

Stonyhurst College

West Elevation Fabric Repairs - Heritage Statement | April 2019

Job name

Stonyhurst Front Fabric Repair Works

Job number

3477D

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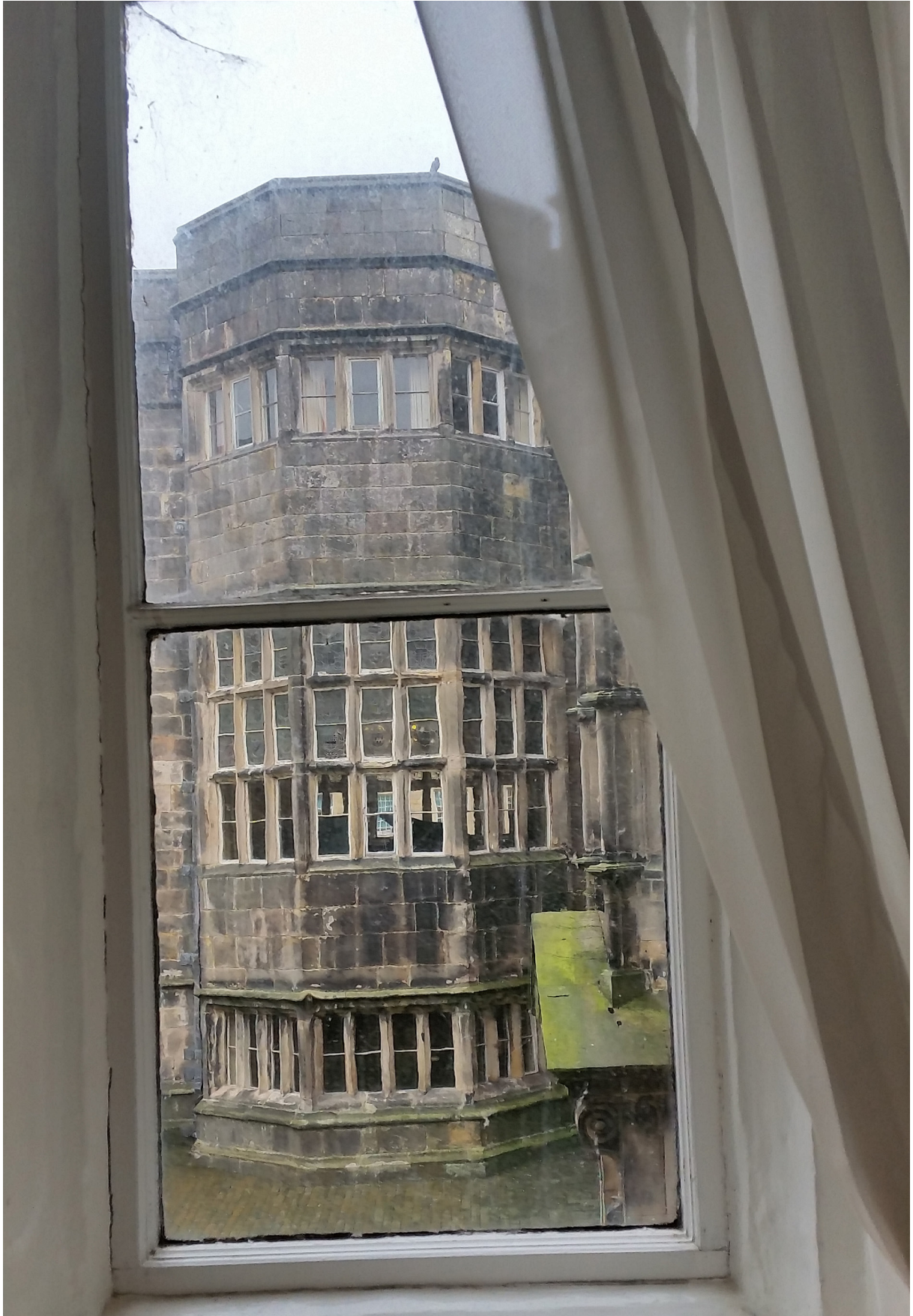
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Heritage Statement

Contents

Introduction	7
Application site	11
Overview of the works	15
Brief description and history of Stonyhurst College	19
Heritage assessment	22
Statutory Listed Building description	28
Impact and mitigation of proposed works	37
Appendix A - Site photos	38
Appendix B - Outline specification for the works	41
Appendix C - Photographic record of present condition	45

Introduction



Introduction

This Heritage Statement accompanies an application for listed building consent to allow for the repairs to the West Elevation also variously referred to as the 'Lions' or the 'Fronts' at Stonyhurst College. For the purpose of this document, the works will be referred to as the West Elevation repairs. The repair works include the following:

- Mortar re-pointing throughout the right hand side only
- Repair/replacement of existing windows

In order to satisfy the requirements of planning policy, the application consists of the following:

- Application form and certificates
- Location plan
- Existing elevations
- Heritage Statement
- Outline specification for the works (appended in the Heritage Statement)

This heritage statement is required due to the Old Quadrangle at Stonyhurst College being Grade I listed.

