

A SUSTAINABLE ALTERNATIVE



How a light-touch development of the back yard at 5 Palace Street East, Berwick-upon-Tweed can achieve more for less

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This proposal and a printer-friendly version of it can be found at www.berwick-heritage.co.uk/alternative or by using the QR code below.



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Summary

The old Grammar School and former Community Centre at 5, Palace Street East, Berwick-upon-Tweed, is being developed by the Berwick Youth Project. The main Georgian building will be refurbished and converted into eight flats for supported accommodation, plus a caretaker's flat.

The yard at the back contains two curtilage-listed structures over a hundred years old: a Great War army hut, brought from the Blyth army camp in 1920, and a rare Speirs prefabricated classroom from 1908. The BYP's intention is to demolish these and replace them with a large garage block, 21 feet high by 72 feet long, along with a new house to help fund the garage block.

The community view in neighbouring streets is that this part of the development is inappropriate and will harm the conservation area and the views from the Town Walls, also reducing amenity for properties in Ness Street and The Avenue by proximity to such large structures. Saddest of all, heritage structures that contribute to the Grammar School's history and the openness of this area will be lost.

This document argues that a better solution for the community, for BYP and for Berwick is to refurbish and reuse the historic structures, supplementing them with cheap and simple secure storage. It will remove the need to build a new house, which is not guaranteed to fund the proposed garage block, and ensure these benefits:

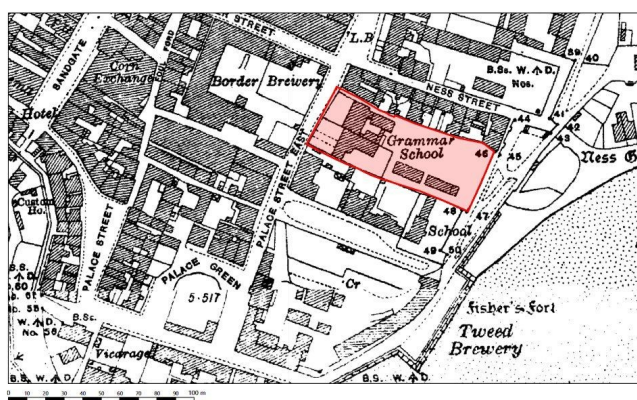
- lower costs and risk for BYP;
- provision of interesting buildings that BYP clients can enjoy and take pride in;
- quicker consolidation of BYP's operations on the site, reducing off-site rent payments;
- retention of heritage assets in the form of Grade II* curtilage-listed huts, which are unique in Berwick and can become part of Heritage Open Days;
- ability to attract funding through heritage grants;
- a much smaller environment impact, including carbon emissions, landfill, development noise over a protracted period, and less disturbance of wildlife;
- continued enjoyment of this beautiful and open area of Berwick for residents and visitors alike, which is so important for our mental health;
- keeping the site intact – a greater area could be given over to gardening and green space, which could be very beneficial for BYP's clients.

We estimate the cost of providing facilities required by BYP to be in the order of £120,000 + VAT – a fraction of the current plan's cost – and we outline how the community can help.

1. Background and History

1.1 The Grammar School

5 Palace Street East was built to impress in 1754, as a merchant's house, within 'The Ness' (an area east of Sandgate and south of Ness Street). When it was completed, it would have been imposing and stylish in appearance, being finished in smooth, ashlar stone. It was fronted by a generous front garden and a stone wall that is listed in its own right, on account of the carved spiral volutes on the gate posts – an expensive touch. The original house was laid out in classic mid-eighteenth century style, with a central entrance hall, flanked by two large reception rooms, and a generous staircase with its own long window leading upstairs to the first floor. The principal rooms were fitted out with panelling, decorative fireplaces and elaborate plaster cornices. It would have been a fashionable, convenient and grand house for a member of Berwick's mercantile classes – in this case, the Riddell family.



Ordnance survey map of the area in 1924, showing the but

When the house became the Grammar School in the 1860s, a Gothic-style hall was added.

The building was Grade II* listed in 1952 (list entry number 1042428).

The school moved out in 1939, and in 1951 it opened as a 'Youth & Community Centre'. A piece in The Berwick Advertiser at the time stated:

"We are not ostriches, and do not duck the inescapable fact that boys will meet girls, by putting our heads in the sand, but how much better is it for a boy to meet a girl in the healthy atmosphere of the centre than in the doorway on a public street?" [\[1\]](#)

The centre included "a main hall, where classes in physical training, drama, ballroom dancing etc. are held; a canteen, where prices are as low as possible; a lounge, craft rooms and library."

At some point in the 20th century an electricity substation was added in a corner of the site.

The Community Centre finally closed its doors in 2015. In 2020, it was acquired by the Berwick Youth Project for £1, with a hope expressed by the County Council of retaining some community function. Before the handover, the main building became dilapidated and suffered badly from vandalism, losing many of its internal fittings.

In 2021, plans were submitted by the Youth Project to refurbish the main building and in the back yard, construct a large garage block funded by the construction of a house, in the process demolishing the existing buildings. The originally mooted community hall idea was not incorporated. In March 2023, the plans were approved.



The Army and Speirs huts

At the rear of the building, the yard extends to the bottom of the Town Walls. From these, the ancillary buildings are barely visible, and the openness of the site allows almost unimpeded views towards Ness Street and The Avenue, as you can see from the photograph below. The red line marks approximately the roof line of the new builds. Since they are large and set close together, they will not leave much space for viewing the streetscape.



The view from Town Walls towards Ness Street

The openness and proximity to the Town Walls is part of what makes this site such a sensitive one, and it's clear how important it is from the amount of attention it gets from visitors, who frequently admire and photograph it. The new builds would largely block this view, and this is why we believe Berwick needs to think again about damaging the tangible and intangible assets on the site, refurbishing the existing buildings instead.

1.2 The Great War Army Hut

This was acquired by Berwick Education Committee in 1920 as additional classroom accommodation,

but probably dates from the early years of the First World War. The hut is about 60 ft long (18.3 m), 15 ft wide (4.5 m) and 10.3 ft high (3.1 m). It has Grade II* listed status by virtue of being within the curtilage of the Grammar School site. Being smaller than the original Armstrong Huts, which were 20 feet wide, it is an example of how the design evolved later in the Great War.



