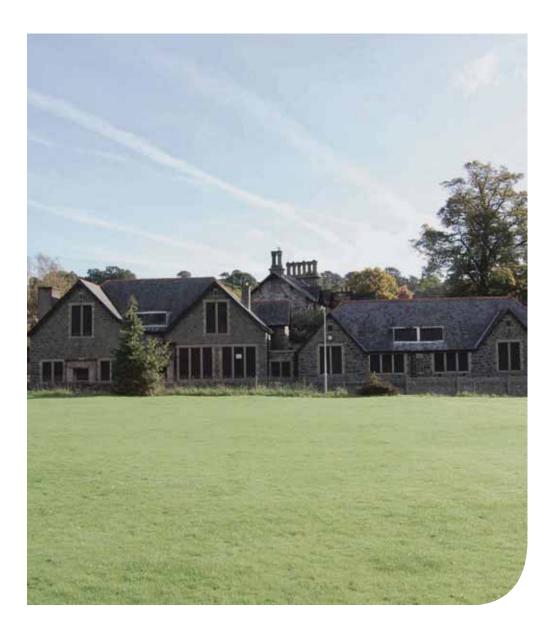


Archaeological Mitigation report





Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

YSGOL DYFFRYN CONWY, LLANRWST

Archaeological Mitigation report

Project No. G1961

Report No.1184

Prepared for: Anwyl Construciton Ltd

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John Roberts, Robert Evans, Macsen Flook, Gertwyn Richards, David McNicol and Tanya Berks

Cyhoeddwyd gan Ymddiriedolaeth Achaeolegol Gwynedd Ymddiriedolaeth Archaeolegol Gwynedd Craig Beuno, Ffordd y Garth, Bangor, Gwynedd, LL57 2RT

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> Cadeiryddes/Chair - Yr Athro/Professor Nancy Edwards, B.A., PhD, F.S.A. Prif Archaeolegydd/Chief Archaeologist - Andrew Davidson, B.A., M.I.F.A.

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NON-TECHINICAL SUMMARY

Gwynedd Archaeological Trust (GAT) completed a large-scale archaeological mitigation programme at the location of the former Ysgol Dyffryn Conwy, Llanrwst during extensive renovation and construction work.

The school complex comprised several interconnected structures of 17th century, 19th century and 20th century origin. The mitigation programme was completed between 2007 and 2012 and included digital structural survey of the 17th century Grammar School and a photographic and written survey of this structure and all structures within the complex. The mitigation programme included pre-renovation and continued observation and survey throughout the renovation work. This allowed opportunities to record the structures once modern extensions and additions were removed and to record internal elevations once the render was also removed. In the case of the Grammar School, this allowed a detailed record of the multiphased activity apparent on the elevations, representing the alterations and additions that were undertaken on that structure during its use as a school. The cellar that ran beneath the Grammar School into the Schoolmaster's House was also accessed and recorded, as well as the roof trusses within the Grammar School once the render was removed, with the aim to characterise and contextualise the mortar in relation to other contemporary examples.

The Grammar School and adjoining structures, including the Schoolmaster's House, were not fully renovated and render was retained on the south and north facing internal elevations of the Grammar School. These elevations require further mitigation should additional renovation work be undertaken.

1.0 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by *Anwyl Construction Co Ltd* (hereafter *Anwyl*) to complete a report for the archaeological mitigation at the former Ysgol Dyffryn Conwy, Llanrwst (NGR **SH80106170**; Figure 1). The archaeological mitigation was completed during a large-scale renovation/conversion programme within the former school complex. This report incorporates the results of the archaeological mitigation completed during the Anwyl works between March 2012 and December 2012 as well as information derived from the archaeological mitigation programme during the renovation stages completed between 2007 and 2011 under different construction contractors but within the same planning application (**0/32894**) and Gwynedd Archaeological Planning Services mitigation brief **D1125**.

The archaeological mitigation included a watching brief during the renovation/conversion programme and a staged building recording programme completed (cf. para. 3.0 for the methodology).

The former school complex was located to the north of School Bank Road, Llanrwst, within a 1.34 hectare irregular shaped plot (Figure 1). Prior to the start of the renovation/conversion works, the school complex comprised several interconnected structures of 17th century, 19th century and 20th century origin. The school remained in operation until 2005, when it was closed and relocated. Prior to closure the school complex included the following:

- A large multi room school building built in the 1960s, located at the eastern end of the site.
- The Old Grammar School and Schoolmaster's House as a combined block with nineteenth and twentieth century extensions, including additional classrooms and connecting corridors; this block was connected to the 1960s main building by a link corridor attached to the eastern end Schoolmaster's House;
- Two early 20th century school buildings facing School Bank Road and located at the western end of the complex; these were connected to the Old Grammar School/Schoolmaster's House block via a link corridor;
- A detached twentieth century structure at the northern end of the complex; this was not linked to the rest of the complex.

The Old Grammar School and Schoolmaster's House are Grade II listed (refs. 3592 and 3593 respectively) and are still extant, along with the two early 20th century school buildings facing School Bank Road and the detached twentieth century structure at the northern end of the complex. The 1960's school was demolished in 2008, along with the link corridors and modern extensions connecting the remaining buildings. GAT completed a photographic record of the school complex in September 2007 prior to demolition. The remaining structures were retained and an additional internal and external photographic record of the school complex was completed in March 2008. A digital internal and external survey of the old grammar school was undertaken using a *Leica TCR 305* total station. The survey recorded the internal fittings and roof trusses as well as visible phasing detail (note: the interior had not been altered at this time except for the removal of furniture); the external survey recorded the two visible elevations (the north and south elevations were blocked by the old schoolmaster's house and a 19th century extension, respectively). A partial external digital survey was also completed of all four elevations of the Schoolmaster's House, paying particular attention to the raised roof. The interior of the schoolmaster's house still incorporated internal partitions and fittings associated with the operation of the school and no phasing associated with it's relationship to the old grammar school could be inferred at that

time. The archaeological mitigation programme continued in 2011 with the recording of the five roof trusses in the old grammar school via photographic survey and drawn record to scale, with all visible phasing identified and recorded. An interim report was completed by GAT in November 2011 (GAT Report unpublished). The final on-site mitigation phase was completed between March and November 2012: the internal render was removed from the old grammar school within targeted areas; render was not fully removed from the internal north facing and south facing elevations, but was completely removed from the internal east and west facing elevations. The wooden floor was removed and replaced and a written record, photographic survey and drawn record to scale was completed of the exposed area during the works; the cellar leading from the Old Grammar School into the Schoolmaster's House was also exposed at this stage and recorded, along with internal elevations on the ground floor of the Schoolmaster's House. Removed render where the schoolmaster's house connected to the old grammar school (exposing what would have been the external wall of the old grammar school) was recorded and three mortar samples were taken at tactical locations from exposed elevations with the old grammar school. No further mitigation works were completed on the two early 20th century school buildings facing School Bank Road and the detached twentieth century structure at the northern end of the complex.

Based on the results of the archaeological watching brief/building recording, the mitigation report contains the following:

- Information on the results of the English Heritage *Understanding Historic Buildings: a guide to good recording practice* Level 2/3 record of the two early 20th century school buildings facing School Bank Road and the detached twentieth century structure at the northern end of the complex.
- The results of the English Heritage Understanding Historic Buildings: a guide to good recording practice Level 3 record of the Schoolmaster's house completed in response to the renovation work completed by Anwyl between March and November 2012. The schoolmaster's house comprises a three storey structure attached to the old grammar school (north facing elevation). The recording phase identified structural phasing within the external elevations indicative of previous alteration work, including the raising of the roofline to accommodate more space on the second floor.
- The results of the English Heritage Understanding Historic Buildings: a guide to good recording practice Level 4 record of the 17th century schoolroom completed in response to the renovation work completed by Anwyl between March and November 2012. This included the drawn record of the five roof trusses and information derived from the *Leica TCR 305* total station digital survey completed in 2008. The results include an inspection of the cellar that runs between the old grammar school and the former schoolmaster's house and from the removal of internal rendering, paneling, fixtures and fittings that obscured earlier structural work.
- The results of a chemical mortar analysis of three mortar samples taken from the old grammar school by Ned Scharer of *The Natural Building Centre* who completed an assessment of the samples. Three sample points were targeted after the removal of internal render:
 - Sample 1: wall plaster on the reveal of a blocked former archway;
 - Sample 2: mortar from the southwest internal wall;
 - Sample 3: mortar from the north face former external wall of the old grammar school taken from a bedding joint;

The Natural Building Centre report is reproduced as Appendix II

Please note that the current report is based on the results of the renovation/conversion programme as completed in 2012; the archaeological mitigation report does not include areas where internal render was not removed and any further renovation work will need to be completed under archaeological mitigation.

1.1 Standards and Guidelines

All work was planned, managed and undertaken in accordance with the following standards and guidance:

- Institute for Archaeologists, 1985, Code of Conduct (revised 2008)
- Institute for Archaeologists, 1996, *Standard and Guidance for the archaeological investigation and recording of standing buildings or structures* (revised 2008)
- Institute for Archaeologists,1994, *Standard and Guidance for Archaeological Watching Brief* (revised 2001 & 2008)
- English Heritage. 2006 Understanding Historic Buildings: a guide to good recording practice

The archaeological mitigation programme was completed in line with Gwynedd Archaeological Planning Services mitigation brief **D1125**.

2.0 BACKGROUND

2.1 Archaeological and Historical Background

2.1.1 Introduction

The town of Llanrwst owes its location to being the first place where the Afon Conwy could be crossed by means of a ford, which would have encouraged early settlement, and had probably encouraged the foundation of St. Grwst's church on the eastern the river bank. The river formed the boundary between the post Edwardian conquest counties of Denbighshire and Caernarfonshire, Llanrwst being located on the Denbighsire side. The church is referred to in the Norwich taxation of 1254 and the Lincoln taxation of 1291, and reference to a market is first recorded in 1328. By the 14th century there was a borough on the site, but there is no record of its foundation, and the majority of the burgesses were Welsh (Soulsby 1983, 172). Glyndwr's attack on the town in 1401 'brought such a desolacion that greene grasse grewe on the market place...and the deare fed in the churchyard' (Sir John Wynne, in Ballinger 1927, 52-53). The parish church appears to have been rebuilt in early Tudor times, as the town recovered after the Glyndwr uprising.

2.1.2 The 17th to 18th centuries

The earliest formation of Llanrwst Grammar School is unclear, 1610 is generally accepted as the date of foundation, and however there is limited evidence that there was a school in in operation prior to this. For example a memorandum written by Sir John Wynne in September 1605 states that the building of "a chimney in the schole" required his attention. Sir John owned a very significant number of properties in Llanrwst at the time and it is likely that the school to which he is referring was housed within one of these properties. It is possible, also that Sir John's only connection with this school was as landlord. However it formed part of a major investment by the family in the town in the 17th century. As well as the school and almshouses, the family built the Pont Fawr, and later the town hall in 1661. By the early 17th century Llanrwst was beginning to recover its position in the locality, and had a flourishing market. Construction of Llanrwst Bridge (Bont Fawr) began in 1636, and was a vital link for the Wynns of Gwydir, linking their estate with disparate portions of it at Cae'r Melwyr and Berth Ddu (Tucker 2002, 20). Despite these adornments Pennant (1782) describes the town as 'small and ill built' (Pennant 1783, 152) and Bingley (1814) as having 'nothing to recommend it to notice: the streets are narrow, and the houses very irregular' (Bingley 1814, 303). These impressions suggest that the Wynne building works did not impose themselves upon the town.

It is clear that in 1610, the Jesus Hospital was founded in Llanrwst, whether as a result of the reformation of an existing school or as a purely new foundation under the patronage of Sir John Wynne is unlikely to be ever known. Some sources find it difficult to attribute such an act of charity to Sir John, however it is clear that at the time there genuine interest in education in the region; the Friars School in Bangor was founded in 1557, and in Ruthin in 1595, and two further Grammar Schools were founded in Beaumaris and Wrexham in 1603. It is possible that Sir John was following the fashion in an attempt to enhance his prestige. In 1610 Sir John obtained the rectoral tithes of Eglwys-bach which he used to bestow upon Llanrwst Jesus Hospital, which comprised a free school, almshouse and a weekly lecture (Gwynedd Archives XD38/428). The statutes Sir John drew up for the school 1612 ordered it to be built at Cae Hullyn, approximately 450m east of the Parish Church. Sir John ordered that the land not be enclosed or ploughed and that the pupils were '*to have liberty to play all over it*'; the grazing and haymaking were to go to the usher, both he and the Master would have a house and garden near the school, at the time a very generous provision. Further to this the Master was receive a salary of £20 per annum and the usher £10 per annum.

Sir John laid down strict instructions regarding the qualifications, duties and conduct of the Master. The Master was to be over 22 years old and be a graduate of one of the Universities and have skill *"both in the Greeke and Latyne tongue"*. The Master was also to have a set form of prayer in the School *"to be read or distinctively sayd in the School"*. Every Friday the Master has to instruct the Scholars in a short *"catechism"* between 2 and 3 o'clock before dismissing them for the day.

The statutes also include the telling phrase "*I do intend to build*" which implies that neither the almshouse nor the school had been built in 1612. In March 1614, believing his death to be imminent, Sir John, aged 61 wrote to his son listing his duties and included the phrase "*the hospital by me founded and builded on the land on the land I did before assure unto you*". Another letter dated July of the same year thanked God for granting him time to "*tyme to fynyshe the almshouse and the Wardens Lodgynge*". It is unlikely that the school would not also have been finished by this time. It is almost certain, therefore, that the school was built between 1612 and 1614. The area of land given to the school adjacent to the road can be seen on an undated, but late 18th century, estate map in the Mostyn collection at the University of Bangor (Bangor Archives, Mostyn MSS S8535, Fig. 3). It can also be seen on a Gwydir Estate map of 1784-6 (Lincolnshire Archives, 4-ANC/4/5). The area of land can still be seen fossilised in the later landscape shown on Ordnance Survey maps, where the development of the school can be traced (Figs. 4 to 6).

The early years of the school, however were not as smooth as to be expected. By 1678 the school has ceased and a claim was being made by the Master and the usher for arrears to the Chancery Suit. Sir John's grandson, Sir Owain Wynne had discontinued payments to both. The Wynne family argued that although Sir John had founded the school, he had never endowed it and therefore, monies could be paid or withheld at will, the Attorney General, in a roundabout ruling found against Sir Owain. The Chancery Suit found that the money for the founding and endowment came not from Sir John, but from a John Williams of Dolwyddelan, another branch of the Wynne family. John Williams was a wealthy man who is said to have been a banker or goldsmith to King James I (King James VI of Scotland); being a charitable man, John give, either in his own lifetime or in his will money to his son and Sir John to erect a Schoolhouse, almshouse and Warden's house in Dolwyddelan. It was decided that Dolwyddelan was unsuitable and the school was moved to Llanrwst. The overall result of the case was the Chancery found against Sir Owain and payments resumed and the school re-opened. It could be argued, therefore, that it was John Williams and not Sir John who had founded the school.

During the 18th century the school went through a quieter period, with many of the headmasters being incumbents of local parishes in addition to their duties at the school, including John Williams, who was a Fellow of Jesus College in Oxford. By 1786 the schoolmaster was paid £25 per annum and the Usher £15 per annum, the payment being made out of the rectorial tithes of Eglwysbach. In 1795 there were about 40 scholars at the school, and in 1803 an entrance fee of 10 shillings was charged, and £1 for those who were to be educated in Latin and Greek (Parry 1960, 11). The master and usher's houses, which adjoined the schoolroom has access to the gardens, and the master had a 2 acre field which was contiguous to his house. This area was subsequently built upon with later school buildings, including the girl's school building.

2.1.3 The School from the 19th Century until Modern Times

Payments from the Wynne family for the upkeep of the school resumed and continued until 1822 when they once again ceased and the school closed and both parties returned to the courts. The dispute lasted until 1828 when once again payments resumed and the school re-opened, for the first time admitting both boys and girls, the schoolroom was divided by a

partition to provide separate classrooms for the girls and boys. The resolution of this second court case left the school on a firmer footing with the appointment of 11 local trustees. In Charity Commissioners' Scheme of 1879 again saw a major change in the school, the bulk of the endowment was now to be spent on the school, Jesus Hospital therefore, became "The Hospital and School Foundation of Sir John Wynne of Gwydir", essentially a Grammar School. Many additional buildings on the site were added to the school from this time, as it developed into a significant modern educational establishment (Fig. 7). Prior to this time the school had been relatively small in numbers (Parry 1960, 22).

The situation remained thus until the passing of the Welsh Intermediate Education Act (1889) when education across Wales was reformed and County Schools were established. In 1894 the school merged into the Denbighshire County Scheme and the school became the Llanrwst County School. At that time the school site and buildings was said to cover 3 acres 28 perches, and was valued at £2100, and the value of the school's endowment, the Eglwysbach and Maenan tithes, amounted to £717 (*ibid.* 24). The girls' school building was completed on the site in 1899, designed by *John Mayers* of Chester, somewhat behind schedule, and not shown on the 2nd edition Ordnance Survey Map of 1900 (Fig. 5). In 1908 it was decided to enlarge the existing school buildings, and alterations were carried out to both the boys and girls schools. This involved the demolition of a projection from the school hall, which had formed the porch of the original school. The Latin foundation inscription was moved from this and placed in its current position at this time (*ibid*, 27). The new buildings were completed by the end of 1913 (3rd edition Ordnance Survey Map; Fig. 6), and the school, with the exception of the addition of a physics block in 1924, took on the form it was to have up until 1960.

The school remained a County school until the passing of the Education Act (1944) when it became Llanrwst County Grammar School and remained thus until the formation of Ysgol Dyffryn Conwy in 1960. In 2005, with the original 395 year old site no longer fit for purpose the school was moved to a new purpose built site on Nebo Road, Llanrwst.

2.2 Project Background

Gwynedd Archaeological Trust subsequently completed the archaeological mitigation specified in GAPS mitigation brief D1125, between October 2007 and November 2012. An external photographic record was completed of the school complex in October 2007, prior to the demolition of the 1960's school and the extensions attached to the old grammar school and the schoolmaster; s house. An internal and revised external photographic record of the school complex was completed in March 2008, after the demolition of the 1960's school and the extensions. A digital internal and external survey of the old grammar school was completed using a Leica TCR 305 total station and the information recorded in AutoCAD software. The survey recorded the internal fittings and roof trusses as well as any visible phasing detail (note: the interior had not been altered at this time except for the removal of furniture); the external survey recorded the two visible elevations (the north and south elevations were blocked by the old schoolmaster's house and a 19th century extension, respectively). A partial external digital survey was also completed of all four elevations, paying particular attention to the raised roof. The interior of the schoolmaster's house still incorporated internal partitions and fittings associated with the operation of the school until 2005 and no phasing associated with it's relationship to the old grammar school could be inferred at that time. The archaeological mitigation programme continued in 2011 with the recording of the five roof trusses in the old grammar school on the instigation of the renovation programme. The trusses were recorded by written record, photographic survey and drawn record to scale, with any visible phasing identified and recorded. An interim report was completed in November 2011 and is reproduced as Appendix I. The final on-site mitigation phase was completed between March and November 2012: the internal render was removed from the old grammar school within targeted areas; render was not fully

removed from the internal north facing and south facing elevations, but was completely removed from the internal east and west facing elevations. A written record, photographic survey and drawn record to scale were completed. The wooden floor was removed and replaced and a written record, photographic survey and drawn record to scale was completed of the exposed area during the works; the cellar was also exposed at this stage and a photographic record was completed. A further written record, photographic survey and drawn record to scale was completed of the cellar, which extended from under the northern half of the old grammar school into the southern half of the schoolmaster's house. The schoolmaster's house was also recorded via written record, photographic survey and drawn record to scale. The removal of the internal render and plaster work as part of the dry rot remediation iondiicated the 19th century lay out of the schoolmaster's house. Removed render where the schoolmaster's house connected to the old grammar school (exposing what would have been the external wall of the old grammar school) was recorded.

3.0 METHOD STATEMENT

3.1 Level 2/3 record of the 19th/20th century school buildings

The Level 2/3 record will incorporate information derived from the 2007 and 2008 GAT mitigation programme which included a written record and photographic survey of the former girl's and boy's schools at the western end of the school complex, the ancillary building at the northern end of the school complex (an infant's school on the closure of the premises) and the 1960's school and associated extensions and link buildings connecting the 1960's school to the old grammar school and then to the boy's and girl's school, as well as the link building connecting the western end of the old grammar school to the school master's house. The location of the photographic record was recorded on *Munro Building and Planning Consultants* drawings 456.14 to 489-511 (a total of 21No drawings), which included elevations and plans of the school complex prior to the start of the renovation/conversion. The drawings will be annotated with directions of plates used in the report.

A Level 2/3 record is defined in the English Heritage *Understanding Historic Buildings: a guide to good recording practice* as a descriptive and analytical record. The record will present conclusions regarding the structures development and use and an account of the origin and development of the structure, both through documentary research (including Ordnance Survey maps) and an examination of the structure.

3.2 Level 3 record of the Schoolmaster's House

The Level 3 record will incorporate information derived from the 2008 and 2012 GAT mitigation programme which included a written record and photographic survey of the external elevations and the building interior, comprising three storeys. The 2008 mitigation included a record of the pre-renovation building layout, which comprised 20th century alterations to the ground and first floors and a little altered second floor 19th century layout completed after the raising of the roofline in 1874 to provide accommodation for resident pupils. The location of the photographic record will be recorded on *Munro Building and Planning Consultants* drawings 456.14 to 489-511. A detailed description will be completed of the exposed render on the internal north facing elevation where the schoolmaster's house is connected to the old grammar school. The phasing for the schoolmaster's house will include documentary and cartographic evidence.

A Level 3 record is defined in the English Heritage *Understanding Historic Buildings: a guide to good recording practice* as an analytical record. The record will present conclusions regarding the structures development and use and an account of the origin and development of the structure, both through documentary research (including Ordnance Survey maps) and an examination of the structure.

3.3 Level 4 record of the Old Grammar School

The Level 4 record will incorporate information derived from the 2008 and 2012 GAT mitigation programme which included a written record and photographic survey of the external elevations and the building interior. The location of the photographic record will be recorded on *Munro Building and Planning Consultants* drawings 456.14 to 489-511. The digital internal and external survey of the old grammar school (completed using a *Leica TCR 305* total station with information recorded in *AutoCAD* software via *TheoLT*), will be utilised to produce an isometric drawing of the building allowing information to be presented on the layout and phasing of the structure. The isometric drawing will include the location of the five trusses and the conjoining cellar. Detailed information on the phasing of the internal elevations will be presented via scaled drawings; a scaled plan of the floor and cellar will also

be presented. The phasing for the old grammar school will include documentary and cartographic evidence as well as the elevation drawings and plans.

The results of a chemical mortar analysis of the three mortar samples taken from the old grammar school have been included. A historical and contextual discussion of these samples will be incorporated into the final report, including comparison with mortar previously analysed at Pont Fawr, Llanrwst (Llanrwst Bridge), also built in the early 17th century. This will include two reports completed by by Ned Scharer of *The Natural Building Centre* who completed an assessment of the samples. The results are reproduced as Appendix II.

A Level 4 record is defined in the English Heritage *Understanding Historic Buildings: a guide to good recording practice* as a comprehensive analytical record and is "appropriate for buildings of special importance" (*ibid.*: 14). A Level 4 record will examine and discuss the building's significance in terms of architectural, social, regional and economic history.

Note: the results of the watching brief have been incorporated into the respective Level 2 to 4 records as the information derived from the watching brief was used to inform the descriptive and analytical records.

4.0 SURVEY RESULTS

4.1 Level 2/3 record of the 19th/20th century school buildings

The level 2/3 record includes the following structures:

- A large multi room school building built in the 1960s, located at the eastern end of the site.
- Two early 20th century school buildings facing School Bank Road and located at the western end of the complex; these were connected to the Old Grammar School/Schoolmaster's House block via a link corridor;
- A detached twentieth century structure at the northern end of the complex; this was not linked to the rest of the complex.
- Extensions to the Old Grammar School block

4.1.1 1960s School Building and ancillary structures

The 1960s school block was located at the eastern end of the school complex (Figure 2; Plate 02). The first to third edition 25" Ordnance Survey mapping of the area (1875, 1900 and 1913 respectively, Sheet XI.14) detail this area as part of the larger school grounds (cf. Figures 4 to 6). A group of small buildings are visible on all three editions at the northern end of the school grounds, against the boundary wall. These were removed to accommodate the 1960s building. The earlier school buildings were still used in conjunction with the 1960s building and collectively formed Ysgol Dyffryn Conwy.

The 1960s school building covered an area of 2109m². This building comprised a central rectangular core, orientated north to south, with large protruding blocks at the southern end. The building was constructed in a flat-roofed functionalist style typical of educational buildings of the period, with prefabricated materials used throughout. The interior was not accessible at the time of the GAT record (2007), but the exterior included large rectangular windows on each floor, with brick facing and wood paneling (cf. Plates 03 to 14).

The 1960s school block was linked to the rest of the school premises via a series of link corridors and ancillary buildings. The main 1960s building was connected to the Schoolmaster's House via a single storey 6.0m long link corridor (Plate 15). The block incorporating the Schoolmaster's House and Old Grammar School were connected to the School Bank Road buildings via a modern main entrance lobby and link corridor (Figure 06; Plates 17 and 18). The detached buildings at the north of the school complex were not physically connected to the rest of the school. In addition to the link corridors and the main entrance lobby, a modern toilet block was added to the southern elevation of the School Bank Road buildings (Figure 06; Plate 21), either as part of the 1960s construction programme or as a later edition.

The 1960s school building, link corridors, main lobby and the toilet block extension were all demolished in 2008, ahead of the renovation/construction programme (q.v. Figure 06 for the location of demolished structures).

Two non-listed stone-built extensions on the eastern side of the Old Grammar School (Plate 16) were also removed as part of the demolition programme.

4.1.2 School Bank Road Buildings

The School Bank Road buildings were located at the western end of the school complex (Figure 2) and comprised two main structures connected via a short corridor. The southern building was single storey and the northern building was two storey.

