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The Parochial Church Council of the Church of St Martin,
Coney Street
C/o Mr. & Mrs. Anthony and Margaret Hammersley
5 Maplehurst Avenue
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December 24th, 2021

RE: ST MARTIN'S CHURCH, CONEY STREET, YORK- JOHN KENDALL MONUMENT

Dear Mr. and Mrs. Hammersley,

We carried out an initial investigation into the condition of the John Kendall Monument in St Martin's Church on January 22, 2019. The findings from this initial investigation are detailed in our Report, dated February 5th, 2019.

At this time, we determined that the entire monument was riddled with embedded wrought iron cramps and armatures which were rusting, placing pressure on the very finely carved monument as a result. The monument was therefore in danger of collapsing. We recommended to dismantle the monument, to extract all of the embedded wrought iron and create a new backing plate to receive a newly designed stainless-steel armature which would support the cleaned and repaired monument. This way the monument would be supported by the armature and backing plate rather than the medieval wall.

Based on this evidence, we were then invited to carry out the dismantling of the monument and careful transportation of the elements back to our workshop, which led to a more detailed investigation of its condition. The process of dismantling the monument and subsequent recommendations for repair were detailed in our second Report, dated July 26th, 2019.

In short, the entire monument was carefully taken down, numbering each stone and fragment, and recording the condition of all items. We had to cut some of the embedded wrought iron armatures in order to dismantling it carefully, exposing further micro-cracks. This work re-enforced the decision to carry out a complete dismantling as the monument was in a more fragile condition than anticipated.

All of the numbered pieces were carefully packed and transported back to our workshop where further assessments took place with the Architect, David Sheriff, and the Client. A couple of repair options were established and offered to the Client, based on the findings to date and further recommendations by the Architect.

Work was carried out in line with our itemized Quotation, dated July 26th 2019 and in consultation with the Architect as described. We omitted the complete shelter-coating of the monument as recommended by the Architect. However, some of the monument surfaces were so fragile that we had to apply a very light limewash in very isolated areas in order to consolidate the surface of the stone. The agreed conservation and repair work, and subsequent re-fixing, of the monument can be summarized as follows:

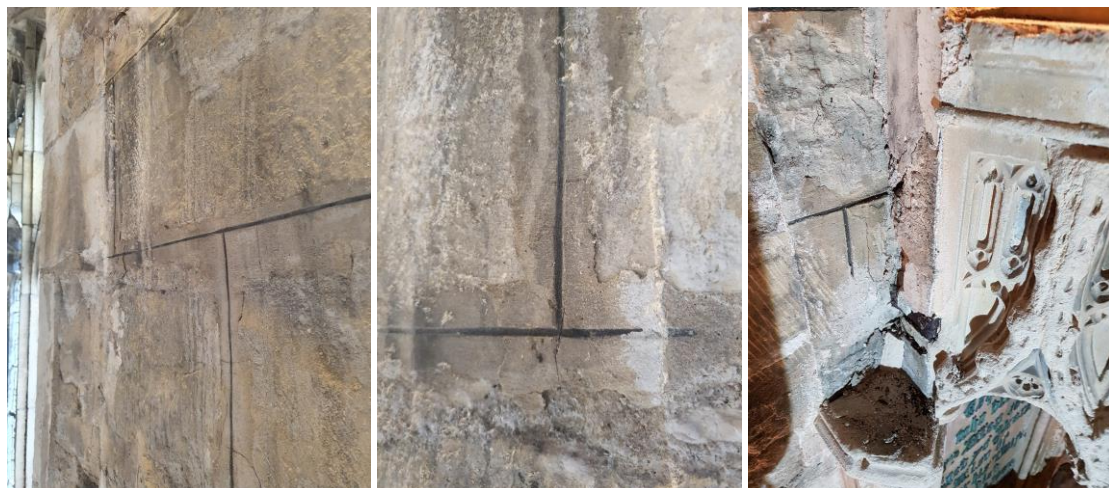
1. We removed all of the iron cramps by gently micro-drilling around them. When excavated, it became apparent that the wrought-iron armatures were completely over-sized, and for this reason some components of the monument were made quite weak when it was originally made.



2. We are quite confident that all of the fixings are original and that the monument was placed in its current position when it was first made. Some of the fixings in the wall of the church were poured with lead. All other fixings on the monument were lime-mortared with a high gypsum content. Further, the plaster remaining on the back, behind the monument, appears to be in line with the date on the plaque.
3. We cleaned the mortar off of every stone and fragment, and we found old setting-out lines from when it was made, which was very interesting.



4. As the monument was mortared directly to the church wall, and the church wall appeared to be very wet for extended periods in previous years, the monument most likely absorbed a lot of the embedded salts in the wall, as clearly seen on the original scored and painted joint lines.