Paragraph 128 of the NPPF (which is currently under review) states that in determining applications, local planning authorities should require an applicant to describe the significance of the heritage assets affected, including the contribution made by their setting. This heritage assessment has been prepared to evaluate the significance of the Registered Park and Garden and the potential impact of the proposal upon this significance.

The following approach was undertaken to produce the heritage assessment:

- Desktop study of existing literature, drawings, historic photos and detailed listing prepared by Historic England and associated documents;
- Site visit and walkaround with the Estate Manager to review the context in respect of the existing condition of the building;
- Assessment of the results of the first two stages to establish the significance of the site, its heritage assets; and
- Assessment of the impact of the proposed development upon the identified assets.



Application site



Application site

The application site lies within the Stonyhurst Estate near to the village of Hurst Green in the Ribble Valley area of Lancashire, England.

The site is set within an Area of Outstanding Natural Beauty.

Stonyhurst College is a co-educational Roman Catholic independent school, adhering to the Jesuit tradition. The school occupies a number of Grade I, II and II* listed buildings.

The school was founded in 1593 by Father Robert Persons SJ at St Omer. In 1794, the school was relocated to Stonyhurst Hall. Today the school provides both boarding and day education to approximately 450 boys and girls between the ages of 13 and 18. On an adjacent site, its preparatory school, St Mary's Hall, provides education for boys and girls aged from 3 to 13.

The earliest record indicating a house on the site is c1200AD as stated in a document held in the archives.

Planning history

Whilst numerous planning and listed building consent applications have been submitted and approved in respect of the school, no specific history was found for the West Elevation of the Old Quadrangle.

Registered park and garden

The gardens and parkland have late 17th century origins, including a well preserved formal garden which dates from circa 1700 and an avenue and water features of a similar date.

The circa 75ha site is situated on land which slopes gently southwards.

The area in which the application area is sited is primarily made up of woodland which separates Stonyhurst College from St Mary's Hall.

Heritage status

The wider Stonyhurst site contains a number of Grade I, II* and II listed buildings. The following

buildings within the wider site are listed:

1. Front Quadrangle – the Shireburn house – Grade I
2. Front Quadrangle – North Side – Grade I
3. Shirk – Grade II*
4. Shireburn Quad – Grade II
5. Old Infirmary and Jumps – Grade II
6. South Front inc. East and West wings – Grade II
7. Ambulacrum and Art Department – Grade II
8. St Peter's Church – Grade I
9. Corn Mill – Grade II
10. St Mary's Hall – Grade II
11. Old Observatory – Grade II
12. Garden Pavilions – Grade I
13. Handballs – Grade I
14. Van Nost Sculpture – Grade I
15. Miscellaneous garden features – Various Grades
16. Registered Park and Garden – Grade II*



Overview of the works



Overview of the works

This application seeks listed building consent for the following works:

Re-pointing works to the West Elevation

- Repairs to existing West facade including cleaning and mortar re-pointing of joints to stonework

Repair and/or replacement of windows to West Elevation:

- Repair and or / replacement of existing windows

Further detail is provided within the outline specification in appendix B and drawings submitted as part of the application.



**Brief description
and history of
Stonyhurst College**



Brief description and history of Stonyhurst College

The grounds

“The landscape of the College has great cultural significance for a number of diverse reasons, most of which stem from its Catholic and Jesuit history. This has regional, national and international importance.

The site as a whole embodies the survival of Catholicism in a time of religious persecution; this is heightened by the isolated location and dramatic landscape. The continued public opening, the numbers of visitors and visits by parish groups demonstrate the ongoing interest in this heritage. The Gardens and landscape are an integral part of the College offering at public opening times. The grounds are also used as part of the ritual of religious ceremonies, for feast day processions and the annual march of St Peter’s Guild. Both the public opening and use for worship maintain long traditions of each activity and demonstrate continued significance.

The Gardens and in particular the Playground embody a tradition of Jesuit educational philosophy, the use of the Playroom rather than the House

system; the rare survival of the probably unique Handballs adds to this significance.”

The Architectural History Practice Ltd, Chris Burnett Associates, Oxford Archaeology North (2015), Conservation Management Plan

Historic development

The buildings at Stonyhurst College have been formed over the past four centuries, starting with the creation of the Gatehouse by the Shireburn family in 1606. The origins of the estate itself date back to the 13th Century. The College moved to Stonyhurst in 1794. This timeline highlights some of the key pieces of historic development with focus on the period since 1794. Extensive detail and explanation can be found within the 2015 Conservation Management Plan.