An examination of the first to third edition 25" Ordnance Survey mapping of the area (1875, 1900 and 1913 respectively; Sheet XI.14), indicates that the location of these buildings was open school ground on the 1875 and 1900 maps (Figures 4 and 5), separated from the Old Grammar School/Schoolmaster's House blocks by an internal boundary wall. The southern School Bank Road building is extant on the 1913 map supporting the secondary source information that states it was built in December 1899, by John Meyers of Chester (Parry 1960). The layout of the southern building on the 1913 map (Figure 6) matches the current form of the southern building, except for the modern toilet block addition (q.v. para. 4.1.1). The southern building was built as a Girls' school, separate from the Old Grammar School that was the Boys' School. The northern building was constructed post-1913. The exterior appearance of the north and south buildings are very similar, with the use of roughly coursed masonry, slate roofs and overhanging eaves, sandstone lintels, sills and mullions on the windows, suggesting the north building was built to match the Girls' school.

As the buildings were conjoined via the link corridor, they were recorded as one building and for the purposes of this report will be discussed together.

4.1.2.1 External Description

All external elevations were accessible and visible. The main entrance points were from the western end; the link corridor connected to the Old Grammar School/Schoolmaster blocks and the toilet block had been demolished at the time of the external record (2008). The external images are recorded on Plates 23 to 42; the location of these plates are indicated on Figure 8.

The western elevation measured c.50m in length and c.9.0m in height at the highest point of the gable apex on the northern building. The elevation included three entrance points on the ground floor: the southernmost was stone-built flat-roofed porch, with a worked inset stone set above the door inscribed Girls (Plate 27). The entrance door was blocked, but the door surround was dressed sandstone that matched the form of the windows. The remaining entrance points along the northern building were two identical inset entranceways with dressed sandstone surrounds; they both measured 2.0m in width and 3.0m in height. The southernmost example was inscribed Girls and the northernmost Boys (Plates 32 and 33). The ground floor included thirteen windows, with each window divided into two or three equal parts by sandstone mullions. There were two gable ends on the southern building of equal height at c.6.0m, with a dormer light set between them in the roof. The two taller gables on the northern building measured c.9.0m in height, with first floor windows in each, of matching style to the ground floor windows. Small sandstone vents were set near the apex of all four gables. Two chimney stacks were visible: a stone-built chimney at the southern end of the northern building and a brick-built chimney at the northern end of the northern building (Plate 29). A cellar entrance point was located at the corner of the west and northern elevations, with access via the dressed stone steps (Plate 34). The cellar entrance measured 0.9m wide and 2.0m high and was surrounded in dressed sandstone, with a small conjoining window in the same style (note: both the door and window were blocked).

The north elevation measured 11.6m in width and 9.0m in height (Plate 35). The elevation comprised three equal sized windows, each measuring *c*.2.0m wide and 3.0m high and built in the same style as the west elevation. Three projecting dormer lights were set into the pitched slate roof, with each dormer aligned to the ground floor window. The brick-built

chimney also visible on the west elevation was set alongside the dormer lights. There was no ground floor entrance on this elevation, but access to the cellar was also afforded here by stone steps. A 1.0m high wall ran parallel to the elevation.

The east elevation measured c.50m in length and c.9.0m in height at the highest point of the gable apex on the northern building (Plate 36). The wall along the northern elevation continued as a retaining wall on this elevation as the School Bank Road buildings were recessed into an east to west slope. The east face of the north building was similar to its western counterpart, incorporating two gable ends. An entrance was set between them, with a large 1.6m wide and 2.0m high door. Above the entrance door was mid-storey window. The south building incorporated four gable ends. The ground floor incorporated sixteen window sets along the length of both the north and south buildings. The windows on the south building differed in form to the north building and were characterised by three sets of windows in each gable, with each set comprising two shorter outer windows (1.6m wide by 2.6m high each) and a taller central window (3.2m high). These windows were of a simpler style, with sandstone lintels and sills but no sandstone surrounds. The windows on the north building gable ends conversely matched the more elaborate style of the west elevation in keeping the sandstone surrounds. The link corridor connecting the two buildings was visible as a narrow 1.2m wide and 3.1m high stone-built structure, with dressed sandstone surround on the door. As with the east elevation, vents were visible near the gable apex points.

The south elevation measured 14.0m in width and 7.0m in height and incorporated one gable end and hip roof. There were no windows on the gable end, whereas a ground floor window was set beneath the hip roof and was built in the same style as the west elevation windows. The south elevation also included the porch entrance visible on the east elevation. A modern entrance had been added to the porch to allow access to the toilet block extension (Plate 25).

4.1.2.1 Internal Description

The School Bank Road buildings incorporated fourteen ground floor rooms of varying size and three first floor rooms in the northern building.

For the purposes of the archaeological recording, each room was designated a number, starting with G01 for the ground floor and F01 for the first floor. The rooms were recorded prior to the main renovation programme and were still extant as modern school rooms. The rooms are located on Figure 08 along with the location and direction of plates.

Ground Floor (Plates 43 to 50)

G01

6.8m x 7.0m (w x l)

A square shaped room at the southern end of the building. The room was accessed from the porch entrance on the western side and included four window sets on the eastern side looking onto the school yard. The windows were in two groups: a central group of three narrow windows, with a middle taller window; the windows were multi paned fixed bottom, with a casement top opening. A smaller sash window was located to the north of this group. The ceiling was vaulted with a central metal vent. The walls were painted plaster and brick; the painted plaster was extant from the base of the windows, with the painted brick running from floor height to the base of the windows. A recessed "arch" was extant on the southern elevation, up to *c*.2.5m in height; this did not appear to represent a former opening but was internal detail (note: a similar arch effect was used in rooms G04 and G05). The room still included modern school media on the walls. Room G01 provided access to room G02.

G02

6.8m x 5.0m (w x l)

This room was of rectangular shape with the same central group of three narrow windows as room G01; as the room was shorter, there was no additional sash window. The ceiling was vaulted as room G01. A modern storage area had been built into the south eastern corner of the room. This room included changing room furniture.

G03

5.0m x 5.0m (w x l)

This room was accessed from G02 and was of a square shape with the same central group of three narrow windows as room G01 and G02; but with no additional sash window. The ceiling was vaulted as in the other two rooms. This room was used as a classroom prior to closure.

G04

7.6m x 5.2m (w x l)

This room was accessed from G03 and was of rectangular shape. The room faced onto School Bank Road and included the large sandstone mullioned windows visible from the external western elevation; the windows were multi-paned sash. The ceiling was flat and not vaulted. A former fireplace was visible next to the entrance from G03: the fireplace had been sealed. A recessed arch was extant on the eastern wall that was shared with room G06; this arch matched the design from room G01; as with that example, this appeared to be an interior design rather than a former entrance. A dormer light was located above the large windows in the corner of the room (this dormer was visible from the western external elevation). This room was used as a classroom prior to closure.

G05

8.4m x 5.2m (w x l)

This room was accessed from a narrow corridor to the east and was of rectangular shape. The room design was very similar to G04, with windows of the same design facing School Bank, flat ceiling and elevated dormer light. The second half of the recessed arch was visible on the eastern wall. This room was used as a classroom prior to closure.

G06

2.4m x 2.4m (w x l)

A square shaped entrance room for G10, providing access to the north building; no internal access was provided to the rooms in the southern building.

G07

3.0m x 5.6m (w x I)

A narrow rectangular room accessed from the porch entrance. The room included two sets of sash windows: one set on the south elevation and one on the west elevation. The room included modern cloakroom fittings and 1.20m high wood panelling on the walls and would have been an access point for pupils to enter class G02.

G08

1.6m x 6.0m (w x l)

A narrow rectangular corridor providing access from the link corridor connected to the eastern elevation, into rooms G09, G03 and G05. A modern partition with internal opaque glass panels above head height formed the eastern wall of the corridor. This separated rooms G08 and G09 and proved that those two rooms were in fact one former room, with partition constructed to create a cloakroom/toilet in G09.

G09 5.0m x 3.0m (w x l) A rectangular shaped cloakroom/toilet. This room was accessed from G08 and G03 and was of a square shape with the same central group of three narrow windows as room G01 to G03 and with a vaulted ceiling as in those rooms.

G10

7.0m x 10.0m (w x l)

A large rectangular shaped room in the north building, accessed from G06. This room faced both School Bank Road and the school yard on the opposite of the building. The windows were multi-paned sash and casement, with two sets on the west elevation and one set on the east. The room had a modern suspended ceiling and modern furniture and appeared to be the Home Economics room. A sealed fireplace with modern décor surround was extant on the eastern elevation. No earlier décor or fittings were visible.

G11

3.0m x 3.0m (w x I)

A small square room that was used for access from G06 to G12 (lobby leading to the first floor). Room G11 included the entranceway marked *Girls* on the exterior. This entranceway had been sealed with a panel and opaque glass panels allowing the room to function as an annexe to the G10. The internal moulded wood door surround for the entrance was still visible.

G12

3.0m x 6.0m (w x I)

Narrow rectangular lobby providing access from the former link corridor connected to the Old Grammar School/Schoolmaster's block to rooms G10 & G11 and to a staircase leading to the first floor. A modern fire door provided access to the link corridor and a modern door provided access to G11. The staircase included wooden moulded handrails and balustrades; the stairs had modern non-slip coverings

G13

7.0m x 10.4m (w x l)

Large rectangular classroom accessed via the former link corridor and G12. The room was located at the northern end of the north building with one set of windows (sash and casement) facing the school grounds to the east and a set of three windows (sash and casement) facing the school grounds to the north. The room included modern furniture fittings, obscuring earlier detail.

G14

3.0m x 1.2m (w x l)

Small rectangular storage room accessed from G13. This room has been created using by the portioning of the western end of G13. The former *Boys* entrance was located in G14, but had been sealed, as with G11. A double sash window facing onto School Bank Road was also extant.

G15

2.4m x 1.2m (w x l)

Small rectangular storage room accessed from G13. This room has been created using by the portioning of the western end of G13 and included a double sash window facing onto School Bank Road.

First Floor (Plates 52 to 56)

F01

3.0m x 8.0m (w x I)

A long rectangular first floor landing, providing access from the staircase to the first floor rooms F02 to F04.

F02

5.0m x 4.8m (w x l)

Square shaped room south of F01 and above G10. Large sash and casement window on the eastern elevation looking onto the school grounds. A built in cupboard on the northern wall appears to be an original feature, along with the skirting and door surround . A small side room was attached to the southern end of F02, with similar unchanged décor.

F03

6.4m x 4.8m (w x l)

Rectangular shaped room south of F01 and above G10; separated from F02 by a partition wall. A sash and casement window was extant on the western elevation looking onto School Bank Road. Built-in cupboard space on northern and southern walls appear to be original features, along with the skirting and door surround.

F04

7.0m x 10.4m (w x l)

Large rectangular shaped room north of and accessed from F01 and above G13. Three dormer lights on northern end (casement style with opening cranks). Sloping ceiling representing pitched roofing. As with F02 and F03, retained original décor; various modern fittings also added, including a kitchen unit in the southwestern corner. Appears to have been used as a staffroom.

4.1.3 Detached twentieth century school building

All external elevations were accessible and visible. The building comprised two main elements: an east section that incorporated a ground floor classroom and a first floor classroom and a west section that incorporated a ground floor classroom. The building was located at the northern end of the school complex, close to the boundary wall. There were two entrance points from the south facing elevation, providing separate access to the east and west portions of the building.

An examination of the first to third edition 25" Ordnance Survey mapping of the area (1875, 1900 and 1913 respectively; Sheet XI.14), shows that the location of these buildings was open school ground on all the maps and the building was constructed post 1913. The building was constructed using roughly coursed masonry, with slate roofs and overhanging eaves, with sandstone lintels and sills on the windows. This building was of similar style and appearance to the earlier school buildings within the complex.

4.1.3.1 External Description

The south elevation (Plates 57 to 59) comprised the single storey section on the western side of the property and the two storey section on the eastern side. Access to the west section was through a flat roofed porch on the east facing elevation. This elevation incorporated matching window styles throughout: there were four windows on the western section (including the porch) and three on the ground floor of the eastern section and three on the first floor. On the west section were two square windows with sandstone lintels and sills, either side of a larger arched dormer window with a sandstone sill and a dressed stone voussoir. The porch window matched the square windows. The ground floor of the east section had been added to this section and subsequently removed. The first floor windows matched the central dormer windows matched the eastern section.

The west elevation (Plate 60) included a gable end with a 9.0m high projecting stone chimney and two small square windows located at 3.2m above ground level. These windows were located either side of the chimney close to the gable apex (apex was 6.0m above ground level); the windows included sandstone sills and lintels. The stone used was more crudely set than the southern elevation and recent repointing was evident.

The north elevation (Plate 62) formed the rear of the property and included an 8.0m long and 2.4m high wall that encompassed the west section of the building. Partly visible above the wall was a dormer window part set into the pitched roof, with a stone lintel (sill not visible); this dormer window did not replicate the style of the dormer windows on the south elevation. The west gable of the east section of the building was visible from this elevation: the window matches the style and size of the south elevation dormer windows and included a stone voussoir. The north elevation of the east section was limited in detail but included three sets of 0.8m high windows, elevated 1.8m above ground level; these windows included sandstone lintels but no sandstone sills. The windows had been blocked with modern breezeblocks.

The east elevation (Plate 61) included the porch access to the west section, which included a stone lintel. A first floor rectangular window was located to the northern end of the elevation: the window included a stone lintel and sill and was located 3.4m above ground level; the window would have provided light onto the staircase leading to the first floor. The north boundary wall of the school was built in the elevation. Evidence for repointing was visible.

4.1.3 .2 Internal Description

The building comprised two ground floor rooms; the ground floor rooms are located on Figure 10 along with the location and direction of plates; the first floor rooms are located on Figure 11.

Ground Floor (Plates 65 to 69)

G01

5.4m x 9.6m (w x l)

A rectangular shaped room in the east section of the building. The room was accessed from a short hall connected to an external door. The room was open plan with a low ceiling and desks/powerpoints long the walls. The north wall included the three raised narrow windows visible from the external elevation, with three sets of sash windows on the opposite window (note: the low ceiling meant the full height of the dormer window was not visible from the inside. At the southwestern corner of the room was a door leading to a cupboard and into room G02.

G02

7.0m x 8.4m (w x I)

This room was of rectangular shape and larger than G01. The room was accessed both from a porch and from G01. The room was open plan, as with room G01. The ceiling was vaulted with roof trusses partly visible. The fireplace for the chimney stack visible on the external west elevation was not visible and was hidden by subsequent alteration work. The two elevated window s either side of the fireplace/chimney were visible as casement lights with metal cranks. The north and south elevations included an elevated casement window and sash windows respectively; the south elevation included the two square windows and rectangular dormer window arrangement also used in room G01. A 2.6m wide opening in the north elevation provided access to a small trapezoidal shaped room with a distinctive dome skylight; this room appeared to be a later alteration, using the former space between the north elevation and the boundary wall.

First Floor (Plates 71 and 72)

F01

5.4m x 10.2m (w x l)

A rectangular shaped room in the east section of the building above G01. This room was accessed from a staircase and was of similar appearance to room G02 with a vaulted ceiling with partly exposed roof trusses. The room was open plan with rows of conjoined desks in the centre. The large arched dormer windows visible on the south and west elevations (and sealed from the outside) were visible as timber framed casement windows with extant metal crank opening mechanisms. As with room G01, the dormer window had a smaller square sash window either side. There no windows on the north elevation. The access staircase was separated from the room by a wooden panel; this panelling was used throughout the staircase area.

4.1.4 Extensions attached to the Old Grammar School block

Two building extensions were attached to the Old Grammar School block: a two storey extension attached to the west elevation (designated as Extension A for this report) and a single storey extension attached to the north elevation (designated as Extension B for this report).

A building is visible at the location of Extension A, on the first to third edition 25" Ordnance Survey mapping of the area (1875, 1900 and 1913 respectively; Sheet XI.14), but on a smaller footprint, likely to match that currently represented by room G01. The location of room G02 is not visible on any of the maps, suggesting it was added post-1913. A detached building is visible on the 1875 and 1900 maps at the location of Extension B; this building is attached to the Old Grammar School and Extension B in the 1913 Third Edition, representing the current form and is likely to have been extended within the intervening period. Both extensions were built from irregular shaped stone, with pitched slate roofs; this design was also used throughout the school complex (except for the 1960s building).

4.1.4.1 External Elevations

The external elevations for Extension A were limited to the north, west and south elevations as the east elevation formed part of the interior. Extension A is located on Figures 10 and 11.

The external elevations for Extension B were limited to the north, west and east elevations as the south elevation formed part of the interior. Extension B is located on Figure 10.

Extension A (Plates 73 to 78)

The west facing elevation of Extension A (Plates 73 to 77) comprised three ground floor windows all with dressed sandstone surrounds, mullions, lintels and sills; two the windows were of equal size (2.0m wide and 2.0m high set 1.8m off the ground level), whilst the third, northernmost window, measured 3.0m in width and height (also set 1.8m above ground level). The windows were masked and sealed at the time of the recording. At first floor level were two dormer windows, each 2.0m wide and 1.6m high, set 4.0m off the ground that were above the ground floor square windows. A projecting dormer window was set into the roof pitch above the larger ground floor window. A small square plaque (Plate 76) was located 3.0m above ground level to the north of the ground floor windows that read:

HANC SCHOLAM INSTITVIT ET LEGATA PECVNIA MVNIFICE DONAVIT IOANNES WYNNE EQVES ET BARONETTVS MDCX

(Translation: This school was instituted and was given a generous endowment by John Wynne Knight and Baronet 1610)

The south facing elevation was a single gable frontage and included a single door entrance and window at ground floor level (Plate 75). Both the window and door included sandstone surrounds, lintels and sills; the window matched the size of the smaller ground floor windows on the west elevation. Two first floor windows were extant, at the same 4.0m off ground level height as the west elevation first floor windows; this window set comprised one larger and one smaller window. Above the windows near the apex of the gable was a small vent. The gable apex measured 9.0m above ground level. The north elevation was a single gable frontage was partly obscured by ivy at the time of the building record (Plate 77). The elevation comprised two ground floor windows and one first floor window: the ground floor windows comprised a 1.2m wide and 3.0m high window and a 3.0m wide and high larger window with three lights separated by sandstone mullions; the first floor window measured 1.6m wide and high, with two lights separated by a sandstone mullion. Above this window, near the gable apex, was a small vent with a sandstone surround.

Extension B (Plates 79 to 81)

The west elevation (Plate 80) was a double gable frontage and included two large ground floor windows, with two smaller windows above: the ground floor windows both measured 3.8m in width and 2.8m in height, with four lights each separated by sandstone mullions; sandstone lintels and sills were used throughout. The two smaller windows above each measured 2.0m in width and 1.6m in height; above these were small vents near the gable apexes; the vents did not include sandstone surrounds as found on Extension A. The gable apexes measured 7.0m from ground level.

The north elevation (Plate 79) incorporated both the pitch from the west elevation and a projecting gable. An entrance door to room G01 was incorporated at ground level and was accessed by two stone steps with slate capping. The door included a sandstone lintel and measured 1.0m in height and 2.0m in width. The gable apex measured 7.0m from ground level. There appeared to be evidence for structural phasing: a distinctive line ran from the gable pitch to ground level, 1.0m to the west of the door. This appeared to be a former external wall and may have represented the earlier building form visible on the first and second edition Ordnance Survey maps.

The east elevation (Plate 81) measured 4.0m in height and 12.0m in width and included three ground floor windows as the main structural detail: these windows were of equal size, each measuring 1.6m in width and 2.0m in height, located 1.6m apart and set 1.4m above ground level. They had sandstone lintels but no sandstone surrounds, sills or mullions.

4.1.4.2 Internal Description

Extension A

The building comprised two ground floor rooms and three first floor rooms; the ground floor rooms are located on Figure 10 along with the location and direction of plates; the first floor rooms are located on Figure 11.

Ground Floor (Plates 82 to 86)

G01

6.0m x 6.8m (w x I)

A square shaped room at the southern end of the building access from the south-facing elevation; wooden moulding visible on the entrance door surround. Cloakroom furniture visible in the room, along with a toilet partition. Wooden panelling at 1.1m height along the elevations. Distinctive iron support joist running north south along the centre of the ceiling. Room G01 included a 1.2m wide double door entrance into the Old Grammar School room, as well as access to room G02 and staircase access to the first floor. The staircase included wooden balustrades and handles and matched the style used in the School Bank Road buildings.

G02 7.4m x 6.6m (w x l) A large rectangular shaped classroom with brightly painted walls. Access from room G01, with the same 1.1m high wood panelling on the walls and the continuation of the support joist running north south along the centre of the ceiling. Large timber framed casement/sash windows on the west and north elevations. Wooden parquet floor.

First Floor (Plates 89 to 92)

The first floor comprised three rooms, all accessed from a landing approached from a staircase accessed in room G01.

F01

2.0m x 4.0 (w x l)

Narrow rectangular room set into the pitched roof and used for paper storage. Interior details limited to a two-light timber framed sash window looking west into the school yard.

F02

4.0m x 4.8m (w x l)

Small rectangular room set into the pitched roof. Interior details limited to a two-light timber framed sash dormer window looking west into the school yard.

F03

7.4m x 6.8m (w x l)

Large rectangular room set into the pitched roof, with a vaulted ceiling and used for paper storage. Interior details limited to a large two-light timber framed sash window looking north and internal storage partitions along the east and west walls and a wooden parquet floor.

Extension B

The building comprised a single ground floor room, which is located on Figure 10 along with the location and direction of plates.

Ground Floor (Plates 93 to 95)

G01

10.4m x 8.0m (w x I)

A large square shaped room that provided external access to the Old Grammar School block and internal access to the Old Grammar School hall. The room included a vaulted ceiling representing the pitch of the roof (there was no first floor in extension B), with partly exposed joists. The apparent extension/alteration visible on the north external elevation was visible internally as a change in ceiling height, with the vaulting interrupted and a lower, flat ceiling apparent; this was visible on both the north and south elevations. The west elevation included the two large and two small windows visible on the external elevation; the windows were timber framed sash/casement windows; on the opposing eastern elevation were three equal sized timber framed sash/casement windows (cf. the external description of the east elevation for dimensions). Access to the Old Grammar School hall was via a short link corridor.

4.1.5 Schoolmaster's House

The Schoolmaster's House was attached to the southern end of the Old Grammar School block and was a three storey structure built with pitched slate roofs and overhanging eaves. The elevations included differing building decor dependent on function.

The Schoolmaster's House is extant on the first to third edition 25" Ordnance Survey mapping of the area (1875, 1900 and 1913 respectively; Sheet XI.14), with the same building form as present.

According to documentary sources the Schoolmaster's House was built in early years of the 17th century, the exact date is unclear but likely to be between 1612 and 1614. It is unclear, what; if any of the current Schoolmaster's House is 17th century in date. Externally, the building remains largely as recorded by the Listed Building description, with only the Griffin statue above the porch no longer *in-situ*.

Documentary sources indicate that the Schoolmaster's House was extensively modernised and re-built in the late 19th century. The Mostyn Estate Map of *c* 1780 (Figure 03) appears to show a two storied two bay house with gable stacks with two ground floor windows, a central door and two first floor windows; almost a rural farmhouse in appearance. Based upon the accurate south-south east alignment, it can be assumed that the map is an accurate representation of the original Schoolmaster's House. In 1874 a sum of £300 was agreed by Trustees to raise the roof of the Schoolmaster's House to increase the available space for boarders and increase school income. The existing Schoolmaster's House dates largely from that 19th century rebuilding, with only limited remains of the 17th century building.

Documentary sources record that at the time that the roof was raised on the Schoolmaster's House provision for a "proper" dormitory was made and twelve individual cubicles were built for the borders. It is likely that this panelling is all that remains of the cubicles, which were mentioned as being still standing in 1960 (Parry 1960).

4.1.5.1 External Description

There were four accessible elevations, although the north elevation was partly obscured by the attachment to the Old Grammar School. The elevations are detailed in Figure 13 and Plates 96 to 100.

The south elevation (Plates 96 and 97) was the front of the building and measured 19.0m in width and 9.0m in height. The elevation included a projecting gable with an attached porch. The elevation was faced with dressed stone. Three equal sized windows (1.6m each in width and height) ran along the elevation lighting the ground floor; each window had a stone lintel and sandstone sill. The porch entrance measure 2.0m wide and 3.4m high, with the entrance surrounded by dressed sandstone. A second entrance on the projecting gable matched the windows with a stone lintel. The first floor windows were all of equal size at 1.0m wide and 1.6m high and matched the stone lintel/sandstone sill design of the ground floor; including the projecting gable, there were five first floor windows. The second floor windows matched the size and design of the first floor windows, with five also present, directly above their first floor counterparts. The second floor windows were set into dormer projections. Visible on the roof ridge were three sets of chimneys, all with the same dressed style.

The east elevation (Plate 98) measured 11.0m in width and 10.0m in height and incorporated two ground floor entrances and a first floor window. The southernmost entrance appeared to be a later addition associated with the former 1960s link corridor. The second entrance was narrow with a stone lintel. Evidence of structural phasing was visible between the two

entrances, with a former quoins representing an earlier building exterior; this line suggested the building was 8.0m wide in an earlier form; with the 3.0m of the projecting gable added at a later date. The projecting gable is visible on the 1875 first edition Ordnance Survey map. Set into the roof pitch was a seven stack chimney; the carved stacks matching those visible on the south and west elevations.

The north elevation was visible as two sections either side of the Old Grammar School: a 6.6m wide section projecting east of the Old Grammar School (Plate 99) and a 5.2m wide section projecting to the west (Plate 100). The west projection included a modern entrance associated with the 1960s lobby; two narrow windows were extant on the first floor and a single dormer window matching those on the south elevation was also visible. The east projection incorporated remnants of the demolished Old Grammar School extensions on the ground floor. A rectangular window with stone lintel was located on ground level that matched in size and construction the windows on the south elevation; an identical window was located above this window on the first floor. To the west of this was a modified window of the same design, but which had been converted into a door for access/egress to the demolished Old Grammar School extension. On the second floor were two dormer windows: the example to the east was a very narrow rectangular window with sandstone surround; the other dormer window to the east was similar to the dormer windows on the south elevation.

The west elevation (Plate 101) measured 7.4m in width and comprised a gable end, measuring 10.0m high at the gable apex. A chimney with carved stacks was set onto the ridge of the roof. There were no windows or doors on this elevation and it was characterised by irregular shaped stone. The raised roofline was evident on the west elevation with the former pitched roof line still visible.

4.1.5.2 Internal Description

The building comprised seven ground floor rooms, eight first floor rooms and six second floor rooms. The ground floor rooms are located on Figure 10, the first floor on Figure 11 and the second floor on Figure 12. Direction of plates are indicated on the respective figures.

Ground Floor (Plates 102 to 105)

G01

1.4m x 12.0m (w x l)

A long rectangular corridor that ran along the northern end of the ground floor and provided access to rooms G02 to G07.

G02 1.6m x 1.6m (w x l) A small square storage cupboard.

