MONUMENTS TREATMENT REPORT ST MARY MAGDELEN FIFEHEAD

Treatment Report
Conservation Programme to Monuments
St Mary Magdalen, Fifehead, Dorset

1315

July 2018

SALLY STRACHEY HISTORIC CONSERVATION

Revision

Date	Revision	Comments
	1	

Quality Assurance Review

Prepared by: Sally Strachey ACR

Signature

Reviewed by:

Signature

Date:

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Contents

1. Image List

2. Location

Name	Church of St Mary Magdalen, Fifehead Magdalen
Address	Fifehead Magdalen, North Dorset, SP8
County	Dorset
District	North Dorset
Parish	Fifehead Magdalen
DAC	
Church Building	
Designation	Grade II
Listing Date	14th June 1984
Historic England Source ID	1171327
English Heritage ID	102672
Contract Administrator	
Surveyor	Philip Hughes
Address	Philip Hughes Associates
	Tout Hill, Wincanton, Somerset, BA5 9DL
Tel:	01963 824240
Email:	info@pha-building-conservation.co.uk
Client	PCC St Mary Magdalen, Fifehead Magdalen Rosemary Redwood
Monuments	
North Chapel	
North Elevation	Sir Richard Newman Bart 1721 Wife - Frances 1730 Son- Samwell 1747 Daughter – Frances 1775 Daughter- Barbara 1763 Daughter – Elizabeth 1774
East Elevation	Thomas Newman 1649 Son- Richard Newman 1664
West Elevation	Richard Newman 1683 stone tablet recording transfer of coffin 1772
Nave	
North Elevation	George Davidge 1772 Wife- Joan1759 Son- John 1744 Hester- 1758 George- 1772
North Elevation	William Mansell Peacock 1811
South Elevation	Royal Coat of Arms Late 18th century
Chancel	
North Elevation	The Rev Edward Peacock MA 1848
North Elevation	Anne wife of the Rev Edward Peacock MA 1832
South Elevation	The Rev Henry Forester MA 1819

The 2018 Treatment Report should be read in conjunction with the 2016 Outline Condition Assessment and Conservation Recommendations by Humphries and Jones

3. Contract Brief Including Reference to 2016 Report

In August 2016 the PCC of St Mary Magdalen Church, Fifehead Magdalen commissioned a condition and recommendation report on the internal wall monuments and Royal Coat of Arms. Concern had been raised in relation to structural cracking, surface deterioration and loss to the Richard Newman and Davidge monuments. In addition, the overall appearance of all the monuments and Royal Coat of Arms had been diminished due to surface soiling, accumulations of dust and debris and reduced legibility of the inscriptions.

The 2016 report identified structural movement through the upper section of the monument to Sir Richard Newman, corroded iron fixings to the William Mansell Peacock Monument, accelerated loss to the inscription panel to the Davidge monument and general surface soiling and surface damage to all monuments and Royal Coat of Arms. The survey was carried out from ground level and no survey cover meter survey was carried out to identify the locations of the structural fixings to the monuments.

The results of the report triggered a tender process to carry out the recommendations detailed in the 2016 report with the following additions:

1. To carry out a full dismantle of the Sir Richard Newman Monument.
2. To include the dismantle of the inscription panel and frame to the Davidge monument.
3. To reorder the electric cables on the west elevation of the Newman chapel and install a cupboard to Contract Administrator's design to box in the electrics board.
4. To assess the condition of the plaster in the Newman Chapel and remove all cement repairs and unstable sections. Reinstate removed plaster with lime putty plaster with three to four coats of toned limewash.

Due to the commitment and dedication of the Fifehead Magdalen PCC and in particular Rosemary Redwood funds were raised to address the issues raised in the 2016 report and the additional items. resulted in funds being raised to address the significant structural issues present in both monuments, carry out improvements to the building envelope and presentation of the monuments.

Sally Strachey Conservation won the contract through open tender with the main contract running from January 2018 to July 2018.

4. Improvements to the Building Envelope

4.1 The External Environment

The 2016 report referred to evidence of previous repair programme and areas of algae on the east wall which may indicate faulty rainwater goods. The recommendation in the report was for the PCC to regularly check the rainwater goods. No further interventions to the exterior fabric were tasked to Sally Strachey Historic Conservation within this contract.

4.1.2 The Internal Environment

No recommendations were made to improve the internal environment within the 2016 report. However, Philip Hughes had noted that the plaster to the Newman Chapel was in poor state of repair with areas of cement patch repair at lower level and live sections across all elevations. The overall appearance of the plaster and painted finish also contributed to diminishing the impact of the Newman monuments. It was agreed by all parties that the removal of the areas of cement and failed plaster followed by the reinstatement with a porous lime putty plaster finishes with a toned limewash would not only enhance the

appearance of the monuments but also introduce a wide surface area through which moisture and soluble salts could transfer. A critical consideration during this intervention was to not disturb the painted black border to the Newman monuments which is believed to part of the original design.

The plaster and flagstones at ground level on the west, north and east elevations show areas of raised moisture with associated biological staining and salt efflorescence over the floor. This is associated with the faulty rainwater goods on the west and east elevations. The gutter at the intersection of the east wall of the Newman Chapel with the chancel fails to collect the rainwater from the hidden gutter beneath the roof tiles. The result is that the rainwater pours down the wall causing raised levels of moisture through the fabric and at ground level. On the west side of the chapel the 2016 report noted issues with the underground area, rainwater goods and build-up of leaves at the base of the downpipe. We would recommend that rainwater goods to the Newman chapel and ground drainage are reviewed at the earliest opportunity

Immediately above the Richard Newman Monument recording the transfer of a coffin was redundant water tank and a surface mounted pipe running down the north edge. This was removed with the surface repaired with lime mortar where necessary.

The electrics board located on the west elevation of the Newman was unfortunately positioned right next to the lower section of the Newman monument on the east elevation resulting in a significant eyesore. Philip Hughes instructed the board to be moved to the south end of the Newman chapel and covered with a cupboard in limed oak. The relocation of the board and installation of the meter cover made a significant improvement to the overall setting of the monuments.

Figure 1: The Newman chapel before the conservation programme showing the electrics board on the west elevation and the numerous cupboards.

Figure 2: Detail of the north elevation with the cracking through the plaster and loss of surface paint clearly visible

Figure 3: View of the ceiling before the conservation programme showing extensive cracking and previous patch repairs

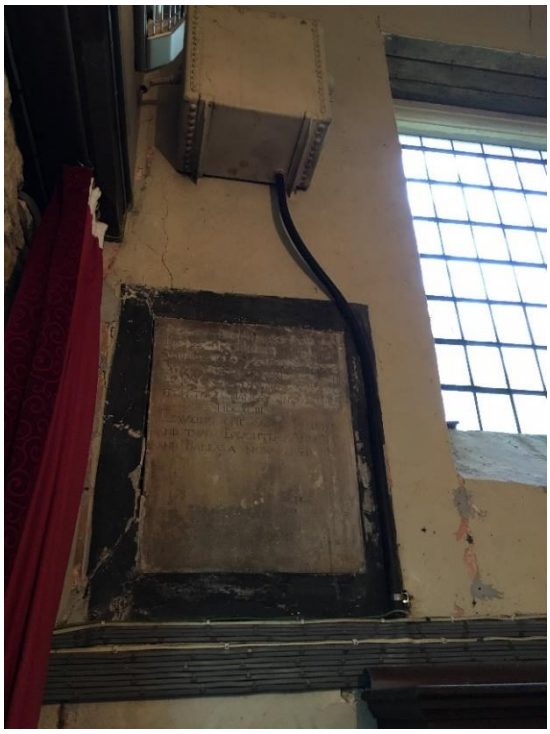

Figure 4: The Newman monument on the west elevation with the redundant water tank above and the piping down the north side of the border

