

**CASE STUDY: BURNSIDE STREET LOCHEE DUNDEE**

**BRIEF:** Conversion of B Listed former Jute Warehouses 5-8 and 14-15 at 55 Burnside Street, Lochee, Dundee into 54 social rented flats for AG Akermo & Sons with Hillcrest Homes.

**DATE:** 2018 – PRESENT

**VALUE:** £7,600,000

**1. INTRODUCTION**

I was initially engaged to reinstate a lapsed planning permission to convert the disused former jute warehouse, more recently used as a Sports and Social Club, into 39 flatted dwellings. This proposal was found to be not viable because of the conservation deficit low property prices locally. In 2019 I introduced Hillcrest Homes to the project as they were interested in the prospect of providing much needed social rented flats in the area. After gathering information and progressing various proposals we settled on a 69 flat design, Hillcrest Homes confirmed that Social Housing Investment Plan funding had been earmarked. Thereafter we submitted a Proposal of Application Notification to Dundee City Council in January 2020 and organised and managed a Pre-Planning Application Community consultation (Fig 13) in February 2020 at the Lochee Community Hub, which was well received. The number of proposed flats has since been reduced to 54 (Fig 27) by omitting most of the attic flats and increasing the size of others which will have the benefit of minimising the intervention on existing roof timbers and the impact on local traffic. I submitted a Planning Application and LBC on behalf of my client in November 2021 and assisted with an application for funding to the National Lottery Heritage Fund. Planning and LBC was approved on 17 March 22. NLHF are interested in making this the first social domestic project that the fund has been used for.

**2. HISTORICAL NARRATIVE AND SIGNIFICANCE**

The disused category B-listed (HES. 1986) Victorian Warehouses on the eastern edge of the Lochee Conservation Area (DCC, 2008) were built as numbered Jute Storage Warehouses for the former Camperdown Works (Fig 1 and 2) in two phases, with No 5-8 completed in 1862 and the taller No 14-15 completed in 1882. These are in line with the earlier warehouses 1-4 on the opposite side of Burnside Street which had the railway embankment removed to allow conversion into residential flats in 1993. Soon after the Camperdown Jute Works ceased operation in the early 1980s warehouses 7,8,14 and 15 were adapted and extended for use a Sports Social Club which operated from the mid-1980's to late 1990's.

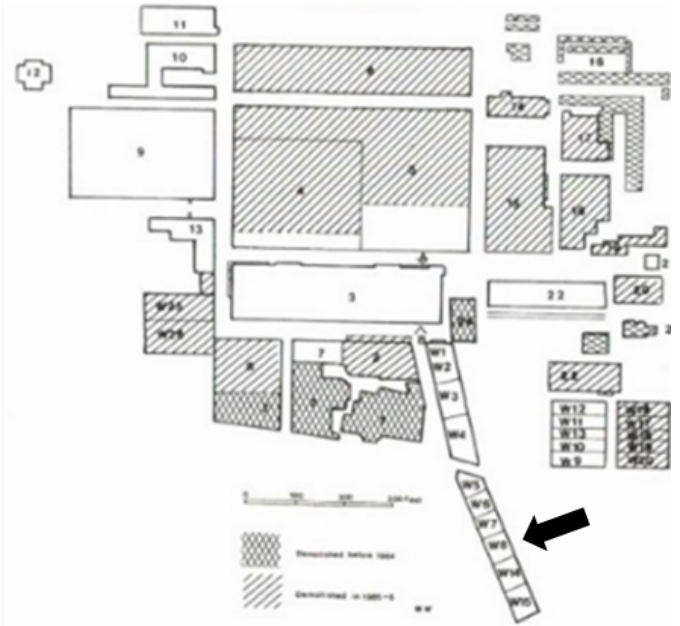


Figure 1. Camperdown works plan c1862 (Watson 1990)