G03

3.6m x 3.2m (w x l)

A square shaped office room with modern decor. A large timber framed bay window was set into the south elevation. Room G03 was separated from room G04 by a modern partition, suggesting they were originally a single room.

G04

 $4.4m \ge 3.2m (w \ge 1)$ A square shaped office room with modern decor. A large timber framed bay window was set into the south elevation, with a panelled surround in the bay. Moulded coving ran along the ceiling line. An arched alcove on the west elevation was interpreted as the former fireplace associated with the central chimney stack. Room G03 was separated from room G04 by a modern partition, suggesting they were originally a single room.

G05

4.4m x 3.2m (w x l)

A square shaped office room with modern decor. A large timber framed bay window was set into the south elevation, with a panelled surround in the bay. Moulded coving ran along the ceiling line.

G06

6.0m x 2.0m (w x l)

A narrow entrance lobby connected to the south elevation porch and providing access to a staircase leading to the first floor and also to G01 (hallway).

G07

8.6m x 3.4m (w x l)

A large lobby with modern fittings masking earlier phasing which provided access to and from the former 1960s link corridor.

First Floor (Plates 105 to 111)

F01

1.4m x 12.0m (w x l)

A long rectangular corridor similar in design to G01 that ran along the northern end of the ground floor and provided access to rooms F02 to F08

F02

1.4m x 1.8m (w x l) Small storage room similar to G02.

F03

4.0m x 3.2m (w x I)

A square shaped office room with modern decor. A large timber framed bay window was set into the south elevation, with a panelled surround in the bay. Moulded coving ran along the ceiling line.

F04

3.8m x 3.2m (w x l)

A square shaped office room with modern decor. A timber framed bay window was set into the south elevation.

F05

 $5.8m \times 3.2m (w \times I)$ A rectangular shaped office room with modern decor. A timber framed bay window was set into the south elevation.

F06

 $5.0m \times 1.6m (w \times I)$ A narrow landing space providing access to the first floor hallway and direct access into rooms F05 and F07.

F07 5.0m x 3.4m (w x l) A rectangular shaped kitchen with modern decor. A timber framed bay window was set into the south elevation. No coving visible; a built in larder was extant on the west elevation.

F08

3.4m x 3.4m (w x l)

A square shaped kitchen with modern decor. A timber framed bay window was set into the south elevation.

Second Floor (Plates 112 to 117)

S01

6.0m x 1.6m (w x l)

A narrow landing space providing access to the first floor hallway and direct access into rooms S02, S03 and S04

S02

3.4m x 3.6m (w x l)

A small, square attic room with a pitched ceiling. A small fireplace was extant in the corner of the southern elevation; a narrow window was extant on the north elevation. This may have been a room for domestic servant.

S03

4.8m x 3.4m (w x l)

A rectangular shaped attic room with pitched ceiling. A timber framed window was set into the south elevation. A fireplace was set into the west elevation, connected to the chimney stack visible on the west external elevation.

S04

5.8m x 3.4m (w x l)

A rectangular shaped room with a square sash window on the north and south elevations. The room was full of redundant school equipment.

S05

5.8m x 7.0m (w x l)

A large rectangular room with pitched ceilings and two square sash windows on the south elevation and one square sash window on the north elevation. The room was full of redundant school equipment but was formerly the boarding school sleeping room, although no direct evidence of this was apparent; neither was their evidence for the ceiling height extension visible on the west external elevation.

S06 2.0m x 3.4m (w x l) A small internal storage room within S05.

4.1.6 Old Grammar School Hall

4.1.6.1 Introduction

To the south of the former schoolmaster's house, and attached to it at a right angle, is the Old Grammar School Hall. There are mullioned windows with deep splays, generally of two lights, but the window of the north wall has three lights, with diapered iron casement glazing. Prior to the renovation work, there were two doors to the western elevation and one to the east; and there was also a blocked doorway to the south wall, which had been used as recess for books (Seabourne 1992, 35-36).

The old Grammar school hall was a structure typical of its type and early 17th century date, based on a late medieval pattern (Figure 15). It would have consisted of a well-lit 'high' end to the north where the master and other persons of importance would have sat on formal occasions; probably this end would have had a raised dais. Opposing smaller doorways at the southern end of the hall in the long side walls indicate the former presence of a crosspassage (Plates 136-139). In addition to the large window at the high end, the hall was lit by four smaller windows on each side, of which some of the original dressed stonework survives. At the southern end was a wide doorway which would have been the entrance to the hall for the pupils, and it had a six bay arch-braced truss roof in late medieval style, similar to that constructed in the Wynne's home at Gwydir, on the west side of the Afon Conwy and close to the town. The original shape of the building, with its door and window openings was reflected in the old town hall in Llanrwst, which was built in 1661 and demolished in 1964, and also the town hall at Denbigh (Tucker 2002). The archaic late medieval style of the building, reflecting the Wynne's earlier work at Gwydir and Dolwyddelan, suggests an attempt to hark back to earlier ideals and to reinforce the family's historic claims in the area (Corbett 2004). This is also reflected in the choice of a Tudor Rose as a motif for use as roof bosses. The upper parts of the roof would appear to be of 19th century date, so it is not known what the original roof covering of the building would have been (Plates 119-120).

All internal fixtures and fittings had been removed prior to the archaeological examination of the hall, although a number of historic fittings are believed to have been present, including a Master's Chair dating to the early years of the school is believed to have been present until relatively recent times (Parry 1960). The room was used in recent times as the school library.

Render covering the internal and much of the former external walls of the Grammar School Hall initially made the interpretation of the structure difficult. However the removal of the internal render on the full west and east facing internal elevations, and the partial removal of the rendering on the north and south gable end elevations in 2012 changed this. This enabled a basic analysis and phasing of the building to take place (Figure 22). Some render was also removed on walls that had formerly been external. The external south-west elevation of the building did not provide significant stratigraphic information. Apart from the window tracery, there is little evidence for dressed stonework on the building, with the exception of external corbels at eves level. These generally seem to have been replaced in recent times, although some original examples do survive.

4.1.6.2 Internal Description

The school hall consists of a rectangular structure 21.5m long and 7.5m wide, with the gable ends orientated north-south. There was originally a formal entrance to the south, which had been in-filled in various phases, and a cross-passage about 6.1m from the north end of the building. A porch, in which the foundation plaque in Latin was originally placed, was originally attached to the building. This, along with all but one of the original openings had been

significantly modified, and this is discussed in detail below. Some stonework on the former external hall walls at the north and south ends of the building, and some on the western long wall, apart from some large masonry quoin blocks at the corners, no architectural features were identified, and there was much modern brick infilling, caused by alterations when the classrooms were added to the building to the west and also subsequently (Plates 136, 143).

The north facing internal elevation had the modern render removed to a height of about 2.2m. An original window opening at a height of 1.4m and 1.6m wide would originally have lit the dais end of the hall. It consists of an embrasured window recess with two mullions with ovolo mouldings and leaded lights. Even though probably a replacement, the window probably reflects its original form. A door opening, 2.2m high, was cut into the western side of the gable end, with a concrete lintel and edged with brick. This gave access to a hallway and was probably of late 19th or early 20th century date (Figure 22; Plate 133).

The west facing internal elevation originally had four window openings, three to the north of the cross-passage door and one to the south of it. There are currently three window openings, 1.9m above ground level and 1.3m wide and 0.6m high, and a doorway 0.6m wide and 3.05m high, which formed part of the original cross-passage in the hall (Plate 134). The windows are lightly embrasured, with single central sandstone mullions and sandstone dressed stone surrounds, with leaded lights. Three of the original irregularly spaced to the northern end and one to the south of the cross-passage door. The cross passage doorway is currently open, and the window to the south of it has been radically modified with a relatively new opening within a former blocked doorway (Plate 141). Part of the in-filled former window opening to the north of this can be noted. The middle former window to the north of the cross-passage has been filled in although the former voussoirs can clearly be seen, with a further later area of brickwork noted (Plate 143). The other windows have also been much repaired and replaced. The northernmost one has a replacement lintel and renewed stonework below it (Plate 149). Above wall-plate level all the stonework has been renewed, and also much of the stonework, particularly around the cross-passage door, is recent replacement work, in place down to ground floor level.

The south facing internal elevation of the hall had had its modern plaster removed from the lower 2.1m of the wall (Figure 22; Plate 135). This revealed a central doorway 3.13m high and 2.32m wide, which had been blocked with rubble infill, although the 17th century voussoirs were noted. A later opening 2.5m high and 2.32m wide, of probable 19th century date, had been cut into this blocking, which removed the original western door jamb, and had a wooden sill and lintel. A later, probable 20th century narrow doorway, 0.76m wide was in filled with modern brickwork cut into the infill and the original gable wall itself to the west of the original doorway. The original doorway will have formed an entrance to the hall at the 'low' end in the centre of the gable, which was probably originally for the grammar school boys. The later opening is of unknown purpose. The narrow blocked central doorway is also either cut through the south door infill rubble, or the infilling was only ever partial and was only a narrowing of the original 17th century door opening to create a narrower one, that was filled in in the 20th century with brick. The modern wall rendering appears to have taken place with the narrow doorway still open, as it can be seen on the reveal of it.

The east facing elevation, which rises in height from 3.1m to 3.4m north to south, constructed of loose rubble masonry (Plate 136). There are currently three window openings, of similar character to those on the western elevation, 1.9m above ground level and 1.3m wide and 0.6m high, and a doorway 0.6m wide and 3.05m high, which formed part of the original cross-passage in the hall. There were originally four windows, three close together to the northern end and one to the south of the cross-passage door. The group of three of these survive although the lintels and voussoirs of the northernmost two have been replaced. The third window opening survives in almost its original condition, and appears to be the only one with its original window tracery. The former cross-passage door has been blocked with

rubble, and a modern opening into later school buildings, with a concrete lintel, has been cut to the north of it, which is associated with some modern brickwork. South of the cross-passage door a former window, similar in character to the northern three has been blocked and a brick lined door opening cut through it and the hall wall, to provide access to 19th and 20th century school classrooms. Above wall-plate level all the stonework has been renewed (Figure 22; Plates 136, 149). The wall plate level, from which the roof trusses spring, is only about 0.2m above the window voussoirs. There are a number of patches of modern repair work on this elevation, often utilising brick.

4.1.6.3 Hall Roof (Figures 16 to 21)

The roof consists of six bays with five pegged arch-braced trusses with cusping above collars. There are three tiers of stop chamfered purlins with small cusped wind braces. The trusses, which rest on small wall plate lengths, were noted to be mainly unaltered from their 17th century form although they are slightly different from each other, particularly within the design of the cusped area above the collar beam. Truss 2 (the trusses are numbered from north to south) showed the greatest variety, with a variety noted with the shape of the cusped arches above the collar beam (Figure 18; Plates 125-126) and Truss 5 had a variation on the mortice and tenon joint between the collar beam and the rafter on the west side of the building (Figure 21). The trusses are of collar beamed arch braced truss type, with decorative Tudor Rose roof bosses, carved as part of the trusses. Carpenters marks were noted to survive on all of the trusses (Plate 132). These are characteristic of medieval and early post-medieval carpentry.

The southernmost two trusses (Trusses 4 and 5; Figs. 20-21) have undergone some modification since that date, although when this took place is yet to be identified. There are however 18th century hand-made nails in the timber of Truss 5, and this may indicate that changes have taken place. The decorative bosses had been removed from the southern two trusses, although replaced in more recent times on Truss 4.

As far as the rest of the roof structure is concerned, some of the chamfered and stopped purlins and some of the wind-braces were of contemporary date with the construction of the building, although the purlins appear to have been re-set. The lower purlin in the fourth bay along from the north has a mortice cut into its upper face, suggesting that this is an original purlin that has been turned around. The removal of much of the later roof as part of the renovation works enabled carpentry joints to be noted within the purlins. Some graffiti was also noted on these, probably dating from the time that the roof was altered in the 19th century (Plate 129).

Other purlins and wind braces have been replaced, and the replacement wind braces do not use the original mortice holes on the principal rafters, and are probably evidence of alterations carried out as part of the 19th century re-roofing of the building, when some new purlins were added, particularly on the western side of the roof. These changes are particularly in evidence at the southern end of the building. Most of the pegs holding the structure together appear to have been cut off almost flush with the timbers, which is not thought to be an original phenomenon, although one uncut peg was noted adjacent to the north side of Truss 3.

There was a ventilator louvre to fourth bay from the north, and flat roofed dormer type windows and skylights which have been inserted. The rafters and roof superstructure, including the dormer windows, are 19th century in date, along with some of the purlins and wind braces at the southern end of the building (Plates 120-122).

4.1.6.4 Hall Floor and Cellar (Figure 23)

The removal of the modern floor surface revealed a cellar to the south, and two north south sleeper walls, on which the original floor would have rested (Figure 23). A 9.5m brick-lined heating duct was noted in the north eastern portion of the building, which was probably of late 19th or early 20th century in date, and inserted at the doorway was inserted into the southern gable (Plate 149). The cellar, approximately 6m by 3m and 3.1m deep was divided from the hall by a retaining rubble wall 0.4m thick. Opening from the cellar were noted to the north-south and west, the northern one leading to a wine cellar under the former schoolmaster's house. The floor of the cellar was covered in flagstones, and had formerly housed the heating system.

The three sleeper walls were approximately 13.8m long, and the two which ran along the length of the room were about 1m wide and were 3m from the east and west walls. A narrow one 0.4m wide was built against the western wall of the hall. Air vents, some of which have been filled in, were noted in the wall below floor level. In the south east corner of the hall (but south of the cellar), the fragmentary remains of a possible hearth were noted (Fig. 23). These covered an area 1.45m by 0.3m and 0.25m high, and were 0.48m north of the cellar wall. The hearth consisted of a small length of split shale blocks of up to four courses. Evidence of burnt earth was noted between this and the east wall of the hall. It is thought that the hearth must post-date the blocking of the window above, and clearly predated the modern floor, however its purpose and date remains unknown.

4.1.6.4 Mortar Analysis

Mortar Samples were taken from three places on the school hall walls; the reveal of the blocked gable-end doorway (Sample 1), from the internal south west wall (Sample 2) and the north face of the external hall wall (Sample 3). All were identified as lime plasters, with sample one including the addition of horse hair. Analysis of the School Mortars (Siddall, R. 2013; included as Appendix II) characterised the composition of the lime cement and investigated the possibility that pozzolanic additives had been used. The conclusions were that this was a pure lime plaster. Furthermore geological descriptions of the aggregates used were provided which included grain size and shape analysis. Natural, non-sharp sand derived from low-grade metamorphic rocks was used as an aggregate. An aggregate to lime ratio of 1:2 was observed. It was not possible to compare the samples with those of other 17th century structures in Llanrwst (Evans 2010). The mortar analysis results are discussed in detail in Appendix II.

5 CONCLUSION

A substantial programme of building recording, to different levels of detail, was carried out on all the structures at the Ysgol Dyffryn Conwy site over a six year period between 2007 and 2013. The school, founded by Sir John Wynne of Gwydir in the early 17th century, consists of a number of buildings which were constructed from the 17th century through to the mid-20th century, as the requirements of the school developed and changed over time. The most significant surviving building is the Old Grammar School Hall that was built in about 1612, and of which many elements remain. These include an arch braced collar-beam roof of six bays. Whilst the trusses have undergone some modification, they survive in much their original form. The Old Grammar School Hall building, which originally consisted of a gableended northern entrance, cross-passage, and high end lit with a single larger window, with four windows on either side, has been altered in more recent times as the needs of the school changed and additional buildings were appended to it. This resulted in the blocking up of some windows, the creation of new ones, and the creation of new door openings, the phasing of which was revealed when modern render was stripped from the walls. A heating system was installed in the hall in the 19th century, and the building used as the school library in recent times. The hall formerly had a porch, which was demolished in 1908 as part of expansions to the school.

A former Schoolmaster's House adjoined the building to the south, built originally in the 17th century, but much altered in the 19th century. From the latter part of the 19th century, the school expanded over the site given to it back in the 17th century with the addition of new classrooms and other buildings. In 1960, a large functionalist style school building was constructed at the eastern end of the complex, with link corridors and extensions added to the earlier school buildings to accommodate this new arrangement. The 1960s building was demolished in 2008, along with the link corridors and modern extensions.

The location of the 1960s school has been replaced by a residential home, whilst the Old Grammar School block and Schoolmaster's House have been renovated but not converted. The detached school building at the northern end of the school complex had not been renovated on completion of the archaeological mitigation and further intrusive internal could expose additional structural detail. The School Bank Road properties were renovated internally during the mitigation programme and no further information can be derived from those structures.

The internal render within the Old Grammar School Hall was only partly removed on the south and north facing elevations and further archaeological mitigation is required should the remaining render be removed. This would also apply to renovation work on the extensions added to the west and north elevations of the Old Grammar School.

6 REFERENCES

7.1 Primary Sources

Bangor University Archives

Mostyn MSS S8535 Estate Map showing Llanrwst, not dated but probably late 18th century

Gwynedd Archives, Caernarfon

Gwydir Archives (XD38)

XD38/402 Minute Book: Gwydyr Charity, inc. extracts from a proposed scheme for the management of schools, rules and regulations relating to the almshouses. Annexed: Letter J. Kennedy to Rev. T.G. Roberts, Llanrwst, concerning the repair of school windows (17th May 1850).

XD38/428 Llanrwst School and Almshouses – Apportionment of Rent Charge; Eglwysbach

Lincolnshire Archives

4-ANC/4/5 Survey of the Gwydir Estate by William Williams, Surveyor 1784-1786

7.2 Secondary Sources

Ballinger, J. 1927 History of the Gwydir Family (Cardiff)

Bingley, Rev. W. 1814 North Wales

Corbett, J. 2004 Castles in the Air

Davidson, A. 2005 Conwy Valley Flood Alleviation Scheme, Archaeological Assessment (G1877) GAT Report.

Encyclopedia Britannic, 1911. 11th Edition.

English Heritage 'Understanding Historic Buildings: a guide to good recording practice' (2006).

Evans, R.T.J. 2010 Conwy Valley Flood Alleviation Scheme: Llanrwst, Gwynedd. Unpublished GAT Report No. **873**

Lewis, E.A. 1912 The Medieval Boroughs of Snowdonia

Parry, R.J. 1960 *Jesus Hospital, A Short History of Llanrwst School.* R.E Jones & Bros Conwy.

Pennant, T. 1783 A tour in Wales 1770

Roworth, C. 1851 Jesus Hospital, Llanrwst (Free School and Almshouses)

Saeborne, M. 1992, *Schools in Wales: A Social and Architectural History*. Gee & Son Ltd. Denbigh.

Soulsby, I. 1983 The Towns of Medieval Wales (Chichester)

Tucker, N. 2002, *Llanrwst: the History of a Market Town*. Landmark Publishing Ltd.

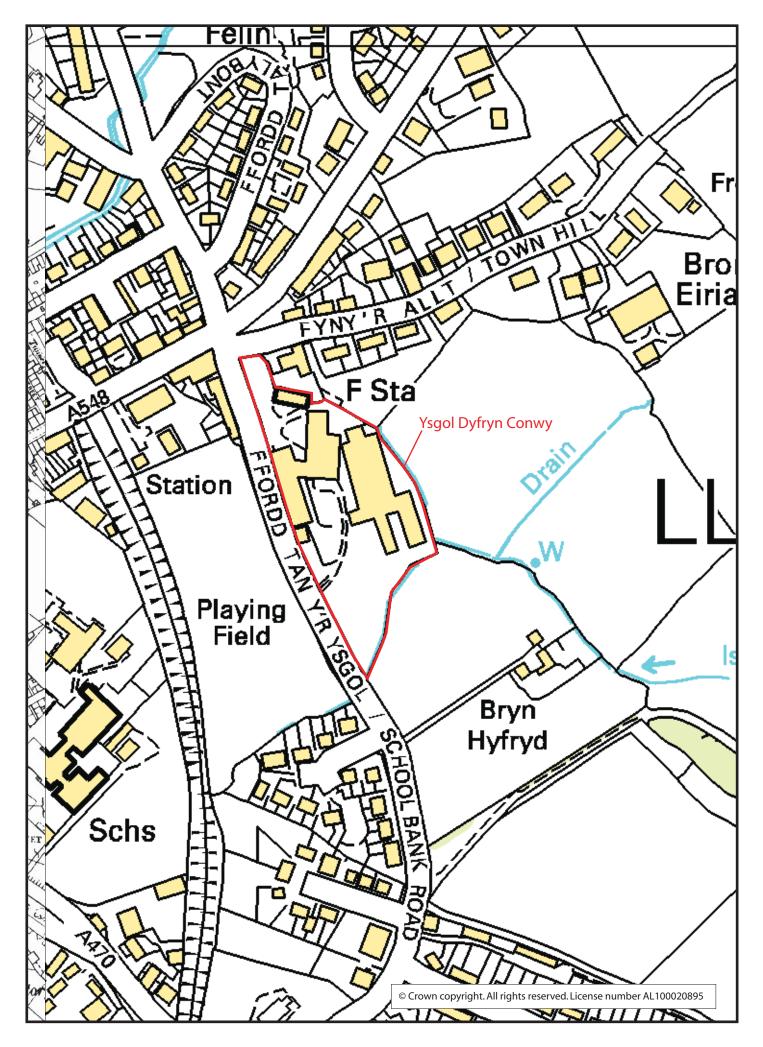
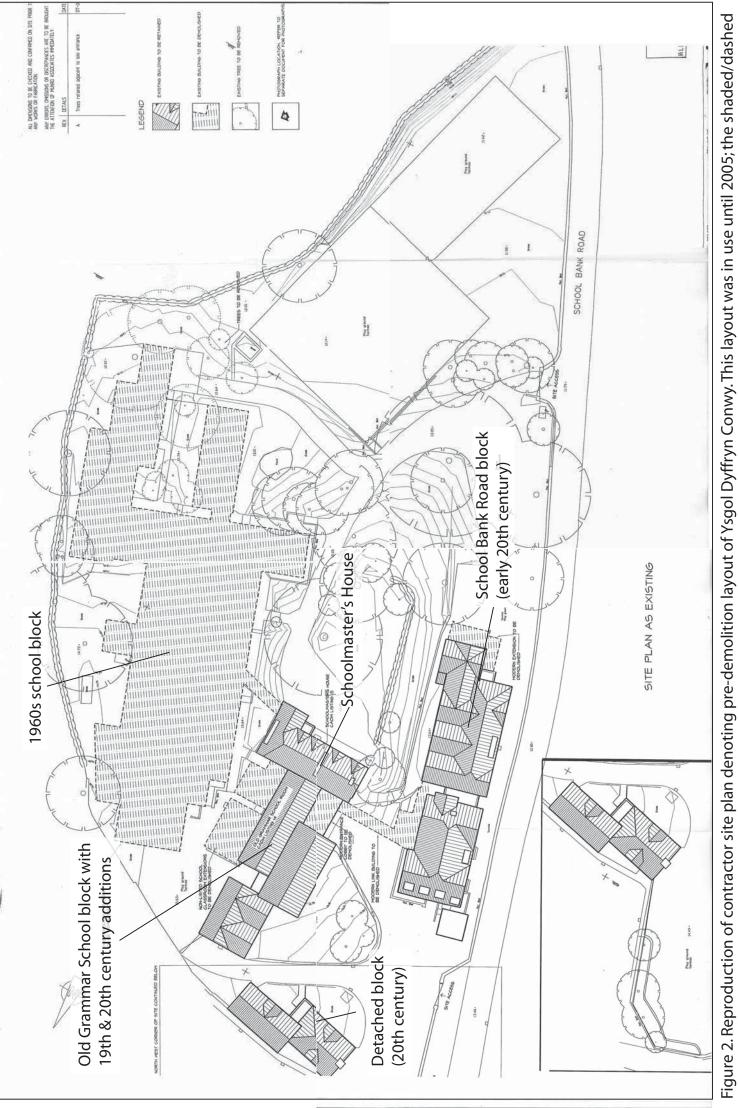


Figure 01 - Location Map for Ysgol Dyfryn Conwy, Llanrwst (NGR SH80106170)



outline buildings were recorded by GAT in 2007 and demolished in 2008. Not to Scale.

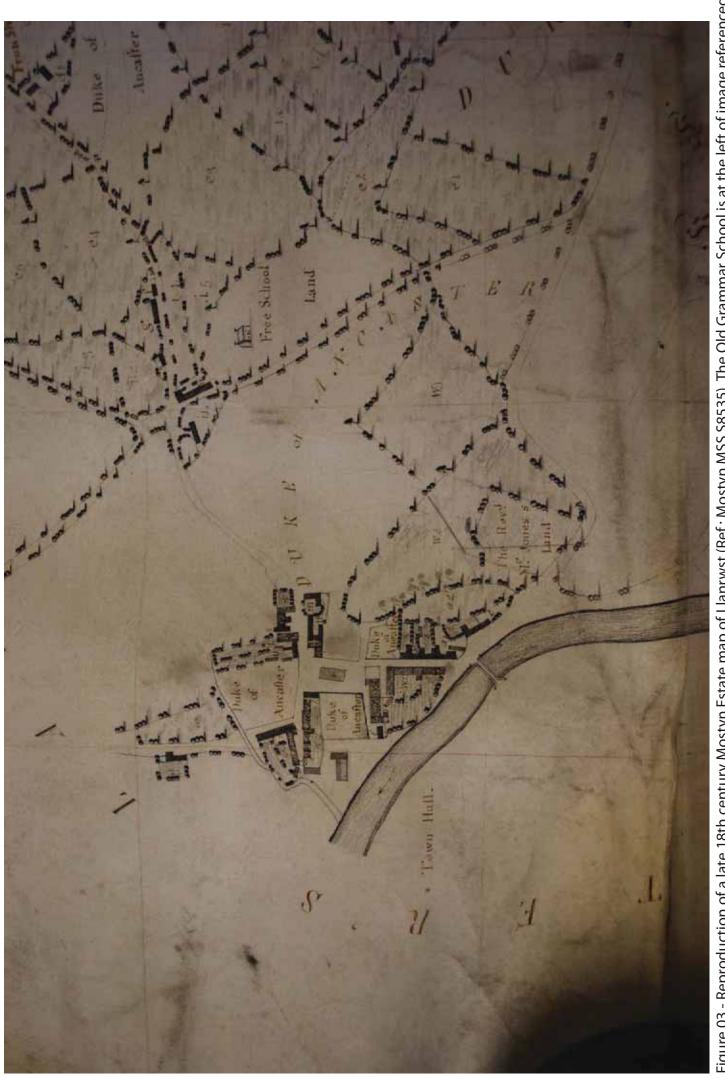


Figure 03 - Reproduction of a late 18th century Mostyn Estate map of Llanrwst (Ref.: Mostyn MSS S8535). The Old Grammar School is at the left of image referenced as "Free School Land". The school land outline matches that visibel on the later Ordnance Survey mapping (cf. Figures 04 to 06). Not to Scale.