Figure 5: Detail of the extensive cracking to the ceiling

Figure 6: Section of the ceiling and wall on the west elevation after the removal of unstable sections of plaster

Figure 7: Further detail of the west side of the chapel after the removal of unstable sections of plaster

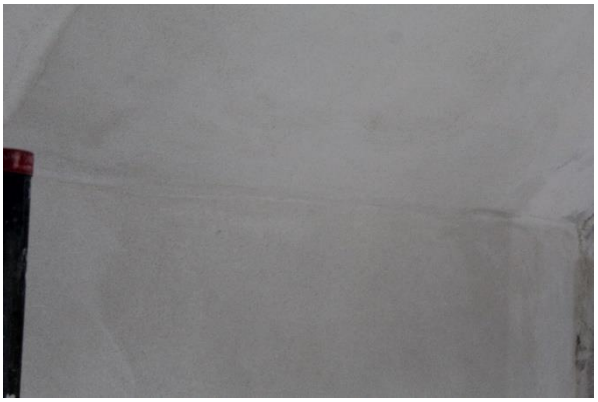

Figure 8: Reinstatement of plaster using a lime putty mix over area illustrated in Figure 7. New laths were used where necessary

Figure 9: The west elevation showing the reinstatement of the plaster with a lime putty mix

Figure 10: The east elevation illustrating the blending in of new to existing plaster. This proved to be problematic at first in creating a cohesive surface which would not detract from the monument above. Addition fine fillet repairs were applied with additional layers of limewash to achieve a satisfactory result

Figure 11: Further example of blending the surfaces together

Figure 12: The lower section of the Newman chapel showing the areas of re-plastering and additional coats of limewash

Figure 13: The east wall of the Newman chapel after the second coat of limewash

Figure 14: Detail of the relationship between the black border and the new limewash

Figure 15: The limewash around the monument to Sir Richard Newman on the north wall drying out after the second application

Figure 16: The Newman chapel after the conservation programme showing the electrics board moved to the south end and covered with the limed oak cupboard. The monument above is now free of the water tank and piping. The damp areas at ground level is due to raised levels of moisture caused by faulty rainwater goods

Figure 17: The north and east elevations of the Newman chapel after the conservation programme

Figure 18: The east elevation of the Newman Chapel showing the faulty rainwater goods at the intersection with the chancel. The area of green biological staining can be seen adjacent to the downpipe where the rainwater is spilling over the wall

Figure 19: Detail of the guttering shown in Figure 18 with the opportunity for rainwater to spill over the wall

Figure 20: Image from the 2016 report showing the west elevation with access to the underground area

Figure 21: Image from the 2016 report showing the build up of leaves at the bottom of the downpipe on the west elevation

5. Conservation of Monuments

Site Set Up

Careful consideration had to be given to the logistics of dismantling a substantial monument in such a confined space. The design of the scaffolding including necessary adjustments had to be thought through to take the correct lifting equipment at each stage of the dismantling process.

The site set up also needed to be well thought through in order to design and install a shelving system which could safely store the numerous sections in an exploded view.

Figure 22: An illustration of the Richard Newman monument laid out in an exploded view after dismantling

5.1 Monument to Sir Richard Newman 1721 and Family attributed to Sir Henry Cheere
Wife - Frances 1730
Son- Samwell 1747
Daughter – Frances 1775
Daughter- Barbara 1763
Daughter – Elizabeth 1774

Location	The North wall of the Newman Chapel
Date	1721-1750
Dimensions	Height 4000 x Width 1880 x Depth 290
Materials	White marble Veined marble veneers Dark grey limestone Painted armorial Incised lettering painted black Limestone backing plates through lower sections
Description	
Sculptor	This celebrated monument is attributed to the eminent 18th century sculptor Sir Henry Cheere. It is known that Cheere lived close by to the Newman family in London and the busts have the quality of detailed portraiture characteristic of an artist who knew his patrons.

Figure 23: The Newman monument at the start of the project with the location of the electrics board and cables illustrated

5.1.1 Condition and Recommendations in 2016 Condition Report

Condition

"General ~ The structural condition of this monument is poor. Cracks are evident to the north elevation on both the east and west of the monument. These extend up to and across the ceiling.

Losses ~ At least one marble element is detached or lost.

Ferrous fixings ~ The upper half of the monument has moved away from the wall. This is likely to have been caused by corroding iron fixings. The lower half of the monument is more stable.

Stability ~ the corrosion of the fixings is on-going and movement is noted particularly at high level. Joints are open. Bronze dowels were noted to support some of the smaller elements. These are stable.

Cracks ~ Some of the marble elements are cracked, broken and at least one has detached.

Soiling ~ The monument is dirty and the covered with a large amount of loose dust and debris.

Polychromy ~ The inscription is in-painted and legible, however some of paint is lost giving it an uneven appearance. A painted black border frames the monument on the plastered wall. Although this has been repainted it is likely to be over an original similar border. It would be interesting to establish if this exists and the extent of the border.

2016 Recommendations

- *The structural stability of the north elevation has been further assessed by a Structural Engineer. Please refer to engineer's report. It is understood that the report surmised that the wall was deemed safe.*
- *External work to the elevation is evident including repointing but the extent of this is unknown. It would be useful to locate any records of the work externally to the north chapel, including roof works.*
- *Record location of all elements to ensure re-assembly in the original position.*
- *Collect, label and bag detached fragments for reinstatement during conservation works. Record the location where all fragments are found*
- *Carefully dismantle upper sections. Commence with the busts. Allow for any holding conservation and protections required during the lifting and moving. Set to one side and protect. It is hoped and anticipated that the lower sections may remain in situ. All efforts must be made to retain the painted plaster surrounding the monument, in particular the painted black border. This may not be possible in all instances.*
- *Assess lower sections*
- *Examine the structure behind. (Determine necessity for and extent of further interventions.)*

- *Fill cracks to north elevation. Monitor further opening for signs of movement and structural instability.*
- *Remove remains of pointing and bedding mortars.*
- *Remove corroding ferrous cramps/fixings.*
- *Re-fix dismantled elements on wall incorporating a DPM using stainless steel 316 armatures.*
- *Repair elements using stainless steel and epoxy resin (Akemi or Marmolit).*
- *Clean all elements in-situ and ex-situ using selected methods based on the results of the trials.*
- *Re-fix busts bedding on Plaster of Paris and incorporating stainless steel pins / cramps where necessary.*
- *Re-point and fill all joints with Plaster of Paris.*
- *Consolidate friable polychromy and applied decoration (inscription and surround)*

As noted above the Contract Administrator, Philip Hughes, instructed that a full dismantle should be allowed for due to evidence of cracking and movement through all sections.

5.1.2 2018 Inspection

Before and during the dismantling process time was spent measuring and recording dimensions of each section of the construction; distance apart, span, depth and joint sizes. This was essential to be able to reconstruct the monument to the correct profile.

As soon as access was available the monument was given a thorough inspection. The initial assessment recorded the following:

- Measurements were taken of various points and places and positions of elements and photographed to document locations and specifics for the rebuild
- A cover meter survey recorded internal fixings throughout all sections of the monument.
- A significant build up dirt, grime and surface debris over all elements.
- The sinister bust was found to be dangerously loose due to corrosion through the iron fixing exerting pressure on the surrounding marble. https://instagram.com/p/BmQmltPhj1J/
- Sinister top corner of pink panel has significant crack and had shifted forward by 25mm at the top joint.
- Crack was also visible through to the top of the central panel above medallion carving of centre sister.
- Movement found through the dexter side of the plinth to the central medallion.