A key event in recent times was the move to become fully co-educational in 1999. This has proved a significant challenge to adapt the buildings from an all boys set-up.



Heritage assessment

Heritage assessment

Heritage policies

The National Planning Policy Framework [NPPF] was issued in March 2012 and immediately replaced the old system of PPGs and PPSs.

The NPPF introduces a presumption in favour of sustainable development [para. 14] whereby proposed developments which correctly balance the requirements of economic, social and environmental issues should be granted planning permission unless there are strong reasons why permission should not be granted.

With regards to heritage issues the following extracts are considered of particular relevance:

Para. 17: [Core planning principles] conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life for future generations.

Para. 128: In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Para. 131: In determining planning applications, local planning authorities should take account of:

- *The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable use consistent with their conservation;*
- *The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
- *The desirability of new development making a positive contribution to local character and distinctiveness.*

Para. 132: When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

Ribble Valley Core Strategy was adopted by the Council on 16 December 2014. Policy EN5 states that there will be a presumption in favour of the conservation and enhancement of the significance of heritage assets and their settings. Assets and their settings will be conserved and enhanced in a manner appropriate to their significance for their heritage value; their important contribution to local character, distinctiveness and sense of place; and to wider social, cultural and environmental benefits.



Heritage assessment methodology

Paragraph 128 of the NPPF states that in determining applications, local planning authorities should require an applicant to describe the significance of the heritage assets affected, including the contribution made by their setting.

This heritage assessment has been prepared in accordance with this guidance to evaluate the significance of the heritage assets at Stonyhurst and the potential impact of the proposal upon this significance.

Accordingly, the following approach was undertaken to produce the heritage assessment:

- Desktop study of existing literature including listing description and associated documents, photos and drawings;
- Site visit to review the context in respect of the existing condition of the Fabric Fronts;
- Assessment of the results of the first two stages to establish the significance of the site, its heritage assets; and
- Assessment of the impact of the proposed development upon the identified assets.

The application sits comfortably within this local and national policy context. As an existing property, it must be dealt with as it stands. The restoration of the Fabric is considered acceptable in principle. As there are no material alterations proposed, it is set out that the development would not have a detrimental impact upon the significance of the Registered Park and Garden or any of the Listed Buildings on site.

Significance assessment

Para. 129 of the NPPF requires applicants to identify and assess the particular significance of heritage assets or their setting and take this into account when considering the impact of a proposal in order to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal. The significance of a heritage asset may comprise a number of factors which are similar to the criteria for listing and include, but are not restricted to:

- Age and rarity: most buildings built before 1700 which survive in anything like their original condition are listed, as are most built between 1700 and 1840
- Architectural interest: through architectural design, decoration and craftsmanship and also important examples of particular building types and techniques
- Historic interest: encompassing buildings which

illustrate important aspects of the nation's social, economic, cultural or military history, or close historical association with nationally-important people or events

- Group value: especially where buildings are part of an important architectural or historic group or are a fine example of planning (such as squares, terraces and model villages)

Taking such factors into account, the relative significance of the elements of the site can be assessed, using the following scale:

- **High significance** – buildings/features which make an important contribution to the architectural and historic interest and character of the site, through age, rarity, architectural merit or historical association or group value, and whose preservation and enhancement is considered essential.
- **Medium significance** – those making a lesser contribution, but which nevertheless are also considered worthy of preservation or enhancement.
- **Low significance** – those making only a limited contribution to the site overall, although not necessarily detracting from it.

Stonyhurst College Estate and its surrounds are assets of high significance with national importance. The wider site is covered by a Grade II* Registered Parks and Garden designation. A number of structures across the site are also listed.

Statement of significance

The West elevation of the Old Quadrangle is of high significance for historic and evidential values as an example of outstanding architectural treatment.

Architectural, aesthetic and historic significance are reduced however due to the current condition of the facade and water ingress has been a major problem, causing external and internal damage to the existing historic fabric.

The works will match the existing, and the re-

pointing and window repair/replacement works will therefore not have a negative impact upon the significance of the heritage assets.



Statutory Listed Building description

Statutory Listed Building description

Stonyhurst College, Old Quadrangle

Overview

Heritage Category: Listed Building

Grade: I

List Entry Number: 1419714

Date first listed: 14-Jan-2015

Statutory Address: Stonyhurst College, Stonyhurst, Clitheroe, Lancashire, BB7 9PZ

Location

Statutory Address: Stonyhurst College, Stonyhurst, Clitheroe, Lancashire, BB7 9PZ

The building or site itself may lie within the boundary of more than one authority.

County: Lancashire

District: Ribble Valley (District Authority)

Parish: Aughton, Bailey and Chaigley

National Grid Reference: SD6902239026

Summary

School buildings, 1592 and later, by C.A.Buckler and others.