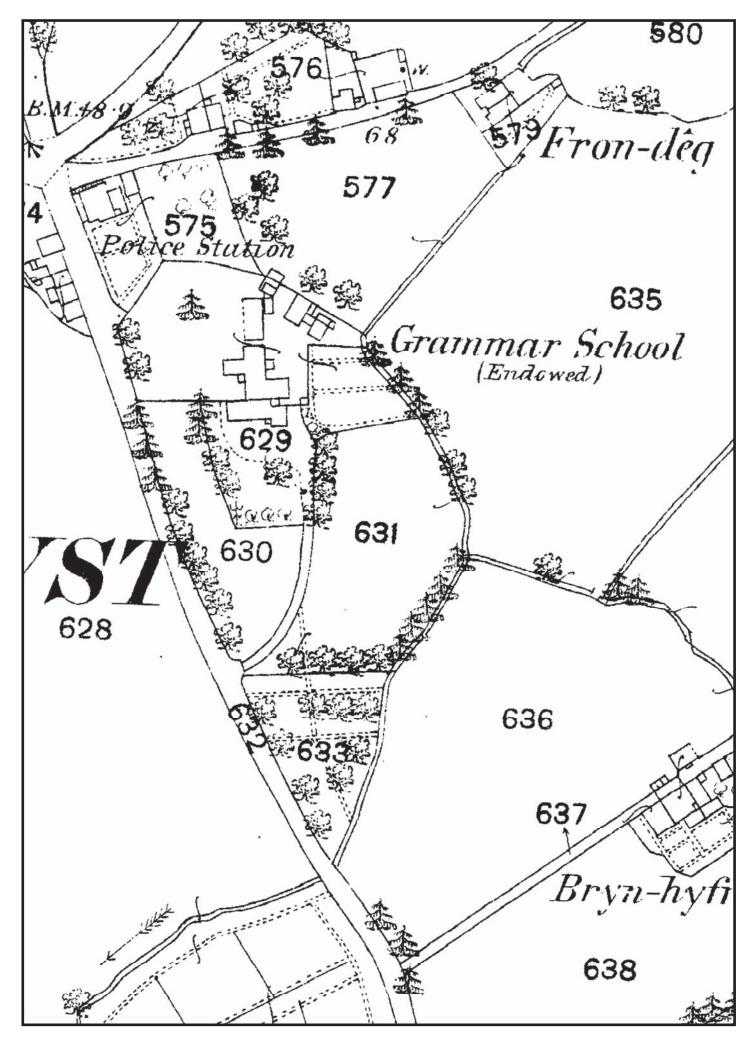


Figure 4 - Reproduction of First Edition 25" Ordnance Survey County Series Sheet XI.14 (1875)

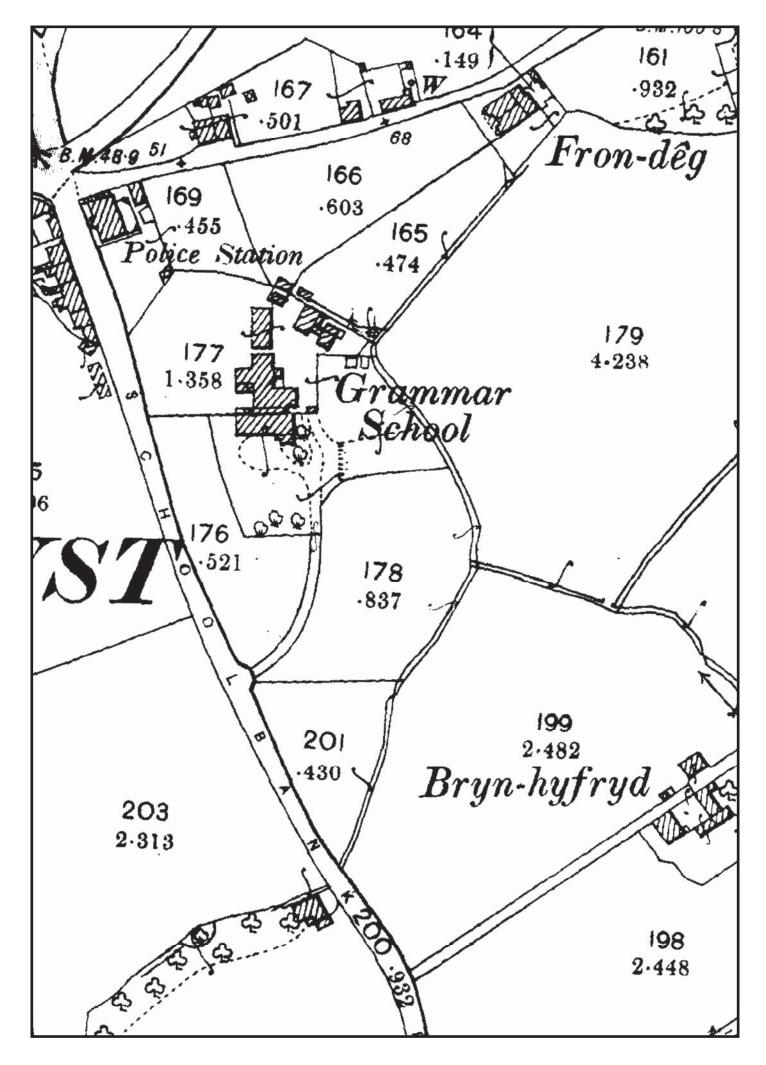


Figure 5 - Reproduction of Second Edition 25" Ordnance Survey County Series Sheet XI.14 (1900)

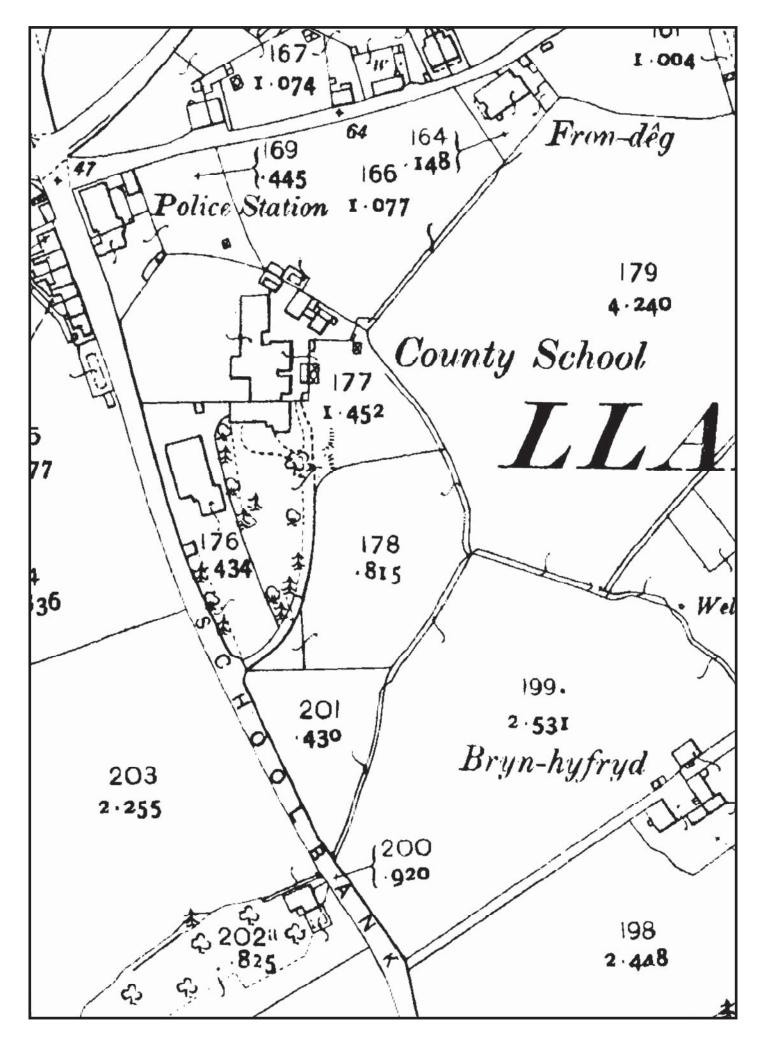
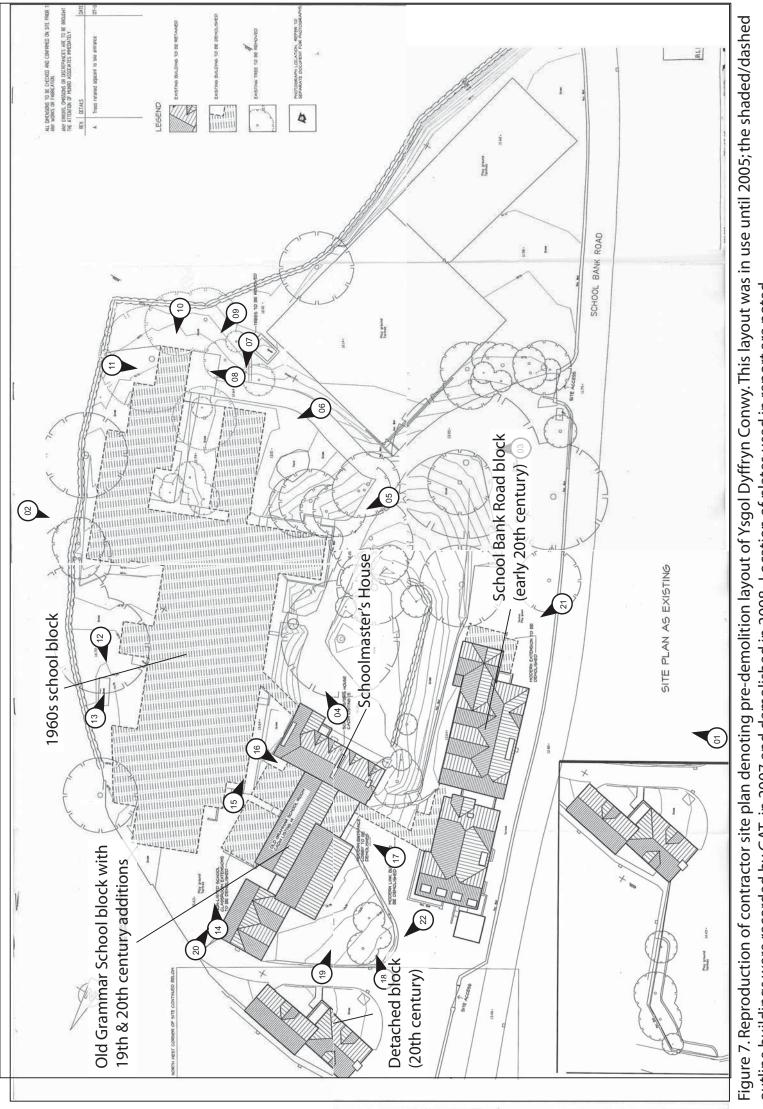
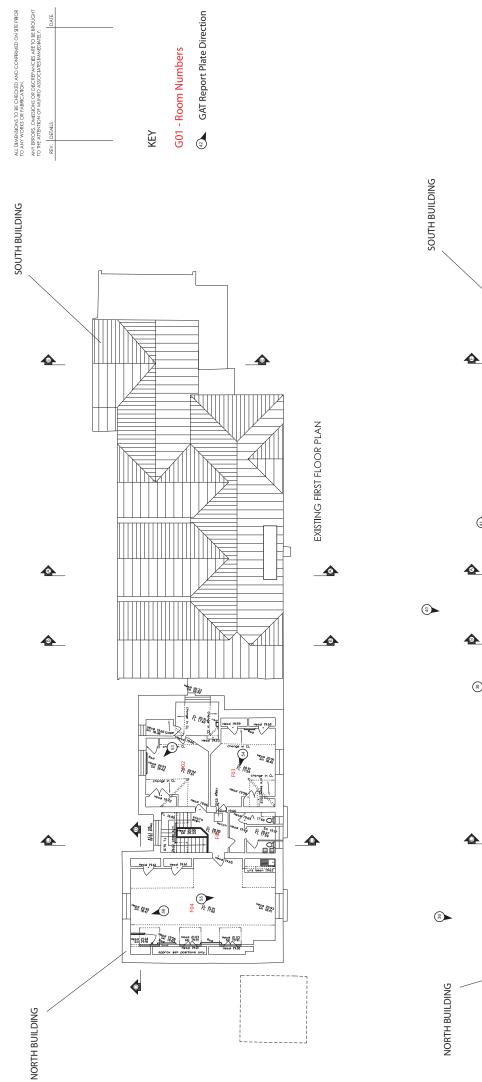
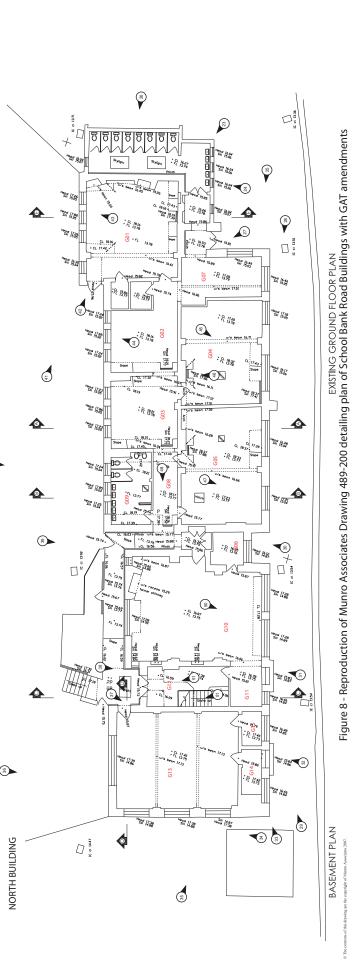


Figure 6 - Reproduction of Third Edition 25" Ordnance Survey County Series Sheet XI.14 (1913)



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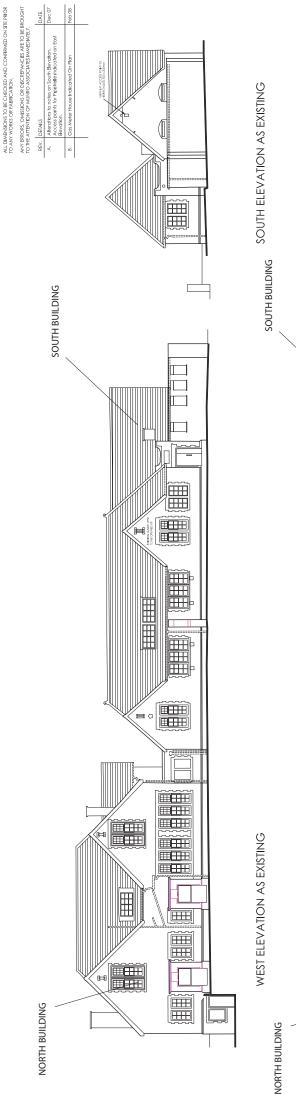
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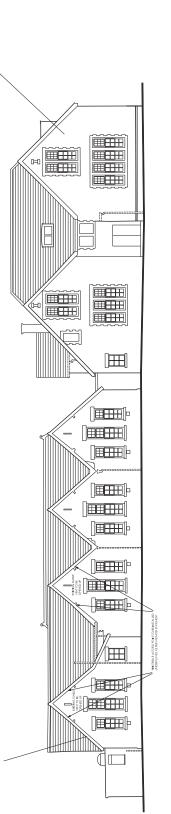
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Figure 9 - Reproduction of Munro Associates Drawing 489-201B detailing elevations for the School Bank Road Buildings with GAT amendments

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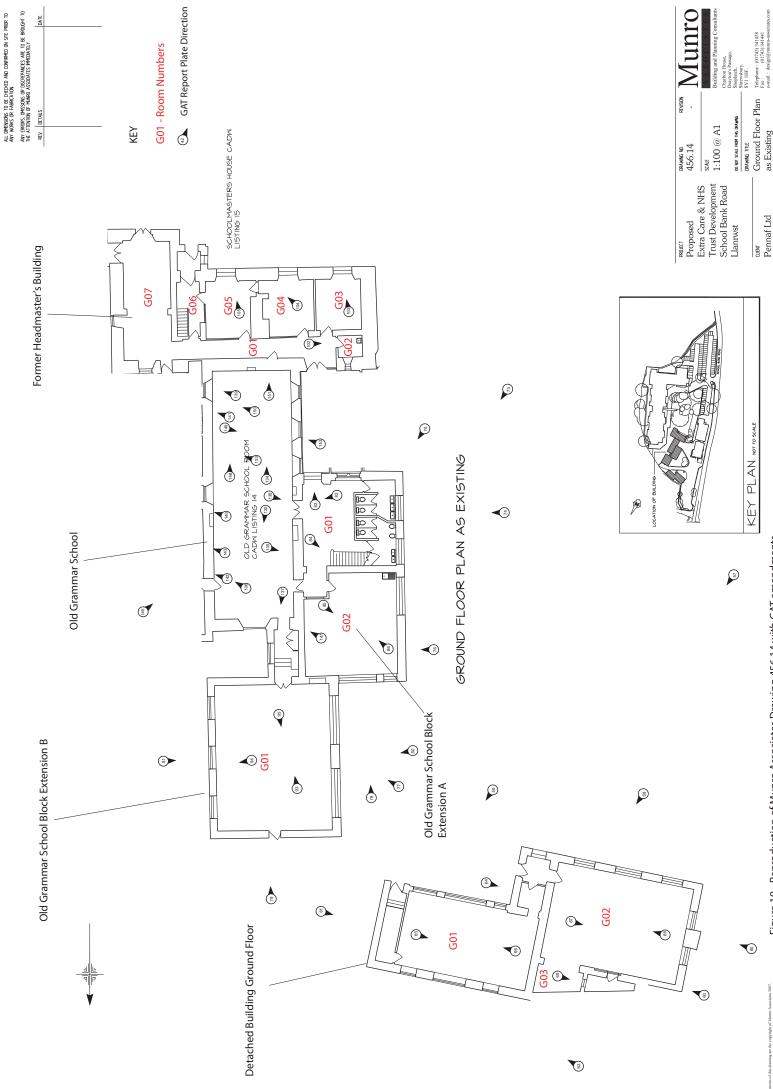
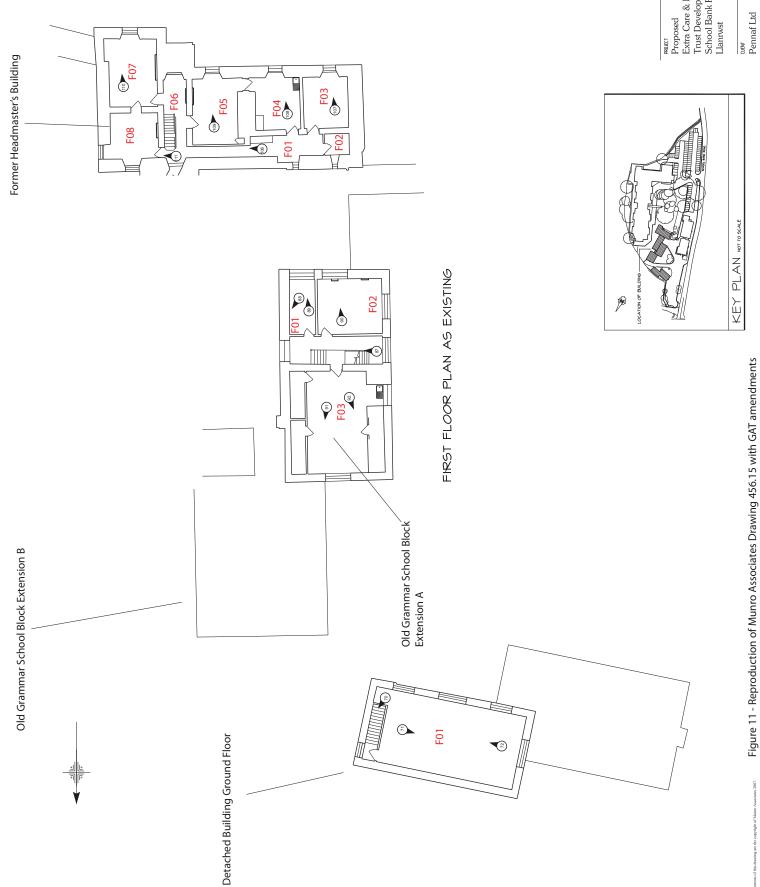


Figure 10 - Reproduction of Munro Associates Drawing 456.14 with GAT amendments

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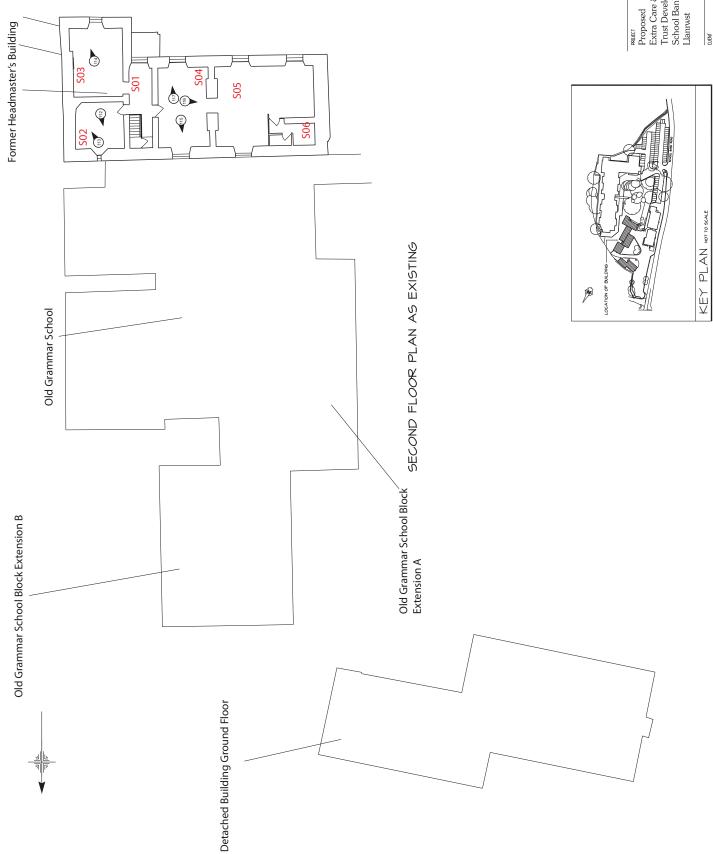


Figure 12 - Reproduction of Munro Associates Drawing 456.16 with GAT amendments

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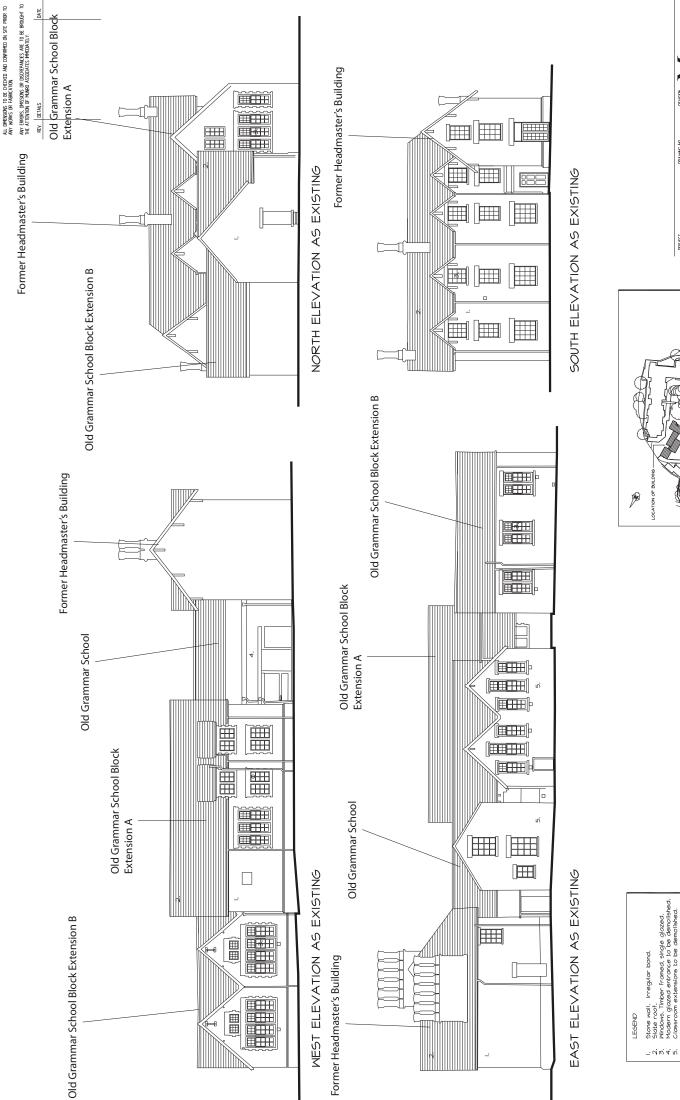
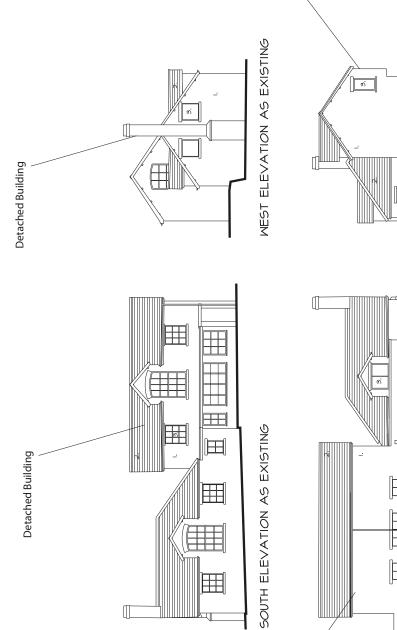


Figure 13 - Reproduction of Munro Associates Drawing 456.17 with GAT amendments

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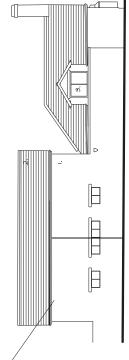
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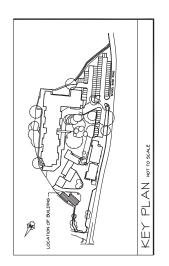