Figure 24: Illustration of the high levels of surface soiling and dust and debris over the monument

Figure 25: Beautifully carved portrait of Frances Newman before dismantling showing the ingrained dirt and surface soiling over the marble extent of dust and debris

Figure 26: Significant crack through the plinth to the bust of Samwell Newman due to the corrosion of the iron fixing. The bust was completely mobile and removed during the initial inspections

Figure 27: The bust to Samwell Newman removed revealing where the severely corroded iron fixing had exerted pressure on the marble causing multiple fractures through the marble

Figure 28: The sinister top corner of the backing panel to the medallion carvings showing the movement through the vertical joint of up to 25mm due to corroded iron fixings. Associated horizontal cracking can be seen through the marble frame and veneer

Figure 29: Detail of movement through the plinth to the central bust of Sir Richard Newman

Figure 30: Overall view of the busts to Sir Richard and Samwell Newman illustrating the point that is hard to see how unstable these portrait carvings are without a close inspection. The cracking through the veneer has been highlighted

Figure 31: Detail of the cracking through the veneer to the dexter of the sinister medallion carving

5.1.3 Dismantle

The dismantling of the Newman monument was particularly challenging due to the numerous iron fixings throughout the monument. As the dismantling progressed the extent of both embedded and surface mounted iron became apparent. The volumetric increase of the corroded iron had undermined the structural integrity of the whole monument and caused significant damage to the veneer and decorative elements. Great care had to exercised during the dismantling of the monument to prevent an uncontrolled collapse and to retain every fragment of decoration released from the monument. Both the embedded and surface mounted iron fixings has caused extensive damage to the backing plates to the veneers and to the marble detail demanding detailed recording throughout.

The sequence for the dismantling of the Newman monument was as follows:

- The three busts and plinths were lifted off first and taken to the storage area.
- As soon as the busts were removed the large grey stones forming the obelisk could be properly assessed. The sections to the obelisk were found to be completely unsupported and in immediate danger of collapse. Immediate action was taken to install a temporary support using the scaffolding with 12mm threaded bar installed into the wall along the bottom bed of the triangle to support the weight of the obelisk stones.
- Investigations were carried out behind the monument with an endoscope which did not provide information or evidence of any internal fixings to secure the obelisk. It worryingly appeared that the full weight of the obelisk stones was relying solely on the two small sections of stone underneath and a retaining cramp at the top below the surmounting marble ball.
- At this stage we had first sight of the large section of iron causing damage to the veneer behind the three medallion carvings of the sisters.
- The three medallion carvings were removed next. Each medallion was fixed with three pins, some of which were found to be brown and rusty, and one top iron cramp all of which were suffering from corrosion.
- The top sinister corner of the backing panel to the medallions was carefully removed and the damaged areas of veneer carefully recorded and marked up before being taken to the storage area. This operation uncovered to huge iron “hanger “sections. These were extracted from the wall to reveal its size and fish tail design.
- The panel was freed from the iron, recorded, marked up and taken to the storage area.
- A section of historic plaster was found behind this section of the monument with an ochre limewash. The plaster was consolidated and secured to the wall using repair lime mortars before the rebuild.
- The central decorative ‘corbel’ had to be removed in two sections due to having been fractured by a corroded iron cramp.
- After all three corbels were removed it was not clear how this panel had been secured to the wall. At this stage we had to assume it could be similar to the panel above.
- The first stage to dismantle this section was to remove the thin section of marble making up the inscription panel which was mounted onto the backing stone. This revealed two large sections of corroded iron which has caused multiple cracks through the panel.
- The panel was extremely damaged and in a dangerous condition, a fact which was unknown to the Strachey team, Philip Hughes and the PCC prior to the works programme.
- The large fixings were actually slightly different on this panel as they were Gudgeon and Pintle. The Gudgeon has been bedded with molten lead into the back of the panel and then it has been lowered onto the pintles. The pintles had rusted solid and therefore the two couldn't be seperated. The molten pour had failed and the extent of the damage to the panel was extensive.
- The large sections of grey limestone were retained in situ.

Figure 32: Corroded iron embedded into the central plinth which has caused the movement through joint resulting in the portrait bust of Sir Richard beginning to become mobile

Figure 33: Example of repeated measuring during dismantling

Figure 34: The three busts and plinths removed showing that the substantial sections of the obelisk appear to be unsupported

Figure 35: Closer view of the base of the obelisk stones with no structural support

Figure 36: The temporary system being installed beneath the obelisk

Figure 37: An image from the endoscope showing the gap between the two sections of the obelisk and the north wall of the chapel with no evidence of fixings to secure the sections to the wall

Figure 38: More corroded iron revealed during dismantling

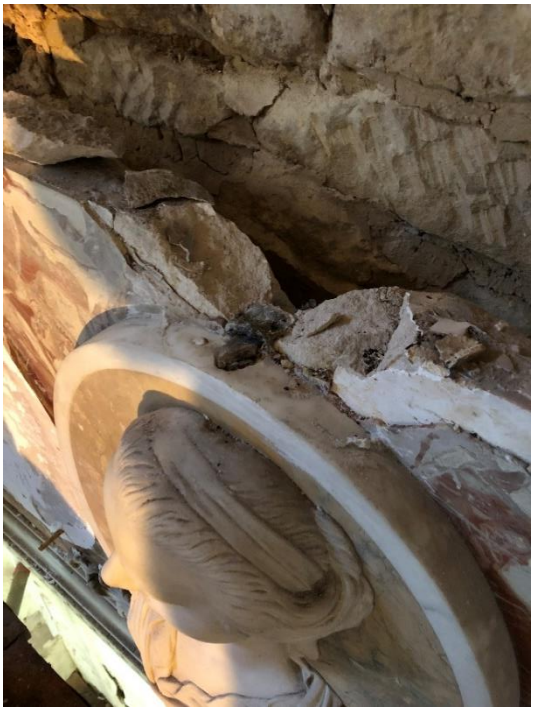

Figure 39: Corroded iron fixing at the top of the central medallion

Figure 40: The large section of iron revealing itself as the dismantling progresses

Figure 41: All three medallion carvings and damaged veneer removed to clearly show huge hanger iron section with a second one revealed behind the dexter medallion carving

Figure 42: Recording the size of the iron fixing

Figure 43: The iron section removed to show the fishtail design

Figure 44: The middle section nearly removed with the sinister iron fishtail section removed from the wall and the dexter still in situ

Figure 45: A large section of iron revealed during the removal of the bottom section

