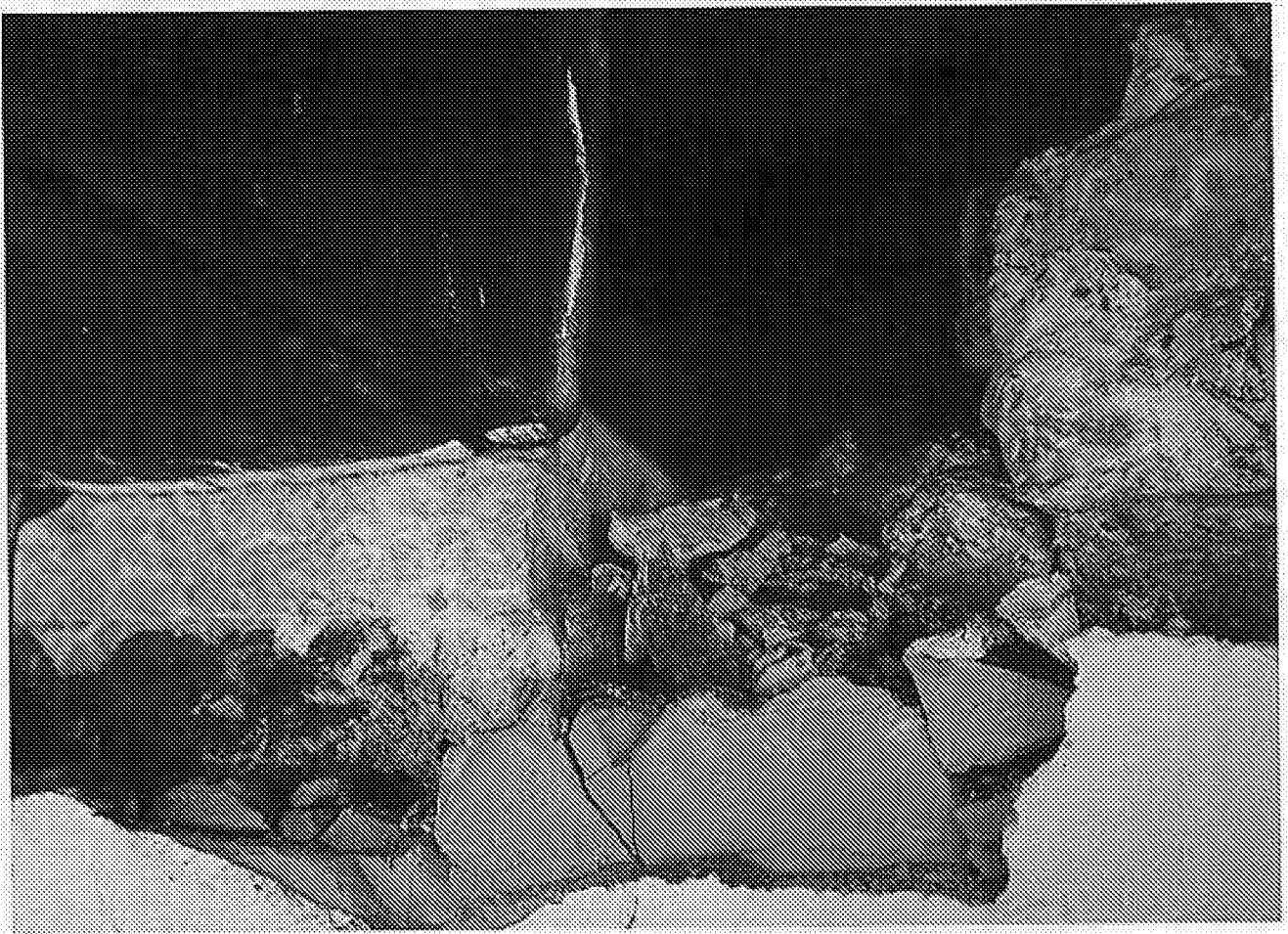
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Project No./Ref: 300582/SK/1
 Project: THE BOONOR CHOPS
 Section: FRONT WALL - REMEDIAL WORKS
 Prepared: RW Checked: Date: 07/2018 Time:



PART PLAN OF GROUND FLOOR - BILLIARDS ROOM
 (1:100)





Peter Wilmott

From: Peter Wilmott
Sent: 10 January 2019 17:41
To: Martyn White
Cc: [REDACTED]
Subject: RE: The Bognor Club Wall - Application for Listed Building Consent.
Attachments: Bridge Club, Sudley Road, Bognor Regis - ; 20190110180630844.pdf; 20190110181002887.pdf

Dear Martyn

Subsequent to your e-mail below the club have been negotiating with builders and have appointed ATA Brickwork Ltd to undertake the remedial works recommended by me. For convenience the first attachment above is my e-mail of 23 October 2018 being my report to the Club of the front wall bowing defect to which was attached my sketch details for repair plus photographs. This work is due to start very shortly. As your suggestion and in parallel with the works I now wish to seek regularization. The second attachment is my completed application. The form does not lend itself to work of repair only and I apologize if there are aspects of my completion which do not meet your needs. I have not completed section 28 "Ownership" and if you need this section by copy e-mail I would ask that the club deals with this. The third attachment comprises copies of record plans which the club were able to provide. These should cover location/block/detailed plan requirements coupled with my own sketch plan. I have marked on the elevation drawing the location of pattress plates.

The builder has not provided a separate method statement but I consider that my report does cover the essential needs. I can if needs be add to this. My report identifies the density of Cement installations which I would like. In the first instance the builder will trial 3 or 4 fittings as he is uncertain as to how easy it will be to carry out the works. The intent is that remaining ties will be installed to an agreed cost rate. If difficulties of installation are encountered I will consider alternative options. The primary wall restraint will be the pattress plates. These are a simple circular pattern which will be painted. I would select black colour but white could be adopted if preferred to blend with the render colour. The disturbances inside the building are indicated on my sketch and any reinstatement will be on a like for like basis. I expect that holes through the front wall to receive the tie rods will be minimal and any making good will be concealed. In view of current temperatures I would not be able to demand that this local infill is solely of lime mortar but in my opinion the localised nature of fill renders this matter as non-critical as regards compatibility.

Please come back to me if you have queries but meanwhile trust there is enough information to assist your review.

Kind regards

Peter

Peter Willmott CEng;FIStructE
Consultant
Archibald Shaw
One Little London
Chichester
West Sussex PO19 1PP



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From: Martyn White <Martyn.White@arun.gov.uk>

Sent: 08 November 2018 16:22

To: [REDACTED]

Subject: RE: The Bognor Club Wall

Good Afternoon,

Thank you for the email below, with the attachment. I note that as part of the email to Ray that you have included a recommendation to undertake the repairs to the above property.

Having reviewed the information, it appears that you would like to use CemTies or equal, along with patress plates on the front elevation of the property. Are you able to confirm how many CemTies would be required? As you note, such works will normally require the submission of a listed building consent application. If the works are of an urgent nature, you can undertake the works and submit an application at the same time so that the works can be regularised.

I hope that this is of assistance to you

Kind Regards

Martyn

Martyn White | Principal Conservation Officer, Planning Policy, Directorate of Place, Arun District Council | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF
Internal: 37717 | External: +44 (0) 1903 737717 | E-mail: Martyn.white@arun.gov.uk

Visit Arun's web site at www.arun.gov.uk



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