

THE CONSERVATION OF HISTORIC BREWERIES

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Since the 1960s, many historic breweries have become redundant due to major changes in the brewing industry. Redundant historic breweries, in common with other historic buildings, generally need a new use to secure their future, before they become neglected and slowly deteriorate. An adaptive re-use scheme for a historic brewery should be devised in accordance with conservation philosophies, in order to retain the special character and significance of the building.

Conservation philosophies have evolved to provide guidance when approaching a conservation project, to ensure the values of the site are not destroyed. They are an excellent tool for informing any aspect of the conservation process from repairs to new design.

The value of this approach will be demonstrated by looking at two historic breweries that underwent large conversion schemes; Newark Northgate Brewery and



Figure 1. Northgate Brewery after closure

Castle Brewery, also in Newark, Nottinghamshire. This is an edited account of a more detailed assessment and the focus is on the key issues.

Northgate Brewery

Northgate, as stands today, was built in stages with the earliest sections dating from 1871 and the street frontage from 1890. It was design by William Bliss Saunders for Warwick Richardson Ltd. It is of red brick construction with detailing in black and white brick, as well as stone lintels to the windows. The roofing to the 1890 and 1882 block is rosemary clay tiles, whilst the rest of the structure has slate. This brewery is Grade II listed.

Brewing has taken place on this site since 1776, but production came to an end in 1966. The brewery was subsequently used as a store, before finally reaching a stage of dereliction in the 1990s. Originally a much larger site than that which remains today, with the maltings being connected to the main brewery via the cask filling shed and other buildings as figure 1 shows. All that remains is the main brewery building and the maltings. The brewery languished on Nottinghamshire's Buildings at Risk register for several years, with the council at one point obliged to step in and put temporary coverings on the roof. Many internal features have been stolen since the building's closure, including the grand oak staircase to the office block mentioned by Alfred Barnard in volume 3 of his, *Noted Breweries of Great Britain and Ireland* published in 1889. Latterly, fire caused partial demolition of the brewery tower.



Figure 2. The double height offices in the 1890 building.

Details of development

The re-development of Northgate began in the mid-2000s and was due to be completed in 2009. The development in, includes;

- A new extension
- Refurbishment of the maltings
- Division of spaces into residential units and retail

outlets

- Refurbishment of the cellar areas
- New roof structures (90%), new roof coverings
- New and refurbished windows
- New fencing to mark boundaries
- New landscaping and car parking areas
- Re-building of fire damaged tower
- New and replacement flooring



Figure 3. Architect's impression of new development.



HB - Historic buildings

Thin dotted line - Approximate historic site boundary

Solid line - Current boundary

Maltings

New extension

1871 block

1882 block

1890 offices

Figure 4. Site Plan of Northgate Brewery.

Castle Brewery

Castle Brewery's offices are French Renaissance in style and made of lias limestone with sandstone detailing and red brick quoins. The rest of operational buildings are red brick. There is an interesting cast iron cask store in the central courtyard. This brewery is Grade II listed.

The brewhouse at Castle Brewery was designed by the famous brewery architect, William Bradford in 1885 for Capram and Hanksy which later became James Hole. Brewing ceased in 1982 and as with Northgate Brewery, Castle Brewery also found itself on Nottinghamshire's Buildings at Risk register. It was converted in 2001.

Details of development

- 36 apartments and 15 houses
- Demolition of the Crown and Cushion public house

and the single storey workshop by the gatehouse.

- A section 106 agreement was put in place to allow a supermarket to be constructed on an area on the perimeter of the site to generate the funding to conserve the brewery tower.