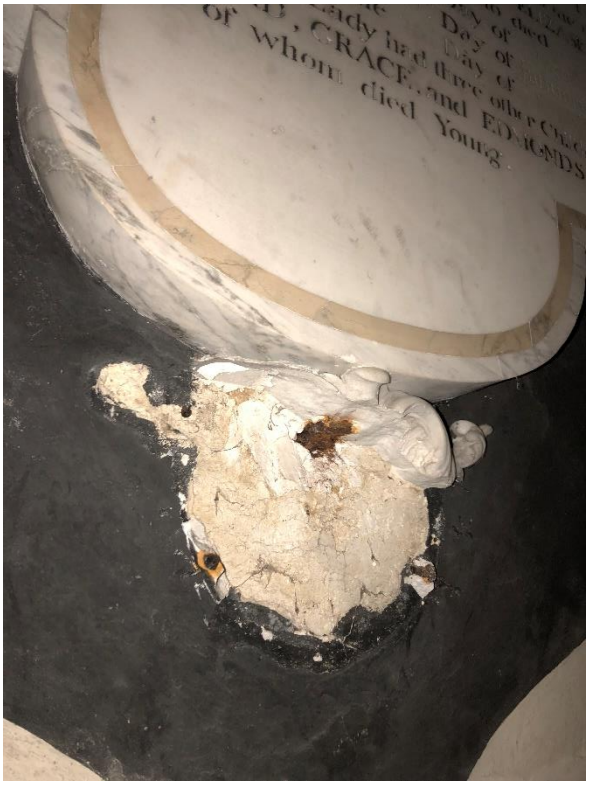

Figure 46: The corroded iron fixing which had split the central decorative corbel in two

Figure 47: The sinister gudgeon and pintle iron fixing revealing itself after the removal of the inscription panel. The significant fractures through the panel can also be seen

Figure 48: The fractured panel removed with all the broken sections and fragments being carefully recorded

Figure 49: The back of the lower panel showing the extensive damage caused by the corroded surface mounted iron cramps

Figure 50: Detail of the corroded gudgeon and pintle fixing after the removal of the lower section showing the failed lead

Figure 51: Detail of the corroded sinister gudgeon and pintle fixing with the failed lead

Figure 52: The wall and painted black border after the removal of the lower section of the monument with the large iron fixings visible

Figure 53: The four large iron fixings in all their glory which caused so much damage to the Newman monument

5.1.4 Cleaning and Conservation Programme

The cleaning and conservation programmes were a technical challenge due to the extent of the damage caused by the numerous iron fixings throughout the monument. A priority was also to remove all trace of the corroded iron fixings bedded into the marble before the repair programme to get a true picture of the extent of the damage.

Figure 54: Example of a corroded fixing in the lower section of the monument

Figure 55: A corroded fixing removed

Figure 56: The back plate to the inscription panel with the corroded iron fixings being removed

Figure 57: Example of corroded iron being removed from the dexter corbel to the pediment displaying the three busts

5.1.4.1 Cleaning Programme

After trials the cleaning for all the marble and polished limestone surfaces was carried out using the Derota steam cleaner system. The minimum amount of water was used to lift the soiling and staining off the surface. As soon as the soiling was mobilised it was removed with cotton wool and the surface dried off with clean cotton wool.

Where historical paint layers remained, these areas were treated with *Mix 1* applied with cotton wool swabs. These areas were the central part of the upper crest, the Dexter bust's eyes and the lettering on the inscription panel.

Mix 1
50% Distilled water
50% White spirit
02% Non-ionic detergent.

Figure 58: Derota steam cleaner in action

Figure 59: Two stages of cleaning with the Derota

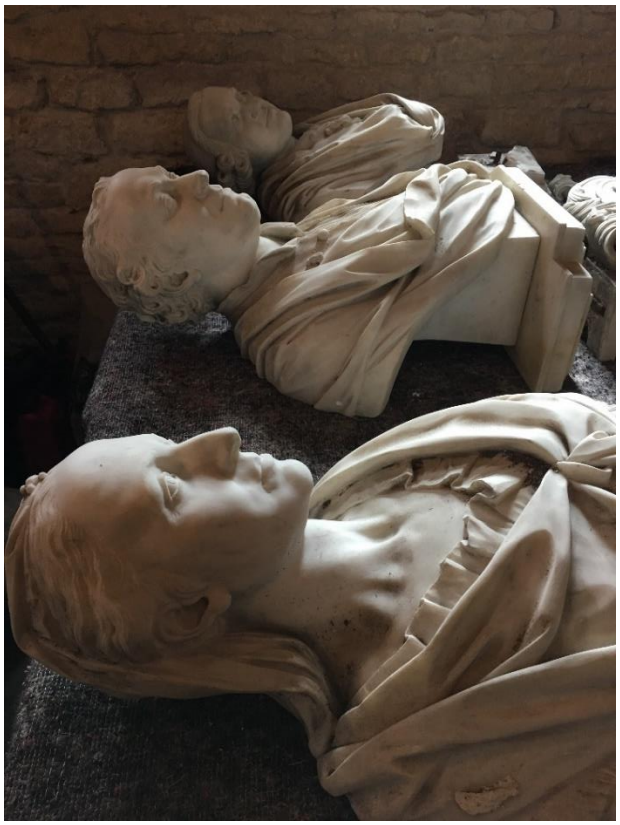

Figure 60: The portrait busts during the removal of surface dust and debris

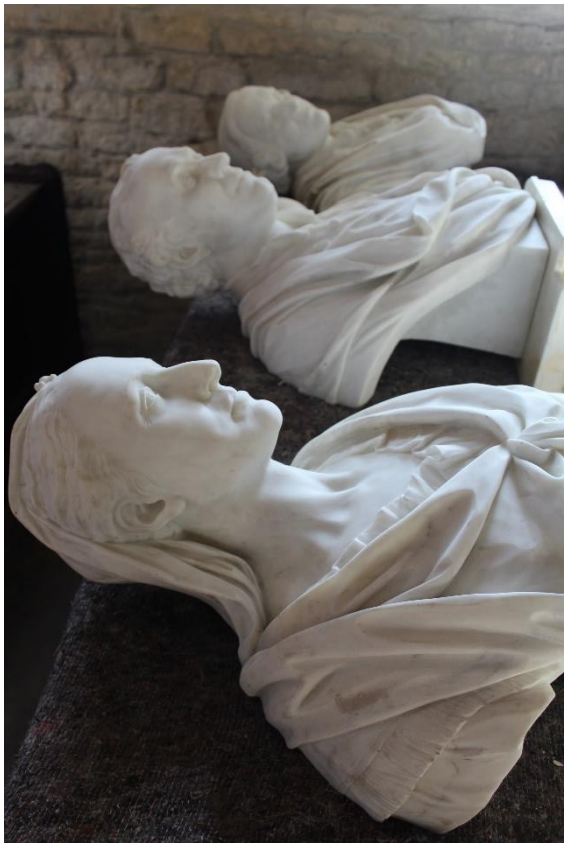

Figure 61: The portrait bust towards the end of the cleaning programme

Figure 62: Detail of Lady Frances's drapery showing the quality of the marble and carving