Reasons for Designation

The Front Quadrangle and West Front buildings at Stonyhurst College are listed at Grade I for the following principal reasons:

* Architectural Interest: the buildings contain elements of late C16 Elizabethan Renaissance design, notably the Gatehouse and first-floor hall and apartments around the Front Quadrangle augmented by highly sympathetic C19 revival additions; * Historical Interest: the C16 and C17 country house is associated with a prominent recusant Catholic family, the Shireburns, then being transformed under the Jesuits to play a central role in the growth of the Roman Catholic Church in England throughout the C19 and C20, as the principal school and college for the Society of Jesus in England; * Group Value: the main buildings form part of a strong group with other elements of the complex at Stonyhurst.

History

The buildings at Stonyhurst College grew out of a courtyard plan house commenced by Sir Richard Shireburn in 1592, on or close to the site of a medieval house. Work continued under his successors, including Sir Nicholas Shireburn who added classical features and a formal landscape setting after 1690. The Shireburns and their descendants were a notable recusant Lancashire Catholic family. Mary, the daughter of Sir Nicholas married the 8th Duke of Norfolk, inheriting the estate in 1732, but the house was largely unoccupied during the rest of the C18.

In 1794 the Society of Jesus fled from a temporary school in Liège, and came to Stonyhurst at the invitation of Thomas Weld, the Shireburns' descendant. In 1809, Weld gifted the buildings and estate at Stonyhurst to the Jesuits. In 1803, the Society of Jesus was re-established in England at Stonyhurst under the Provincial Marmaduke Stone, although the Society was not formally recognised by the English Bishops until 1829. In this location, the school continued the lineage of Catholic boys' education and the training of Jesuit priests for the English Mission established at Saint-Omer (St Omers), France by Father Robert Persons in 1593, following Elizabeth I's Protestant Religious Settlement of 1559. In affiliation to the University of London, from 1840 to 1916, Stonyhurst provided degree-level education for men (known as the Philosophers) at a time when Catholics were excluded from Oxford and Cambridge. As the centre for the Society of Jesus in England a seminary was maintained at St Mary's Hall (NHLE 1362219) from 1828 to 1926. Stonyhurst has been co-educational since 1988, continuing to expand on the site and to adapt existing buildings. This long history of Catholic education is reflected in an important collection of Catholic and Jesuit artefacts, devotional relics and works of art, many in-situ within the college buildings since the C19.

The Jesuits adapted the Shireburn domestic buildings and added new school ranges including Shirk, as well as striving towards self-sufficiency with its own gas plant for lighting and later a corn mill. As Catholic ambition and confidence grew after the Emancipation Act (1829), the Jesuits built (and still own) St Peter's Church (1833-35), to serve local Catholics as well as the college. The college buildings expanded in the mid-C19 with the completion of the north side of the Front Quadrangle and the Sodality Chapel (1859). Further development in the mid-C19 included an infirmary, new kitchens, the Ambulacrum and extended chemistry laboratories. More ambitious rebuilding culminated in the new South Front and Boys Chapel designed by Dunn & Hansom, 1875-1888. Early C20 development included a gymnasium and physics laboratory and, in the 1960s, an accommodation block known as the New Wing.

This building was previously Listed under an entry on the NHLE which covered the entire complex of school buildings at Stonyhurst (NHLE 1072336).

Details

Roman Catholic boarding school, comprising dormitories, chapel, libraries, communal and circulation areas, collection display rooms, archive stores and offices.

SOUTH RANGE of WEST FRONT AND GATEHOUSE 1592-5, for Sir Richard Shireburn, with embellishments to Gatehouse 1712 for Sir Nicholas Shireburn, **NORTH RANGE OF WEST FRONT AND NORTH SIDE OF FRONT QUADRANGLE** rebuilt in similar style, 1843-56 by Fr Richard Vaughan, including the **ARUNDELL LIBRARY. THE SODALITY CHAPEL** 1856-9 by C.A. Buckler. **EAST HALL RANGE** 1590s for Sir Richard Shireburn, completed 1690-1718 for Sir Nicholas Shireburn, extended to north 1856 by Vaughan.

MATERIALS: sandstone, ashlar or coursed dressed stone, with deep moulded plinths, string courses, hoodmoulds, cornices and parapet copings; pitched roofs of graduated Lakeland or Welsh slate, mineral felt. Elizabethan, Jacobean, Baroque and Elizabethan revival style. **PLAN:** buildings enclose a rectangular quadrangle with the principal historic entrance in the **GATEHOUSE** on the **WEST FRONT**, facing south-west and axial to The Avenue; (in this description south-west is referred to as west).