5. In short, the monument was loaded throughout with salt- which also resulted in heavy surface erosion. But some of the salt, when dried out within the cracks caused by rust jacking of the wrought-iron, grew and further accelerated the monument's decay. This indicated to us that this cracking and salt ingress has occurred over a long period of time.



6. We mechanically removed some of the salt crusts using wooden spatulas and fine dentistry equipment.
7. Following the mechanical removal of salt, we poulticed some of the heavily loaded pieces in order to remove additional salts where possible. For example, the plaque had very heavy salt build up around the metal letters, and it was meticulous work to remove the salt in these areas- but the result is that the letters are now visually distinguished from the background, and the monument is now legible.



8. The monument had been subjected to light repairs in the past, clearly carried out by untrained individuals, which resulted in build-up of plaster on the corona, filler of unknown substances in open cracks on missing areas. All of this work was removed.
9. We started consolidation of the monument with nano-lime, E25 and E50, and used sheltercoat on top of the mortar repairs in some areas. Some of the stones were shattered in places under the pressure from the rust and salt, and all of these pieces were pinned back using, in some instances, resins and lime paste as well as stainless steel cramps and pins, varying in size.
10. The corona had approximately 40% of original material missing. We casted areas of the existing, cleaned elements to reproduce the missing parts in Herculite plaster. These pieces were then shaped to match the existing, broken, remaining items. No original material was removed.



11. We started re-assembling the entire monument on the three, custom-made back plates, re-using existing holes where possible to safely connect the monument to the back plates with stainless steel fixings. The back plates were made using Hillhouse Edge sandstone from Holmfirth as agreed. From the bottom, the angel is self-supporting on three downward-directed pins. It is worth pointing out this this entire repair/conservation project began when the angel fell from the monument.



12. The bracket above the angel has two large stainless-steel flat bars embedded at the top and fixed into the back plate as well as two downward facing pins in the centre of the bracket. This is the most structurally important piece as the rest of the monument would have sat on it, but unfortunately, as the previous fitting was grossly over-sized, the entire stone bracket was hollowed out on the back in order to receive this original fitting. We filled all of these holes using plaster in order to regain some stability within this piece.



13. Above this, the shelf with two hanging corbels- which was cracked in the middle- was fitted together with two stainless steel cramps. The two hanging corbels had embedded steelwork which we removed and replaced with stainless steel. All of the carvings on this piece were heavily eroded due to salt ingress as described. All of the loose pieces were removed, cleaned and repainted with a yellow foundation paint above which was painted gold-leaf- to match the existing.





14. All stones above this section, included bases, jamb stones, the lettered memorial plaque were fitted with stainless steel cramps going through the back plates in order to stabilize their fragile condition. All pieces were fitted using lime mortar and Herculite plaster. Light limewash was applied to some areas in order to consolidate the surface. This limewash will also be sacrificial in order to take further embedded salt within all of the stones and consolidate deeply embedded fractures.
15. The corona itself was in a very bad condition and, again, the bracket below was heavily pierced with over-sized steelwork in order to stop it from toppling over as this stone has only 4 points of contact to the base stones. We repaired the entire corona, which was broken into 8 pieces, with stainless steel pins and using modern resins, plaster and lime mortar. We casted the fine fretwork on the upper left-hand side using the right-hand as a mould. These cast pieces were then shaped to fit perfectly around all existing stonework. In order to unify and bring the colours together, a very light limewash was applied to the corona top. The corona itself was fitted with five anchors, hooked into the back plate. All of these receiving holes were prepared in our workshop. Some of the stainless-steel hooks work by gravity alone. These fittings are far less intrusive, and much more sustainable, for the future of the monument.



16. All of the three back plates were fitted with brackets below, steel plates with thorns for the top and bottom, and the steel plates went into the existing, old holes of the old wall- but two, new holes had to be drilled on the top of the monument in order to receive brackets to the third plate securely into place. These eight steel brackets and plates were resined into the wall in order to secure the monument.
17. The monument itself is slightly leaning back in order to follow the slight tilt of the wall, but we made the monument quite flush at the base and slightly proud at the top so that all of our mechanical stainless steel fitting could be fitted through the sandstone plates and so that, most importantly, the existing wall plaster with the coloured in joint work is preserved. This fixing also now allows the monument to fully dry out on the reverse and therefore not receive any more moisture from the wall as air can flow freely between the wall and backplate.



We think the monument now has a durability to its structure and that the cleaning and repair was very successful. The new stainless-steel fixings and airflow behind the plates should keep this monument in a secure and stable condition for a long time.

Finally, with the pandemic and resulting lockdowns, this project did extend over a period of time- and we regret that we were unable to carry out this important work in a timelier fashion. However, your patience allowed us to attend to the work as and when we were able to give it the care and attention that such a complex project required.

Kind regards,

A handwritten signature in black ink, appearing to read 'Matthias Garn', written in a cursive style.

Matthias Garn