The army hut in the snow

The hut has the original windows and the characteristic louvres for ventilation at either end. The timber exterior is also likely to be original. The original Armstrong Type huts were built with corrugated iron walls, until a nationwide shortage caused by the German monopoly on the production of zinc used to rustproof the iron led to wood being used instead. Photographs of the camp at Alnwick and huts outside the Berwick Barracks show this type.



Huts in Parade during WW2

The Armstrong Hut and its derivatives were constructed to house the large number of recruits following Kitchener's famous 'Your Country Needs You' campaign. Major Bertie Armstrong and a team of Royal Engineers designed seventeen different types of hut to create camps for the expanding army. When they presented their ideas, the army adopted them, although Lord Kitchener considered them "unnecessarily good." Armstrong is "considered to be the most important architect of the First World War" ([The Courier](#)).

These huts were in use in camps at Berwick, Alnwick and Blyth. Some army huts from Parade in Berwick, by the Barracks – where huts stood in both World Wars – were used for a fever hospital, situated in the ditch between Lord's Mount and the old Edwardian Walls. From the Berwick Advertiser, 31st December, 1920:

"Berwick Sanitary Authority decides to purchase three army huts on the Parade – cookhouse, dining hut and wash-up, for the purpose of a fever hospital at the cost of £600."

Dispersal of the huts at the various camps occurred at different times, which is probably why the hut at the Grammar School was brought from Blyth, before the Parade huts were put up for sale. From the Berwick Advertiser, 7th May, 1920:

“The Army hut which is to be erected in the playground at Berwick Grammar School to provide temporary accommodation was purchased at the Link House and Gloucester Lodge Camp dispersal sale for £62 18s. It measures 60 feet 9 in. by 15 feet 9 in.”

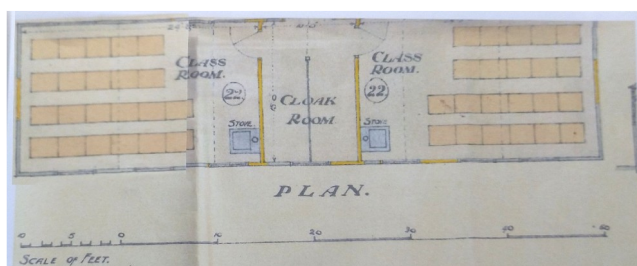
It was fitted out later that year. An entry in *The Berwick Advertiser* of 3rd December, 1920 states:

“The Army hut having been erected in Berwick Grammar School, it is being fitted up as a classroom. Messrs Henderson, Bros., Berwick, have received the contracts for the covering of the roof with ruberoid, amounting to £17 17s 6d, and for lining dado and ceiling of the classroom with match boarding, to cost £48 1s.”

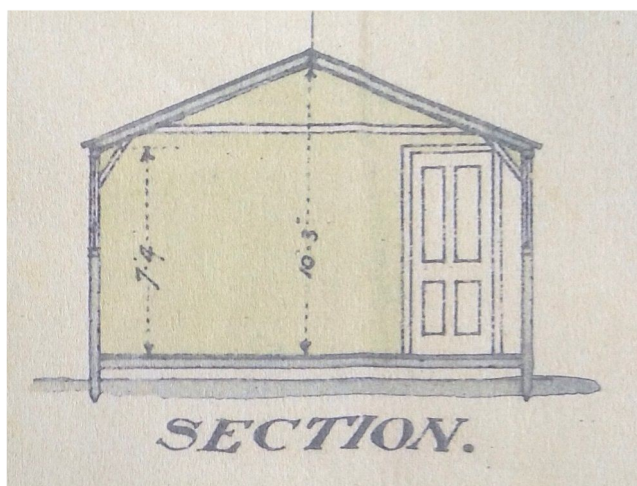
And on 8th December, 1920:

“To Messrs Henderson Bros., Berwick, has fallen the contract to remove from Links House Camp, Blyth, the Army hut recently purchased by the Education Authority, and to re-erect it in the playground at Berwick Grammar School for use as a temporary school to accommodate 44 scholars. The equipment of the hut to serve as a class-room, is estimated to cost £230.”

This rare hut therefore has significance for local military history in addition to being part of the history of the Grammar School. Its preservation is advocated by Major Lance Thornton, Executive Officer for The King's Own Scottish Borderers Association, based at the Barracks. Local historian and photographer Cameron Robertson points out that as huts were dispersed or demolished at the end of the First World War, and new huts built for the Second World War, the hut at Palace Street is an ‘unlikely survivor.’



Army hut classroom plan



Army hut classroom section



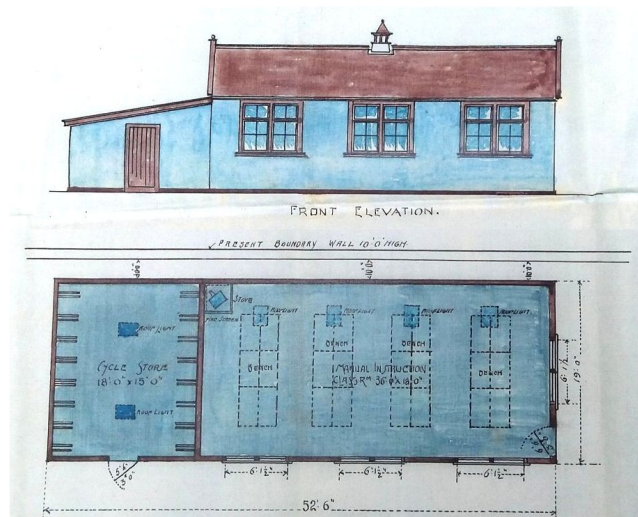
Army hut classroom interior

1.3 The Speirs Classroom

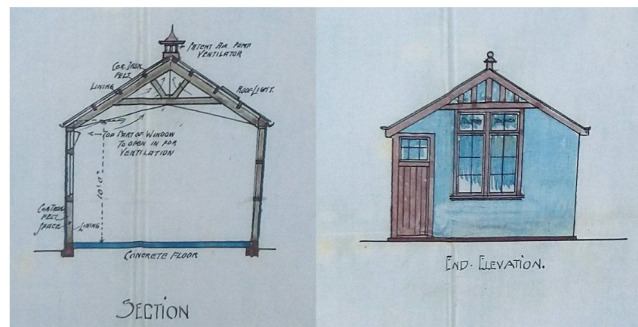
This interesting prefabricated building, clad in corrugated iron, was commissioned by the Governors of the Grammar School in 1908 from Speirs & Co., a well-known firm of manufacturers and builders in Glasgow. Galvanization became popular from 1843, and companies were quick to exploit the convenience and cost-effectiveness of providing buildings in kit form. At the Great Exhibition of 1851, Prince Albert was so impressed by the prefabricated buildings – including cottages and warehouses – that he decided to commission one as a ballroom for Balmoral Castle.

