

Pantycelyn Halls - Aberystwyth University



KEY FACTS

Customer: Aberystwyth University

Value: £15.5m

Architect: Lawry Architects

Project Manager: Aecom

Engineer: ARUP

Contract: JCT 2016 D&B

Duration: 65 weeks

Completed: 11/09/2020

Scope of works:

- Refurbishment of existing Listed building creating 6559m² of new facilities
- Live education campus
- 198 en suite bedrooms with WIFI access
- On-site catering and laundry facilities

Overview

Aberystwyth University Council's requirement was that the refurbishment of Pantycelyn provided "fit-for-the-future Welsh-medium accommodation and social spaces" which would be "good for 40 years".

This ambitious project aims to bring this iconic Grade II listed building back into operation and reinstate it as a focal point of Aberystwyth University's Penglais Campus.

Pantycelyn Hall was one of the first buildings to be constructed on site, which Aberystwyth University acquired in 1929.

The design is by architect Sir Percy Thomas and named after the eighteenth-century Welsh poet, hymnist and revivalist, William Williams Pantycelyn.

Pantycelyn later served as the University's Welsh-medium hall of residence from 1974, and hosted Prince Charles when he was a student in 1969.

The project provides modern, high quality en-suite lodging facilities for 19 students in a welsh-medium environment.

Project win

Morgan Sindall were appointed to complete a £15.5 million renovation of the prestigious Pantycelyn student hall of residence by Aberystwyth University. The historic student hall of residence has an illustrious past spanning almost seven decades. First opened in 1951, it was home to Prince Charles during his time as a student in Aberystwyth and has been a dedicated Welsh-language hall since 1973. Its significance as a national heritage asset and important community for Welsh-speaking students has led to Welsh Government backing the University's vision to restore the building, earmarking £5 million towards the cost of the work through its 21st Century Schools and Education Programme.

Morgan Sindall Construction was awarded the high-profile project through the South and Mid Wales Collaborative Construction Framework (SEWSCAP), which it has held a place on for almost a decade. Plans to restore the high-profile building involve sympathetic external renovation, along with internal refurbishments spanning 70,000 sq ft. The work will create contemporary, en suite bedrooms, with high-speed internet access for up to 200 students. In addition to communal catering and laundry facilities, there will be study and leisure spaces for use by both students and the local community. Construction is set to begin on 3 June 2019 and will be completed in time for the new academic year in 2020.

Senior University staff and representatives from the Pantycelyn Project Board joined members of the Morgan Sindall project team to mark the occasion at Pantycelyn on Friday 24 May 2019. Rob Williams, Morgan Sindall Construction area director, said: "We're incredibly proud to be working with the University as its construction partner on such a prestigious project. Pantycelyn's significance, both in terms of its history, and the role it can play in nurturing future generations of passionate Welsh-speaking students, is lost on no one involved in the project. We'll work closely and meticulously with the University to ensure the work is completed sympathetically and in time for the hall to reopen in 2020."

Professor Elizabeth Treasure, Vice-Chancellor at Aberystwyth University, said. *"We are delighted to be working with Morgan Sindall Construction on the redevelopment of Pantycelyn, and to bring to life once more a hall that has been the focus for the Welsh culture at Aberystwyth University for almost half a century. This project represents an investment in the future of Welsh speaking students for generations to come and a unique addition to the excellent portfolio of student accommodation we offer here at Aberystwyth. We are also grateful to Welsh Government for their support for the project, which will help enhance further the excellent student experience offered by Aberystwyth."*

Scope of works

The brief of the project was to refurbish and restore Pantycelyn Halls of Resistance for Aberystwyth University, which had been unoccupied for the last few years. With Pantycelyn Halls being listed as a Grade II building, there were certain aspects of the building which were protected to ensure the historical and architectural significance of the building was maintained. Therefore, most of the building envelope was maintained as it was originally.