The HALL RANGE encloses the east side of the quadrangle, with the long gallery range to the south. Libraries at first floor level in the **NORTH SIDE** of the **WEST FRONT** and to **NORTH SIDE OF FRONT QUADRANGLE**.

EXTERIOR: central 4-stage **GATEHOUSE** tower with semi-circular arched gateway, Doric frieze and recessed roundels with classical heads to the ground floor (from lead garden statuary by van Nost); each floor framed by paired columns of Doric, Ionic, Corinthian and Composite orders, articulated by moulded cornices and string courses. Stone-carved cartouche of Shireburn arms to first floor, 4-light moulded mullioned and transomed windows. Battlemented parapet and external stacks to returns. Iron gates, 1955, by Vincent Hall and Wilfred Mangan. Segmental-vaulted stone ribbed outer passage, with moulded steps and grotesque keystones to inner arch. Rear elevation is plainer, flanked by octagonal stair turrets with 2-light mullioned windows and narrow moulded doorways with C19 panelled doors, gilded clock face to north tower; Baroque domed cupolas added 1712.

WEST FRONT SOUTH RANGE, 3 storeys, 4 irregular bays, with projecting block to south. Moulded plinth, 2 or 3-light mullioned windows to ground and second floor, tall mullioned and transomed windows to first floor, all with hoodmoulds, string course to plain parapet. Block to right breaks forward as squat tower with 5-light pointed window with interlaced tracery to ground-floor former chapel, 2-light and 3-light mullioned windows to first and second floors above.

WEST FRONT NORTH RANGE mirrors south range, 3-storeys, 4 regular bays. North block breaks forward to left, with tall oriel with mullioned and transomed window to first floor, hipped roof. Two ashlar ridge stacks. Rear elevations have moulded plinth, mullioned windows to ground and second floors, tall mullioned and transomed windows to first floor, blocked door to left.

FRONT QUADRANGLE: SOUTH RANGE, 3-storey, 5-bay range with canted central bay with string courses, corner pilasters and moulded friezes. Pedimented doorway c1690-1700. Lead rainwater hoppers with shields of c.1694. Four blocked Tudor-arched doorways, and 3-light mullioned windows to ground floor, large mullioned and transomed

windows to first floor, 4-light mullioned windows to second floor.

HALL RANGE encloses east side of quadrangle, 1590s for Sir Richard Shireburn, altered c1700, extended to north in similar style, 1856 by Father Richard Vaughan. 3-storey, half-octagonal bay to right, mullioned windows to ground and second floors, mullioned and transomed windows to first-floor hall. Raking mid-C19 buttress to centre conceals basement staircase, with above a moulded hoodmould, re-set on site of external staircase. Plain parapet, pitched Lakeland slate roof. Square bay projecting to left added c1856, flat roof. 3-storey canted bay window on the east side of the hall is visible in the Shireburn Quadrangle (qv).

FRONT QUADRANGLE: NORTH RANGE built in form and style to match the south quadrangle range, c1856 by Fr Vaughan, doorway to central canted bay. Double-pile plan with felted flat roofs. **SODALITY CHAPEL**, 1856-9 by C.A.Buckler projects to outer north-east angle of quadrangle on upper floor; canted apse has pointed windows with Perpendicular tracery, square-headed cusped mullioned and transomed windows to east and west elevations, plain parapet to Welsh slate roof. C20 infill on north side of north range not of special interest.

INTERIORS: In the south range, **PIETA GALLERY** has flagged floor, deep chamfered plastered beams and arcaded alcove by Edmund Kirby, 1889 containing a plaster Pieta by Achtermann, 1862. **BAYLEY ROOM** in former chapel to south-west corner has three late-C16 traceried windows, blocked to south and east, and decorative plasterwork of c1800. Adjoining offices have deep chamfered plastered beams and moulded corbels. First-floor **LONG ROOM** in south range, and **STAFF ROOM** in west range have late-C16 plasterwork with scrolled or foliage friezes, compartmentalised ceilings with strapwork decoration, partly restored, C19 bolection-moulded marble fireplace to Long Room, C19 panelled doors and late-C19 chimneypiece incorporating re-set C16 oak mullioned window to Staff Room. First-floor hall, known as the Top Refectory, has early-C17 geometric ribbed plaster ceiling with plaster frieze dated 1606, restored and north bay added 1850s, lateral C16 segmental-arched stone fireplace to east, arcaded oak screen and gallery balustrade to

north incorporates re-used C16 joinery with Latin inscription and date MCCCCXXII, diagonally-laid grey marble floor, 1840s, with stepped upper end, oak dado panelling 1910, stained glass by Willement, 1851 and P.Woodroffe 1920. **GATEHOUSE** has newel staircase with stone treads and newel, chamfered stone doorways, third floor rooms with fitted Neo-classical cupboards and joinery of c1800.