Figure 14 - Reproduction of Munro Associates Drawing 456.18 with GAT amendments

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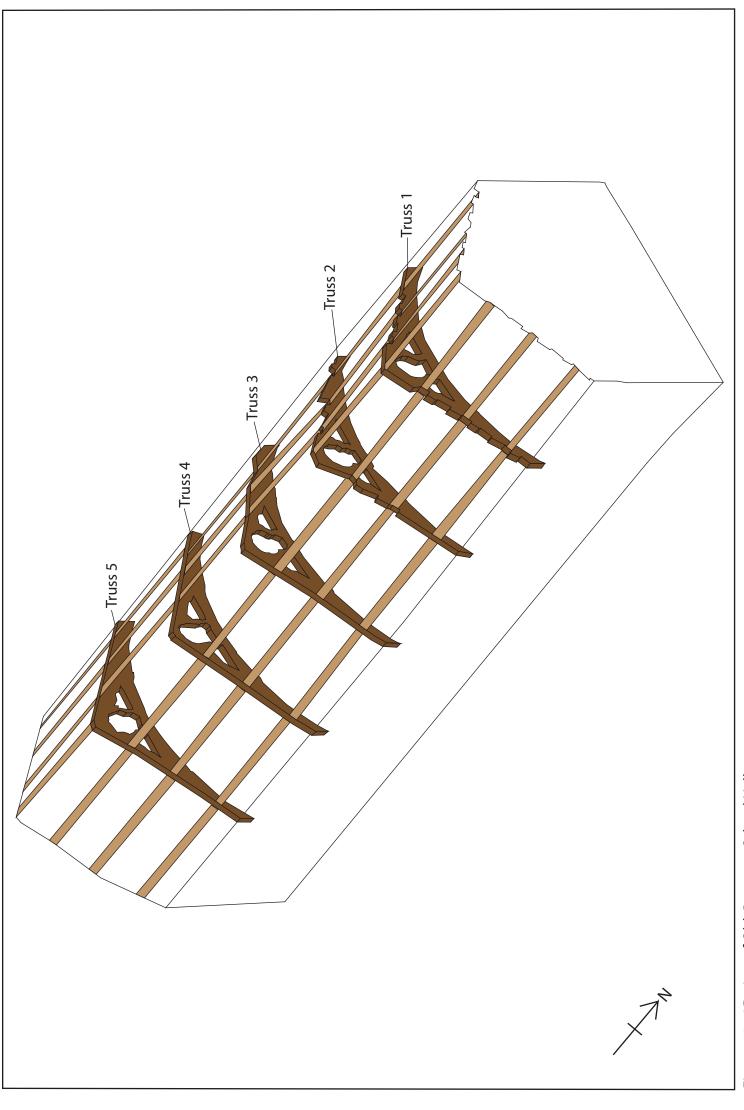


Figure 15 - 3D view of Old Grammer School Hall

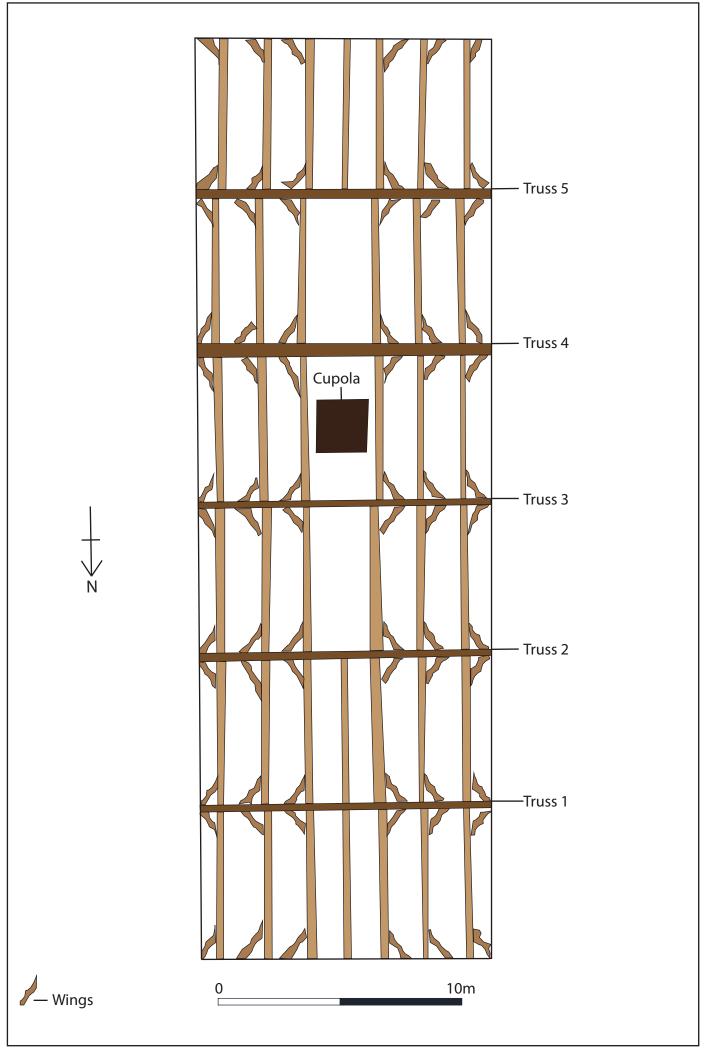


Figure 16 - Detailed Plan of Old Grammer School Hall roof construction

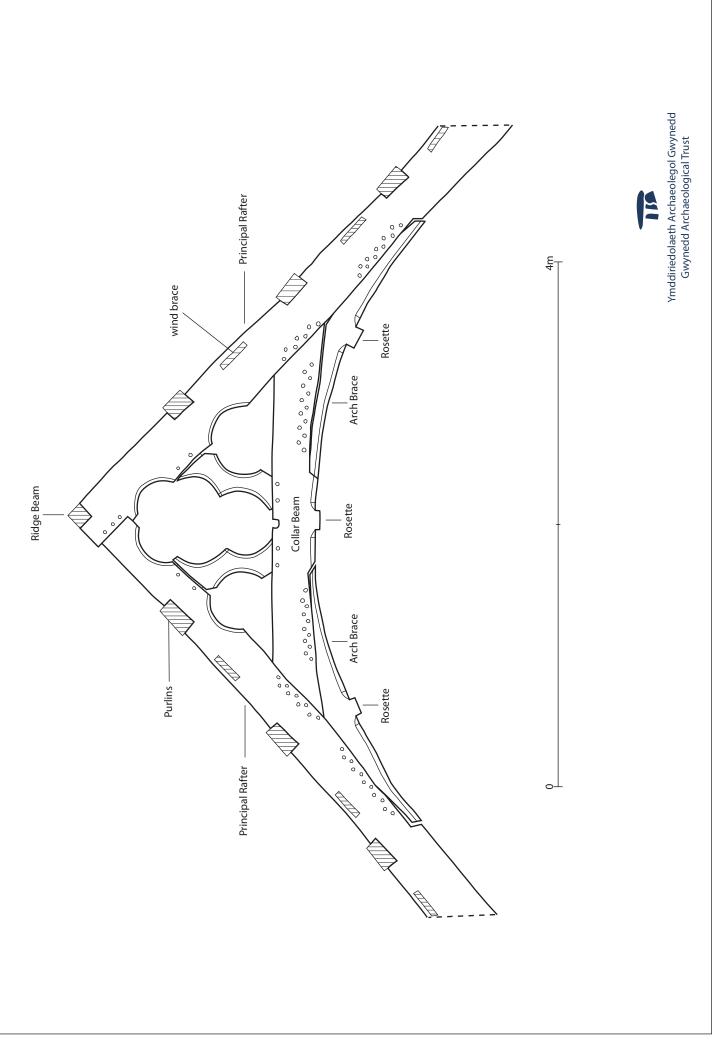
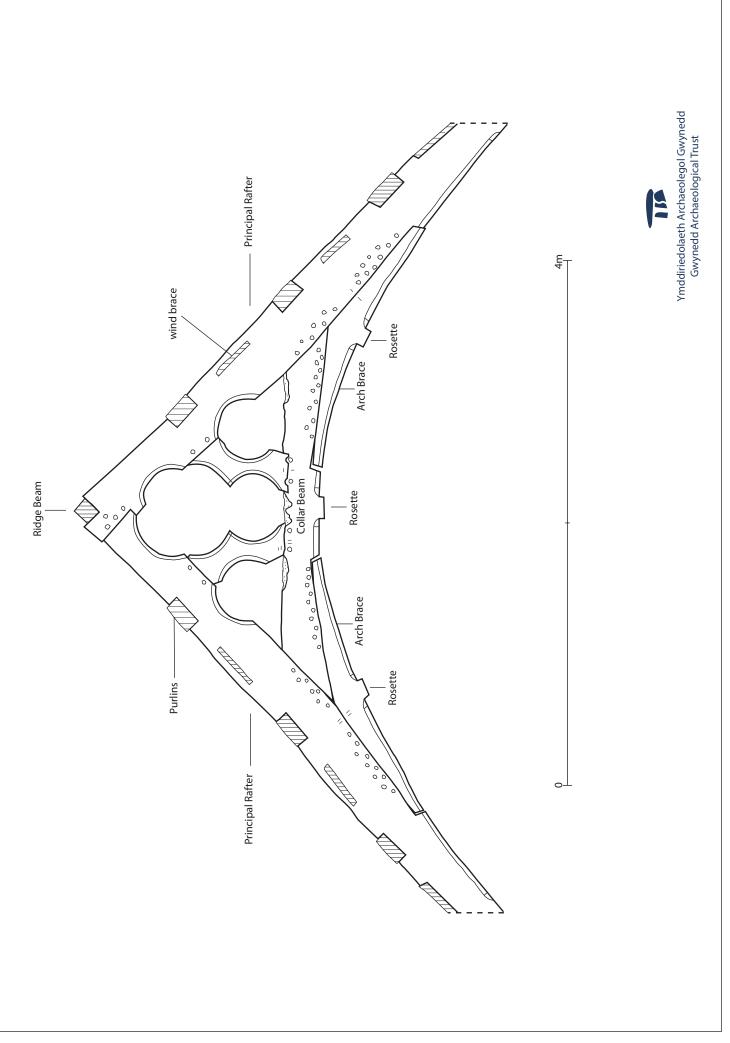
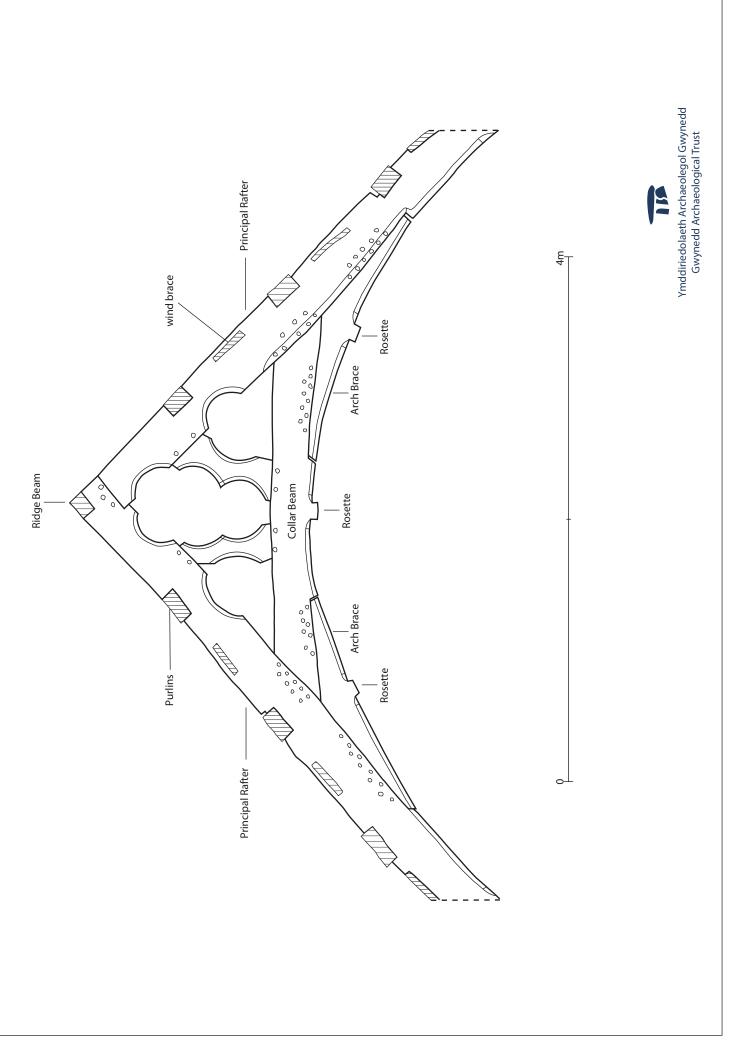
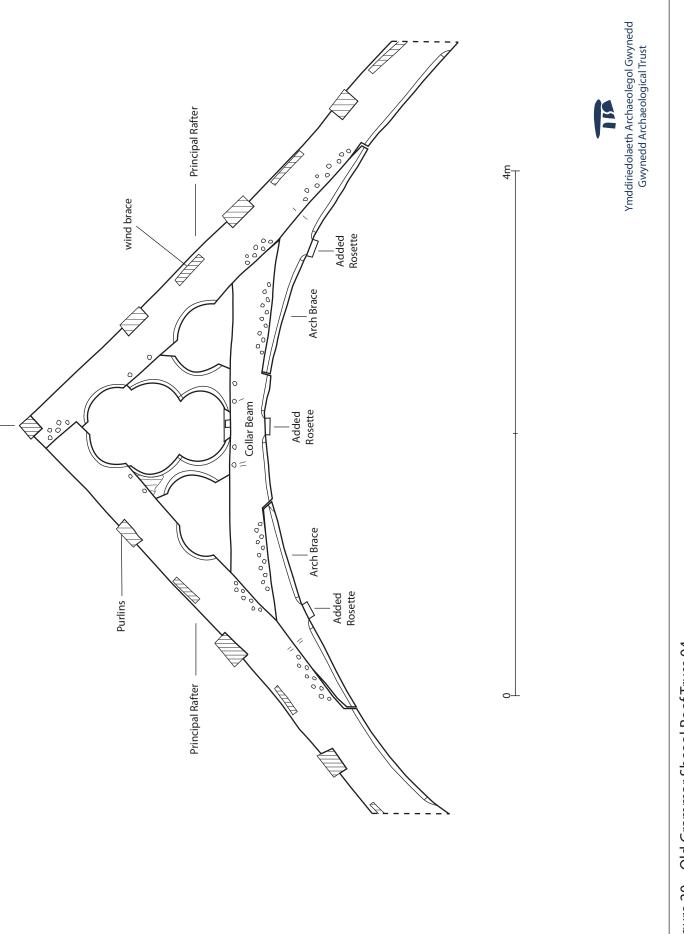


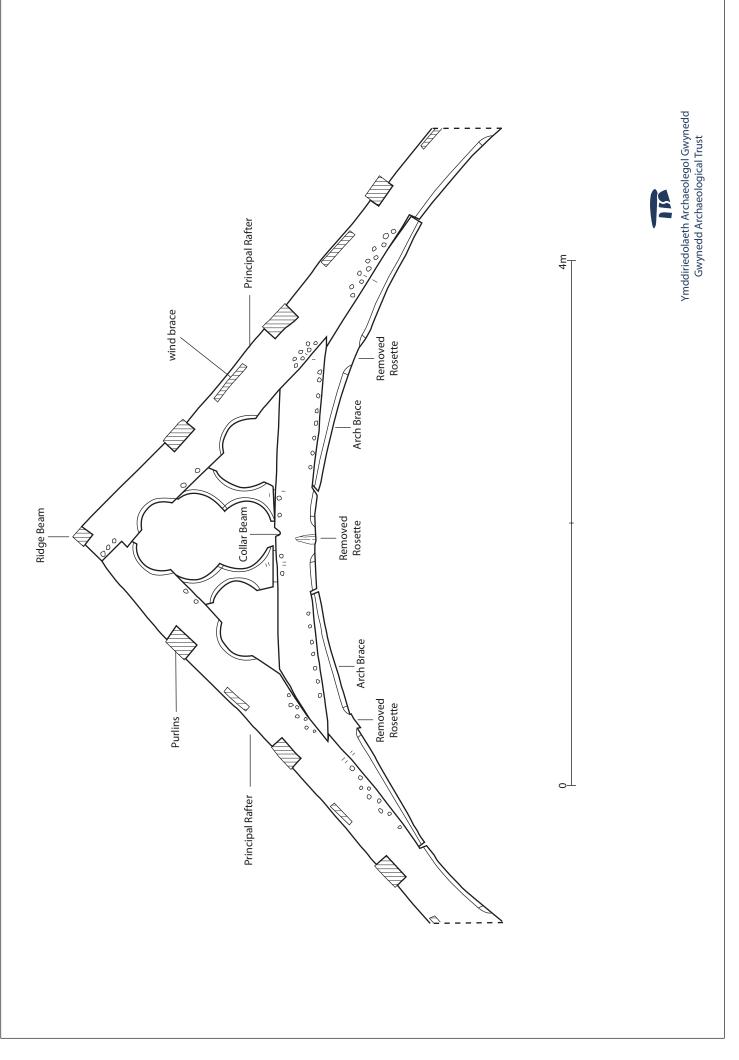
Figure 17 - Old Grammar Shcool Roof Truss 01







Ridge Beam



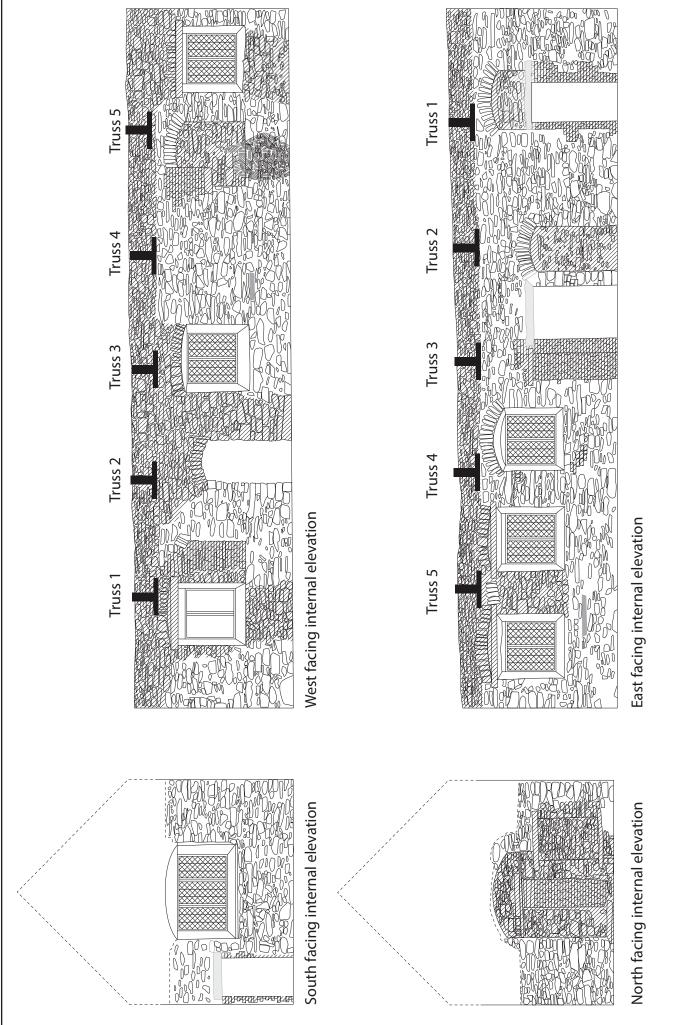


Figure 22 - Reproduction of phased elevation drawings of the Old Grammer School interior (not to scale)

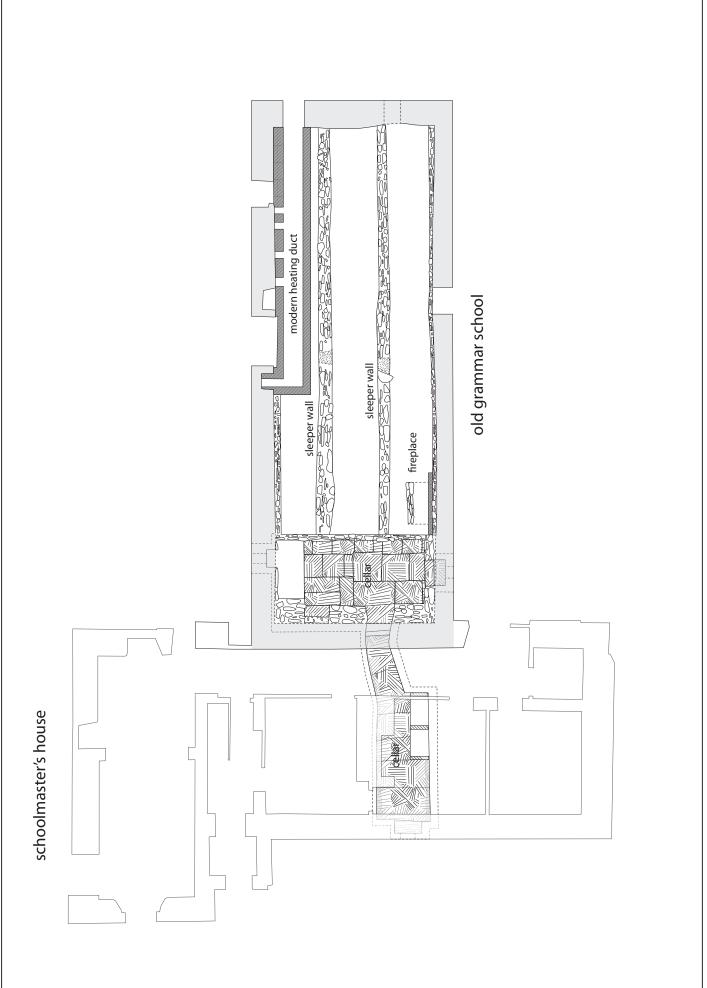


Figure 23 - Reproduction of the old grammar school/schoolmaster's ground floor plan with phasing detail.



Plate 01: View west of Ysgol Dyffryn Conwy, Llanrwst prior to the renovation and conversion programme (October 2007); these buildings were constructed in the early twentieth century



Plate 02: View east of Ysgol Dyffryn Conwy, Llanrwst prior to the renovation and conversion programme (October 2007)



Plate 03: View northeast of the 1960s school block; taken from the school grounds. This was demolished in 2008.



Plate 04: View east of 1960s school block; note the Schoolmaster's House in the left foreground. This was demolished in 2008.



Plate 05: View northeast of west projecting 1960s school block. This was demolished in 2008.



Plate 06: View northeast of south projecting 1960s school block. This was demolished in 2008.

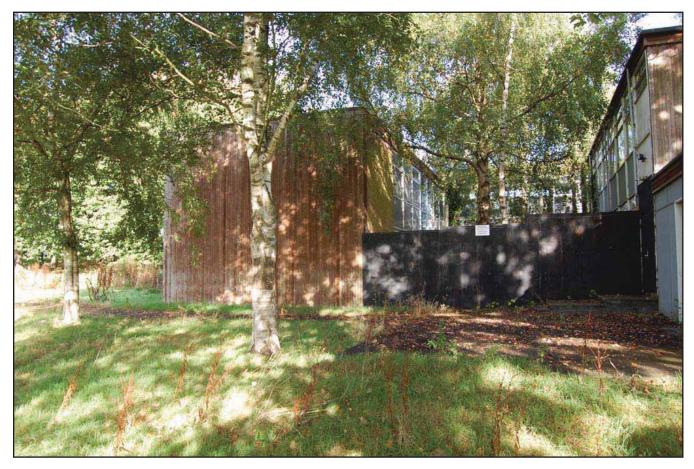


Plate 07: View north of south projecting 1960s block (cf. Plate 06). This was demolished in 2008.

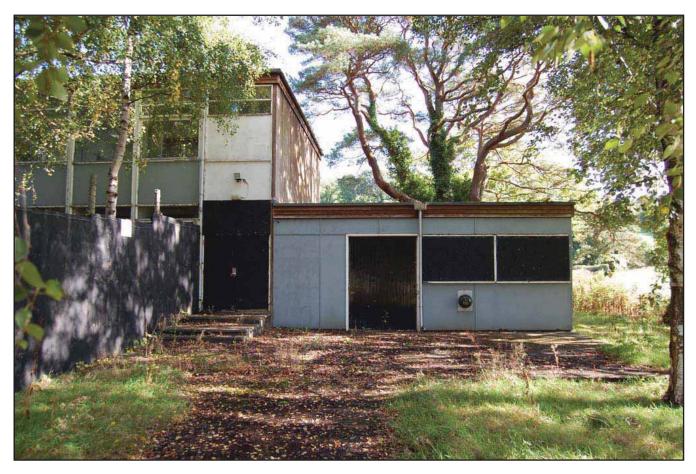


Plate 08: View north of south projecting 1960s block. This was demolished in 2008.

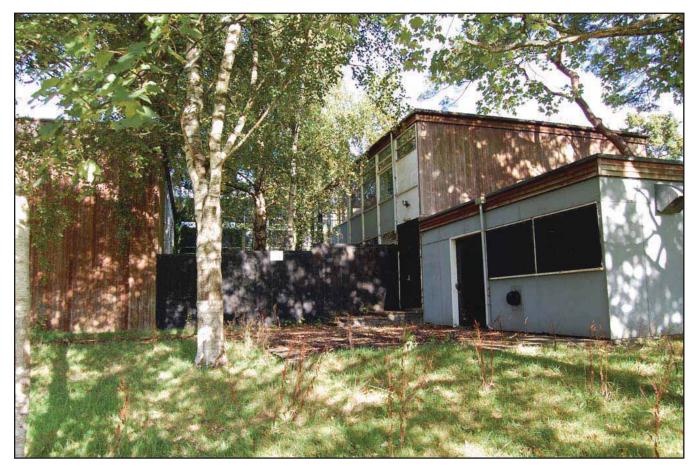


Plate 09: View north of south projecting block (cf. Plates 06 to 08); note the larger school block in the background. This was demolished in 2008.

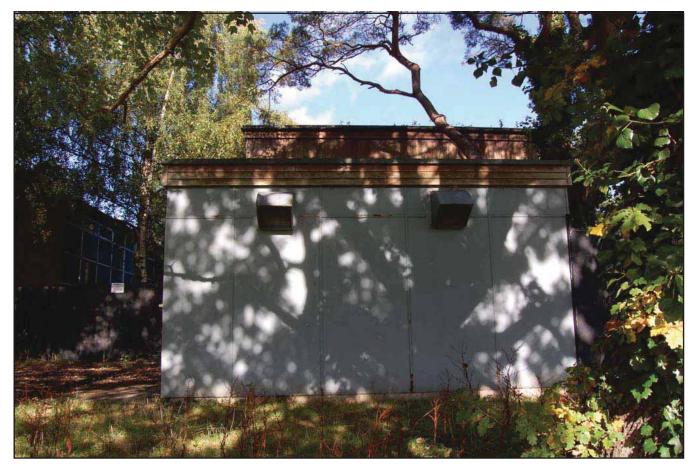


Plate 10: View north of south projecting block (cf. Plate 09); note the larger school block in the background. This was demolished in 2008.