Assessing successful conversion schemes

Assessing the successful conversion schemes of these historic breweries requires a basic understanding of conservation philosophies. This begins with William Morris who wrote:

the Society for the Protection of Ancient Buildings (S.P.A.B.) Manifesto in 1877. He began the modern day conservation movement and subsequently there have been several international charters devised to guide the philosophical development of conservation. The principle charters begin, in 1931, with the Athens charter which was the first time an international code of practice had been established. This was

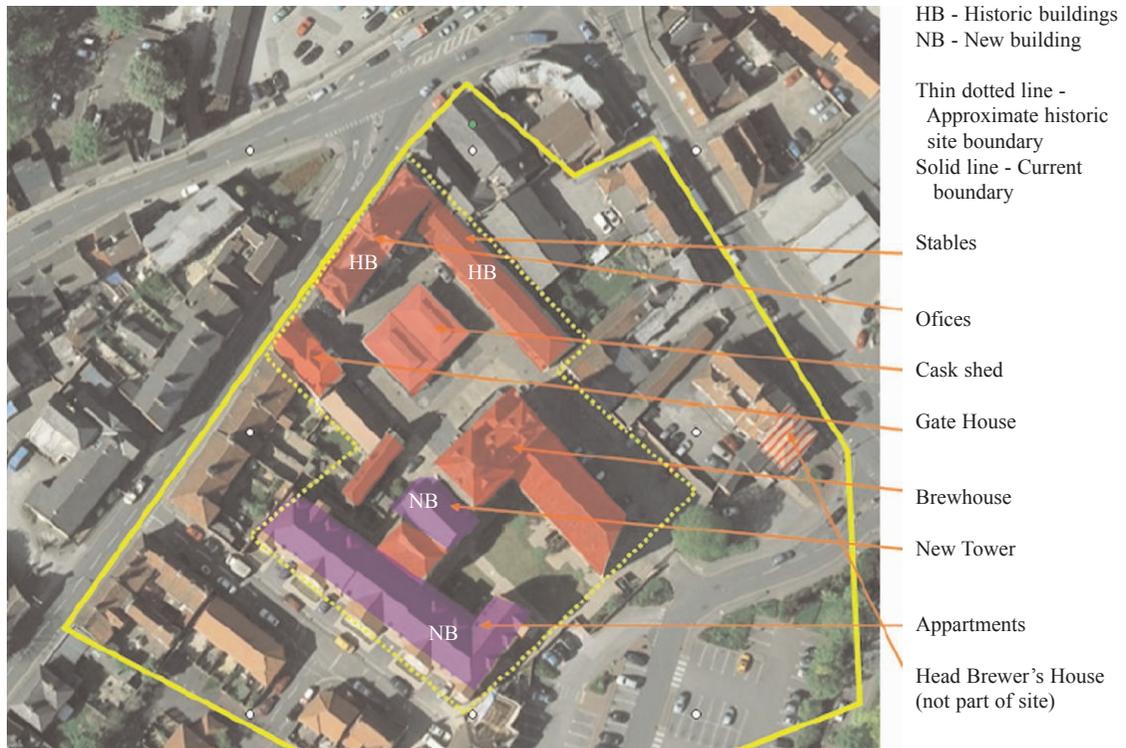


Figure 5. Site Plan of Castle Brewery.



Figure 6. Castle Brewery office block.

followed by the Venice Charter of 1964 and then the Burra Charter, from Australia, was written in 1979 and redrafted more recently in 1999. This charter is the first charter to identify the cultural values a building has. Recently, English Heritage has produced 'Conservation Principles' (2008) which follows on from the charters and identifies the different values that can be found with a historic building.

More information about these charters and other conservation tools can be found at the end of this article.

For the purpose of this article the philosophies have been collated and key principles summarised. The conversion schemes of the breweries will be assessed against those listed below;

- i) Understanding of the heritage values
- ii) Authenticity of materials used in replacement and repairs.
- iii) Integrity of design and sympathy of new additions
- iv) Extent of intervention and reversibility

i) Understanding the heritage value

When approaching a conversion scheme it is always important to understand the values that the site holds. With a historic brewery there are lots of generic values and, hopefully, many still remain. These are

Site - Traditionally the large breweries occupied a large site with many auxiliary buildings. It would be important to recognise how much of the site was still in tact. Site buildings to look for include;

- Maltings
- Cooperage
- Stables/Garages
- Boiler House
- Railway track and sidings
- Brewery offices
- Head Brewer's House
- Workers Cottages
- Brewery Tap
- Bottling plant
- Cask cleaning shed

Structure - The main brewery was made up distinct components that aided the brewing process;

- Tower
- Chimney
- Brewhouse



Figure 8. A lucam at Kimberley Brewery.