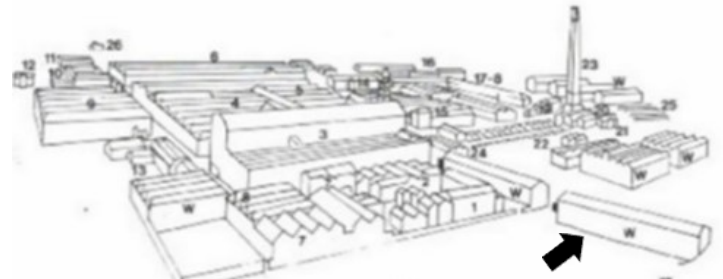


Fig 2. Camperdown works isometric c1900 (Watson 1990)



Fig 3. Cox Brothers Advertisement

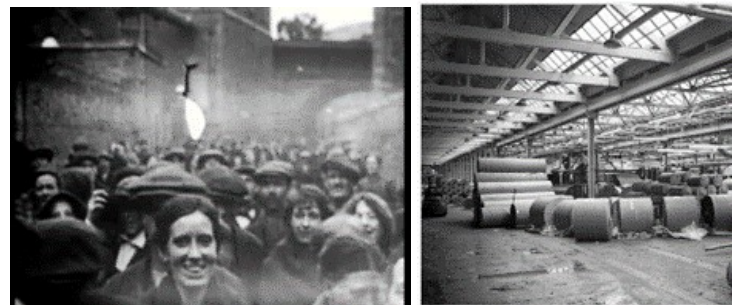


Fig 4 and 5. Mill workers Burnside St, closure 1985

Its OVERALL and INDUSTRIAL significance relates to the warehouses being part of 'the world's greatest jute works' (Watson 1990) and being served by its own private rail siding which spurred of the Dundee to Newtyle line and the integration of a high-level rail platform along the northeast elevation which was used for the unloading of Jute brought directly from the ships at Dundee docks and allowed a streamlined delivery process which would have more than compensated for the comparatively long distance from the docks compared to other Jute mills in the area. This was a unique set up as 'no other jute works were laid out around their own railway siding' (McKean 2008) and was part of the virtually autonomous operation of the works. The rail connection to the docks ceased in the 1950's and over half of the Camperdown Works buildings were demolished when it ceased operation in the 1980s. The architectural details such as blind windows, including round headed typana in gables, skewputts and flat-topped finials and decorative cast iron ogee rhones and hoppers which all belie its warehouse use. Several of the works buildings and warehouses have since been adapted to residential and retail use. These warehouses have not been used since the closure of the Sports and Social Club in the 1990s and remain as the only Camperdown Works buildings not in use despite several planning permissions for adaptation into residential use. The conservation deficit associated with the site is compounded by the challenge created by the 4m high railway embankment on the northeast side which also creates an additional challenge of bringing natural light into the building. The economic impact of the closure of the works to the Lochee area has been considerable and is confirmed by its SIMD Data Zone (S01007853) which is the 79th most deprived out of 6976 in Scotland and is the reason that the area is a regeneration priority for Dundee City Council.

### 3. STATE OF REPAIR

Due to the non-use of the building for circa 20 years it has fallen into disrepair and was listed on the Building at Risk Register in 2010. The building is in sound structural condition except for the roof of Warehouses 5 and 6 where the roof has started to collapse (Fig 18 and 21), and several trusses require closer inspection to allow appropriate repair. The failed and open roof and roof-lights to Warehouse 5 and 6 mean that the risk of collapse, pigeons and hence guano are ongoing safety issues in this area (Fig 20).

The walls are made up of sandstone and roof covering



Fig 6 and 7. 1872 and 1882 maps



Fig 8 and 9. Historic aerial image, Google Earth view



Fig 10 and 11. Conservation area, location plan



Fig 12 and 13. Movement diagram, Lochee consultation



Fig 14 and 15. Warehouse 5 and 6, former rail bridge

is Scottish slate, most likely Ballachuilsh. Stone cross walls that acted as fire barriers stand proud of the roof and have well-proportioned skew putts, skews, and flat-topped finials. The masonry and mortar are largely in fair condition for a disused building of this age, although there do appear to be areas of localized cement pointing (Fig 24) which has accelerated decay which will require repointing with lime mortar and possible limited stone repairs along with other areas to be agreed on closer inspection and on completion of stone and mortar analysis.