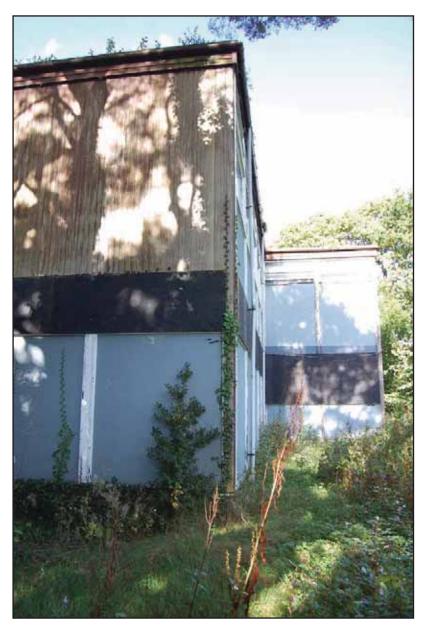


Plate 11: View west of south projecting block (cf. Plate 09). This was demolished in 2008.

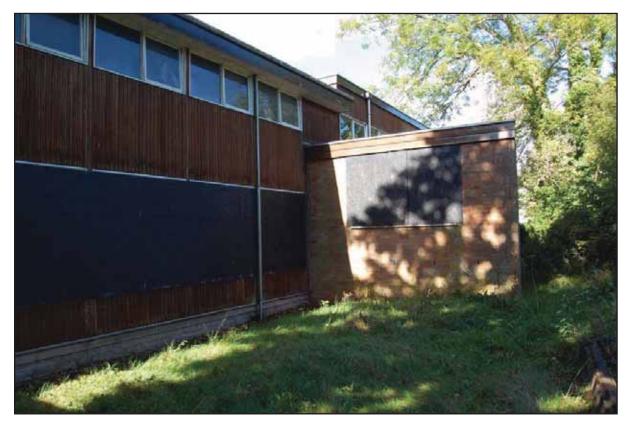


Plate 12: View north of east projecting annexe; note the main school block to the west. This was demolished in 2008.

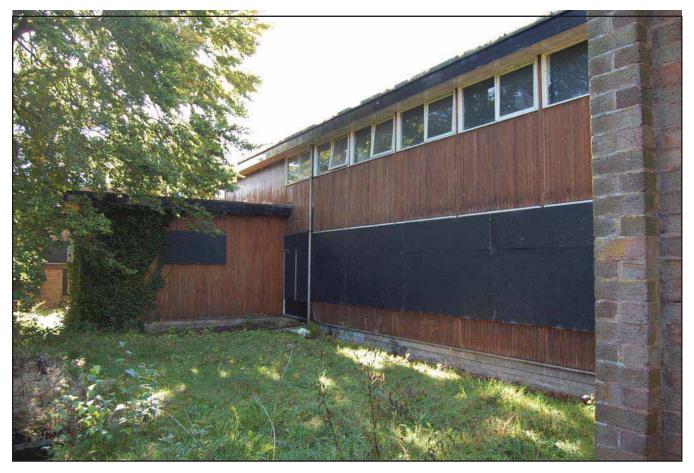


Plate 13: View south of main block. This was demolished in 2008.



Plate 14: View south of main block. This was demolished in 2008. Note the earlier schoolbuilding in the foreground.

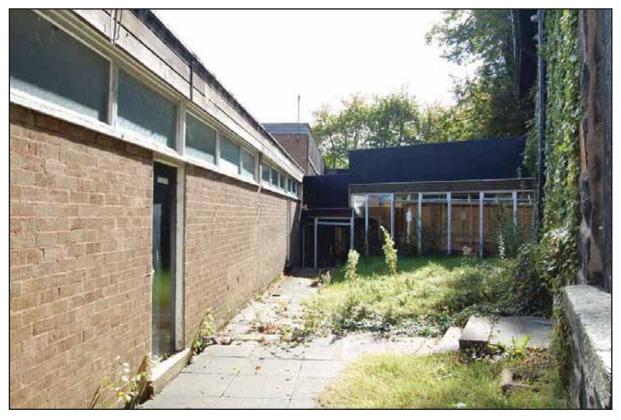


Plate 15: View south of link corridor connecting the 1960s school to the Schoolmaster's House. The link corridor was demolished.

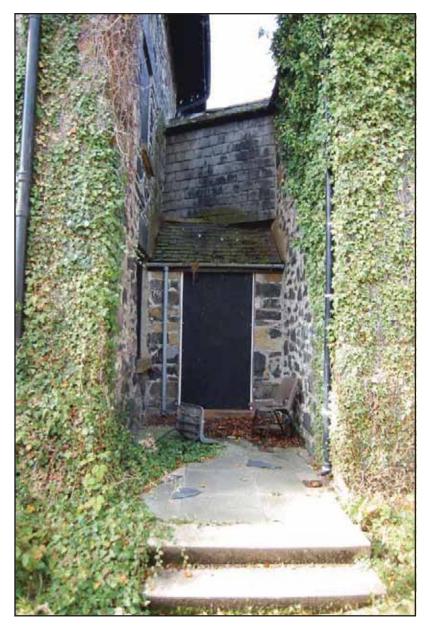


Plate 16: View west of a small entrance into the Old Grammar School. This was demolished in 2008.



Plate 17: View east of modern entrance lobby. The Old Grammar School block is to the left of image and the Schoolmaster's House is to the right of image. The entrance lobby was demolished in 2008.

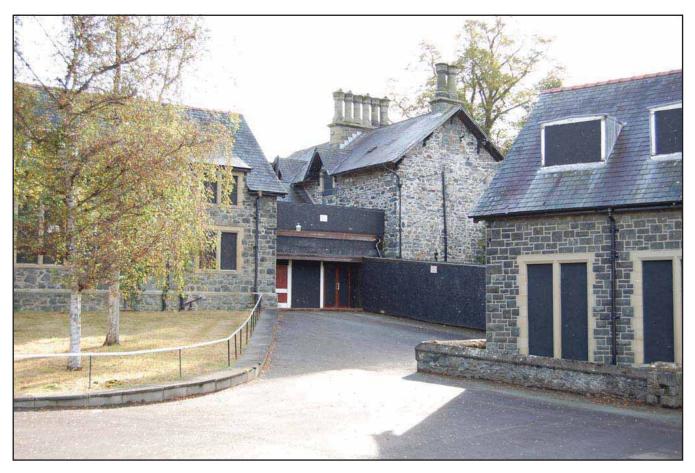


Plate 18: View east of modern entrance lobby (cf. Plate 07), which was connected to the Old Grammar School block and the Schoolmaster's House. The early twentieth century school building is to the bottom left of the image. The entrance lobby was demolished in 2008.



Plate 19: View south of 1960s school block and non-listed classroom extension (stone-built) attached to the Old Grammar School block. Both the school block and the non-listed classroom extension were demolished in 2008.



Plate 20: View north of Schoolmaster's House and 1960s school block.



Plate 21: View north of late twentieth century extension added onto the school block facing School Bank Road. This extension was used as a toilet block prior to closure. This extension was demolished in 2008. The School Bank Road block was retained.

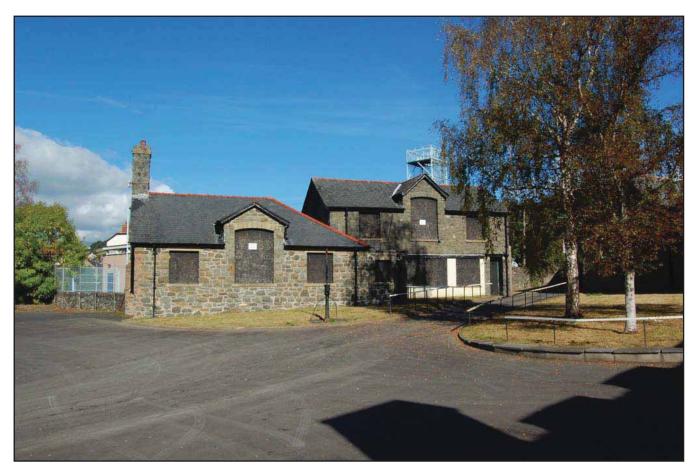


Plate 22: View north of detached block at northen end of site. This block was retained but was not renovated or converted.



Plate 23: School Bank Road south building south elevation - entrance porch and south gable. Scale: 1.0m



Plate 24: School Bank Road south building west facing elevation- exterior of room G01. Scale: 1.0m



Plate 25: School Bank Road south building south facing elevation- porch detail/former modern extension. Scale: 1.0m

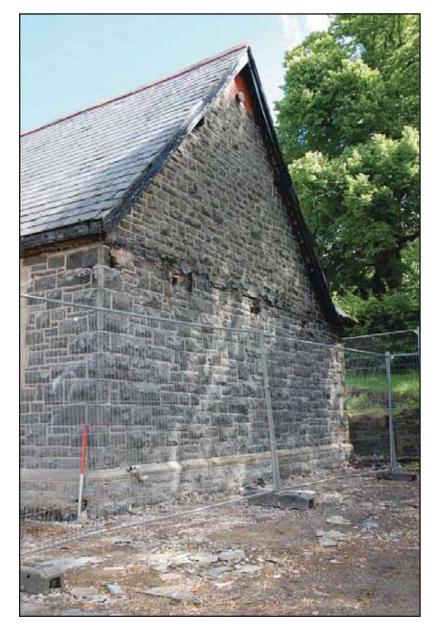


Plate 26: School Bank Road south building south facing elevation- exterior of room G01, detail of construction. Scale: 1.0m

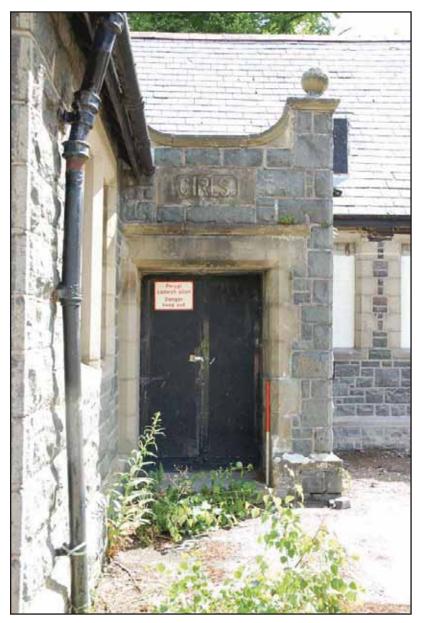


Plate 27: School Bank Road south building west facing elevation- porch detail: note inscribed stone. Scale: 1.0m



Plate 28: School Bank Road south building west facing elevation - oblique view. Scale: 1.0m

Plate 30: School Bank Road south building west facing elevation - link room G06. Scale: 1.0m



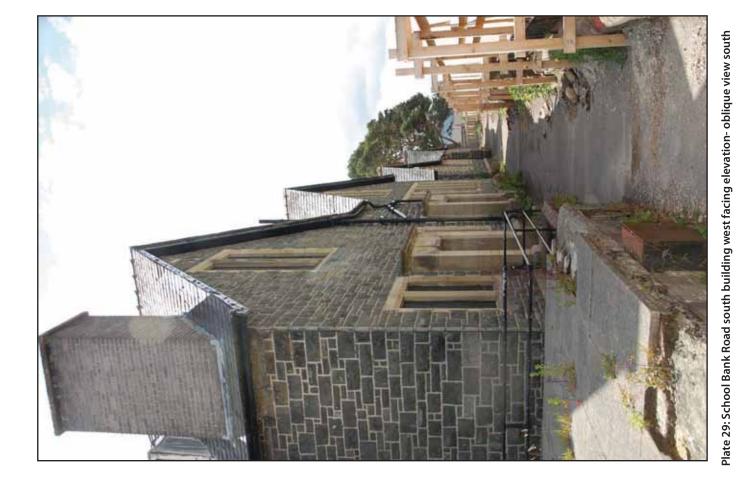






Plate 31: School Bank Road west facing elevation- detail of former "Girls" entrance on north building. Scale: 1.0m.

Plate 32: School Bank Road west facing elevation - detail of former "Boys" entrance on north building. Scale: 1.0m.







Plate 33: School Bank Road north building north facing elevation - cellar entrance. Scale: 1.0m.



Plate 35: School Bank Road north building north facing elevation. Scale: 1.0m.



Plate 36: School Bank Road north building east facing elevation. Scale: 1.0m.





Plate 37: School Bank Road north building east facing elevation entrance point detail. Scale: 1.0m.

Plate 38: School Bank Road north building east facing elevation - ground floor entrance to room G13. Scale: 1.0m.

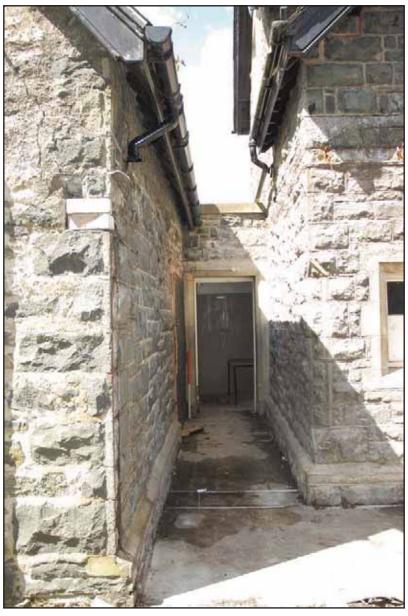


Plate 39: School Bank Road north building east facing elevation. - ground floor entrance for both north and south building. Scale: 1.0m.



Plate 40: School Bank Road south building east facing elevation - elevation detail. Scale: 1.0m.

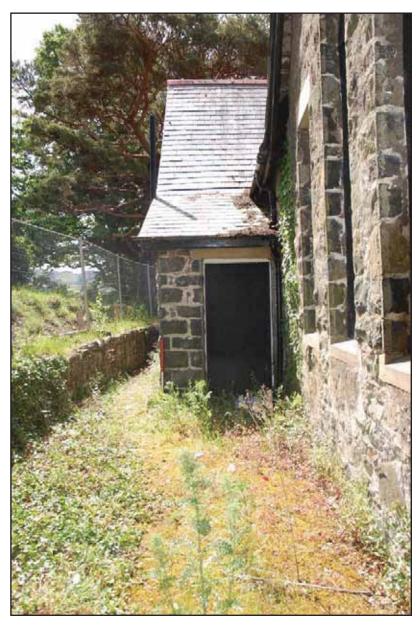


Plate 41: School Bank Road south building east facing elevation - ground floor entrance to room G01 detail. Scale: 1.0m.

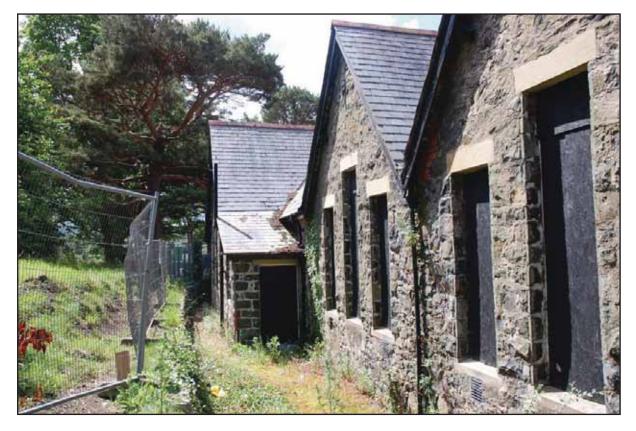


Plate 42: School Bank Road south building east facing elevation oblique view and ground floor entrance to room G01. Scale: 1.0m.



Plate 43: School Bank Road south building room G01 east elevation detail. Scale: 1.0m.



Plate 44: School Bank Road south building room G02 east elevation detail.

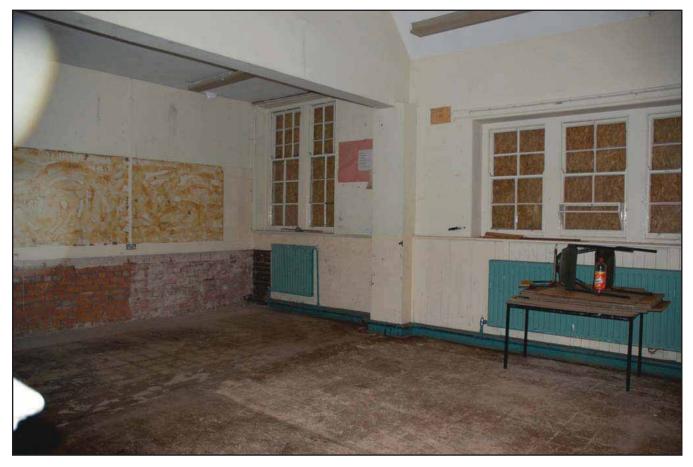


Plate 45 - School Bank Road south building room G04 west elevation detail

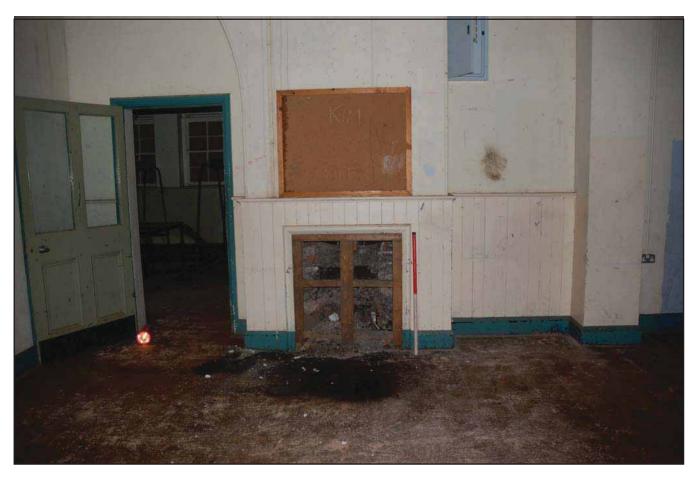


Plate 46 - School Bank Road south building room G04 east elevation detail of fireplace



Plate 47 - School Bank Road south building room G05 west elevation detail



Plate 48 - School Bank Road south building room G08 north elevation detail



Plate 49 - School Bank Road north building room G10 west elevation detail



Plate 50 - School Bank Road north building room G10 west elevation detail

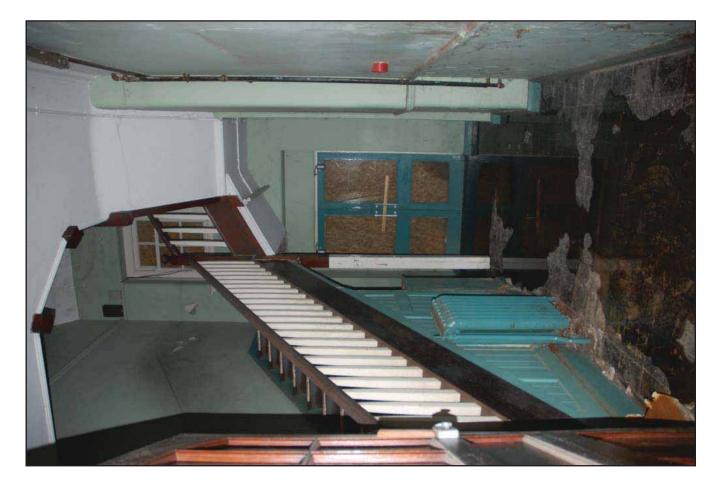






Plate 53 - School Bank Road north building room F02 entrance and east elevation detail



Plate 54 - School Bank Road north building room F03 entrance and north elevation detail



Plate 55 - School Bank Road north building room F04 east elevation detail



Plate 56 - School Bank Road north building room F04 west elevation detail



Plate 57 - Detached north building - south elevation

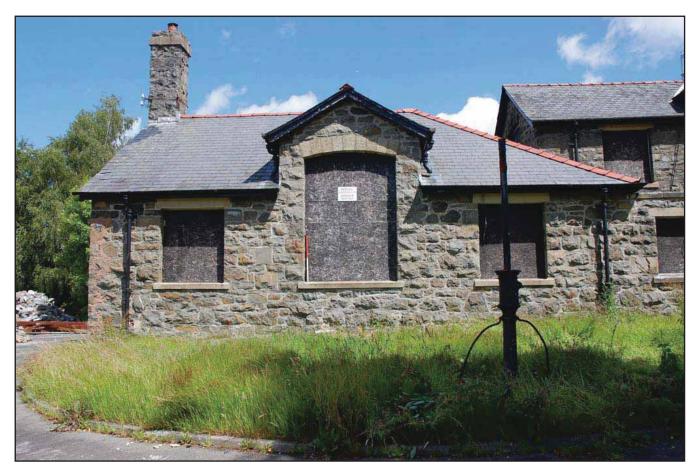


Plate 58 - Detached north building - south elevation detail

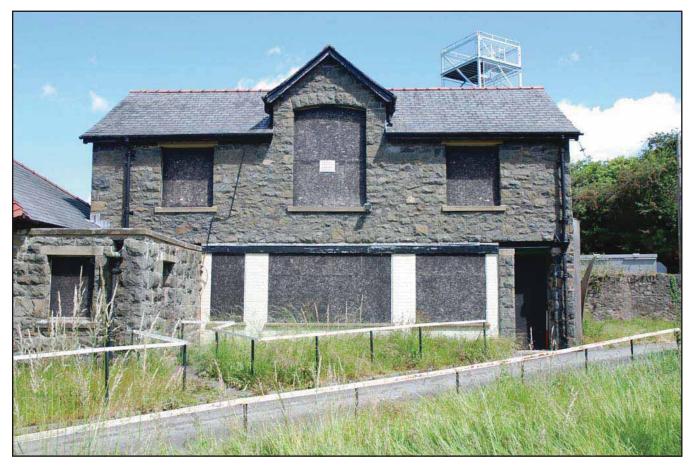


Plate 59 - Detached north building - south elevation detail

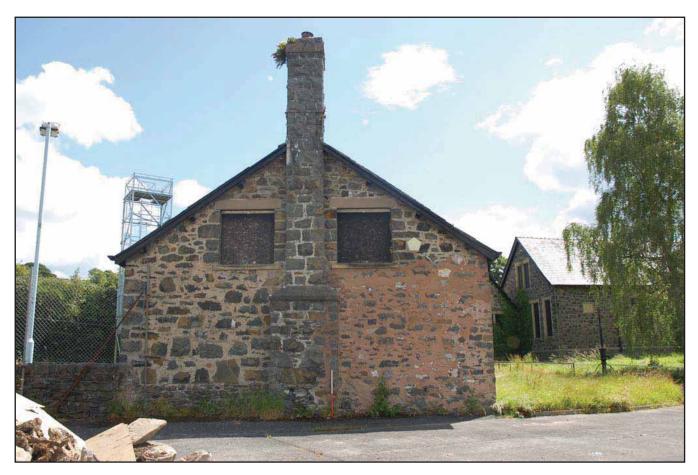


Plate 60 - Detached north building - west elevation

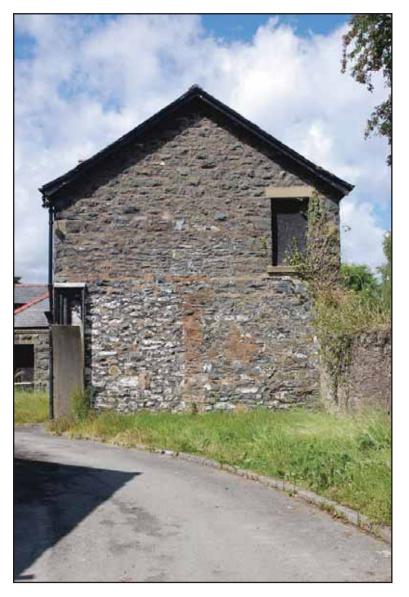
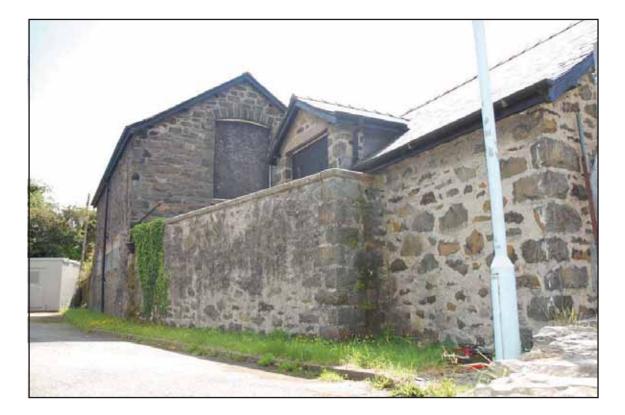


Plate 61 - Detached north building - east elevation



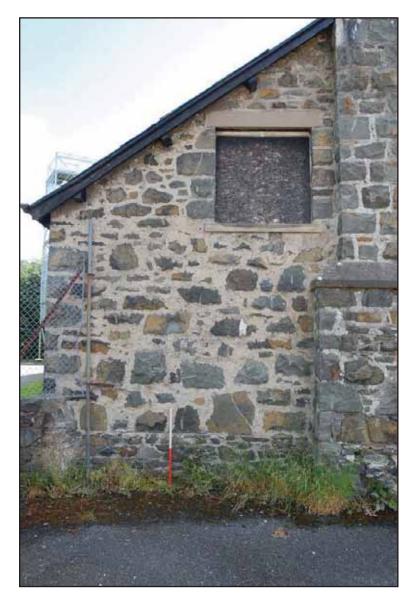


Plate 63 - Detached north building - west elevation detail. Scale 1.0m



Plate 64 - Detached north building - east elevation detail



Plate 65 - Detached north building Ground Floor Room G01 - south elevation. Scale: 1.0m

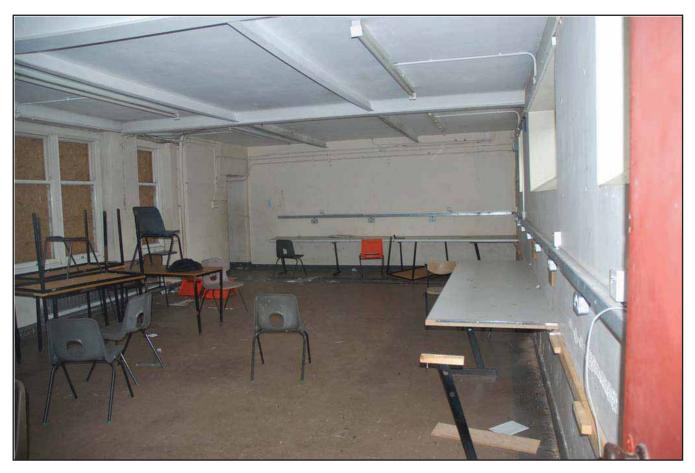
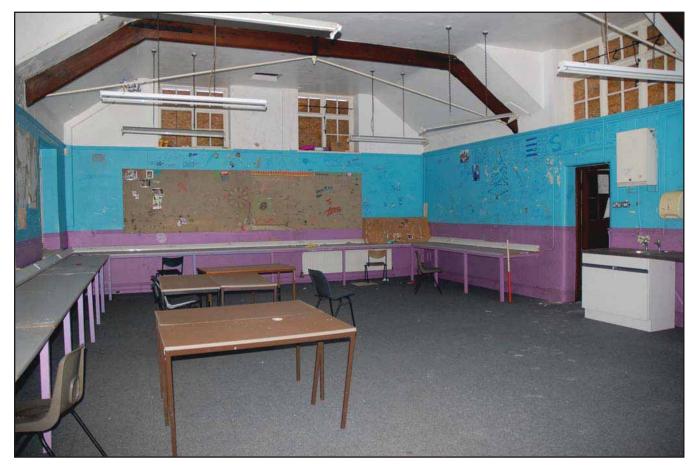


Plate 66- Detached north building Ground Floor Room G01 - north and east elevations



 $Plate \ 67 \ - \ Detached \ north \ building \ Ground \ Floor \ Room \ G02 \ - \ west \ elevation. \ Scale: 1.0m$



Plate 68 - Detached north building Ground Floor Room G02 - east elevation. Scale: 1.0m.