New matching windows were installed to all new bedrooms, with a new gutter and isolated roof repairs being undertaken to ensure the building was water tight. Internally the building was completely stripped and demolished, with

198 En-suite bedrooms being installed. Some of the original features such as the parquet flooring, listed ceilings and terrazzo stairs were refurbished to keep some of the existing characteristics of the existing building.

Over the last 15 months the building has gone from a derelict, neglected and unoccupied building to a fully refurbished and operational building for Aberystwyth University. With the building being of huge political importance to the local area, all stakeholders are thrilled that this building could be restored to its former self. A point cloud survey of the building was undertaken to understand the geometric constraints and aid in the co-ordination of considered designs.

Live environment

Pantycelyn Halls was located on the campus of Aberystwyth University. Therefore, before any works were undertaken it was fundamental that the site boundary was completely secure with relevant construction signage in place. One of the challenges was there was an existing walkway for the university which ran through our project. To overcome this, we provided clear signage on the path stating it was closed ahead, along with diversion signage to provide a safe route around the construction site. This issue was raised at the pre-construction stage, which allowed the university to inform the students of the area and footpath being closed for the duration of the project.

The location of the project also had its own challenges. It was more difficult to get materials to site as there was very limited distributors in the local area. Distributors were very reluctant with delivering small items as it wasn't in their interests. Also forecasting work for each of the sub-contractors brought more challenges. With nearly all the sub-contractors working away from home, it was fundamental that we had enough work for each of the trades so that they could book their accommodation accordingly. This was overcome by ensuring we had regular meetings with the sub-contractors to discuss forecast works available. Unfortunately, it was difficult to overcome the deliveries of materials, skip exchanges etc.



Minimising disruption

To minimise any disruption to the university during our works, all our site set up was located within our site boundary. This included the site welfare, waste storage and car parking facilities. All deliveries and site routes were through our own site entrance and road which prevented any disturbance to the University. Our site was completely segregated from the University and the general Public

Planning, phasing and decant

The general phasing of the project was to complete and handover the second floor, then first, mezzanine and finally the ground floor. This allowed the upper floors to be completed earlier which provided

the opportunity for the client to furnish some of the bedrooms at an earlier stage. Once the upper floors were completed, the floors were locked and secure to prevent any un-authorised access to provide a safe working area for the client if they wished to furnish the building sooner.

One of the challenges was our site set up and decanting works. Due to the limited space on site, firstly we used the existing building for our welfare, canteen and office space. However, once we needed to commence working in these areas of the building, site cabins were landed onto the site car park area to provide these facilities. Therefore, works had to be coordinated to allow works in the car park to be completed before the cabins landing and the rooms within the building were decanted in time to allow works to be completed.



Sustainability

Achieving fabric requirements with appropriate materials given spacial constraints was particularly challenging. This drove us to look at the use of materials that could achieve multiple goals e.g. vcl backed, insulated plasterboard, vcl insulation blankets etc. External lighting design was developed to be considerate to local wildlife.



Programme control

The construction programme is monitored daily and then reviewed at the end of each working week. The programme is reviewed on a Thursday evening to give us the opportunity to address whether work is required to be undertaken over the weekend to stay on programme. From the weekly programme reviews, we carry out a fortnightly forecast to see if we are still on target for key dates. The programme is updated weekly by Dale Harris and passed onto Gary Owens to review. The programme is also reported to the client during the monthly client meetings on site.

On this project we have encountered delays to our programme, some of which were Morgan Sindall's responsibility whilst the others were the clients. There were three EOT's applied for and accepted as a result of works and situations which fell outside of our contract works.

The first EOT was for the deep fill works of the existing floors with the remedial works required to the existing walls. To overcome this, we had to employ additional floor layers and decorators to work ahead to complete the relevant making good works so that the contract works could be completed on programme. This extended the programme as a result of impacting the critical path.