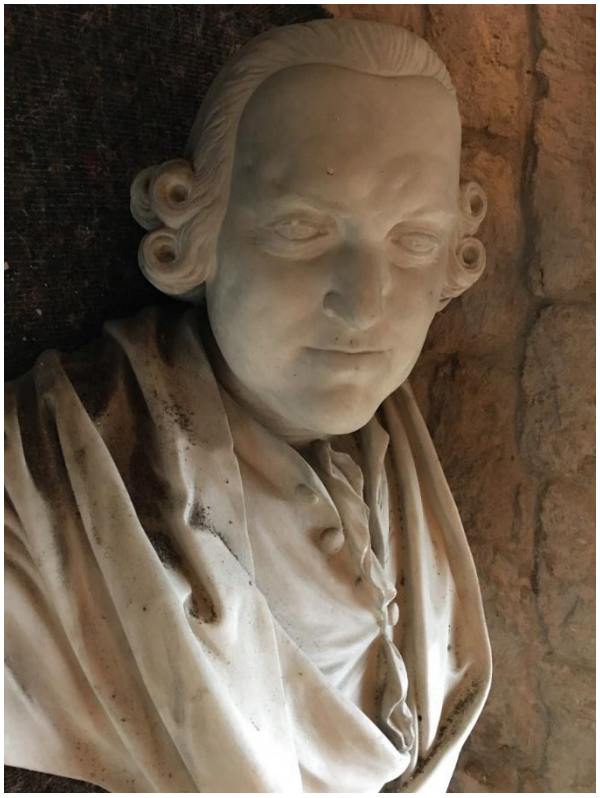

Figure 63: Bust of Samwell Newman during the removal of surface dust and debris

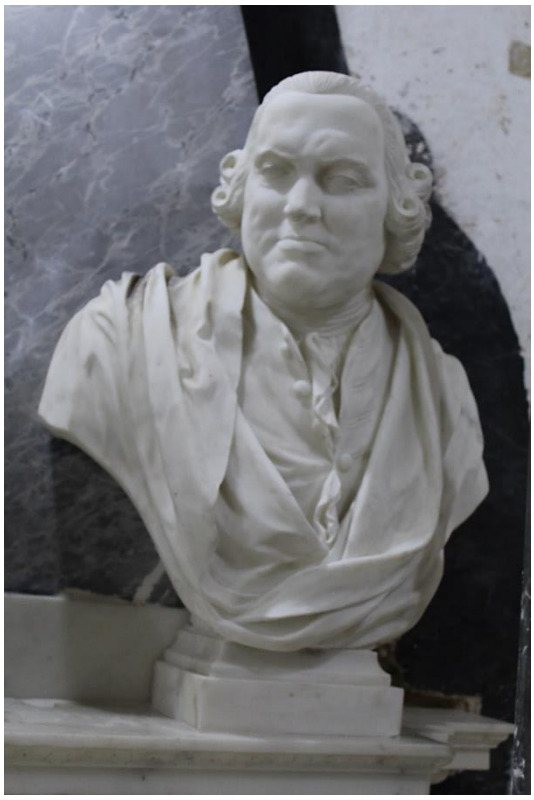

Figure 64: Bust of Samwell Newman after cleaning

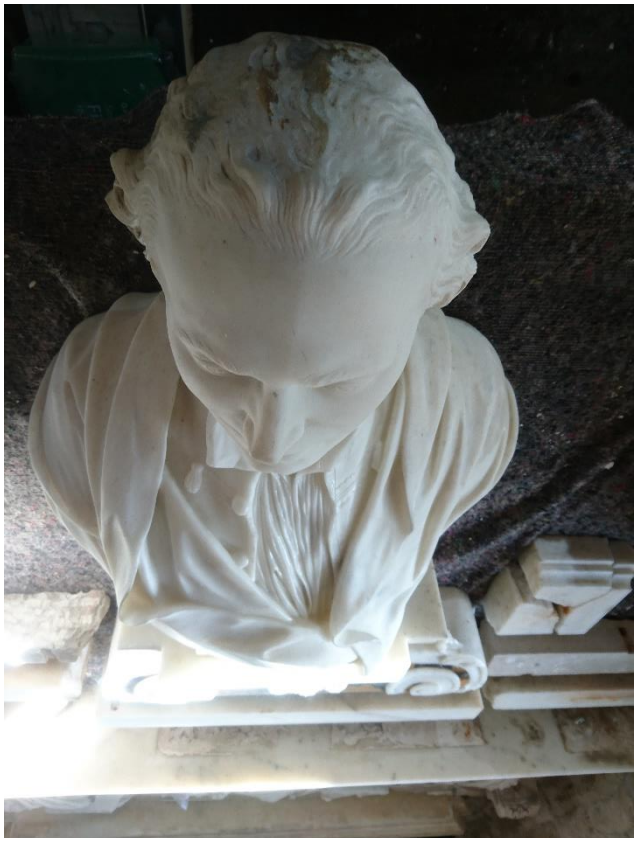

Figure 65: Portrait of Sir Richard after cleaning

Figure 66: Sir Richard after cleaning illustrating the high quality of the carving and in particular the linen shirt and overcoat

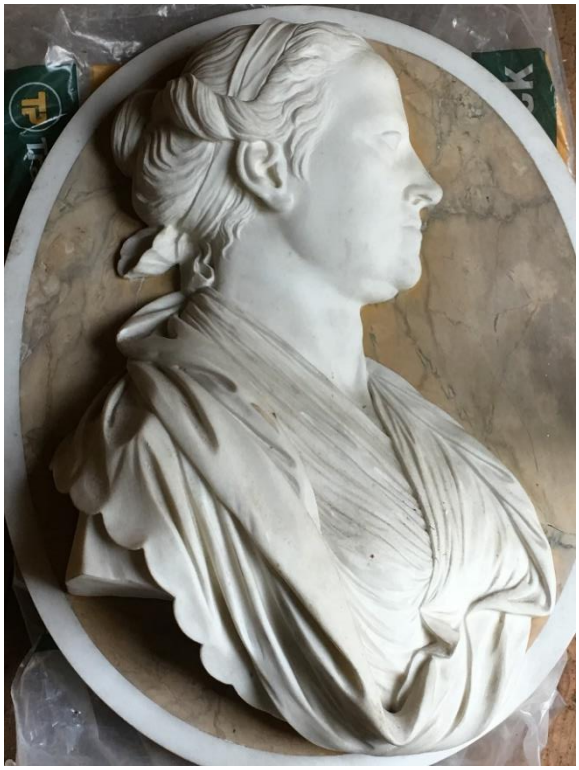

Figure 67: Dexter medallion portrait during the removal of surface dust and debris

Figure 68: The dexter medallion portrait after cleaning with the Derota

Figure 69: The central medallion portrait after cleaning with the Derota

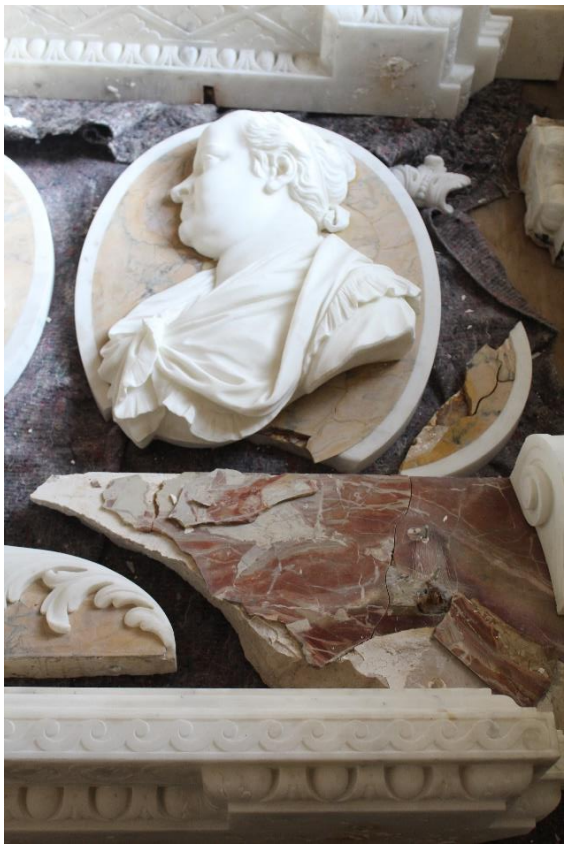

Figure 70: Sinister medallion portrait after cleaning programme. The numerous fractures to the veneer and fracture to the backplate to the medallion can be seen

Figure 71: Detail of the drapery to the dexter medallion portrait after cleaning showing the beautifully carved drapery

Figure 72: Overview of elements towards the end of the cleaning programme

Figure 73: Detail of architectural elements after cleaning

Figure 74: Decorative lower corbel after cleaning showing the attention to detail of the carving. The damage caused by the corroded iron fixing can also be seen

5.1.4.2 Conservation Programme

The Inscription Panel and Lower Surround

The inscription panel was made of white marble, set onto a white and grey backing stone. The inscription panel was only 10mm thick. The corroded iron fixings behind the panel had put considerable pressure on the marble which had also been weakened by the high levels of damp within the surrounding fabric. This combination of decay mechanisms had caused the thin section of marble to fracture.