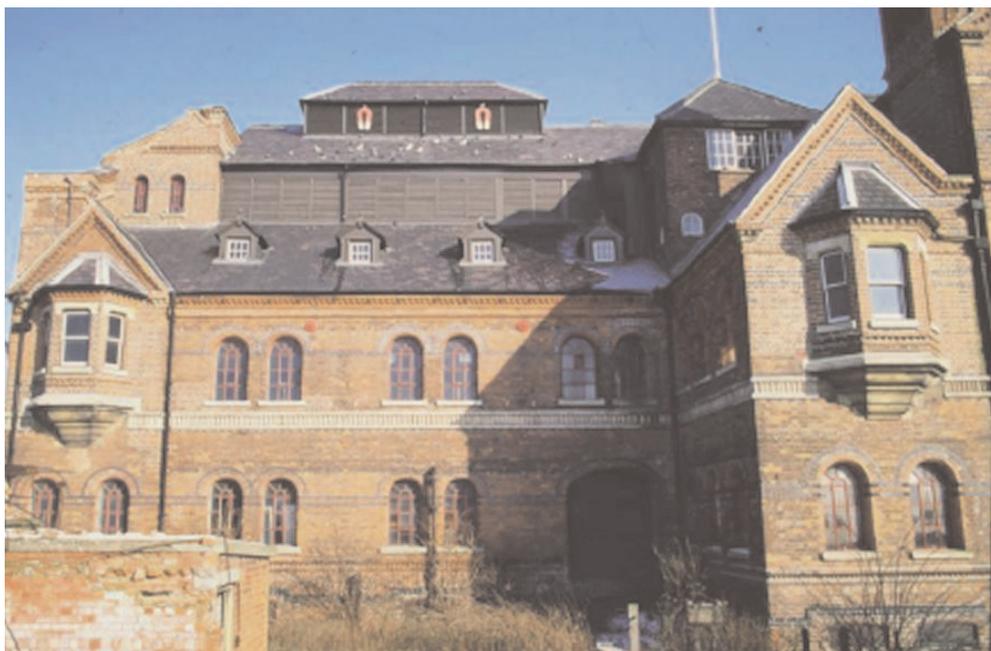


Figure 9. Louvred windows at Northgate Brewery.

Features - There are several architectural features found on a historic brewery;

Lucam

Louvred windows

Location - The historic brewery is almost always in the same location or occupying the same site as when brewing there began and this location was chosen for a reason. Often its proximity to a reliable water supply, either a river or a spring and with good transport links.

Other values to consider when assessing the brewery are below. These may not be relevant to all breweries and other breweries may have additional specific values. The more unique a value the more important it is.

Influence on the urban grain of the area.

Local landmark and contribution towards the streetscape

Major employer

Major benefactor to the area

Architecturally significant and/or visually impressive

Northgate Brewery - The scheme at Northgate sees the main brewhouse structure remaining primarily unaltered, including the barrel vaulted ceiling with cast iron columns to the basement and first floor. The site has been eroded over the years and the brewing equipment removed, although not as part of this scheme. There is evidence of the louvre windows but there are no lucams.

The aesthetic of this brewery reflects both local trends with its colonnade imitating the market square and the general Victorian appetite for gothic style with the oriel windows and structural polychromy. Notably, this is seen in nearby Kelham Hall, the Grade I listed building design by George Gilbert Scott.

The dominance of this four storey building on the area remains as it was when it was built and continues to afford the building its landmark status.

The redevelopment scheme has incorporated many of the original features of the building. The windows in the 1890s block remain and so does the decorative wooden kiosk that connects the double height ground floor office with the loading bay.



Figure 10. Retention of the high ceilings in the 1890 block in the current scheme, Northgate Brewery..

Castle Brewery - Castle Brewery superbly illustrates the Victorian brewery complex because it maintains many of the physical components that contribute towards a brewery site, including the metal cask cleaning and storage structure in the main courtyard, the brewery offices, brewhouse and tower and stable block. The cobbled yard is also still in situ and the Head Brewer's house also remains but no longer included as part of the complex.

