

Our ref: EJM/RLK/14891~03

14th November 2013

Mrs Claire Waters
Parish Clerk
Castle Heddingham Parish Council
25 Bayley Street
Castle Heddingham
Essex CO9 3DG

Dear Claire

RE: WAR MEMORIAL, CASTLE HEDDINGHAM, ESSEX

I was pleased to visit the above on 25th October 2013, when I undertook a brief structural assessment of the War Memorial and am pleased to confirm my findings as follows.

Brief Description

The War Memorial dates from 1921 (see photograph 1) and resides to the south east end of the churchyard on a direct access from the gate which leads onto Falcon Square. It is orientated to face towards the gate and thus with the front facing south east. Directional notations are taken in relation to this.

The lead cross bears onto a tall stone shaft dated to the early twelfth century with associated stone base, then residing on two square stone bases, the upper one being the memorial stone having carved inscriptions on three side to those whom fell in the Great War of 1914-1918. The stone shaft and associated base, is suggested as originally have been made to stand at Crouch Green in Castle Heddingham as a wayside cross and is of Barnack limestone. It was take down during the dissolution and for many years acted as a support in a Falcon Inn to support the floor over the cellar (information from Castle Heddingham Parish Council website).

Condition Assessment

The lead cross was briefly inspected from ladder access, although this was limited. The cross can be seen to lean to the SE in its height. It was not possible to establish the nature of the fixing between the cross and shaft head. We assume the lead cross will be hollow and fixed around an armature or possible a solid substrate such as timber (which we have seen elsewhere for lead elements). If timber this may have decayed hence the movement. In either case we consider it will be necessary to carefully release the cross and establish the fixing and constructions details and then re-set back in a vertical position. The actual condition of the lead appears good and thus only limited further works is envisaged.

The shaft has clear indications of a new section of stone at the head, which we assume dates to when the memorial was erected. The corners are chamfered to marry with the original stone below, but no attempt has been made to re-carve the motifs to the faces. This accords with good conservation practice where the later repair is readily discernible from the original stone.

The shaft plinth also has repairs to the top to both the SW and NE sides.

The memorial stone has carved lettering to three sides, with the rear face being blank. The lettering is difficult to decipher and we understand that previous treatment to clean including grit or sand blasting, which possibly caused damage or removed the face of the stone leaving a more vulnerable surface prone to decay. Inside the church is a further memorial to the fallen, and thus the names can be established from this source.

To the underside of the memorial stone between this and this base stone, it was noted that there was a slate packing course. This may have been used as a method of levelling, or perhaps acts as a damp proof course to help reduce the effects of rising damp.

The base stone is in reasonable condition, although to both this and the memorial stone racking out and re-pointing of the joints is required.

A trial hole was excavated to the NE side, i.e. where the settlement or subsidence has taken place. This exposed a rough concrete foundation, projecting marginally from the face of the base stone course, and at approximately 280mm depth. We assume this repeats around the structure.

Looking generally around the churchyard, it seems likely that the position of the memorial probably overlies burials. As burials generally have loosely compacted backfill they are prone to further settlement under load, or indeed wooden coffins can collapse in with time and decay. We suspect that this is the cause of the leaning of the memorial, although this could only be proved with extensive excavation which is not necessarily warranted.

Conclusions and Recommendations

It is indicated that the out of plumb movement which has occurred is progressive in nature. We could only prove this with a period of monitoring. This would be by checking verticality of the shaft, although this would need to take into account the tapering nature of this, or alternatively by checking the top of the memorial stone course in its length with a spirit level.

However based on the conditions seen, and as the memorial is probably underlain by previous burials, it seems quite likely that future movement will occur. Therefore foundation strengthening is appropriate to help reduce this risk. We consider that the most appropriate solution would be to use piles to each corner and then with an edge beam to the sides fixed into the concrete and then itself concreted in (see attached sketch). This would avoid deep excavation with the likelihood of conflict with burials. We do not recommend trying to correct the out of plumb.

