

**Town Clerk | Swaffham Town Council**

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**From:** Jeremy Stacey <jsarch@mac.com>  
**Sent:** 05 June 2019 14:46  
**To:** Town Clerk | Swaffham Town Council  
**Cc:** Paul Quinn  
**Subject:** 177(01.0) Buttercross  
**Attachments:** report-to-town-clerk-19-06-05.docx; report-to-town-clerk-19-06-05.pdf

Dear Richard

Following my inspection of the Buttercross this morning with the contractor and your works manager I attach in word and pdf format my comments with regard to the email 4 May from Councillor Edwards addressed to your office.

Please let me know if you require any further information.

Regards

Jeremy

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*Councillor Edwards: Documents.*

*I also attach a few examples including one from Marshalls a major manufacturer of paving products and standard drawings from Luton Council on laying granite setts. Quite why your architect did not produce such comprehensive documentation for work on a Grade 1 listed building is not at all clear.*

*You will see that the joints should be 15mm up to a maximum of 30mm the difference depends of the shape of the setts, these are not ever perfect and it is in consideration of this imperfection that the tolerance of the joints arises, nothing more. This is repeated in other documents that are attached but suffice it to say this is normal good trade practice and in the case of Luton Council a requirement.*

Whilst we have specified Marshalls many times and they are a very good supplier of stone products, the specification and drawn examples from Marshalls and Luton Council are relevant to new work they are not relevant to working on an historic building.

For example cement and concrete is specified, generally all work on historic buildings should where ever possible be cement free.

The documents provided by Marshalls suggest a 1:4 cement sand mix and those from Luton Council an even stronger 1:1/4: 3 cement hydrated lime sand mix. These mixes are not suitable when working over an historic sub-base which will flex with the seasons.

Please note that hydrated lime stated in the Marshalls specification above is not the same material as the lime specified for this project.

*Councillor Edwards: Architects instructions.*

*4.4 refers to ".....(Pointing) finished by tamping with the Churn brush....." I have never heard of such a brush but it has had the unfortunate consequence of leaving depressions in the surface finish in which will collect water which will freeze and in my opinion be harmful to the long term life of the weak lime mortar pointing.*

The use of a churn brush, a stiff brush with a short handle available from most builders merchants, is a standard and well recognised method of finishing pointing on historic works.

Lime mortar, unlike cement, takes time to harden. We did initially consider using NHL5, a strong lime mix, but following discussion with Breckland Council, we reverted to NHL3.

*Councillor Edwards: 5.5 refers to ".....A recess of 5mm for pointing from the edge of each cobble....." no width is stated.*

The width of the joint is not relevant to this architects instruction. This instruction confirms COI 5.5 dated 29 October 2018 which followed a site visit by Breckland Council. At the site meeting the 5mm recessed sample, one of a number of sample panels of lime mortar pointing, was chosen.

*Councillor Edwards: 5.14 refers to leveling the cobbles around the Butter Cross.*

As with the above instruction the width of the joint is not relevant here. This instruction confirms COI 5.14 dated 29 October 2018 and relates to small areas of cobbles that were to be raised and re-laid flush with those adjacent in the same place.

*Councillor Edwards: Specification.*

*Items, 10,11,16,17 refer to setts but whilst the bedding is described the width of the pointing isn't*

The width is not included here, sample panels of cobbles, stone paving and stone slabs were prepared for discussion with Breckland Council, once agreed the work continued on the basis of the agreed sample panel.

*Councillor Edwards: Item 30 refers to work in cold weather which is prohibited when the temperature drops below 7deg but I believe such work may have been carried out during such times to the possible detriment of the work. Certainly there are already signs of breakdown to what appears to be excessively width pointing, if indeed it can ever be described as pointing.*

Towards the end of the contract it was necessary to carry out some work in conditions that were not ideal. Whilst one could have delayed the works to the following April the disruption to the Town would have been considerable.

Following an inspection today, 5 June 2019, with the contractor and the Town Council Works Manager, the pointing and areas lime infill were inspected using a new stainless steel flat head wire nail. Whilst there were a few areas that were damaged by frost in general the lime mortar was found to be hard and sound. A record was made of areas requiring repointing and a time to carry out this work will be agreed with the Town Council.

*Councillor Edwards: Item 35 refers to ".....Neat junctions of regular joint width with adjoining paving....." and later ".....Even overall appearance with even joint widths....."*

This specification refers to pavings which have been correctly laid.

*Councillor Edwards: So regrettably whilst the general specification is in my opinion short of the required detail it is nonetheless clear on the overall concept of the standard that was required and this in conjunction with technical material and good trade practice should have produced a more or less satisfactory result.*

Ideally specifications for work on historic buildings should be short and to the point such that the tradesman involved has scope to carry out the work leaning on and learning from the memory of tradesmen who have worked on the site in the past and generally matching that already extant. This may not be of the appearance expected when using new materials.

It is worth noting that Breckland Council Historic Buildings Officer praised the work carried out on this project and in particular gave praise to the contractor's tradesmen.

*Councillor Edwards: Architect.*

*I presume the architect was instructed to supervise the works and at the end certify that the works have been completed in accordance with the contract documents and the contractor could be paid having fulfilled his obligations under the contract.*

The standard form of appointment of an architect does not require the architect to supervise the works. The contractor has fulfilled his obligations and given the date of the practical completion certificate will in fact be attending certain items earlier than the contract rectification period date.

*Councillor Edwards: The question then is why did the architect sign off this work, work that would appear to be substandard, why did he not condemn it and make the contractor replace what appear to be the excessive "Lime paved areas" they can hardly be called "Pointing to form joints". Weak lime would not appear to be suitable for paving as can be seen by it's present failure.*

The standard form of appointment does not require the architect to sign off the work. A final certificate is issued once the final account has been agreed and following any work required during the contract rectification period, we are not yet at this stage in the contract.

The work was carried out to a high standard as noted by a registered member of the Institute of Historic Building Conservation, the professional body whose members have the necessary experience and qualifications to comment and make knowledgeable and considered responses to the historic work in hand.

To conclude, the inspection today found the lime mortar pointing to be generally sound and hard. Small areas were noted and recorded as being hollow or frost damaged and these are being addressed by the main contractor.

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