This building was used for technical classes and as a bike store. The hut is approximately 52.5 ft (16 m) long – 18 ft (5.4 m) of which is the cycle store – 19 ft (5.8 m) wide and 17.5 ft (5.3 m) high. Like the army hut, it has listed status by virtue of being within the curtilage of the Grammar School site.

The original drawings survive in the Berwick archive and many of the details survive in the building.



The Speirs hut drawings from 1908: plan



The Speirs hut drawings from 1908: section and end elevation



The Speirs classroom interior

Another example of a hut by Speirs & Co. is the St Columba Scottish Episcopal Church in Brora, pictured below. It serves the same purpose now as it did when it was built in 1909.



The St Columba Scottish Episcopal Church in Brora

1.4 Further Reading

[Armstrong Huts in the Great War \(1914-1918\)](#), Karey L. Draper and James W. P. Campbell, Queens' College, University of Cambridge.

Berwick-upon-Tweed: A View From The Walls, John Convey, 2017.

Corrugated Iron Buildings, Nick Thomson, Shire Library, 2011.

Wartime Huts: The Development, Typology and Identification of Temporary Military Buildings in Britain 1914-1945. Karey L. Draper, Faculty of Architecture University of Cambridge [2].

The Hutting Problem in the War, Major General Sir George Scott-Moncrieffe, K.C.B., K.C.M.G., C.I.E. The Royal Engineers Journal, September 1924.

[This Week in World War One, 7 January 1916](#), Northumberland Archives, mentioning the presence of huts in Parade.

Berwick Record Office: BPR 1, Page 7, 1908, Palace Street Berwick, School, Grammar School, Speirs & Company, Box 1. BPR 1, 18, 10/7/20, 29, Grammar School, Berwick, Temporary Building, Education Committee, Walker, T, Architect to Education Committee, Box 5. BPR1, 25, 5/1/24, 30, Grammar School, Berwick, Motor House, Ballard, G. H., Unknown, Box 8.

www.berwick-heritage.co.uk, the residents' site with details about the planning application.

2. Berwick Youth Project's Plans

The planning application can be found on Northumberland County Council's planning portal divided between 21/02292/FUL and 21/02293/LBC (listed building consent).

2.1 The Main Building

The Georgian main building and Victorian add-ons will be renovated and converted into eight flats for supported living, and a caretaker's flat. The entrance to the back yard will be widened by moving the gable wall of the Victorian school hall, and the archway over the lane to the yard will be moved.

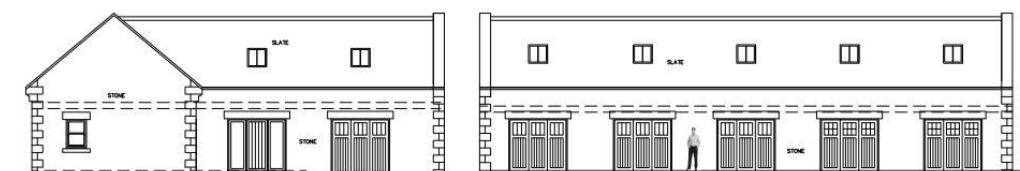
2.2 The Yard

The Youth Project want to consolidate various operations on the site, and therefore would like secure storage for canoes and bikes, a drying area, a meeting room, showering facilities, a kitchen and a loo. 16 parking spaces would be provided.

The plan is to demolish the Edwardian buildings and build a large 1.5 storey garage block to the south of the yard with a footprint of 186 square metres. The building of an L-shaped house to the east of the site with a footprint of 205 square metres is planned, to finance the garage block by selling the house on the open market. Both would be faced in stone.

The garage would be 22 metres (72 feet) long by about 8.5 metres (28 feet) wide, and 6.4 metres (21 feet) high. The upper half-storey would contain storage and a meeting room, while the lower storey would have four garage bays for storage, and a further bay containing a kitchen.

Note that the motor workshop designation was removed from a bay in the plan after a condition was added by the Planning Officer, so the garage dimensions are now greater than necessary.



New buildings, north elevations, with 5' 10" figure

2.3 Costs

A local builder estimates the cost of building a single-storey house at a minimum of £2,500 per square metre; the required high standard of finish, including stone facing, would probably add to this. However, we will use a lower cost of £2,200 to avoid any danger of exaggeration.

So at 205 square metres¹ (from the Planning Officer's Report), the cost for the 2-bedroom house would work out at **£451,000**, at a conservative estimate. By comparison, the average price for 3-bedroom houses in the nearby Governor's Gardens is estimated at £340,000 by Zoopla.

The garage block would cost £2,000 per square metre minimum – possibly more when taking into account the upper half-storey. Therefore with a footprint of 186 square meters (from the Planning Officer's Report), the garage block would cost **£372,000** at minimum.

Demolishing and disposing of the huts would cost around £10,000 each or **£20,000** for both.

The total minimum cost is therefore estimated at **£843,000** for the yard development.

Due to the restricted access at the site, moving materials in and out would add further to these costs. The figure above also does not include hard-standing, landscaping, solar panels, battery, an energy control system, an allowance for risk, and an allowance for inflation over the period covered by the phasing condition.

2.4 Risks

It is not clear how the house could be sold at a profit given its position in the site which the Youth Project says will reduce its market value. It would almost certainly make a loss, let alone cover the full cost of building the garage block.