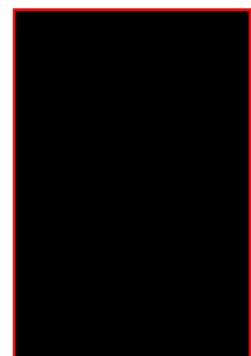
For the memorial itself we suggest a conservator should visit and provide a report, however we anticipate the following outline scope of works may be required:

- Removal of lead cross, checking of construction, minor repairs and installation of new fixing detail;
- Cleaning of memorial following trial sample areas, but assumed to be JOS of DOFF or Thermatec system;
- Re-pointing of all joints to stones and between layers;
- 'Nipping' back of slate course below memorial stone and pointing over.

With regard to the memorial inscription, we do not consider it practical to reinstate the lettering without cutting back and installing a new face. Some improvement may be possible by highlighting with thin pigment washes to the background and odd repairs. However in addition we suggest consideration is given to installing a new cast bronze plaque to the rear face re-recording the names and by reference to the memorial within the church.

With regards to budgets costs we anticipate the following and which has been assisted by discussions with Simon Swann Associates (conservators) and Geo-Structural Solutions:

Foundation works (a budget of [REDACTED] has been received but excludes welfare whilst on site, so has been rounded up – costs from Geo-structural)
 Archaeological watching brief (if required)
 Scaffold
 Conservator's Report
 Cleaning (assumes power source would be available)
 Repairs and re-instatement of lead cross (provisional based on 4 man days)
 Re-pointing etc. (4 days)
 Pigment washes to background to script and odd repairs (4 days)
 New Bronze plaque
 Professional Fees
Total



Please note the above figures do not include a contingency which we would normal suggest at 15%, which allows for unknown elements or further discoveries following the conservation report or during the works. This would increase the total cost to [REDACTED] The costs do not include for the bronze plaque which would need separate costing.

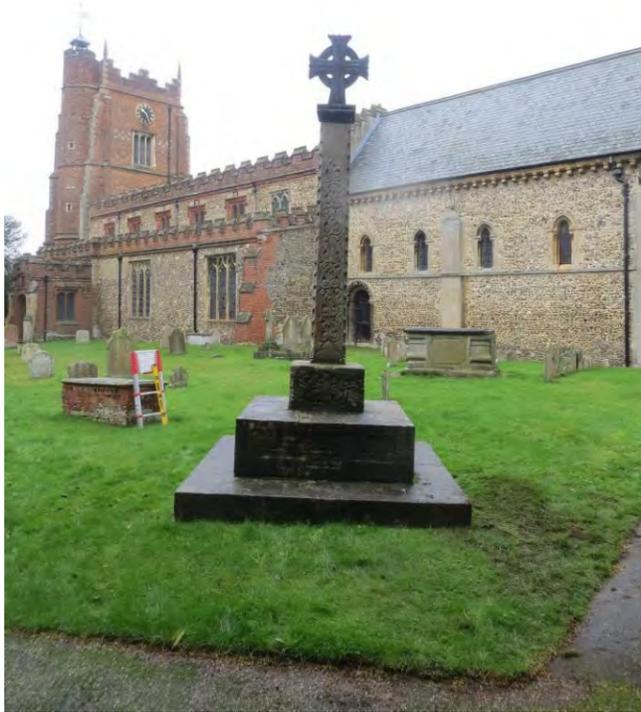
Please do not hesitate to contact me if you have any queries of wish to discuss.