Secondly further asbestos was identified during our works. Until the sample was deemed positive and safely removed from site, we were unable to progress in one area of the building.

Lastly like all projects COVID-19 had caused a delay to our programme. We mitigated this by remaining open during this period and having strict guidelines in place to ensure the site was safe to work. However, to ensure we adhered

to the guidelines in place, we could no longer accommodate the full capacity of workforce on site. Therefore, our site numbers dropped from approx. 100 to 40.

Even though the EOT's were granted, it caused problems for the client as our works were now extending further with the student move in date still being the same. Therefore, this resulted in the client having less time to furnish, tarmac and white line the external works. To overcome this, we liaised with the client and their relevant sub-contractors to work on our project before PC. This then allowed the client to carry out their works in time for the students moving into the building.

Overall the building was handed over on time and the client completed their relevant works on time before the building was occupied

Collaborative and partnering approach

Several collaborative tools were used to ensure perfect delivery was achieved for this project.

- Operationally a collaborative planning session was held in the Morgan Sindall office with the key sub-contractors. This allowed discussions and best sequence of works to be agreed at an early stage to allow the construction process to run smoothly. It also allowed any potential issues to be raised early enough so that they could be resolved before commencing on site. Weekly meetings were held on site with all site supervisors to ensure the works being undertaken were mirroring what was agreed at the collaboration stage.
- The project also utilised the use of Viewpoint, which allows all stakeholders to work off the latest approved design drawings so there was no contradiction with the works information. All stakeholders had access to Viewpoint which allows the information to be accessed at anytime for their convenience.
- Client meetings were held monthly to provide regular updates with the project progress. These meetings addressed the programme of the project, design issues, a risk register and any other matters which required addressing. This allowed matters to be raised and closed out quickly without impacting the project progress.
- Furthermore, Andrew Thomas from the University was regularly on site to review the progress on site and provide any feedback or concerns from the client.



Innovation

During the demolition stages of the project, noise and dust monitors were located throughout the building. The noise monitor worked on a traffic light system, where operatives working in the area could visually see whether the noise levels being generated exceeded any noise limits. If the traffic light was showing green, then the area was safe without hearing protection. If the light was amber, it is signally that hearing protection is advised. When the traffic light was showing red, it is indicating that hearing protection is required whilst working in that area. The dust monitors worked slightly differently to the noise monitors. The dust monitors had a sensor, where if the dust volumes in that area exceeded a certain level then an email or text notification was sent to the site manager and relevant supervisor. This then allowed the supervisor to review

whether the dust suppression tools were being carried out correctly and if so whether further dust suppression was required for that area.

Another innovation used at Pantycelyn Halls was the use of electronic scaffold tags. The tags were located at access points for the scaffold and clearly indicated whether the scaffold was in date of its latest inspection and safe to work on. It stated the specification of the scaffold installed, the wind speed and the time frame for next inspection to be undertaken. All these electronic tags can then be viewed on an online portal, which allows you to see all the scaffold tags from either your phone or desk top. This then saves you inspecting all the scaffold tags individually around site.

Health & Safety

There were a number of factors which ensured a 100% safe environment was achieved.

- This started from the pre-start meetings with sub-contractors to ensure all health & safety measures were in place and to be adhered to on site.
- Even though the building was stripped of asbestos before commencing, asbestos awareness training was mandatory for some sub-contractors.
- The existing service trench was located below ground and deemed a confined space. Therefore, anyone who needed to work in the service trench had to provide evidence that they have completed confined space training.
- Noise and dust monitors were located throughout the building site to provide awareness to all on site.
- Also completed realtime reporting of any near misses or accidents on site, no matter how small they were.
- The use of MSite for the induction process was also beneficial. This allowed us to access the competency cards online for everyone working on site.

Delays due to COVID

The one element that needed full attention. Project Manager Dale Harris mitigated delay almost from day one - pre-planning resource to work longer shifts and weekends to achieve our goal. Labour worked additional hours in April and May to mitigate as much as we could.