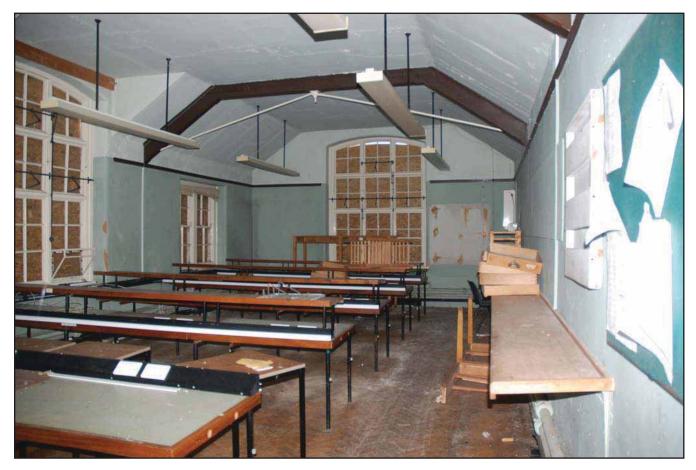


Plate 71 - Detached north building First Floor Room F01 - general room shot looking west. Scale: 1.0m

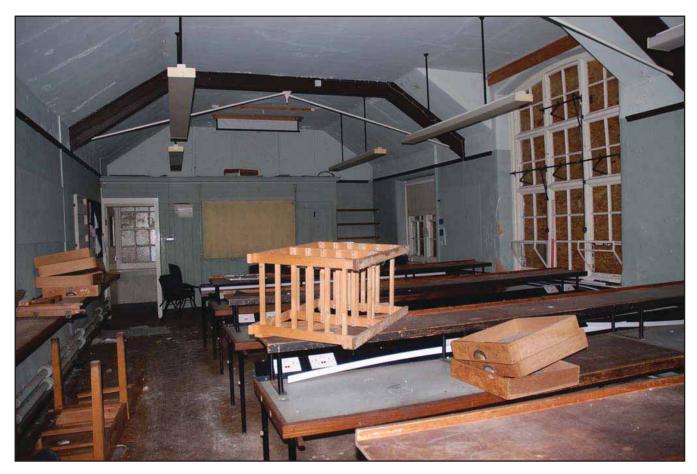


Plate 72 - Detached north building First Floor Room F01 - general room shot looking east. Scale: 1.0m

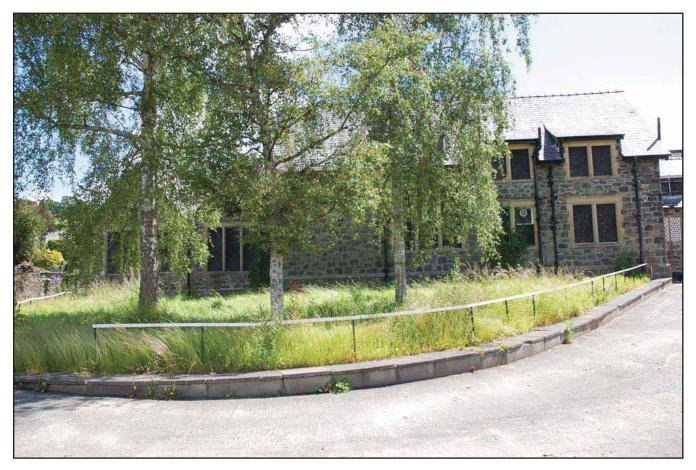


Plate 73 - Extension A (Old Grammar School Block) - west facing elevation

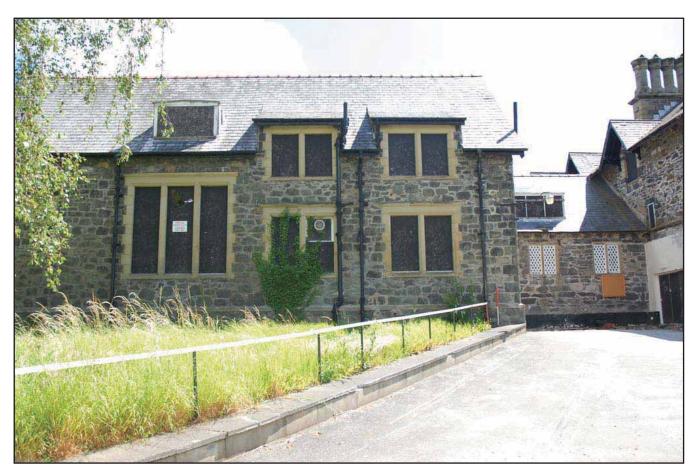


Plate 74 - Extension A (Old Grammar School Block) - west facing elevation detail



Plate 75 - Extension A (Old Grammar School Block) - west facing elevation oblique; note wall plaque to left of image



Plate 76 - Extension A (Old Grammar School Block) - west facing elevation: wall plaque detail.



Plate 77 - Extension A (Old Grammar School Block) - west facing elevation oblique; note wall plaque to left of image

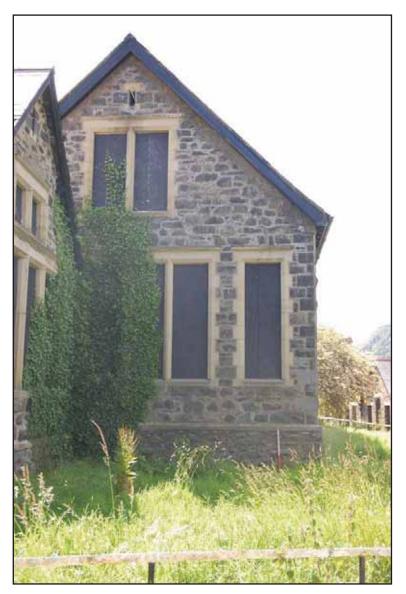


Plate 78 - Extension A (Old Grammar School Block) - north facing elevation oblique. Scale: 1.0m

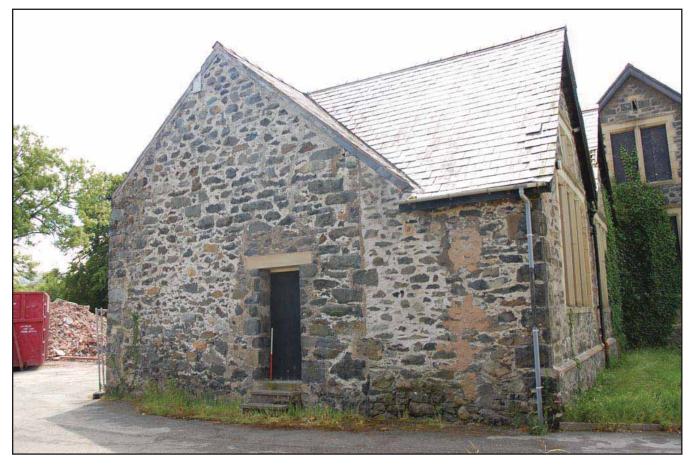


Plate 79 - Extension B (Old Grammar School Block) - north facing elevation; note structural phasing to the left of the door. Scale: 1.0m

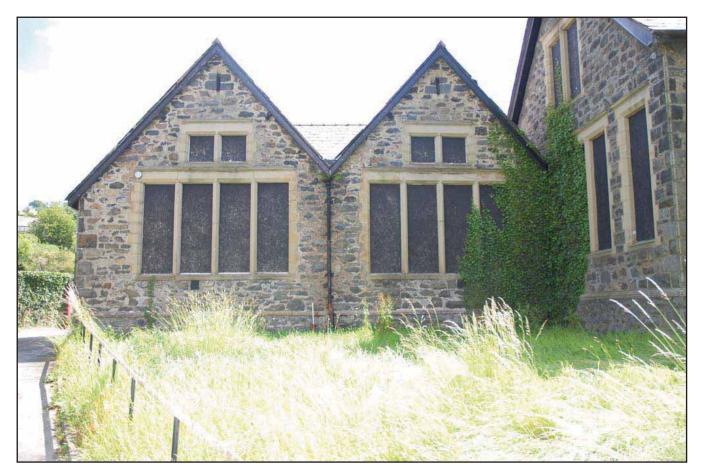


Plate 80 - Extension B (Old Grammar School Block) - west facing elevation. Scale: 1.0m



Plate 81 - Extension B (Old Grammar School Block) - east facing elevation. Scale: 1.0m



Plate 82 - Extension A (Old Grammar School Block) - Room G01 view south; note cloakroom furniture and ceiling support joist. Scale: 1.0m



Plate 83 - Extension A (Old Grammar School Block) - Room G01 view east; note cloakroom furniture and ceiling support joist. The double door entrance provides access to the Old Grammar School Hall. Scale: 1.0m



Plate 84 - Extension A (Old Grammar School Block) - Room G01 view north; note cloakroom furniture and ceiling support joist. The staircase leads to the first floor (rooms F01 to F03); the open access leads to room G02



Plate 85 - Extension A (Old Grammar School Block) - Room G02 view west; note ceiling support joist



Plate 86 - Extension A (Old Grammar School Block) - Room G02 view south; note ceiling support joist. Access is from room G01



Plate 87 - Extension A (Old Grammar School Block) - First floor landing; rooms F02 and F03 are to the left and room F01 to the right

Plate 89 - Extension A (Old Grammar School Block) - Room F01 view south. Scale: 1.0m

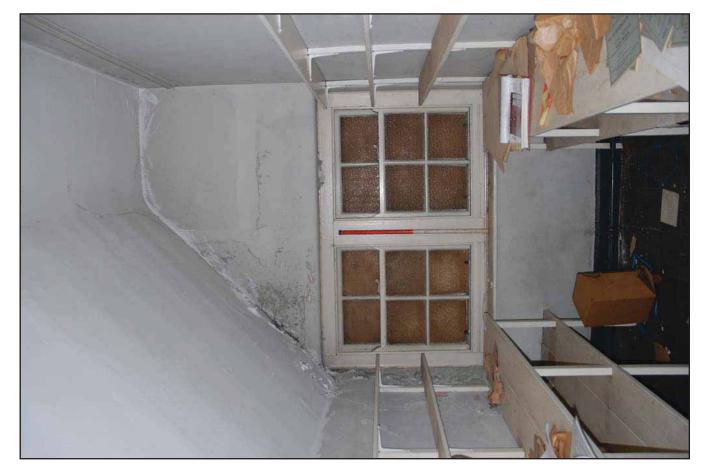






Plate 90 - Extension A (Old Grammar School Block) - Room F02 view west. Scale: 1.0m



Plate 91 - Extension A (Old Grammar School Block) - Room F03 view north



Plate 92 - Extension A (Old Grammar School Block) - Room F03 view west. Scale: 1.0m



Plate 93 - Extension B (Old Grammar School Block) - Room G01 view south. Scale: 1.0m



Plate 94 - Extension B (Old Grammar School Block) - Room G01 view east. Scale: 1.0m



Plate 95 - Extension A (Old Grammar School Block) - Room G01 view north. Scale: 1.0m

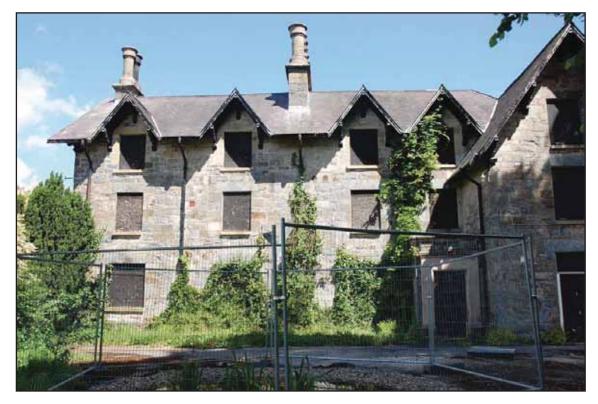


Plate 96 - Headmaster's Building - south elevation. Scale: 1.0m

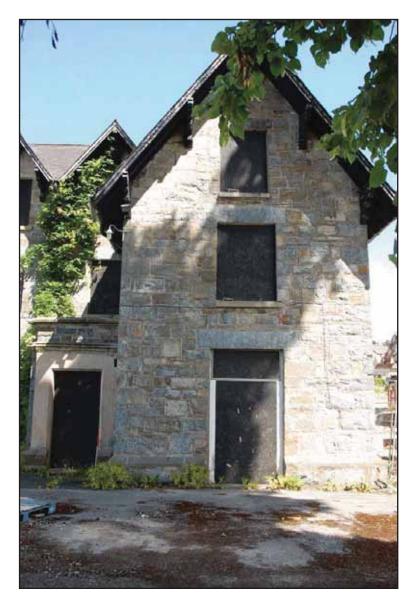


Plate 97 - Headmaster's Building - south elevation, projecting gable detail. Scale: 1.0m



Plate 98 - Headmaster's Building - east elevation. The former link corridor entrance is at the left of image. Note the former building exterior next to the link corridor entrance that was replaced by the projecting gable. Scale: 1.0m

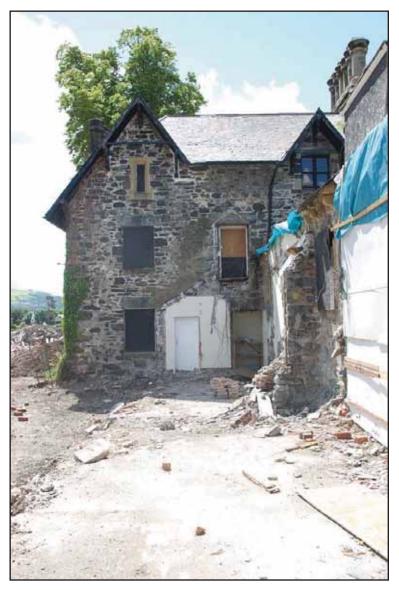


Plate 99 - Headmaster's Building - north elevation east side. Note the former building extension which was demolished in 2008 and the first floor window converted into a door. Scale: 1.0m

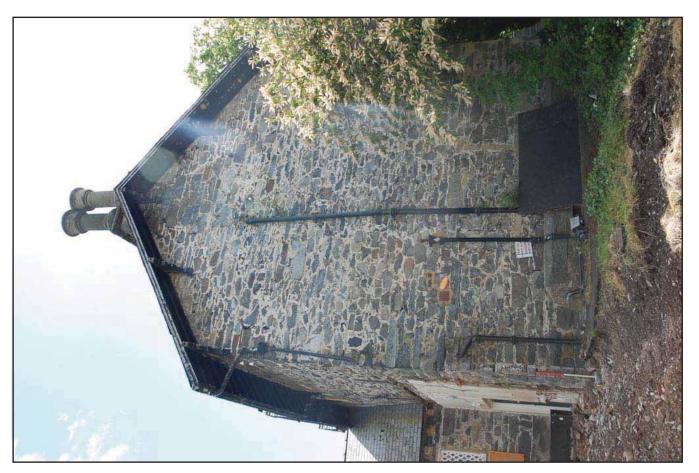






Plate 102 - Headmaster's Building - internal - room G01 view west. Scale: 1.0m



Plate 103 - Headmaster's Building - internal - room G03 view south. Scale: 1.0m



Plate 104 - Headmaster's Building - internal - room G04 view south. Scale: 1.0m



Plate 105 - Headmaster's Building - internal - room G05 view south. Scale: 1.0m



Plate 106 - Headmaster's Building - internal - room F01 view east. Scale: 1.0m



Plate 107 - Headmaster's Building - internal - room F03 view south. Scale: 1.0m



Plate 108 - Headmaster's Building - internal - room F04 view south. Scale: 1.0m



Plate 109 - Headmaster's Building - internal - room F05 view south. Scale: 1.0m



Plate 110 - Headmaster's Building - internal - room F07 view south. Scale: 1.0m



Plate 111 - Headmaster's Building - internal - room F08 view east. Scale: 1.0m



Plate 112 - Headmaster's Building - internal - room S02 view north (window detail). Scale: 1.0m



Plate 113 - Headmaster's Building - internal - room S02 view southeast (fireplace detail). Scale: 1.0m



Plate 114 - Headmaster's Building - internal - room S03 view south. Scale: 1.0m



Plate 115 - Headmaster's Building - internal - room S04 view north (window detail). Scale: 1.0m



Plate 116 - Headmaster's Building - internal - room S04 view west towards room S05. Scale: 1.0m

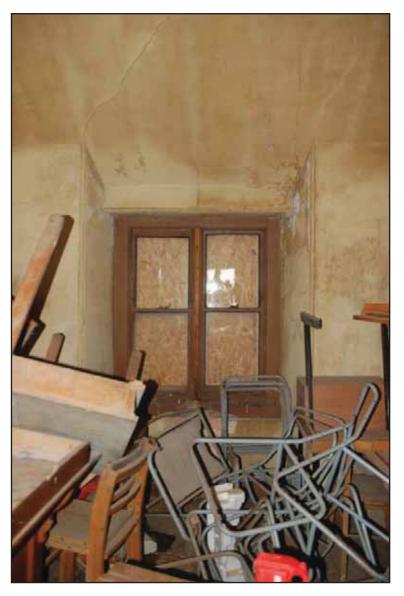
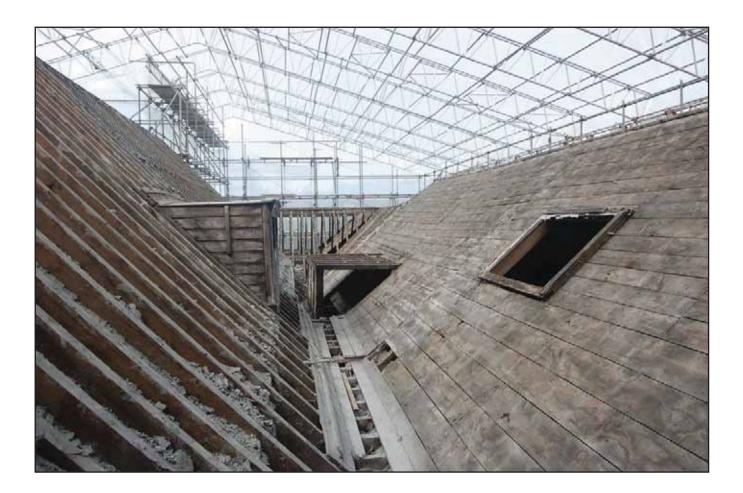


Plate 117 - Headmaster's Building - internal - room S04 view south (window detail). Scale: 1.0m



Plate 118 - Old Grammar School External - view south of roof during renovation; note the cupola in the background



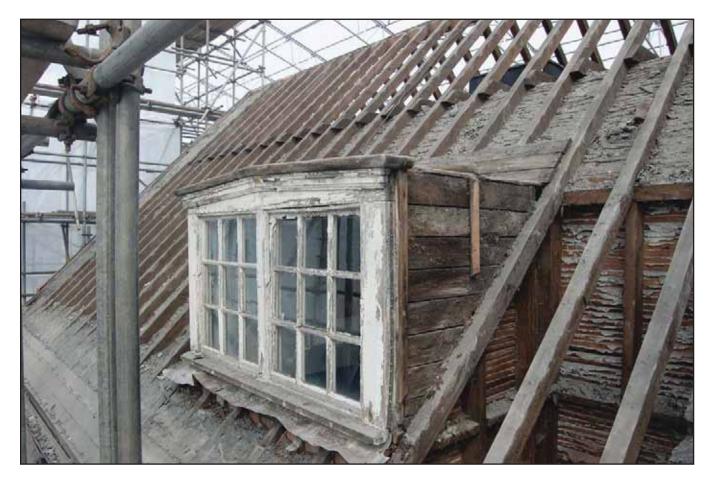


Plate 120 - Old Grammar School External- view west of roof during renovation: dormer light detail

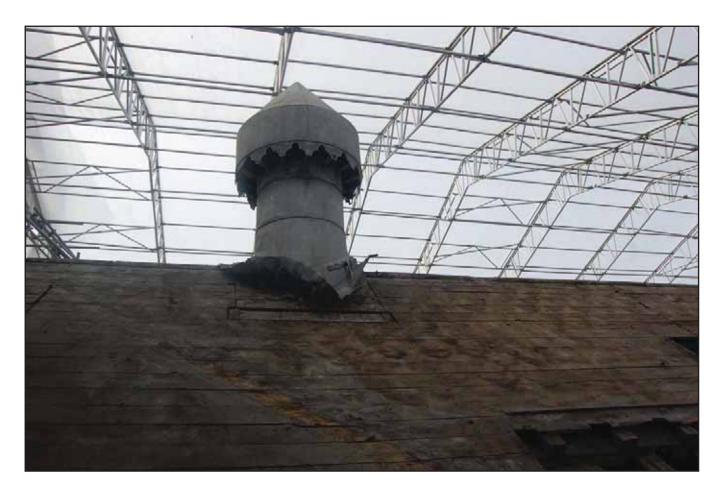


Plate 121 - Old Grammar School External- view east of roof during renovation: cupola detail

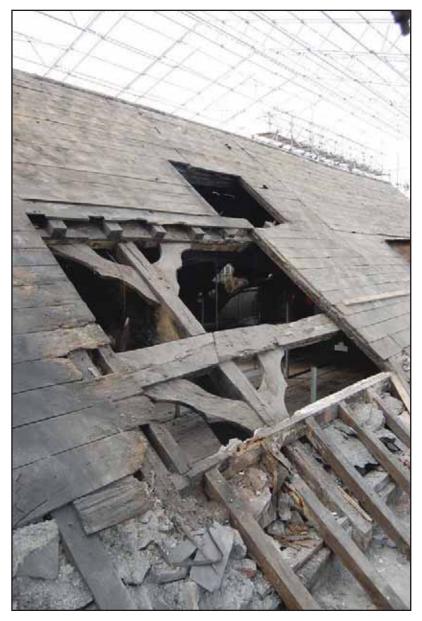


Plate 122 - Old Grammar School External - view east of roof during renovation: wind brace and purlin detail



Plate 123 - Old Grammar School internal- view north of roof trusses during renovation. Scale: 2.0m



Plate 124 - Old Grammar School internal- view north of roof truss 02 during renovation works. Scale: 2.0m



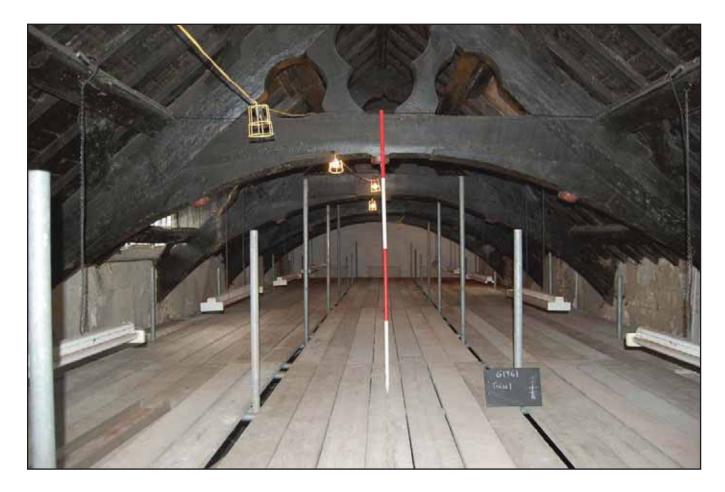


Plate 126- Old Grammar School internal- view south of roof trusses during renovation works. Scale: 2.0m

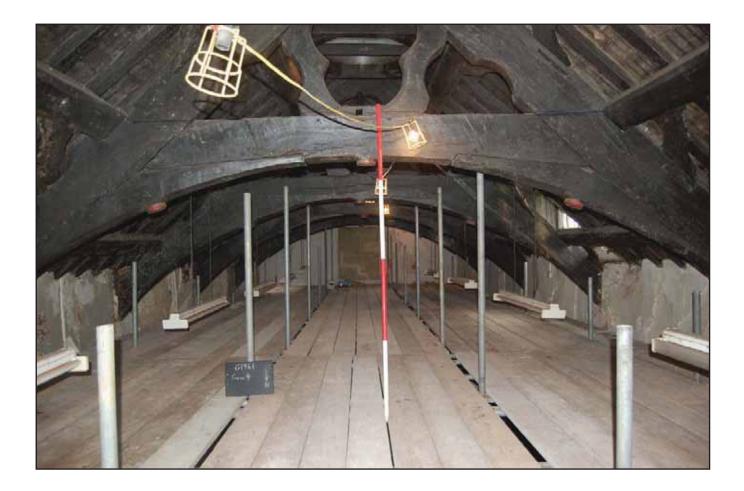




Plate 128 - Old Grammar School internal - detail of join between purlins and associated fixings. Scale: 0.3m





Plate 130 - Old Grammar School internal - detail of rosette decoration used on the roof trusses.