Yours sincerely
FOR THE MORTON PARTNERSHIP LIMITED,



EDWARD MORTON

Encls



Photograph 1: SE Elevation



Photograph 2: SW Elevation



Photograph 3: NW Elevation



Photograph 4: NE Elevation



Photograph 5: SE Elevation Lead Cross



Photograph 6: SE Elevation Shaft



Photograph 7: SE Elevation Shaft plinth



Photograph 8: SE Elevation Base Stones



Photograph 9: SW Elevation Lead Cross



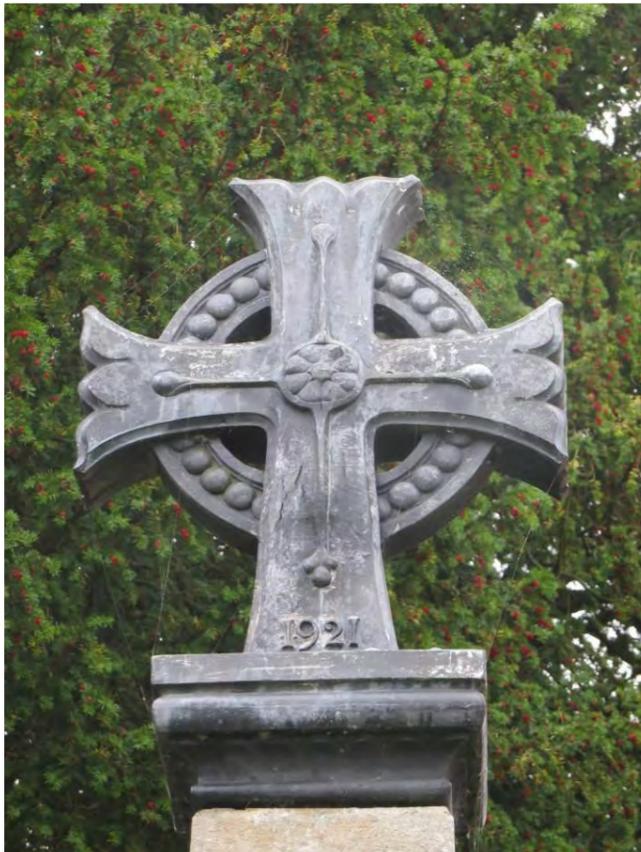
Photograph 10: SW Elevation Shaft