Quality and continuous improvement

As a result of handing over the bedrooms in stages, this allowed the quality process to be achieved easier as we knew the standard which was to be met. Once the first section of bedrooms was handed over and signed off, the client, contractor and sub-contractors knew the high standard which was to be achieved for each bedroom phase. As we had this template from the first sign off procedure, we were able to handover the next phase of bedrooms more efficiently as there were little. if not no snagging items identified.

Having one designated MS manager looking after the quality and sign off procedure, it allowed our high standards to be achieved.



Pupil engagement

Regular site visits were arranged with the University to allow the students and staff to have site walk arounds. This allowed both new and current students to see the new facility being provided, and to allow students to decide whether they wished to stay in this student accommodation building.

Furthermore, a sample room was installed early in the construction phase. This provided the opportunity for the client to see the finished product and to confirm they were happy with the standard being provided. This was also beneficial for the students visiting the site, as they could see the end product from the construction process.



Community engagement Greenhouse donation

- At the site entry with have a letterbox, which allows the community to raise any queries they have with regards to the project.
- We also had a designated bilingual website for the project. This provided monthly updates to on progress, site photos and issues which have been raised. This website also gave details of the MS site team and sub-contractors being used on the project.
- All our site signage has been ordered and installed incorporating both the English and Welsh language.
- We also had stickers on hard hats for those who could speak fluent Welsh

The team were thrilled to donate and install a brand new greenhouse at SEN school, Coleg Ceredigion. The school were delighted with the result.

"Thank you again for your kindness. The students will really benefit from it. The new greenhouse will enable to the Vocational Access students to grow vegetables for their allotment in Borth, sell flowers for their enterprise and provide the catering department with flowers for table decorations."

Margaret Neville, Vocational Access Course Tutor

Go Wales

The GO Wales team at Aberystwyth University are very grateful to Morgan Sindall for offering our students quality, graduate level work experience. The 'GO Wales Achieve through Work Experience' project assists young university students who are facing barriers to gaining graduate level work. The project supports them in arranging quality work experience opportunities relevant to their degree and career aspirations.

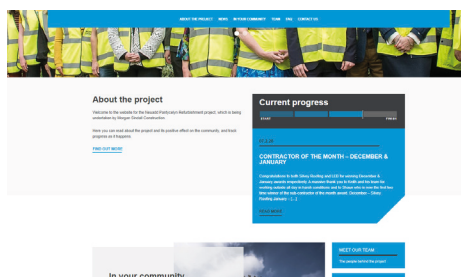
Cameron Price is a third year Mathematical and Theoretical Physics student. We discussed career options when we first met, and suggested Quantity Surveying, for which he was enthusiastic. Morgan Sindall were about to start the renovation of Pantycelyn Halls, so we contacted their Community Manager. Their Senior Quantity Surveyor Mike Kavanagh replied offering Cameron a week's work experience on site at Pantycelyn. Cameron very much enjoyed his week, but Mike felt there was still more that he could learn and suggested Cameron return for an additional week to further develop his skills and knowledge. The GO Wales team look forward to working with Morgan Sindall in the future to support additional students



Dedicated microsite

To keep everyone updated with progress on the project the team has designed and launched a project microsite - keeping everyone updated with progress around the project, along with insights into community investment activity. It is the first dual-language microsite the business has launched:

<http://www.pantycelynproject.wales>



"We are proud to have completed work on such a historically significant project, and to have ensured a safe working delivery throughout the challenges posed by the ongoing coronavirus pandemic. Pantycelyn is one of the university's most iconic buildings and plays an important cultural role in championing the Welsh-language. We have worked closely with the university to ensure that the newly reopened hall will provide future generations of students with bright, modern amenities, while retaining its heritage as national asset for Wales."

Rob Williams, Morgan Sindall Construction Are Director