The Brewery makes an impressive contribution to the streetscape from the ornate office range that fronts on to Albert Street, to the impressive brewery tower. The relationship between the buildings is largely unaltered by the conversion scheme, with the dominant buildings remaining as the brick brewhouse and office range.

ii) Authenticity of materials used in replacements and repairs

‘Authenticity’ means approaching the conservation of a

historic building with truthfulness. With repairs, use like for like materials and be true to the character of the building whilst acknowledging that ageing and creating a replica diminishes the authenticity. The new design must have legibility. Traditional building skills and materials enhance the authenticity of a building but modern materials can also be used if deemed appropriate.

A large brewery redevelopment is underway at the Eldridge Pope Brewery in Dorchester. This is a large Victorian brewery that is part of a wider redevelopment project. Figure 11 shows an excellent use of building materials. Although a new construction the use of glazed tiles is a Victorian technique and compliments the original scheme very well. No attempt is made to imply that this is an original feature and the simple stretcher bond and modern fenestration highlight the modernity of the structure.

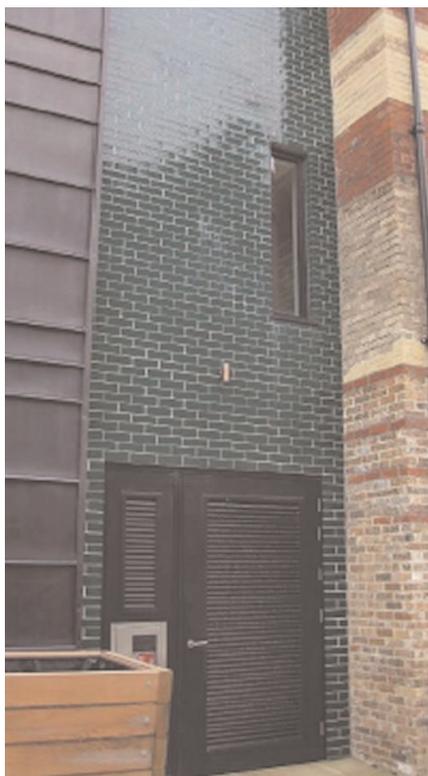


Figure 11. Tiled detailing from new build at the Eldridge Pope re-development scheme, Dorchester.

Newark Northgate Brewery - With much of the external skin remaining at Northgate Brewery, lots of repairs inevitably required. The original metal and timber casement windows have been repaired on site with the windows repaired in situ. Overall the windows were in good condition and casements required merely sanding down and repainting although patch wood repairs were carried out where necessary.

New timber double glazed timber windows were inserted into the louvre area on the 1882 block. The developers wanted double glazed units which were only authorised when an example was installed for inspection that had narrow internal glazing bars. It was felt that an element of flexibility could be employed as they were a new feature and at a height that the visual impact was not great.

An estimated that 10,000 reclaimed bricks have been used in this project on areas which will be on view.

There are many ethical issues involved with the use of reclaimed bricks, not least the demolition of other buildings in order to secure them. Reclaimed bricks, by their very nature, have a patina of age and using them within a historic context creates the impression of an original element.

The roof structure was largely replaced. About 90% of the timbers were replaced with about 15% of those suffering wet of dry rot and 20% either fire damaged or physically damaged. The replacement wood used was an imported pine which has the same characteristics as the pitched pine of the original timbers. The small amount of remaining timber was metal plated in order to meet current load requirement.

The reroofing which involved new materials was a like for like replacement with slate, rosemary tiles and lead being used. This is an appropriate way to treat a large component of the site.



Figure 12. Infilled brickwork with reclaimed bricks.

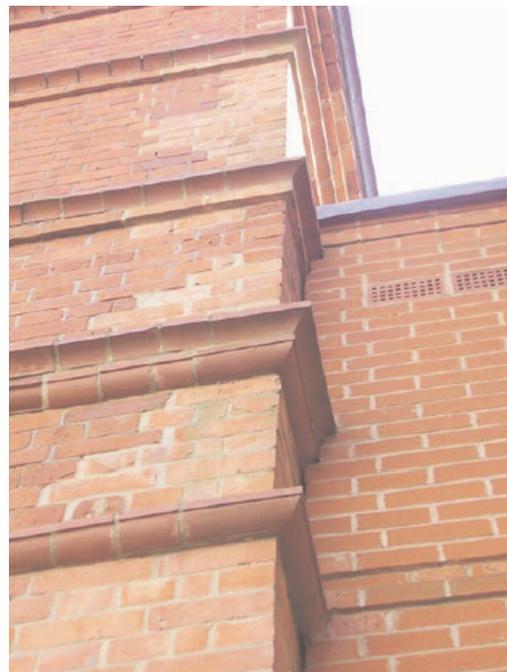


Figure 13. Differences between the historic brickwork, left and the modern brickwork, right. Also note the repairs to the quoin.