Building and any loan costs could easily go up during the build or interim period, with the risk that the build could be abandoned and even compromising the finances of the Youth Project and the completion of the main building refurbishment.

2.5 The Planning Application Decision

The BYP's application was granted on 23rd March 2023, having initially been granted on 19th January 2023 and then resiled in order to strengthen interim protection for the huts. We respectfully disagree with the way in which the public interest was balanced against harm to the conservation area, when considering the unproven financial viability of the new build plan, the lack of a feasibility study for reusing the two historic buildings, the loss of views from the Town Walls, and the impact on residents' enjoyment of their properties. Impacts to the conservation area and the heritage value of the huts were noted by Historic England, the Council's Built Heritage and Design Officer (BHDO), and the Planning Officer; and both the Victorian and 20th Century Societies urged reuse of the huts. The BHDO judged the impact on the conservation area as "less than substantial harm". Historic Buildings and Places were not contacted until days before the decision.

The decision to grant the application conflicts with advice in the National Planning Policy Framework² [3] and the local Berwick planning policy related to conservation areas and listed buildings³ [4] – especially where Grade II* listing is concerned. The Planning Officer still judged that the public good of the overall scheme (given that the new builds were bundled with the renovation) would override these heritage and environmental considerations, and the North Northumberland Planning Committee followed this advice. Our view is that mixing several complex aspects of the development into one application was unfortunate, and consideration of alternative schemes was lacking.

However, this phase is now over and our focus is reaching a better solution in everyone's interests.

¹ Note: from the plans, we calculate the house footprint to be 191 square metres, not 205 square metres as the Planning Officer states. It's not clear which is correct, but 191 square metres would work out at £420,200 for the house build cost instead of £451,000.

² National Planning Policy Framework (2021), para 200: Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of: a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional; b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be **wholly exceptional**.

³ Berwick-upon-Tweed Borough Local Plan (April 1999), Policy F24: Within Conservation Areas, consent to demolish a building or buildings will be permitted, provided that: i) the building or buildings do not make a positive contribution to the character or appearance of the Conservation Area; and, (ii) a contract for the carrying out of the works for redevelopment of the site has been made and planning permission has been granted for the redevelopment for which the contract provides. Where the building does make a substantial contribution to the character or appearance of the area, consent will be granted provided that: (iii) (a) **all reasonable efforts have been made to sustain existing uses and find alternative viable uses** including ownership under charitable or community uses and these efforts have failed; or, (b) redevelopment would produce substantial benefits for the community which would decisively outweigh the loss resulting from demolition. The partial demolition of such a building will be permitted provided that its overall contribution to the character or appearance of the

Conservation Area is not adversely affected.

3. Conservation

3.1 Why Preserve Berwick's Huts?

There is a revival of interest in unconventional historic buildings. The preservation of authentic architecture is crucial to our well-being in a world that sometimes forgets the importance of beauty and a connection to our past. There is also a growing awareness that refurbishment is often not only better for the environment but more satisfying in the long term.

Often buildings that were originally intended to be temporary have turned out to have a life longer than many newer, conventional buildings, due to the quality and economy of their design, an unassuming utility within their setting, and a quirkiness that invites affection. Indeed, their relative fragility and rarity is part of what makes them important survivals.

Huts can and are being saved and restored for future generations, still providing a variety of use not only as museum-pieces but as homes, stores, places of worship, community hubs, and many other functions. They add to the charm and history of an area, and help to enrich people's lives. You can see some good examples in [Appendix B: Other Hut Conservation Projects](#).

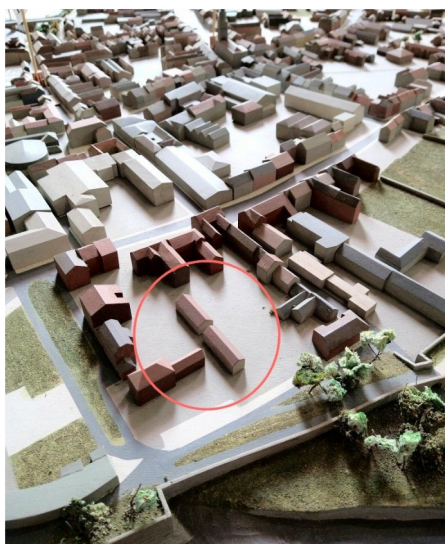
Here we cover a number of reasons to conserve and refurbish rather than demolish and build, although we will leave financial reasons to the next section.

3.2 Conserving Heritage

Both Edwardian structures reflect the history of the Grammar School. Generations of pupils – and latterly, adults – have spent time learning in these buildings. The Grammar School building is a Grade II* listed property, and by law old buildings within its curtilage should be respected as part of the history of the site, and are assigned the same listing status.

Although the huts are hidden away below the Town Walls, they could and should be part of Berwick's heritage offering, attracting visitors to the town's Heritage Open Days to see what are effectively endangered species. It is easy to envisage a Berwick Hut Trail, taking in the Army and Speirs huts, the Lifeboat Station, the Rowing Club Boat House, the 'Loovre', and others.

Below you can see the two huts represented in the model at the Berwick Visitor's Centre.



The huts in the model of Berwick at the Visitor's Centre

3.2.1 The Great War Army Hut

Berwick has a proud military history, which has very tangible remnants in the form of the Barracks – centre of an imminent regeneration plan – and the historic Town Walls. While Berwick's army hut is from Blyth, it still illustrates the life-and-death struggle in which Northumberland played its part, and as the only Great War army hut known to survive in Berwick, shows the stark reality of what Great War soldiers called home before being sent to the front. The 20th Century Society says:

“The Twentieth Century Society has been notified of an application for Listed Building consent which would involve the demolition of an Armstrong Hut located in the grounds of the former Grammar School. The Armstrong Hut is an important piece of World War I engineering history and the example in the grounds of the former Berwick Grammar School is in good condition with many original features intact. It has remained in this location for more than 100 years, having been relocated from the nearby army camp at Blyth upon the cessation of war, and initially used as an extra classroom space.