In the north-west range to Front Quadrangle the 1840s **STUART PARLOUR** has oak panelling and Renaissance-style oak chimneypiece. 8-panelled doors with brass fittings and plaster cornices to this and adjoining rooms. North Range has **ENTRANCE HALL** with black and white marble tiled floor, moulded plaster cornices and panelled doors, C17 style open-well timber staircase to north-east corner has closed string, turned balusters, ball finials, wide handrail, top light (blocked) with glazing bars and coved plaster ceiling. First-floor **SQUARE AND BAY LIBRARIES** in north-west range have 1840s fitted shelving and display cases, timber galleries with brass handrails, ornate radiator cover, Elizabethan style decorative plaster ceilings. First-floor **ARUNDELL LIBRARY** in North range, 1850s, has fitted bookcases and Elizabethan-style ceiling plaster. First-floor **SODALITY CHAPEL** designed by C.A.Buckler, 1856, remodelled by him 1899; pointed vaulted ceiling, carved stone gothic altar by Earp, feretory by Buckler, dado panelling and pews, stained glass to apse by Hardman and side windows by Paul Woodroffe, c1920.

Ancillary features: sandstone setts to the Front Quadrangle, laid c1850s, with geometric footways.

Sources

Books and journals

Graffius, Janet, A Stonyhurst Museum Guide, (nd)
Hartwell, C, Pevsner, N, The Buildings of England: Lancashire North, (2009)
Muir, T. E., Stonyhurst, (2006)

Other

Architectural History Practice Ltd, Stonyhurst College, Conservation Management Plan, Parts 1 and 2, 2014

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

ERRA

The listed building(s) is/are shown coloured blue on the attached map. Pursuant to s.1 (5A) of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act'), structures attached to or within the curtilage of the listed building (save those coloured blue on the map) are not to be treated as part of the listed building for the purposes of the Act.

End of official listing



Map

Impact and mitigation of proposed works

Impact and mitigation of proposed works

West Elevation re-pointing

The principle aim of the proposed development is to carry out essential mortar re-pointing to the facade to make it weather proof to withstand the elements and avoid any further deterioration of the existing building fabric externally as well as internally.

The current condition of the masonry wall and stonework require extensive re-pointing. No material changes are proposed.

An outline specification is provided for these works and is appended to this report.

West Elevation window repair/replacement

The principle aim of the proposed development is to carry out essential window maintenance with like-for-like repair (and replacement where necessary) of windows to the west facade to make it weather proof to withstand the elements and avoid any further deterioration of the existing building fabric externally as well as internally.

The current condition of the windows are poor and in need of a comprehensive overhaul. A more detailed external assessment is required in the first instance. No material changes are proposed.

An outline specification is provided for the assessment and is appended to this report.

The window types across the facade, due to replacement of originals at different times in the history of the building. This forms part of the narrative of the building and as such a like-for-like replacement strategy is determined to be justified.

Summary

It is considered that the proposed development will have no material impact upon the Estate, all works proposed will re-instate the original character and appearance of the West Elevation.

The proposed use will be in keeping with the rest of the site.

It is considered that as only restoration and repair works are proposed these would not have an impact upon the setting and character of the Registered Park and Garden nor any of the Listed Buildings.