Around the inscription tablet is set a light brown marble veneer which runs in a ribbon beneath the tablet and becomes more substantial on the flanks. On the flanks are set two carved white marble corbels. As with inscription panel the pressure from the rusting iron rusting had pushed the veneer away from the base stone. Some of the pieces separated along the cut lines others cracked along the weak beds. The veneer had originally been set in shellac resin.

All fractured sections of the veneers were retained and recorded before they were reinstated using plaster of Paris after the inscription panel was set in place.

The grey and white marble base stone had suffered the same fate as the inscription tablet and broken where the iron fixings had expanded and sections along weak beds had become sugary.

The sections were re assembled by using a combination of stainless steel fixings, resin and plaster of Paris to strengthen the cracked sections.

The final surface repairs and toning in were done after the lower section of the monument was reinstated.

Figure 75: The back of the inscription panel showing the numerous corroded iron fixings and associated severe cracking

Figure 76: damage to the veneer and backing stone due to the corroded iron fixings

Figure 77: Surface mounted corbel with fracturing the backing stone and corroded pins running through the veneer

Figure 78: Further example of corroded pins running through the veneer and the fractured backing stone

Figure 79: Iron fixings removed from behind the inscription panel and repairs to the frame being applied with plaster of Paris

Figure 80: Iron fixings removed from behind the inscription panel and repairs to the frame being applied with plaster of Paris

Figure 81: Stainless- steel cramps fitted

Figure 82: Threaded stainless-steel cramp stitching two sections of the backing stone together

Figure 83: The sections of the veneer being reattached using Plaster of Paris

Figure 84: Section of reattached veneer on the dexter side next to the fixing hole for the large sections of iron

Figure 85: Sinister side of lower section with sections of veneer reattached and pin holes for the surface mounted decorative corbels visible

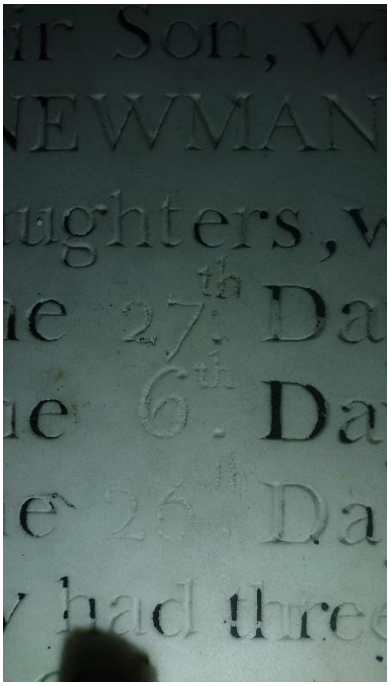

Figure 86: Scribed dates of death of the daughters on the inscription panel

Red Marble Veneer Panel

The red marble veneer was fixed to a bath stone backing plate and flanked by marble scrolls displayed on an ochre veneer. This veneer was originally fixed in place with shellac, whereas the white marble sides were fixed using plaster of Paris. The Bath stone backing because of the iron fixings had broken into sections with a higher level of damage on the sinister side.

The broken sections were pinned together with stainless steel threaded bar set in resin. For extra support the cracks were filled with plaster of Paris.

This fragmentation of the backing plate had caused the veneer to become detached from their substrate. The loose sections were removed, logged and stored for reattachment. The white marble sides were also removed for cleaning.

The veneer and the sides were re-fixed using plaster of Paris.

The final surface treatments were undertaken after the monument had been rebuilt.

Figure 87: Cracking seen through the red veneer before the conservation programme

Figure 88: The veneer during the removal of the three medallion carvings

Figure 89: The fishtail iron fixings revealed behind the veneer

Figure 90: The red veneer being reinstated with plaster of Paris during the rebuilding of the monument.

Figure 91: The middle panel during dismantling showing the location of the two fishtail iron fixings and resulting damage

Figure 92: The sinister side of the middle panel during rebuilding showing the veneer being reinstated and surface repairs.

Medallion Portraits of the Three Sisters

The dexter and middle portraits did not need any intervention other than cleaning.

The sinister portrait needed the portrait resetting on a bed of plaster and the lower section of the oval, which had become detached, re-fixed. The latter was achieved using stainless steel fixings, resin and plaster of Paris.

Figure 93: The sinister medallion carving showing the detached section and damaged veneer

Figure 94: The detached section showing the fixing points for the pins

Figure 95: The medallion carvings during the rebuilding process with the sinister portrait repaired

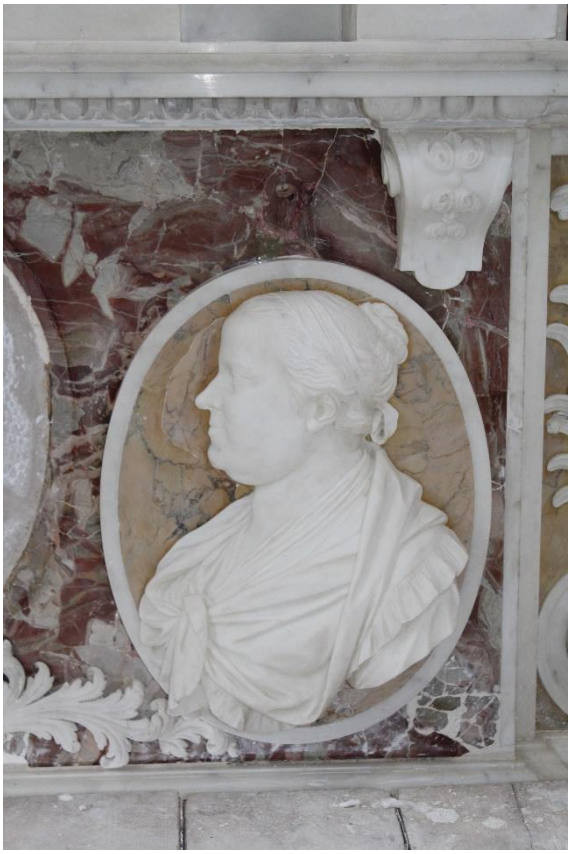

Figure 96: The sinister but showing the repairs to the roundel and surface repairs to the surrounding red veneer

Three Marble Busts

The Sinister bust was broken around the base of the carving, just above the marble plinth stone wherethe iron pin rusted and had expanded. The pin was removed, and the fragments cleaned. The fragments were then glued and pinned in place. The cracks were filled with plaster of Paris and painted to match the marble.

The Dexter bust was found to have black paint on her eyelids which did not look like accidental drips. All the busts had paint drips present including pink, black and cream. These drips had happened during the decoration of the chapel and the black border.

Figure 97: Image of the cracking through the plinth and bust

Figure 98: Image of the corroded iron fixing causing fracturing through the plinth

Figure 99: The plinth repaired with plaster and secured with a stainless-steel pin

Figure 100: Surface repairs to the back of the marble bust with toned plaster surface repairs

5.1.5 Rebuilding Programme

The recommendations in the 2016 report were to insert a DPM behind the upper sections of the monument. However, during the dismantling of the monument in 2018 the grey limestone obelisk was retained in situ and not removed. It was noted that that the backing stones to all sections of the monument had significant air gaps between the wall and the monument which would reduce the transmission of moisture and soluble salts across large areas of the monument and the need for a DPM.