The Society writes to object to the proposed application and urge the applicant to reconsider the demolition of the historic hut and to pursue alternative arrangements which would preserve this important piece of early 20th century military and architectural history. There are increasingly few Armstrong huts that remain across the country, and this example is a particularly fine example in good condition.”

At 18.3 m by 4.5 m, it's a generous space for storage, training or other purposes. Taff Gillingham of Great War Huts says of this hut:

“Most of the later huts were sectional so could easily be divided up into six separate sections and could have doors put into each 10' length if that would make the building more usable to the new owner. If the hut is in sound condition it can save the owners a great deal of time and money to repair the building and it is certainly a much greener option than demolition and a new build.”

3.2.2 The Speirs Classroom

The Speirs building, with its plans still present in the Berwick Archive, is a rare survival. The highly respected Victorian Society says about it:

“Thank you for consulting the Victorian Society about this application. We object to the proposed demolition of the Speirs & Co. of Glasgow hut. Commissioned in 1908 by the Governors of the Grammar School, as technical classrooms and a bike store, this hut demonstrates the changing needs of the former school and makes a positive contribution to the Berwick-upon-Tweed Conservation area. These types of educational prefabricated buildings are increasingly rare. By their nature, these types of buildings were supposed to be a temporary

solution, which makes their survival worthy of note and therefore retention.

Although the Victorian Society is sympathetic towards the needs of the Berwick Youth Project, we believe that the Speirs & Co. of Glasgow hut could be suitably adapted for use as a workshop. Emphasis needs to be put on the importance of reusing and recycling buildings such as this as per Historic England guidance: <https://historicengland.org.uk/whats-new/news/recycle-buildings-tackle-climate-change/>

As we saw in [Background and History](#), such buildings mark an important era in architecture and this one is as worthy of preservation as many more ‘normal’ buildings in Berwick.

Like the army hut, it provides ample space for a variety of activities and a kitchen, loo and shower could be added in this building as it is relatively close to the main house.

3.3 Conserving Beauty

With their relatively low height, the buildings also perform a vital function in keeping the site as open and attractive as it has been for hundreds of years, affording beautiful views from the Town Walls towards the old houses of Ness Street and The Avenue. They are thus important, discreet contributors to the ‘soul’ of the Ness area.

As Historic England says in their Heritage Report for the application:

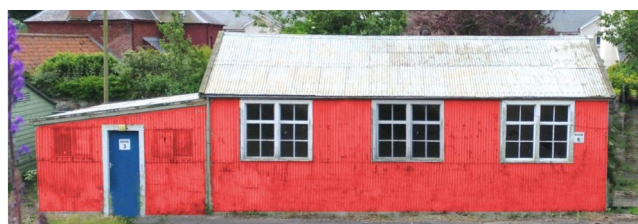
“The rear yards and back gardens are important elements within this part of the conservation area. Its open character contributes to enhance the setting of the ramparts and views along the promenade.” [5]

They continue with a reminder of the County Council’s obligations:

“In determining this application you should bear in mind the statutory duty of section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 to have special regard to the desirability of preserving listed buildings or their setting or any features of special architectural or historic interest which they possess.

You should also bear in mind section 72(1) of the Planning (Listed Building and Conservation Areas) Act 1990 to pay attention to the desirability of preserving or enhancing the character or appearance of conservation areas.”

Much has been made of their current rather tatty state and how they should be tidied away for fresh new modern buildings. But they are in better condition than the Georgian building, and *can* be made beautiful again, if the will is there. In the picture below, we imagine how the Speirs hut might look if painted a cheerful colour.



How the Speirs hut might look if painted red

Beauty is not a wishy-washy, nice-to-have optional extra – its presence or absence significantly affects our mental health. Experiments have shown that bland architecture has a measurable negative impact compared with more interesting and stimulating architecture. An experiment by the University of Waterloo Professor and neuroscientist Colin Ellard explored how spaces in various cities affect our bodies and minds by measuring the physiological arousal – mood, alertness, stress, attentiveness – of participants as they walked through them. This is from the article ‘Bland Buildings Dangerous to Health: The Physiological Effect of Architectural Aesthetics [6]’ by architect Noel Thijs:

“Results revealed that monotonous, unvaried and impermeable façades left people feeling bored and unhappy

with higher stress levels. Conversely, passing by stimulating, permeable environments with variety produced high sensory arousal, better mood, and higher motivation.”

Historic England recognised this when they said:

“There are other ancillary buildings from different phases of development extending up to the first decades of the twentieth century. As a whole, they make for an interesting arrangement of buildings of different character which make a positive contribution to the character of the conservation area.”

We believe a collection of huts – some of them historical – provides more interest, on a more human-friendly scale, than the proposed monolithic five-bay garage block, and can be a source of pride and interest to BYP clients and neighbours alike. A stimulating environment is especially important when considering the state of mind of young residents from difficult backgrounds.

3.4 Conserving The Environment

Building new facilities when the old ones could be reused makes no environmental sense, and any energy efficiency of the new builds does little to mitigate that fact.

The UK Green Building Council says [7]:

“It is often the case that simple ideas are the best ideas, and this holds true when it comes to reducing the impact of the built environment. From a numerical perspective, the impact of the industry is staggering – approximately 40% of the UK’s emissions are attributable to the built environment, while construction, demolition, and excavation activities generate approximately 60% of the UK’s waste. When a building is demolished and a new one is put in its place, the emissions locked into the original building are wasted and the new building’s material manufacturing and construction processes create new emissions. Even energy efficient buildings can take decades to save more operational energy emissions than were created in the construction process up to 51% of a residential building’s carbon is emitted before the building is operational (and up to 35% for an office building).”

The fact that *two* new buildings will be created to serve the relatively modest, intermittent needs of the BYP drastically amplifies this harm.

A recent report on realising the potential of Berwick’s conservation areas [8] emphasises the need for low-carbon development, refurbishment and sustainability. But in addition to generating landfill when the huts are demolished, the BYP’s new builds will release an unnecessary 100,000 kg of CO₂. That’s quite an example to set for BYP’s young clients, and detrimental to Berwick’s green aspirations. To offset these emissions, someone would have to take cold showers for the next 170 years.