Figure 14. Modern cobbling.

Part of the tower which was destroyed by fire has been skilfully repaired and rebuilt using the correct bricks and lime mortar. There is conflict in the principles, as there often is, when it comes to rebuilding. In rebuilding the tower has the legibility of the building been affected? Is this a pastiche of the original? In this instance, and conservation projects can only ever be viewed in a

holistic way, it was appropriate to rebuild the tower. With the site so greatly eroded maintaining the key structural features is important to the character of the site.

Castle Brewery - The new building work has been carried out in brick and the extensive use of reclaimed bricks has been resisted. The selection of the bricks on the new build is in keeping with the historic brickwork and has a smooth surface, similar to that of the original.

The existing dormer windows were repaired as necessary with new timber and window sections. New windows, located in the brewhouse, were timber and damaged glass panes were to be replaced as is the putty.

The cobbled courtyard which remains in the heart of the site informs the new hard surfacing throughout. The design and material of the modern blockwork differentiates from the original cobbled, whilst at the same time complementing the industrial character of the brewery. It would have been highly inappropriate in this setting to have formal gardens or trees and there is a small amount of lawn space to the rear.



Figure 15. Poor legibility of buildings at Castle Eden Brewery.

iii) Integrity of design and sympathy of new additions

A building has integrity and it should be conserved with integrity. This means that any work, be it additions, repairs or alterations should respect the values of the building and its site. The building is a sum of all its parts and the layers and changes that have taken place over the years contribute towards the current integrity of the building.

At the recently refurbished and extended Castle Eden Brewery, in County Durham, the majority of the site was demolished leaving only the brewery offices and a couple of brewery buildings. Extensions to the original building were made, but externally it is difficult to easily identify the evolution of the building. Figure 15 highlights this.

Northgate Brewery - The scheme at Northgate Brewery involves a modern extension on the site of a demolished part of the original brewery and it maintains, in part, the original footprint of the building. The extension is to scale with the rest of the building and is clearly articulated. The extension is freestanding and there is no access to the historic brewery building. The new extension is an honest addition and is clearly legible being simple in construction and clad in cedar.

A poor example of integrity in new design on this site could be the new metal infill panels to the new staircases in the 1872 block. It is based on an external air brick on the 1890 block and made from cut out metal sheet. This is a crudely inspired design that will result in large panels of shiny metal occupying the stairwell. See figure 16.

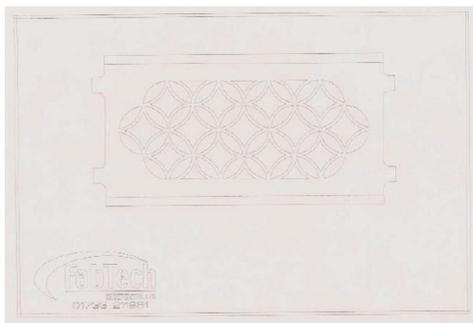


Figure 16. Detail of steel stair panel.



Figure 17. The new tower, left and the historic brewhouse, right, at Castle Brewery.

Castle Brewery - The key new additions to this site are a connecting tower, joining the Victorian brewhouse to an older brewing building and a three storey apartment block. The height of the main tower and the closeness of the other original buildings around the court yard has



Figure 18. Modern detail reflecting historic lucam.

been understood by the architects and they have incorporated the new buildings carefully. The new tower is a simple design and makes a subordinate contribution to the group. Its pitched roof is a traditional building shape, but is not found on the higher level buildings on site which have half-hipped roofs. The only explanation for this element can be found in the triangle dormer windows on the main brewhouse tower.

Additional windows have been added to the building either in original locations where infill has taken place or in completely new locations..