All the iron cramps were replaced, and additional cramps installed with 316 marine grade stainless steel. The structural cramps into the wall were secured with Resifix with the marble to marble/stone cramps bedded into position with plaster of Paris.

The process for rebuilding the monument was as follows:

- While the monument was dismantled the grey limestone section to the obelisk needed to be secured. As noted already in the report there were no visible fixings tying these significant sections back into the wall except for the retaining cramp at the top. To introduce support beneath the sections stainless steel bars were inserted with resin to the underside of the sections.
- The inscription panel was the first section to be reinstated. The design for a large section upturned stainless steel cramp was agreed with Philip Hughes Associates and cut into the bottom of the marble for optimum support. The profile was shored up to be level using the 'faux corbels' either side with stainless steel cramps securing the top bed to the wall.
- The central bottom 'corbel' was then re-fixed with stainless steel pins.
- The two side wings were secured to the panel with stainless steel dog cramps and tied to the wall behind with stainless steel cramps.
- The first shelf was placed on top of the inscription panel. This is held up with the surface fixed decorative corbels using three stainless steel pins. The shelf was reinforced with three cramps before the middle panel displaying the three medallion carvings of the sisters was installed.
- We wanted to avoid the entire weight of the middle panel and the rest of the monument above bearing down on the inscription panel and knew that it would have to be hung as it was before with the huge iron fish tail cramps. Where the huge fish tail cramps were removed the wall were rebuilt with rubble stone to match the existing which were not suitable to fix to. There were only a handful of stones in this section of the wall which were sound enough to fix to, so we had to work out where we could get a hidden fixing into these stones and where they would be eventually covered by the three sisters. We worked out the positioning of the fixings to hang the panel 3mm above the shelf using 4x12mm threaded bar in varied locations. The result was that the weight was now being taken by the wall and the 3mm joint was pointed in with toned plaster of Paris.
- The two side wings were then fixed using both stainless steel cramps to the panel and to the wall.
- Surface mounted 'corbels' fixed, ready for the next shelf.
- Cornice shelf bedded and secured with stainless steel cramps.
- Side cornice wings fixed and cramped.
- Repaired bust bases fixed back into original positions.
- Pediment supporting the central bust was bedded and cramped with stainless steel fixings.
- The three portrait busts were re-fixed with pins into their bases and cramps from their shoulders back to the wall.
- The three medallion carvings of the sisters were re-fixed to the panel with three pins each.
- The retaining cramp at the top of the obelisk was replaced with a stainless-steel cramp set in resin with the surmounting marble ball secured on top.

Figure 101: Original iron fixings

Replacement Stainless Steel fixings

Figure 102: The wall behind the inscription panel section showing the rubble construction and with the iron sections still in place

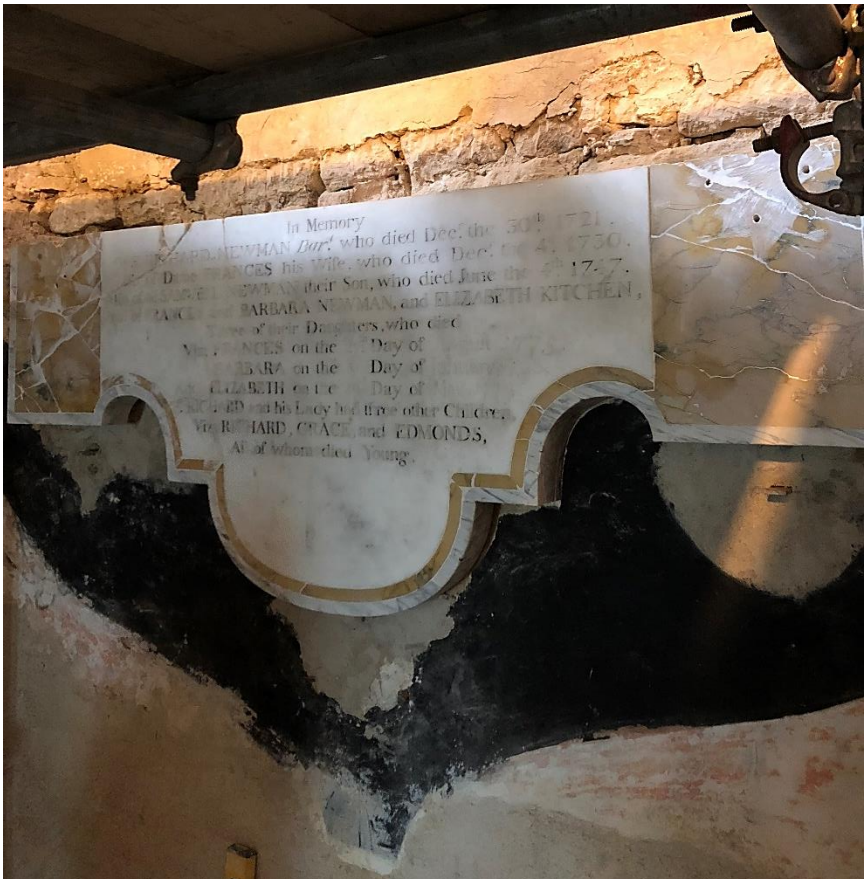

Figure 103: The lower section installed with the repairs to the veneer visible

Figure 104: Example of a stainless-steel structural cramp securing the moulded section which supports the panel above. The air gap can be seen behind the middle section

Figure 105: The middle section reinstated

Figure 106: The sinister side of the middle section reinstated including the scrolled side wings. The new supporting fixings to the grey limestone obelisk can be seen above

Figure 107: Image illustrating the stainless-steel cramp tying the top of the middle panel into the wall and the dexter scrolled side wing waiting to installed

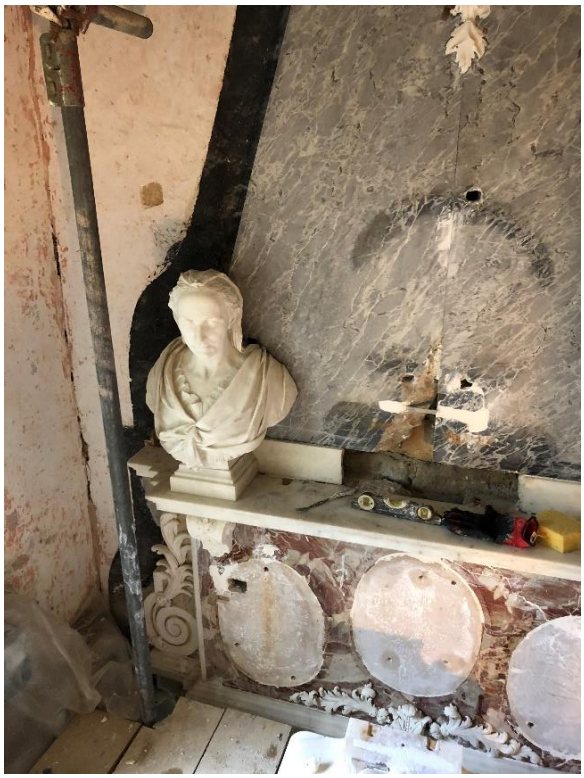

Figure 108: The middle section, bust of Frances Newman and the marble blocks beneath the grey obelisk all reinstated

Figure 109: Detail of the stainless-steel strap between the two sections of the obelisk and the air gap behind the middle section

Figure 110: The busts of Frances and Sir Richard Newman and the central plinth reinstated with stainless -steel cramps ready to be installed to tie the sections of the obelisk together

Figure 111: The bust of Samwell Newman about to be installed. Two of the three medallions have been reinstated

Figure 112: The corroded iron retaining cramps in place before removal

Figure 113: The retaining cramps replaced with stainless steel and the surmounting marble ball reinstated. The coat of arms can be seen after cleaning

5.1.6 Finishing Treatments

As the sections of the monument were reinstated the final repairs to the veneers on the lower and middle panels could take place. The surface repairs to the veneers were carried out with plaster of Paris. The plaster was smoothed and polished with dental tools, then painted with acrylics. The paint was colour matched to the surrounding marble, being brown, red, black and green hues.