In addition, the building works will cause noise and distress to humans and wildlife alike, another environmental factor in favour of a light-touch development.

3.5 Summary

In summary, this is why we believe these two buildings should be saved in situ:

1. These are rare survivals that enhance Berwick’s heritage offering.
2. They are still capable of being used for training, storage, events, and so on.
3. Once restored, they will be beautiful and interesting in their own right.
4. Keeping them is far more environmentally friendly and sustainable than building anew.
5. They help to protect the openness of this area, affording visitors and residents alike wonderful and much-loved views from the Town Walls over Ness Street and The Avenue.
6. It makes financial sense, as we will discuss next.

4. An Alternative Plan

4.1 A Simple Approach

Our plan is very simple: to retain and refurbish both classroom buildings, and install one or more inexpensive, secure garage units at the east end of the site, under the Town Wall. A kitchen, shower and loo can be installed in the Speirs classroom, and the rest of the space and/or the army hut can be used for meetings, drying and storage in addition to the separate garages.

This will leave plenty of space for landscaping, with trees, flower beds and perhaps a vegetable patch for teaching valuable skills to the young residents and getting them into the fresh air. Those particularly interested in gardening could even be allocated their own area to tend.

While some of the internal character of the huts might be lost due to renovation, a lighter touch refurbishment is permitted by the provision of external secure garaging. Externally, refurbishment should make little visible difference, retaining their charm and sense of history within the site.

4.2 Garaging

In addition to the existing buildings, one or more inexpensive but secure garages can be provided, in steel or wood. Being in the spirit of the classroom buildings, these will complement them, forming a coherent group, even though in other circumstances they might be frowned on in a conservation area.



Secure Steel Garage

A 4.5m by 7m steel shed can be sourced from Lifelong Steel Sheds Ltd, as pictured above. A wooden double garage measuring 6m by 5.5m is available from Dunster House, pictured below, and can be erected in a few days.



Wooden double garage

Many other kinds of inexpensive structure are available, and landscaping can help them blend in with their surroundings. Such buildings are not only in keeping with the look of the current buildings – they are appropriate on this site for exactly the same reasons of economy and simplicity as the original huts.

4.3 Floor Area

These are the figures for the floor area, assuming the addition of two inexpensive garages. We don't have figures for internal floor space areas but the walls are relatively thin so it won't be too different from this.

Army hut: **82** square metres

Speirs hut: **91** square metres

2 x steel garages: **63** square metres total, OR 2 x wooden garages: **66** square metres

Total external area: **236-239** square metres

4.4 Solar Panels

There are solutions that would allow solar panels to be fitted to the Speirs hut. We estimate that it could generate a peak 4kW output, compared with our estimated 4.8kW with the new build and solar tile approach, and the cheaper cost of conventional solar panels compared with PV tiles would partly compensate for the cost of strengthening the Speirs hut roof.

For more details, please see [Appendix A: Solar Panels](#).

4.5 Costs

These costs are very approximate. Basic hut renovation has been estimated by a local builder.

Renovation of hut, with insulation: **£30,000** each

Provision of kitchen, loo and shower: **£20,000**

Roof reinforcement for solar panels: **£20,000**

2 x garages: **£10,000** each

Total: **£120,000** excl. VAT or **£144,000** incl. VAT

This compares favourably with the approximately **£843,000** that might need to be found or borrowed for the new builds, before the new house is sold.

The average price for 3-bedroom houses in the nearby Governor's Gardens is estimated at £340,000 by Zoopla, and the highest sale price at that location to date was £305,000.

So if the house were sold for £400,000 – quite optimistic given its close proximity to the garage block and the scarcity of direct sunlight – this would entail a *loss* of at least £71,000 after demolishing the huts and building the house. Added to the £370k+ costs of the garage block, this means that the cost of the garage block effectively becomes **£441,000**.

This is *three times* the cost of our solution and loses a considerable portion of the site, with negative financial consequences for BYP.

We exclude solar generation system figures and water and sewage works as they are not included in our estimates for the new builds either.

In the unlikely event that one or more hut proves beyond reasonable repair, we suggest similar, modern structures as replacements that would make little difference to the cost noted above, and would represent a continuation of the architectural and aesthetic precedent set by the Edwardian buildings.

Below we show different options with different build costs and outcomes, estimated using footprints of 205 square metres for the house and 186 square metres for the garage, and using a value of £20,000 for hut demolition.

Option	Build Quality	Build Cost	House Sale	Final Cost
New Build 1	Good House: £2.2k/m ² Garage: £2.0k/m ²	£843,000	£400,000	£443,000
New Build 2	Poor House: £1.8k/m ² Garage: £1.5k/m ²	£668,000	£400,000	£268,000
New Build 3	Very poor House: £1.3k/m ² Garage: £1.1k/m ²	£491,100	£400,000	£91,100
Hut Renovation and New Garages	Good	£144,000		£144,000

4.6 Funding

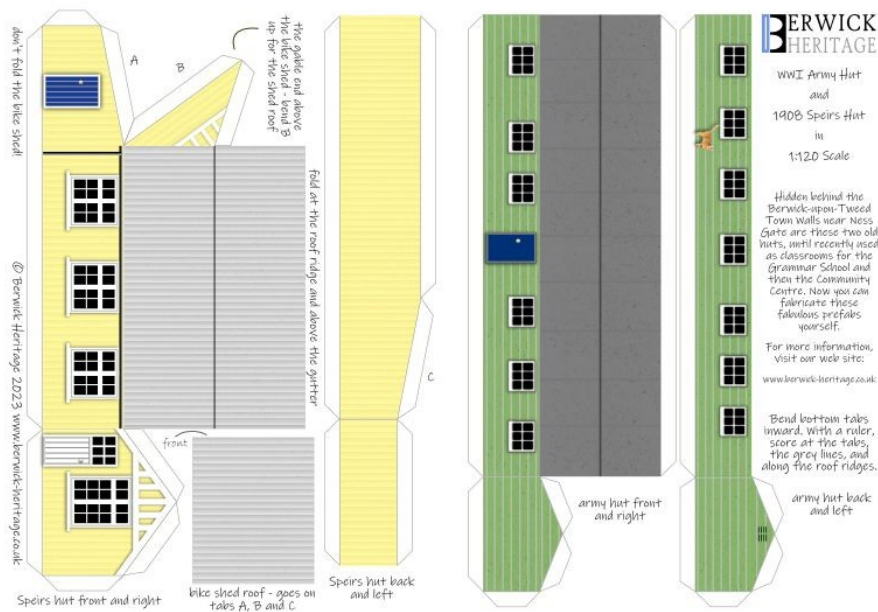
The two historic buildings should attract heritage funding, and the community will also be able to help with fundraising.