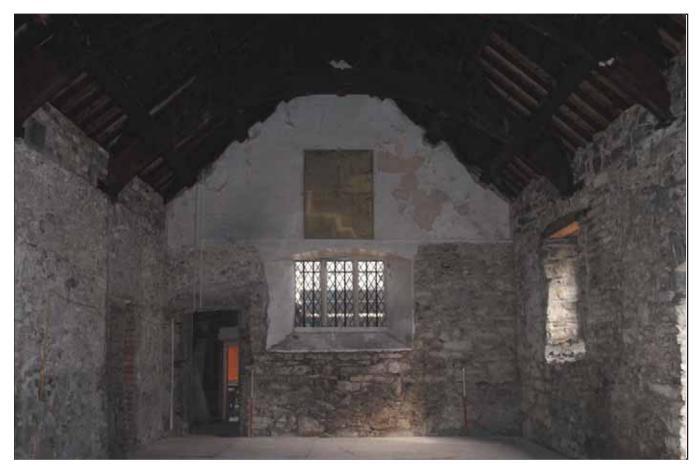


Plate 132 - Old Grammar School internal - North Facing Internal elevation of the School Hall. Scales 1m

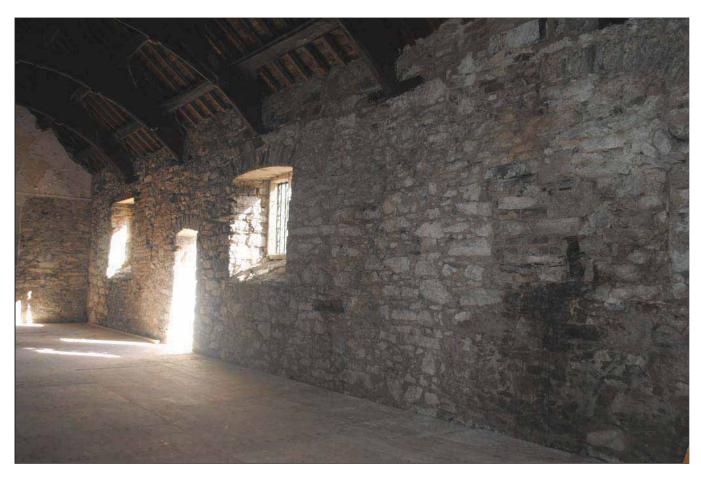


Plate 133 - Old Grammar School internal - West Facing Internal elevation of the School Hall

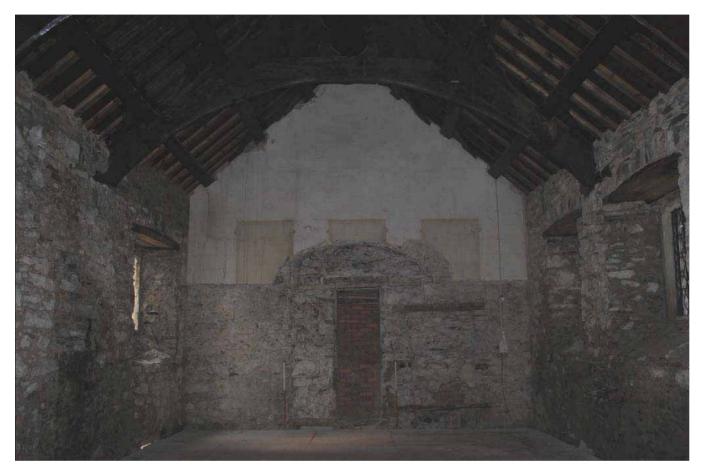


Plate 134 - Old Grammar School internal - South-facing Internal Elevation of the School Hall. Scales 1m

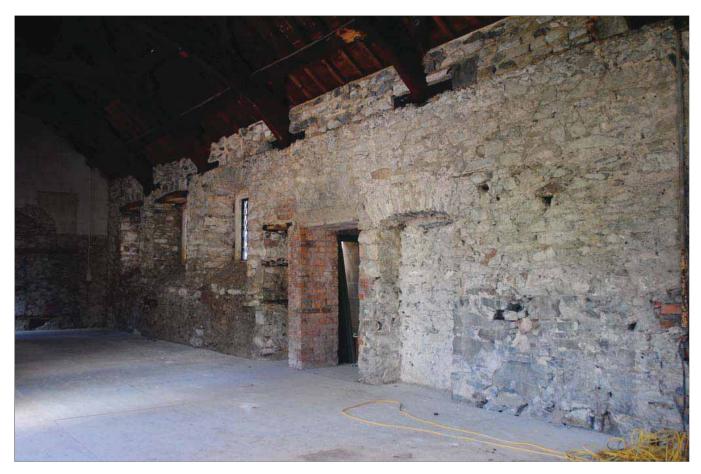


Plate 135 - Old Grammar School internal - East Facing Internal Elevation of the School Hall from the North East



Plate 136 - Old Grammar School internal - East Facing Internal Elevation of the School Hall from the South-West. Scale 1m



Plate 137 - Old Grammar School internal - Detail of blocked window and modern doorway on the internal east-facing elevation



Plate 138 - Old Grammar School internal - Blocked Cross-Passage Door on the East Facing Internal Elevation. Scale 1m



Plate 139 - Old Grammar School internal - Detail of blocked window and renewed window with modern lintel at the Southern End of the West Facing Internal Elevation



Plate 140 - Old Grammar School internal - Blocked Window on on the West Facing Internal Elevation with Brick Infill



Plate 141 - Old Grammar School internal - Detail of blocked window on the West Facing Internal Elevation, with later brick infill

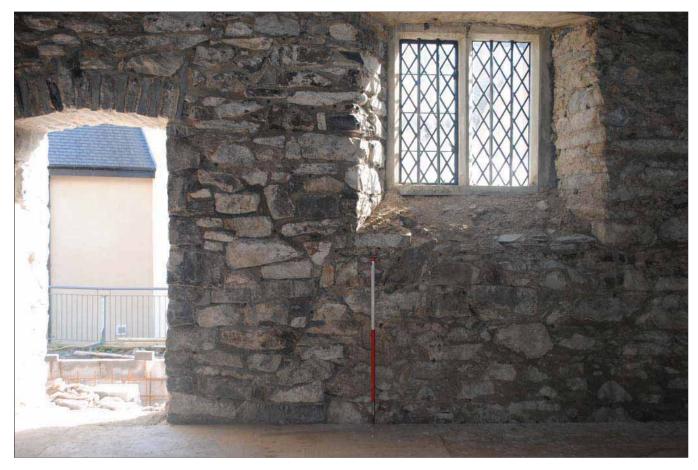


Plate 142 - Old Grammar School internal - Modern Stonework by the Cross-Passage Doorway on the West Facing Internal elevation



Plate 143 - Old Grammar School internal - Detail showing modern work on the West Facing Internal Elevation at wall plate level



Plate 144 - Old Grammar School internal- View of the Formerly External Quoin Stones at the South East Corner of the School Hall. Scale 1m



Plate 145 - Old Grammar School External View of the School Hall During the Recent Renovations, View Taken from the North East



Plate 146 - Old Grammar School internalView of the Formerly External Quoin Stones at the South West Corner of the School Hall, with adjacent Modern Brickwork. Scale 1m



Plate 147 - External View of North West Corner of the School Hall, taken from Extrension A room G02 showing interface between the corner quoins and the later school passage constructed of smaller rubble masonry. Scales 1m



Plate 148 - Old Grammar School internal - View of the School Hall looking north during renovations, showing the sleeper walls beneath the hall floor



Plate 149 - Old Grammar School internal - View of the Possible Fireplace adjacent to the west facing internal elevation. Scales 1m

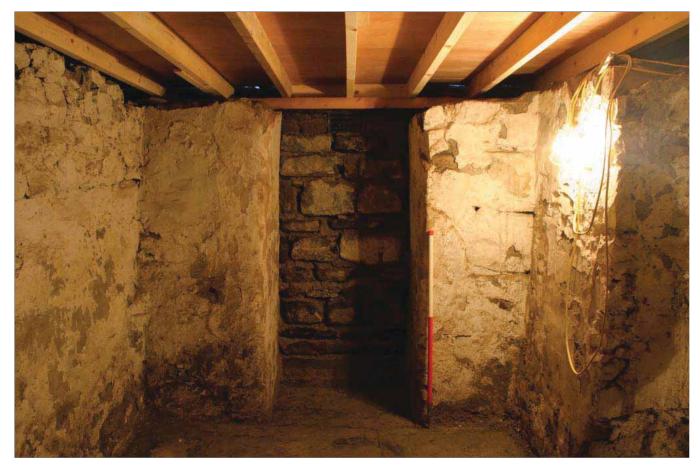


Plate 150 - Old Grammar School internal - View of the cellar beneath the School Hall looking East towards the Modern Doorway Blockage. Scale 1m

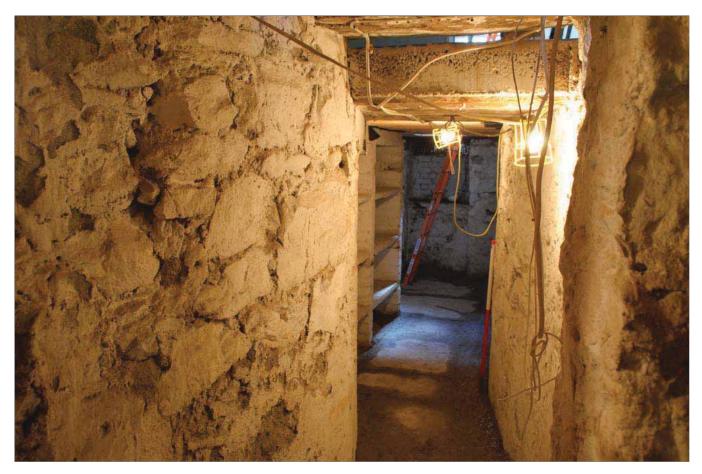


Plate 151 - Old Grammar School internal - View of the cellar looking South showing the passage under the Headmaster's House and Wine racks. Scale 1m



Plate 152 - Old Grammar School internal - View of Flagstone Floor in Cellar area under the Hall Floor. Scale 1m

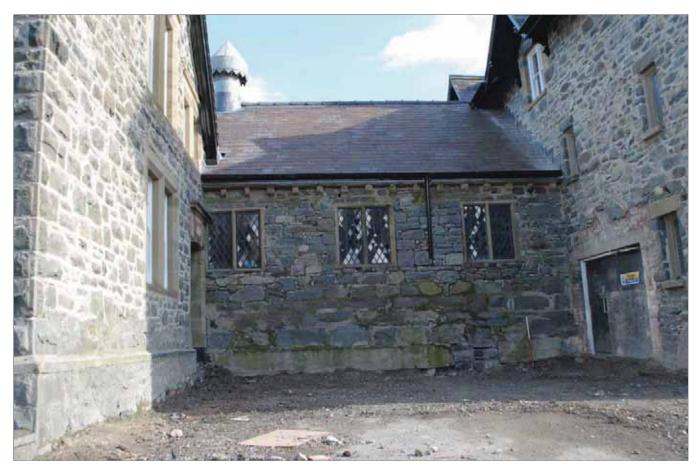


Plate 153 - Old Grammar School external - View of the Visible Portion of the External Western Elevation of the School Hall. Scale 1m

APPENDIX I

Reproduction of Gwynedd Archaeological Planning Services Mitigation Brief

DESIGN BRIEF FOR ARCHAEOLOGICAL BUILDING RECORD

Gwynedd Archaeological Planning Service

Site: Ysgol Dyffryn Conwy, School Bank Road, Llanrwst Date: 6th August 2007 National Grid Reference: 280194 361687 Planning reference: 0/32894

This design brief is only valid for six months after the above date. After this period Gwynedd Archaeological Planning Service should be contacted.

It is recommended that the contractor appointed to carry out the archaeological assessment visits the site of the proposed development and consults the Regional Historic Environment Record (HER) for north-west Wales before completing their specification. Gwynedd Archaeological Planning Service cannot guarantee the inclusion of all relevant information in the design brief.

Key elements specific to this design brief have been highlighted.

1.0 Site Location and Description

- 1.1 For the purposes of this brief the site comprises the former Ysgol Dyffryn Conwy, Llanrwst.
- 1.2 The c.1.5 hectare plot is currently occupied by a number of large school buildings.
- 1.3 Llanrwst is located 20km south of Conwy, on the east bank of Afon Conwy in north-west Wales.

2.0 Archaeological Background

- 2.1 The school site incorporates 2 grade II listed buildings; the Old Grammar School (reference 3592) and the Former Schoolmaster's House (reference 3593).
- 2.2 The Old Grammar School is a single storey hall structure aligned north-south, thought to date to the early 17th century. It is one of several examples of 17th century vernacular architecture in Llanrwst and, like Pont Fawr, (listed building reference 3612) its construction has been attributed to Inigo Jones.
- 2.3 To the south, running perpendicular to the old schoolroom is the Schoolmasters House. This is listed as an early 19th century building extended and altered in latter part of the century to include some good architectural detailing, including steeply pitched dormer roofs and cylindrical, stone chimneys.
- 2.4 The school has had many 19th century and later additions but is represented on the Ordnance Survey 1st edition map as one main school building, comprising the listed structures, with several subsidiary structures to the north.

- 2.5 Numerous additions and alterations have been made in the 20th century whilst the flat-roofed school buildings of the 1960s today cover most of the site.
- 2.6 Although now mostly obscured, some of the 17th century fabric of the Old Grammar School may survive hidden beneath later alterations and additions. It is possible that details may be revealed during the demolition and refurbishment programme.
- 2.7 The reports below must be consulted in relation to this brief.
- 2.8 Documentation

 Royal Commission on Ancient and Historical Monuments in Wales and Monmouthshire, 1914. An Inventory of Ancient Monuments in Denbighshire, 148. London: H.M. Stationery Office.
Seebarras M. 1002. Sebasta in Wales 1500, 1000. A Social and Arabitacture

Seaborne, M. 1992. Schools in Wales 1500-1900. A Social and Architectural History, 19-43. Gee & Son. Ltd, Denbigh

3.0 The nature of the development and archaeological requirements

- 3.1 The proposals comprise plans to demolish many of the 20th century buildings on site and several earlier structures adjoining and obscuring the 17th century schoolroom. Total refurbishment and redevelopment of the entire site is to include conversion from school rooms and library to surgery and community music centre along with the construction of offices, car park and landscaping.
- 3.2 This is a *design brief* for a programme of archaeological works to mitigate the impact of the development to be undertaken following planning consent, according to guidelines set out in Welsh national planning guidance (*Planning Policy Guidance Wales 2002*) and Welsh Office Circular 60/96 (*Planning and the Historic Environment: Archaeology*). The programme of works will comprise a **detailed building record** to be made partly in advance of and partly during the proposed works.
- 3.3 This *design brief* should be used by the archaeological contractor as the basis for the preparation of a detailed written archaeological *specification*. The specification must be submitted to the Gwynedd Archaeological Planning Service for approval before the work commences.
- 3.4 The *specification* should contain, as a minimum, the following elements:
 - Non-technical summary.
 - Details of the proposed works as precisely as is reasonably possible, indicating clearly on a plan their location and extent.
 - A research design which sets out the site-specific objectives of the archaeological works.
 - Reference to the relevant legislation.
 - Health and Safety considerations.
 - Monitoring procedures.
 - Field methodology.
 - The level and grade of all key project staff.
 - A timetable for the proposed works including contingency costs (if appropriate).
 - The intended method of publication.

• Archive deposition.

4.0 Building record detail

- 4.1 A general photographic record should be undertaken of the entire site prior to beginning any site works.
- 4.2 This photographic survey should incorporate external views of all structures on the site in order to set the older structures within their existing context.
- 4.3 This survey should also include more detailed internal and external photographs of the late 19th and early 20th century additions to the school including those buildings that run parallel to School Bank Road and those structures proposed for demolition to the north of The Schoolmaster's house.
- 4.4 Further building recording must be undertaken of the listed structures on site. This record should be commensurate with the English Heritage *'Understanding Historic Buildings: a guide to good recording practice'* (2006) Level 2/3 and should include the following elements:

•	written account	1-3, 6-9;
•	drawings	2, 6-9;
•	photographs	1-9.

- 4.5 Before new records are prepared, existing sources of information should be examined for their adequacy. It is recommended that the archaeological contractor visits the regional HER, the local archive service held by Conwy County Borough Council (CCBC) and the National Monuments Record for Wales (NMRW) held by the Royal Commission on Ancient and Historic Monuments in Wales (RCAHMW).
- 4.6 The **written account** should draw on the available resources and discuss the building's origins, development and use.
- 4.7 **Photographs** should be used not only to show the appearance of the buildings but also to record the evidence on which any analysis of historic development is based. Each print should be clearly labelled with the subject, and orientation and the date taken, and cross-referenced to its negative. Both black-and-white photographs and colour photographs should be taken.
- 4.8 The **drawings** must include a plan of the floor and elevations of the Old Grammar School and must record the form and location of structural detail / features of historic significance. Further recording may be required of any details / features of historic significance revealed or exposed during the demolitions / refitting of the old schoolroom (see 4.9 for further detail).
- 4.9 Further information may be revealed during the course of the refurbishment of the Old Grammar School. The programme of works needs to be co-ordinated with the archaeological contractor so that there is adequate opportunity and time allowed to identify, investigate and record any remains which may be relevant, in accordance with the Archaeological Standards.

5.0 General requirements

- 5.1 The archaeological recording and watching brief must be undertaken by an appropriately qualified individual or organisation, fully experienced in work of this character.
- 5.2 Details, including the name, qualifications and experience of the project director and all other key project personnel (including specialist staff) should be communicated to the Gwynedd Archaeological Planning Service and all written work attributed to an author(s).
- 5.3 Contractors and subcontractors are expected to conform to standard professional guidelines. The following are of particular relevance in this instance:-
 - English Heritage's 2006 <u>Understanding Historic Buildings: A guide to</u> good recording practice.
 - Richards, J. & Robinson, D. 2000. Digital Archives from Excavation and Fieldwork: *Guide to Good Practice*. Second Edition. The Archaeology Data Service Guide to Good Practice. Oxbow Books. <u>http://ads.ahds.ac.uk/project/goodguides/excavation/</u>
 - The Institute of Field Archaeologists 1985 (revised 2006) <u>Code of</u> <u>Conduct.</u>
 - The Institute of Field Archaeologists 1990 (revised 2002) <u>Code of</u> <u>Approved Practice for the Regulation of Contractual Arrangements in</u> <u>Field Archaeology</u>.
 - The Institute of Field Archaeologists 1994 (revised 2001) <u>Standard and</u> <u>Guidance for Archaeological Desk-Based Assessment</u>.
 - The Institute of Field Archaeologists 1994 (revised 2001) <u>Standard and</u> <u>Guidance for an Archaeological Watching Brief</u>.
 - The Institute of Field Archaeologists 1996 (revised 2001) <u>Standard and</u> <u>Guidance for the Archaeological Investigation and Recording of Standing</u> <u>Buildings or Structures</u>.
 - The Institute of Field Archaeologists 2001 <u>Standard and Guidance for the</u> <u>Collection, Documentation, Conservation and Research of Archaeological</u> <u>Materials</u>.
 - The Institute of Field Archaeologists 1999 <u>Standard and Guidance for the</u> <u>Collection, Documentation, Conservation and Research of Archaeological</u> <u>Materials</u>.
- 5.4 Many people in North Wales speak Welsh as their first language, and many of the archive and documentary references are in Welsh. Contractors should therefore give due consideration to their ability to understand and converse in Welsh.
- 5.5 The archaeological contractor must satisfy themselves that all constraints to groundworks have been identified, including the siting of live services, Tree Preservation Orders and public footpaths. Gwynedd Archaeological Planning Service bears no responsibility for the inclusion or exclusion of such information within this brief.
- 5.6 Any changes to the specifications that the archaeological contractor may wish to make after approval by this office should be communicated to Gwynedd Archaeological Planning Service and approved.

- 5.7 Care must be taken in dealing with human remains and the appropriate environmental health regulations followed. Gwynedd Archaeological Planning Service and the local Coroner must be informed immediately human remains are discovered.
- 5.8 Arrangements for the long-term storage and deposition of all artefacts must be agreed with the landowner and Gwynedd Archaeological Planning Service before the commencement of investigation.
- 5.9 The involvement of Gwynedd Archaeological Planning Service should be acknowledged in any report or publication generated by this project.
- 5.10 A full archive including plans, photographs, written material and any other material resulting from the project should be prepared in accordance with standard guidance. All plans, photographs and descriptions should be labelled, cross-referenced and lodged in an appropriate place (to be agreed with Gwynedd Archaeological Planning Service) within six months of the completion of the project.
- 5.11 Two copies of the bound report must be sent to the address below, one copy marked for the attention of the Development Control Archaeologist, the other for attention of the HER Officer, who will deposit the copy in the HER.

6.0 Curatorial monitoring

6.1 The project will be monitored by Gwynedd Archaeological Planning Service to ensure the fulfilment of the brief and specifications. The Development Control Archaeologist will normally review the progress of reports and archive preparation. The archaeological contractor must inform Gwynedd Archaeological Planning Service in writing of the proposed start dates for the project and any subsequent phases of work.

7.0 Glossary of terms

7.1 Archaeological Contractor

A professionally qualified individual or an organisation containing professionally qualified archaeological staff, able to offer an appropriate and satisfactory treatment of the archaeological resource, retained by the developer to carry out archaeological work either prior to the submission of a planning application or as a requirement of the planning process.

7.2 Archaeological Curator

A person, or organisation, responsible for the conservation and management of archaeological evidence by virtue of official or statutory duties. In northwest Wales the archaeological advisor to the Local Planning Authorities is the Development Control Archaeologist, who works to the Welsh Archaeological Trust's Curators' Code of Practice.

7.3 Archive

An ordered collection of all documents and artefacts from an archaeological project, which at the conclusion of the work should be deposited at a public repository, such as the local museum.

7.4 Brief

The Association of County Archaeological Officers (1993) defines a *brief* as an outline framework of the planning and archaeological situation which has

to be addressed, together with an indication of the scope of works that will be required.

7.5 *Historic environment Record (HER)*

A documentary record of known sites in a given area. In north-west Wales the HER is curated by the curatorial division of the Gwynedd Archaeological Trust.

7.6 Specification

The Association of County Archaeological Officers (1993) defines a *specification* as a schedule of works outlined in sufficient detail to be quantifiable, implemented and monitored.

7.7 Watching brief

A formal programme of observation during non-archaeological excavation works in order to identity, investigate and record any archaeological remains which may be present, in accordance with the Archaeological Standards.

8.0 Further information

- 8.1 This document outlines best practice expected of an archaeological assessment but cannot fully anticipate the conditions that will be encountered as work progresses. If requirements of the brief cannot be met they should only be excluded or altered after gaining written approval of the Gwynedd Archaeological Planning Service.
- 8.2 Further details or clarification of any aspects of the brief may be obtained from the Development Control Archaeologist at the address below.

Ashley Batten Swyddog Rheolaeth Datblygiad - Development Control Officer

GWASANAETH CYNLLUNIO ARCHAEOLEGOL GWYNEDD - GWYNEDD ARCHAEOLOGICAL PLANNING SERVICE

Craig Beuno, Ffordd Y Garth, Bangor, Gwynedd LL57 2RT Ffon/Tel: 01248 370926 Ffacs/Fax: 01248 370925 <u>ashley.batten@heneb.co.uk</u>

APPENDIX II

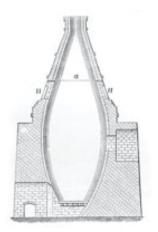
Reproduction of the chemical mortar analysis of three mortar samples

Dr Ruth Siddall

Geological Archaeologist

Schafer House 168-182 Drummond Street London NW1 3HZ, UK

0207 679 2758 r.siddall@ucl.ac.uk



Llanrwst Old School Mortars for Cadwraeth Schärer: Comparison with mortars from Llanrwst Bridge.

The mortars analysed from the school cannot readily be compared with those used on the bridge as the methods of analysis were different and aimed to answer different questions. In addition, it would appear that the samples analysed from the bridge were much larger than those from the School.

Analysis of the School Mortars (Siddall; Report January 2013) characterised the composition of the lime cement and investigated the possibility that pozzolanic additives had been used. The conclusions were that this was a pure lime plaster. Furthermore geological descriptions of the aggregates used was provided which included grain size and shape analysis. A natural, non-sharp sand derived from low-grade metamorphic rocks was used as an aggregate. Analysis using thin sections can overestimate the amount of lime present, but an aggregate : lime ratio of 1:2 was observed.

Locock & Hall (G1877 Appendix 2, p. 11) analysed the mortars from the bridge in terms of their physical properties and specific compositions were not recorded. Their summary indicated that both samples analysed were composed of coarse aggregate : fine aggregate : lime in a ration of 1:1:1.

The following similarities and differences between these two sets of materials can be made:

• Lime plasters were used in both the school and in construction of the bridge.

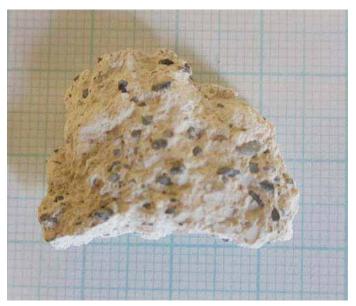
• Preliminary analysis of the grain-size data presented in G1877 Appendix 2 suggests that a wider range of aggregate particle sizes was present in the Bridge samples than was observed in the School samples. It is possible to conclude that aggregate chosen for the school was graded, whereas that for the bridge was not.

• Grain shape in the School mortar aggregates was rounded, whereas that from the bridge was sub-rounded. This may tentatively be interpreted to indicate a different aggregate source for the two samples.

• Mortars used in the school appear to contain fewer aggregate particles (i.e. were more limerich) than those used for the Bridge. No coarse aggregate was observed in the school mortars.

• Comparisons of the compositions of these materials cannot be made with the data currently available. Photographs below may be used for comparison with the textures of the Bridge mortars. *NB*: RS has not seen photographs of the Bridge mortars.

On the data provided for comparison it is not possible to ascertain whether the materials used in the Bridge resemble, in terms of their texture, manufacturing technologies or composition, those used in the School. Similarly any relation in the relative age of these materials cannot be determined.



Photograph of a sample of the School mortar. The background has a 1 cm grid. Macroscopically the lime is very pale ivory n colour with a fine aggregate (< 2 mm) of grey rock particles.



Samples of the School mortar mounted on microscope slides (76 x 26 mm) showing the macroscopic texture of these materials.

Reference: Locock, M. & Hall, J., 2010, Appendix 2: Mortar sample report., in: Conway Valley flood alleviation scheme; Llanrwst, Gwynedd., archaeological excavation, Gwynedd Archaeological Trust Report no. 1877., p. 11.

Ruth Siddall, 6 Feb 2013.