The monument was given a final clean with a lint free cloth with the steamer reused on the portrait busts.

The lettering to the inscription panel was touched in with Payne's Grey acrylic paint to improve legibility. It was noted that most of the lettering was carved by one person at the time of construction. The names of the daughters were scribed, but the dates for their deaths were left blank. As the daughters died the dates were added. So, in all, four letter carvers work is present. Other than the inscription no other lettering was found.

The fragments of paint to the coat of arms did not require consolidation.

All elements of the monument were given a protective coat of microcrystalline wax.

The painted black border was reinstated with black gouache as it was the closest pure material with a binder to black pigment and would not react adversely with the original scheme.

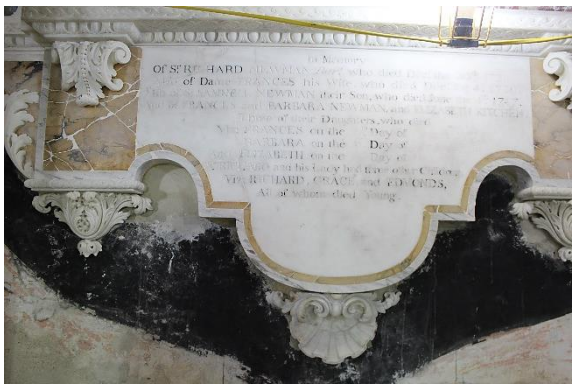

Figure 114: The lower section of the monument after reinstatement showing the surface repairs to the veneer

Figure 115: Detail of the reinstated and repaired veneer

Figure 116: Fractured dexter decorave corbel adjacent to the inscription panel during the removal of the corroded iron

Figure 117: The dexter corbel pinned and repaired

Figure 118: Central corbel below inscription panel which was cracked through the upper section repaired and reinstated

Figure 119: The lower section after surface preparation, toning in and application of microcrystalline wax

Figure 120: The middle section and portrait busts after surface preparation and toning in to the red veneer and microcrystalline wax to all elements

Figure 121: Overview of the busts and medallion carvings after waxing

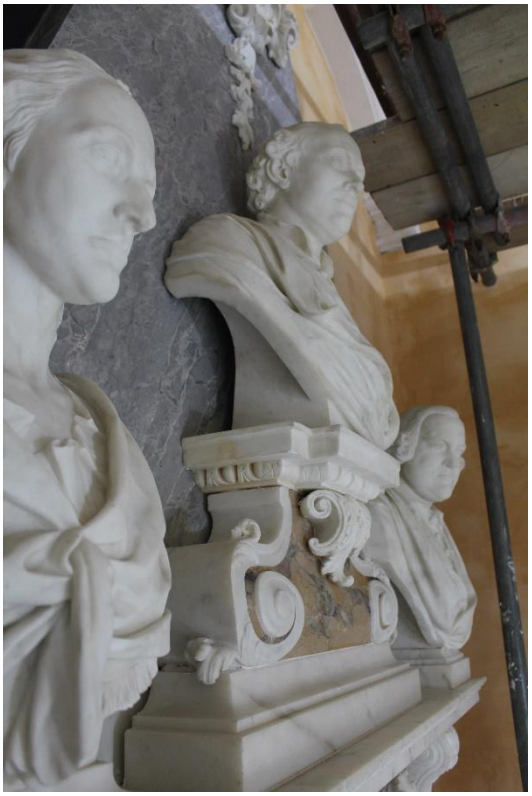

Figure 122: Side view of portrait busts after waxing

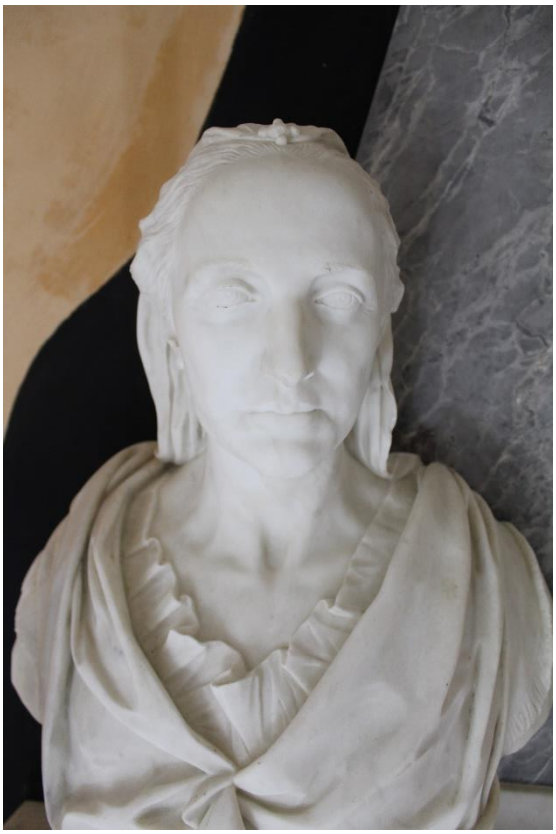

Figure 123: Lady Frances after conservation

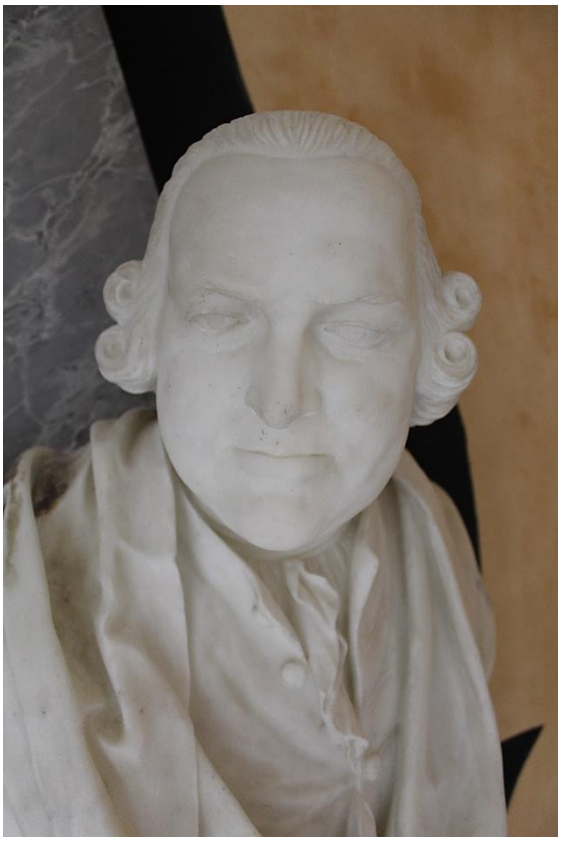

Figure 124: Samwell Newman after conservation

Figure 125: Monument after conservation programme and redefinition of black border