The Victorian Society and the 20th Century Society have offered to write in support of any grant applications for the two buildings: the former for the 1908 Speirs classroom, and the latter for the army hut.

By retaining the old buildings, the heritage aspect provides an additional angle for fundraising, thereby reducing risk.

Since huts are intrinsically appealing, they lend themselves well to marketing and merchandising. Illustrations of the huts can be used for items whose profits can help with their restoration and maintenance.

As an example of this, we have created a greetings card, illustrated below, to show how the charm of the restored huts and the allure of miniatures can be combined. A PDF file is available from www.berwick-heritage.co.uk/models and BYP is welcome to make use of it.



Hut card models

Cards can be sold online and in outlets such as the Berwick Visitor Centre, stationers, gift shops, and the Barracks shop, helping to promote awareness of these buildings.

4.7 Timing

It is likely that in exchange for providing extra benefit to the conservation area, the County Council may choose to loosen the phasing condition so that BYP can move their operations to this site sooner.

The simpler and cheaper provision of facilities also may allow them to be used within months rather than the years required by the current plan.

4.8 How The Community Can Help

In exchange for preserving the openness and heritage of this part of the conservation area, we are happy to help with ideas and fundraising for the huts.

We can help share their history with Berwick and our visitors, who will be fascinated to find out about these unusual structures tucked away behind the Town Walls.

The buildings can then be established as valuable heritage assets that can attract the appropriate funding.

4.9 Benefits Of This Approach

There are numerous benefits of this approach for BYP and the community, including:

- massively lower costs and risk for BYP;
- provision of interesting buildings that BYP clients can enjoy and take pride in;
- quicker consolidation of BYP's operations on the site, reducing off-site rent payments;
- retention of heritage assets in the form of Grade II* curtilage-listed huts, which are unique in Berwick and can become part of Heritage Open Days;
- ability to attract funding through heritage grants;
- a much smaller environment impact, including carbon emissions, landfill, development noise over a protracted period, and less disturbance of wildlife;
- continued enjoyment of this beautiful and open area of Berwick for residents and visitors alike, which is so important for our mental health;
- options remain for use of the whole site: for example a greater area can be given over to gardening and green space, which could be very beneficial for BYP's clients.

We hope that all interested parties will find this assessment useful and the advantages compelling. We wish the Berwick Youth Project every success with a project that not only saves the main Grammar School and benefits young people, but also enthuses the surrounding community and preserves the heritage in this area for everyone.

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Appendix A: Solar Panels

This appendix describes how we compared the solar panel systems for new build and renovation scenarios, and notes some issues around installation on the Speirs hut. Note that there are many variables so the numbers are very approximate. Variables and unknowns include dimension accuracy, real-world panel efficiency, roof angle, pricing variations, and structural and aesthetic considerations.

Costs and Output

From the plans, the PV tiled area in the upper area of the rear garage block roof is approximately 20.4m x 1.7m, or 34.6 square metres.

Using figures from www.gb-sol.co.uk, each unit covers 0.2 square metres, so there is space for about 173 units, each emitting 28W. This gives a peak power output of **4.8kW**, and the solar panels (only) would cost around **£10,380**.

In the renovation scenario, the rear roof slope on the Speirs hut is about 3m by 11.4m, giving a total area of 34.2 square metres. This could accommodate 10 2m x 1m solar panels. High-efficiency panels at 400W output would generate about **4kW** peak output. At £300 a panel, the panel cost would be about **£3,000**.

Discreetly coloured solar panels and strengthening the hut would add a little to the cost, but this would be balanced against the higher cost of the PV tile solution. It may also be possible to add smaller arrays of panels on the proposed timber or steel garages, if planning rules allowed it.

Solar Panel Options On The Speirs Building

The higher Speirs building is in a better position for getting the sun than the army hut. However, since it is made of corrugated iron on a timber frame, special consideration is required compared with installation on a regular building, and a structural engineer should be consulted as part of the refurbishment process. Options include:

- Add extra joists and purlins, possibly with extra posts to support them.
- Carry some of the weight of the panel assembly using supports at the back of the building.
- Use lightweight, thin-film panels. These degrade faster than normal panels, and are a little less efficient, but are good in ambient light.
- Distribute panels between the Speirs building and the garage roof(s).

There are also issues to examine when installing solar panels in a conservation area. Ameliorations of the problem include:

- Use of coloured, discreet panels.
- Consideration of the fact that the roof is not visible to many people – it will be almost invisible from the Town Walls, and the roof is not very visible to the three homes in The Avenue because of screening by foliage.
- Balancing the harm of a potential loss of heritage versus suboptimal roof aesthetics.

Historic England's comment on the application was in sympathy with this view, stating:

“While the panels proposed in the new workshop would be relatively sheltered from view, the ones envisaged on the dwellings would be prominent in views from the promenade and therefore detrimental to historic character. We recommend these are removed.”

Appendix B: Other Hut Conservation Projects

These are examples of notable buildings of a 'temporary' nature that have been saved.

The Boulmer Memorial Hall

After the First World War, the residents of the village of Boulmer bought an Armstrong hut from the army at Berwick, to use as a church hall and as a memorial to the fallen of their village. Recently, the village raised funds to restore it. That and the one at 5 Palace Street East are the only two surviving Great War army huts that we know about in Northumberland. However, the Berwick hut is a later, narrower variant at 15 feet wide and covered in wood rather than corrugated iron.