The new build apartment block clearly reflects the traditional wooden clad lucam in porch design, although it is horizontally not vertically clad.

iv) Extent of intervention and reversibility

If the previous principles of authenticity, integrity and respect for the heritage values are strictly adhered to, intervention is unavoidable and the likelihood of reversibility minimal.

Minimum intervention, in conservation terms, is an attempt to leave the building unaltered. Minimum intervention, in terms of adaptive re-use would mean unnecessary changes to the historic fabric through lack of understanding.

Deciding what parts of the building has the most heritage value helps inform the development process and ultimately the extent of the intervention and reversibility.

Northgate - There has been major intervention into the internal areas of the site. Internal doors have been bricked up using reclaimed bricks, new floors, windows and roof timbers have been inserted and a new layout and extension have been added.

Given that the brewery was essentially a shell when the scheme began and many of the features have been badly water damaged or stolen, returning the brewery to that state would never have been advisable. The reversibility of some of the techniques employed in the restoration is poor. The sandblasting of the internal brickwork for example and the indiscriminate replacement of the roof timbers.



Figure 19. Detail of beam, Castle Brewery.

Castle Brewery - Externally, there are some interesting observations about the treatment of the historic fabric. The large industrial beam used in the new tower, upon closer inspection, is in fact purely decorative as a connection is not made with the brewhouse tower which sits adjacent to it. This is inauthentic, yet in not physically connecting to the 18th century building it is next to the external fabric is limited. With minimum external intervention comes, in this instance, an increased level of reversibility.

Assessment

The breweries have each retained a different level of character and significance since redevelopment.

Castle Brewery retains much of the individual brewery buildings and many details. The cast iron Cask Filling Shed and cobbled yard are particularly resonant of the former function. Northgate has a more eroded site but

has retained the dominance of the remaining structure within the streetscape and important features like the kiosk.

At Northgate the authenticity of repairs was varied and with little workable internal fabric remaining effort was made to keep as much as possible. The windows were repaired in situ and re-roofing was carried out using as much of the existing tiles as possible. However, a large percentage of the timber roof structure was replaced. Castle Brewery demonstrated an excellent understanding of modern materials and the example used within the article was the creation of modern cobbling within a historic setting.

The new extension to Northgate Brewery is appropriate and informed by the existing building. It is adds a new architectural chapter to this building whilst at the same time ensuring that the building is legible to the observer. Similarly, the new tower at Castle Brewery blends perfectly into the form of the site.

Some of the approaches at Northgate have resulted in unnecessary intervention and therefore limited reversibility. Sandblasting brick damages the surface of the brick and is irreversible. Similarly the wholesale replacement of the roof structure. At Castle Brewery modern construction techniques dictated that the new tower was built structurally separate from the surrounding buildings so that removal of this addition would not damage the historic building.

The next step

The re-developed historic breweries in this study have retained a level of character and significance, with Castle Brewery having the most successful scheme. However, there are still many redundant breweries at risk from poor quality re-development. What can be done to help retain the special character of these important buildings?

- Stop site erosion before brewing ceases
- Make use of original brewery buildings and unusual features

- Keep part of the site in original use - the office range as offices?
- Attention to detail in the use of materials and finishes
- Careful balance between needs of the developer and the authenticity of the building
- The historic values of the site should inform all development schemes
- Brewery Architecture Group - statutory consultee on applications relating to listed breweries.

Further reading and information

Clark, K. (2001) *Informed conservation: understanding historic buildings and their landscapes for conservation*. London: English Heritage.

English Heritage (2008) *Conservation principles policies and guidance for the sustainable management of the Historic environment*. Swindon: English Heritage.

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S.P.A.B (1877) *The Manifesto*. Society for the Protection of Ancient Buildings, <http://www.spab.org.uk/html/what-is-spab/the-manifesto/>

International Charters

The Athen's Charter

http://www.icomos.org/docs/athens_charter.html

The Venice Charter

http://www.icomos.org/docs/venice_charter.html

The Australian I.C.O.M.O.S. Charter for the Conservation of Places of Cultural Significance (the Burra Charter)

http://www.icomos.org/burra_charter.html

Government Advice Documents

PPS 5 Planning Policy Statement on the Historic Environment.