Appendix A

Appendix A - Historic photos



1885



1895



1885



1905



1905



1905



1860



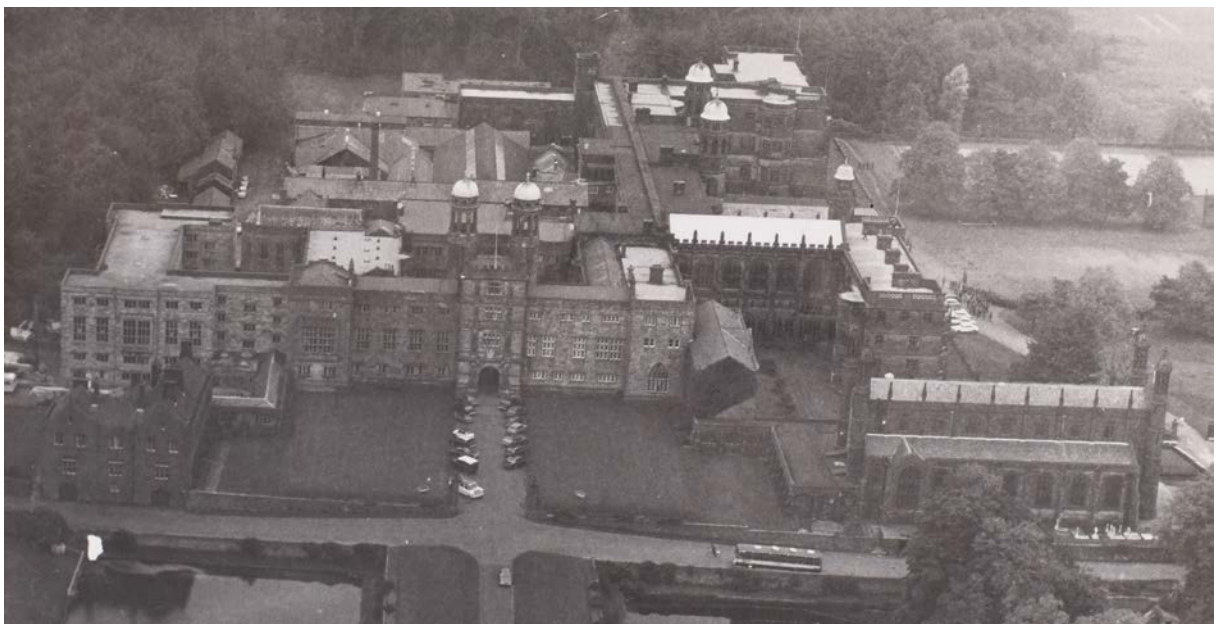
Date / period unknown



Date / period unknown



Date / period unknown



Appendix B

Appendix B - Outline specification for the works

B1 – Re-pointing to West Elevation

1.0 Description / overview

The right hand side of the West Elevation, also known as the Lions are to be overhauled and repaired including re-pointing to match the existing appearance. A full detailed survey of the condition of the existing masonry facade will be required to determine the extent of repair and re-pointing.

1.1 Scope of work

The following works are required to the right hand side of the West Elevation also known as The Lions:

- Re-pointing per the area hatched on the accompanying drawings.
- Localised stonework repairs where required

1.2 Drawings

Please refer to Levitt Bernstein drawing numbers:
3477D-LB-01-DR-A-0001 - West Elevation - Existing West Elevation
3477D-LB-01-DR-A-0002 - West Elevation - Existing Window Schedule

2.0 Mortar re-pointing

2.1 Standards and Codes of Practice

All work is to comply with current standard, guidance documents and best practice as set out in the following documents:

- Historic England, Practical Building Conservation: Earth Brick and Terracotta, 2016
- BS 8221 – 2012 (2 parts) Code of Practice for Cleaning and Surface Repair of Buildings
- N Ashurst, Cleaning Historic Buildings, Donhead, 2 vols, 1994
- BS 7913:2013 Guide to the conservation of historic buildings

2.2 General

Mortar re-pointing is to be carried out by suitably skilled operatives, experienced in the use of specified methods and materials.

Monitoring of the progress of the re-pointing will be required. Any damage to the listed fabric will need to be reported immediately.

2.3 Method

(Information from UK restoration services)

Method Statement

1. Operatives will receive a site induction from the Site Supervisor in which site rules will be taught and RAMS will be reviewed. Certificates and qualifications of the operatives will be assessed for the task. PPE will be distributed. Fire and first aid areas will be confirmed.
2. Operatives must appropriately wear the assigned PPE in accordance with the Risk Assessment.
3. A clearly defined work area will be marked out using cones, tape and barriers to avoid members of the public being in potential danger.
4. A scaffold supplied by a qualified contractor is required to be scafftagged on a weekly basis.
5. Removing the existing pointing must be carried out using hand tools so as not to damage the surrounding stone, using hacksaw blades, querks, TC chisels.
6. Joints must be clear of all cementitious product.
7. Joints must be flushed out using a hand-held water spray. This also wets the stone in preparation for lime application.
8. The Lime is a powder which is available in 25kg bags. Care should be taken when manual handling.
9. The Lime should be mixed as recommended using a gorilla tub and 110V Whisk and transformer by a competent person.
10. Joints must be flooded with clean water prior to grouting. Joints to be plugged with modelling clay. Grouting to not exceed 1 horizontal and 1 vertical per pour. Allow 24 hrs before re-pointing.
11. Non grouting voids- lime must be packed and filled deep to cover the misshaped stone voids using a finger trowel.
12. Once applied the area must be covered with a sheet which is then wet down thoroughly and monitored so as not to dry out – depending on the level of sunlight and heat.
13. Upon removing the sheeting, the lime is to be brushed back to a good visual finish.
14. The area is to be cleaned and cleared. All tools

returned to the vehicle.