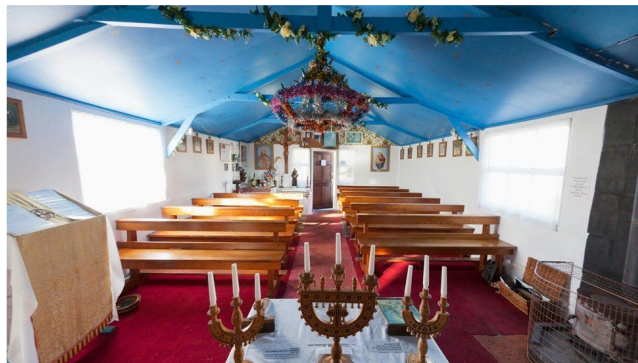
Boulmer Memorial Hall (photo: Ian Capper)

More information:

<https://www.iwm.org.uk/memorials/item/memorial/33638>

Hallmuir Ukrainian Chapel

The small prefab iron hut forms part of the Hallmuir POW Camp and was put to use as a chapel from 1947 by Ukrainian prisoners who had fought against the Soviet Union alongside Nazi Germany as part of the 14th Waffen Grenadier Division of the SS (1st Galician). The chapel has received funding from the Architectural Heritage Fund, South Scotland Enterprise and Historic Environment Scotland to replace its roof, windows, walls and carpets.



Hallmuir Ukrainian Chapel (photo: ALAMY)

The AHF site says:

“Just outside of Lockerbie, in the unlikely situation of a bus compound, sits the tiny Ukrainian POW Chapel. It is a truly remarkable survival dating from the Second World War – a prefabricated hut built of corrugated metal and asbestos sheeting – intended as a very temporary structure. The chapel is the last recognisable remaining structure on a former POW camp dating from the early 1940s, which originally comprised 40 huts. The Ukrainian POWs arrived after the war and fitted out the chapel in a makeshift way – candlesticks made from recycled shell fragments, banners from tents, and a wooden carving of a Ukrainian Cathedral, carved with a penknife. As a result, the Category B-listed building has a simple exterior, with a contrasting highly decorative interior.”

More information:

en.wikipedia.org/wiki/Hallmuir_Ukrainian_Chapel

Tin Chapel Conversion in Kent

This project shows that a simple tin chapel can be made into a functional home.



Tin Chapel, Bridge (photo: Kent Online)

From Kent Online:

“Simple tin chapel in Bridge near Canterbury is now a luxury home after stunning conversion.

A tin Methodist chapel built for worshippers for £140 more than a century ago has gone on the market for almost £400,000. But the building in Patricbourne Road, Bridge, is a far cry from the austere space it used to be after an extensive two-year conversion to turn it into a unique, luxury home. It retains its period oak floorboards but the nave has been transformed into a huge open plan kitchen and main reception room with a large over-looking mezzanine, which could either be used as an extra bedroom or office.”

More information:

www.kentonline.co.uk/canterbury/news/the-tin-chapel-with-the-91511/

Ballykinlar History Hut Experience

This project has constructed an Armstrong hut from scratch.



Ballykinlar History Hut

The recreated Armstrong hut (complete with tunnel entrance) was constructed and fitted out during lockdown as part of the Council's 'Shared History and Culture' programme, a project supported by the European Union's PEACE IV Programme, managed by the Special EU Programmes Body.

The Chairperson of the PEACE IV Partnership, Martina Byrne, said:

"Down County Museum has created a unique shared history experience in the recreated hut, exploring the lives of diverse occupants of the 'World's End Camp', in particular people who lived through the difficult years of the First World War, The Irish War of Independence and the Second World War. When you enter the hut, you really feel as if you are travelling back in time."

More information:

<https://www.facebook.com/BallykinlarHistoryHut/>

St Andrews Mission Church, Edithmead

This lovely 'tin tabernacle' was originally an adult school in East Brent; in 1918 it was purchased as a Mission Church in Edithmead, and has been in continuous use ever since. It received funding from the Valencia Communities Fund in 2018 for repairs. It bears a striking resemblance to the Speirs building in Berwick, which was originally designed with a similar cupola.



St Andrews Mission Church, Edithmead (photo: Valencia Communities Fund)

More information on this and other 'tin tabernacles':

Great War Huts, Suffolk

Great War Huts is a ground-breaking First World War museum and visitor centre near Bury St Edmunds, Suffolk.



Visitors admiring huts (photo: Great War Huts)

Different types of original WWI hut are on display, including Armstrong huts. They are running a scheme called 'Love Your Hut' to give advice for people saving their local hut. Groups around the country contact them for advice on restoring their own buildings, or for copies of plans: English Heritage and The National Trust are among the organisations that have consulted them.

The picture below shows an interior view of an Armstrong Type Plan Hut prior to dismantling for its move to the Great War Huts site. Originally built in October 1914, it was repurposed as the Girton Women's Institute Hut c. 1920.



Interior view of an Armstrong Type Plan Hut (photo: Taff Gillingham and Great War Huts)

As hut restorer Kevin Smith says:

“Original huts are artefacts in their own right and just ooze history.”

More information: www.greatwarhuts.org/

Wilby Station Hut

This timber and corrugated iron hut was originally at Wilby station, but served 40 years as a garden hut

before being brought to the Mid-Suffolk Light Railway and restored.



Wilby Station Hut: in its original position (photo: Mid-Suffolk Light Railway)



Wilby Station Hut: restored and in its new position (photo: Mid-Suffolk Light Railway)

More information:

www.mslr.org.uk/history/the-wilby-station-building/

Wheatley Hall Church Conversion

Wheatley Hall, Devon, is a tin tabernacle that has been converted to a stylish home with a Scandi feel.



Wheatley Hall (photo: Unique Property Company)

From the particulars:

Wheatley Hall, a tin tabernacle, was built around 1900 and is now the most exquisite home.

The building has lived a life of variety, and was most recently used as a church hall and a masonic lodge until around eight years ago. A detailed renovation... took the building back to a shell and core state. It was then lovingly restored to preserve its integrity while adding thoroughly modern improvements including double glazed windows and roof lights along with upgrades to the plumbing, heating and insulation.

More information:

uniquepropertycompany.co.uk/property-results/for-sale/scandi-style-church-conversion-in-exeter-devon-for-sale/