Photograph 11: SW Elevation Shaft plinth



Photograph 12: SW Elevation Memorial Stone



Photograph 13: NW Elevation Lead Cross



Photograph 14: NW Elevation Shaft



Photograph 15: NW Elevation Shaft plinth



Photograph 16: NWSE Elevation Base Stone



Photograph 17: NE Elevation Lead Cross



Photograph 18: NE Elevation Shaft



Photograph 19: NE Elevation Shaft plinth



Photograph 20: NE Elevation Memorial Stone



Photograph 21: Repair to shaft head



Photograph 22: Repair to shaft head

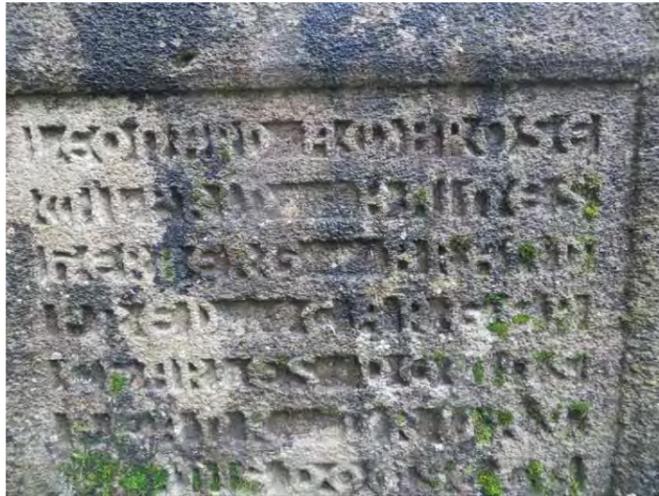


Photograph 23: Repair to shaft base



Photograph 24: Repair to shaft base





Photograph 25: Eroded script to memorial stone



Photograph 26: Slate below memorial stone



Photograph 27: Memorial stone script



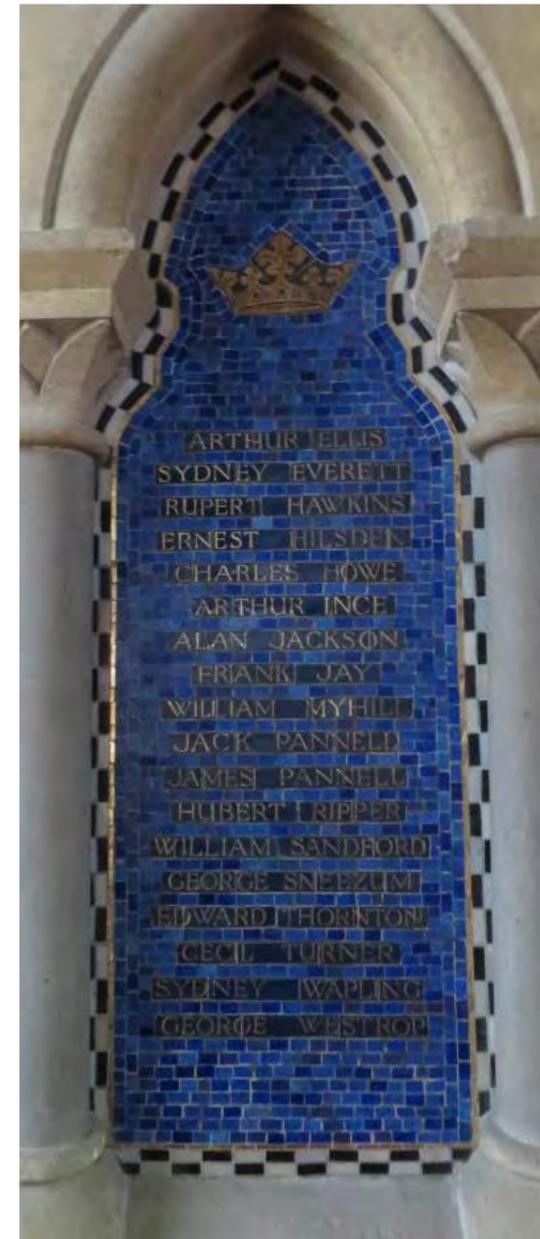
Photograph 28: Memorial stone script



Photograph 29: Memorial inside church



Photograph 30: Memorial inside church