Mix

Lime Repointing Mix:

- 750 ml Ionic 2 NHL
- 750 ml Silica Sand
- 250 ml Red Brick Dust
- ¼ Teaspoon Ty Mawr Strong Red Pigment

Lime Grouting Mix:

- 1 Litre Jug Measure of Ionic NHL 2
- 25% PFA
- 15% Chalk Flour
- 10% - 50% Silica Sand (Increased depending upon size of joint)
- ¼ Teaspoon Casein
- 1 Litre of Water

3.1 Stonework repairs

- Work includes repairs required to external masonry surfaces, full extent of repairs to be determined after cleaning, subject to re-survey.
- All the stonework and mortar needs cleaning using a steam based cleaning system to give a very gentle clean initially. Refer to section 2.0 for alternative methods where more invasive techniques are specified.
- Prior to steam cleaning, removal of biological growth (e.g. algae, lichen, climbing ivy) by hand, ensuring all roots are fully removed without harming the original brickwork and stonework.
- Repointing and brickwork repairs should only be done after the brickwork is cleaned.
- All loose bricks to be carefully removed and re-bedded with suitable mortar mix to match existing in composition, colour, texture and appearance. The mortar colour should match the immediately surrounding areas of point. No attempt should be made to remove firmly embedded hard cement.
- Careful re-pointing of stonework joints in suitable mortar to match colour, texture and appearance of the original work.
- Document all repair work before, during and after operation with photos and notes to monitor the refurbishment.
- Repair types to be carried out include:
 - Filling redundant fixing holes
 - Removal of defective or unsightly previous mortar repairs and reinstatement using hydraulic lime-based mortars, to match existing masonry (stone and brick) substrates
- Repointing of any open or defective joints using hydraulic lime-based mortar, to match existing original
- Fractures to masonry – preparation and filling of fractures using hydraulic lime-based mortar to match existing stone, brick and mortar joints if required, and only by direction of the Architect, stone or brick indents to areas of damage or loss – new, natural stone and buff brick indents to be grouted into carefully prepared repair cavities with natural hydraulic lime-based grout
- Repairs and replacement bricks subject to survey findings
- Sample panels must be approved.

Appendix B - Outline specification for the works

B2 – Windows to West Elevation

1.0 Description / overview

The right hand side of the West Elevation, also known as the Lions are to be overhauled and repaired including repair of windows. Where a window is beyond repair (more than 70% damaged) the window will be replaced on a like for like basis. A full detailed survey of the condition of the existing windows will be required to determine the extent of repair and replacement.

1.1 Scope of work

The following works are required to the right hand side of the West Elevation also known as The Lions:

- Repair of the windows identified on the accompanying drawings.

1.2 Drawings

Please refer to Levitt Bernstein drawing numbers:
3477D-LB-01-DR-A-0001 - West Elevation - Existing West Elevation
3477D-LB-01-DR-A-0002 - West Elevation - Existing Window Schedule

2.0 Window repair

2.1 Methodology

- Carry out full inspection in conjunction with Structural Engineer to verify integrity of window framing including damp testing and infestation testing. Allow for infestation treatment according to specialist advice.
- Evidence of water damage/decay: remove damaged framing sections and replace with suitable timber which matches timber profile, species, type and appearance to specialist's advice.
- Any windows that are removed for repair to be carefully recorded, with sashes, casements and other parts labelled to ensure that they go back in the correct positions.
- Complete trial / control samples and arrange for inspection before proceeding with the remainder of work. Areas to be agreed with Architect before carrying out samples.

- Repair of window sections and frames to match existing by specialist contractor e.g. Ventrolla or similar approved.
- Assess glazing condition and replace to match existing.
- Condition of existing ironmongery to be surveyed by specialist to determine required repair / refurbishment work or replacement for each element. Ironmongery to be refurbished / replaced accordingly. Any new ironmongery to match existing.
- Windows shall be repaired, or if beyond repair shall be replaced like for like. Timber windows shall be painted.

2.2 Temporary weatherproofing and security

Window openings are to be blocked up/secured for the duration of their removal for refurbishment to ensure the weatherproofing, security and safety of the building and personnel are maintained.

Appendix C

Appendix C - Photographic Record (Present Condition)



Photo of the West Elevation

Window Types:

Window Type 1
 Timber (sliding sash)

Window Type 2
 Timber (side-hung 1 over 1)

Window Type 3
 Metal (Crittall style)

Window Type 4
 Timber (side hung)

Window Type 5
 Timber (side hung)

Window Type 6
 Timber (fixed putty glazing, and, tilt and turn pivot hung & side hung)

Type 1
Timber frame
(Sliding Sash)



WE-FF01



WE-SF01



WE-TF01

Type 2
Timber
(Side-hung 1 over 1)



WE-GF01



WE-GF02

Type 2 (continued)



WE-GF03



WE-GF04



WE-SF02



WE-SF03



WE-SF04



WE-SF05

Type 3
Metal frame
(Crittall style)



WE-FF05

Type 4
Timber (Side hung)



WE-FF02



WE-FF03



WE-SF06



WE-SF07

Type 4 (continued)



WE-FF04

Type 5
Timber
(side hung)



WE-FF06



WE-FF07

Type 6
Timber frame & putty fixed glazing
(Tilt and Turn & side hung)



WE-GF05