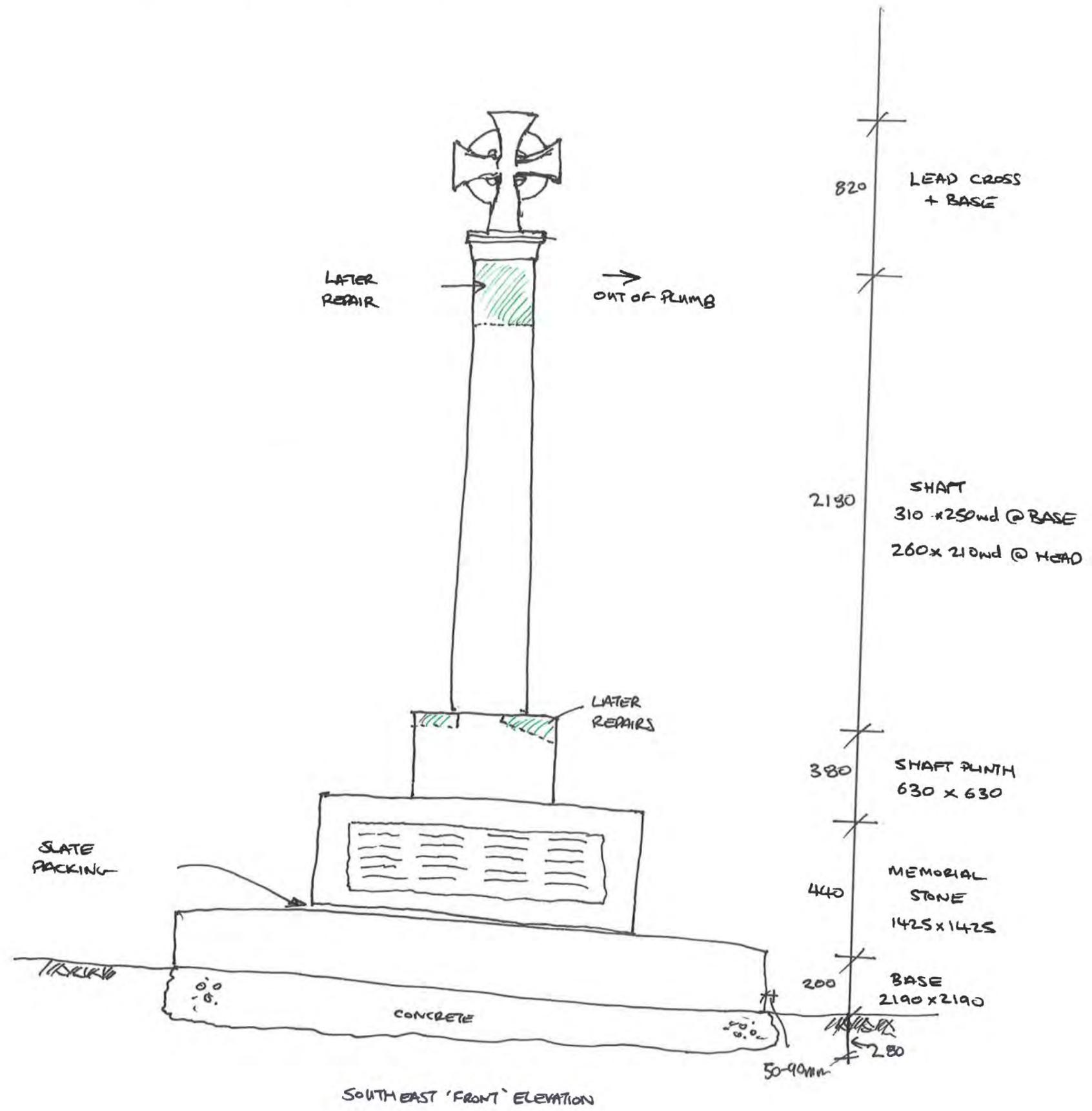


Photograph 31: Memorial inside church



Photograph 32: Memorial inside church

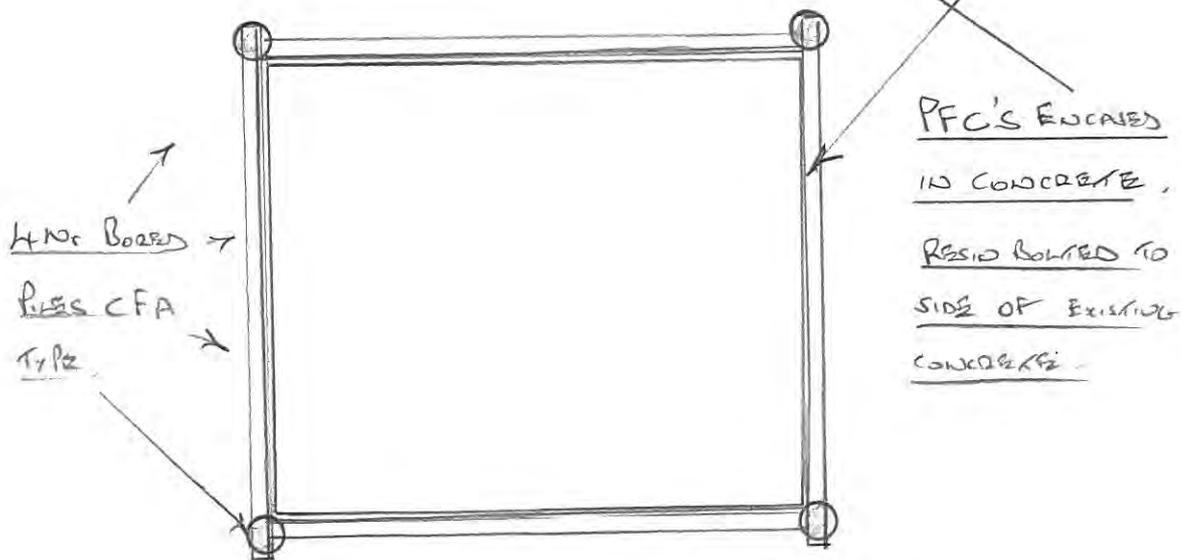
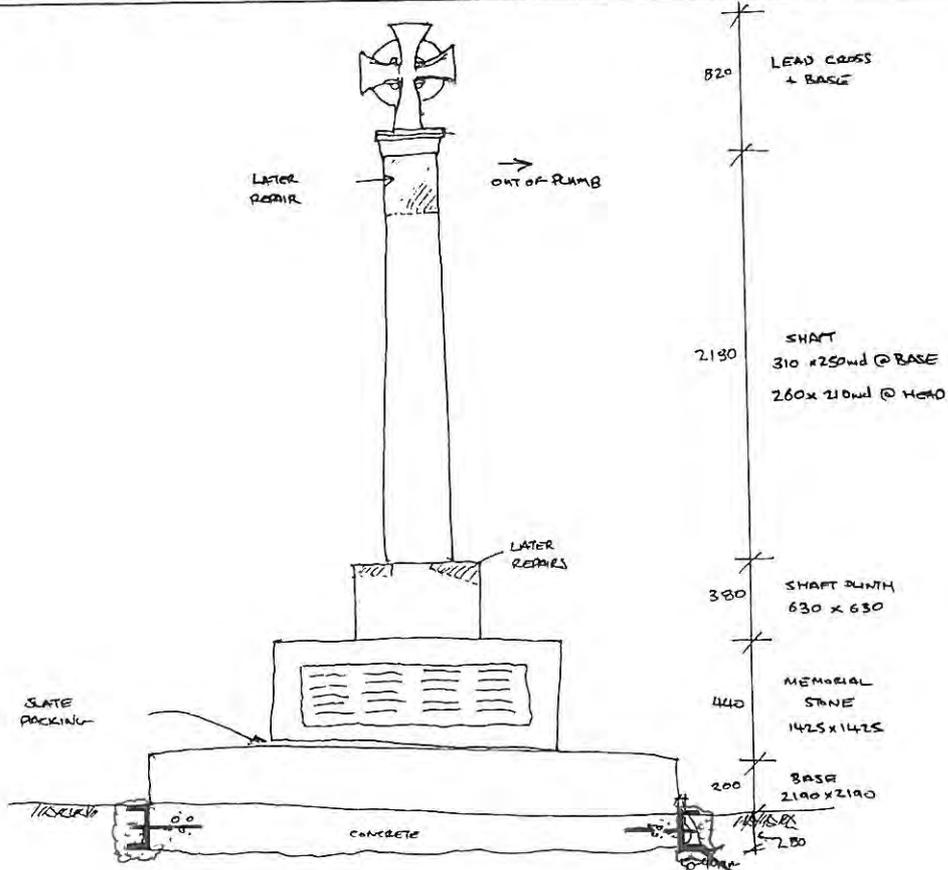
WAR MEMORIAL, CASTLE HEDINGHAM





Geostructural Solutions Ltd Sketch Sheet

Date: Nov '13	Job No:	Ref No: SK 1	Scale: NTS
Eng: TR	Checked: AP	Rev: -	
Project: CASTLE MESSINGHAM		Title: WAR MEMORIAL	



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