Iron pattress plates to external walls of Warehouse 14 and 15 in line with first floor joists assist the seating of the joists into the walls and stabilization by tying front and back elevations. One floor joist has been unseated in Warehouse 7 and has dropped at one end and wedged itself in place. There are also iron pattress plates tying the northeast retaining wall, visible on Wellbank Lane, and the internal side of the warehouse northeast wall for structural stability.

The rainwater goods have failed in several places (Fig 23 and 24) and as a result rainwater staining and vegetation growth and masonry decay are at varying stages of development throughout the building. Early roof repair and making good rainwater goods to stop water ingress and halt deterioration is planned as part of the proposed repairs which are due to start January 2023 and are being supported by Dundee Historic Environment Trust (DHET). The schedule of repair works includes making good rainwater goods, making good masonry and mortar exposed when rainwater goods are down, clear guano, provide safe access to the various timbers for structural engineer and timber specialist inspection to allow appropriate repairs to be designed and implemented to ensure structural stability and making good of slate covering, all on a like for like basis.

#### 4. DESIGN APPROACH

The client commissioned a conservation plan by a heritage consultant and reference to the plan helped me to understand the significance of the building, its site and context. After much deliberation exploring arrangements that would retain the rail platform, e.g., an atrium on the northeast side I concluded that the impact on the number of flats and therefore level of funding and impact on daylighting meant that this was not feasible. The use of two new external stair towers and platform accesses or 'pletties' on the other hand offered a space and cost-efficient solution. The platforms are to be kept clear of the warehouse, only connecting back at flat entrances to minimize the impact on the historic



Fig 16. Northeast elevation and former rail platform



Fig 17 and 18. Graffiti, Warehouse 5 roof collapse



Fig 19. Aerial view of Warehouse 5 and 6



Fig 20 and 21. Internal views of Warehouse 5

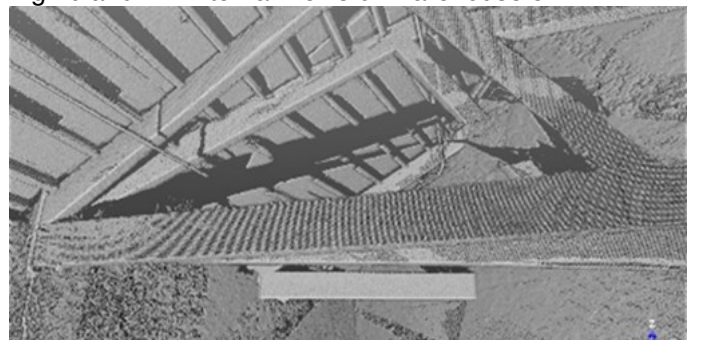


Fig 22. 3D scan, Warehouse 5 decayed roof timbers

fabric (Fig 30) and to help reinforce a distinction between old and new. They are to be on the same line of the railway platform and hence will offer a similar view of the impressive A Listed 'Cox's Stack,' which will reinforce a visual link to the heritage of the place, as well as referencing the rail platform and similar access arrangements used throughout Dundee's history and the local vernacular. Once the mix of flat types was agreed with Hillcrest Homes and I had feedback from the Community Consultation this allowed the design to settle and LBC and Planning Applications were duly submitted and approved by DCC. The proposal includes the removal of the rail platform and removal of some of the embankment to allow light and air to northeast elevation. Warehouses 5 and 6 are to be served by an internal stair due to the restriction imposed by the stone retaining wall springing from the rail bridge which is to remain as will the existing cast iron cantilevered platform to Warehouse 5 as a memory of the rail platform.

I have taken the approach that interventions and new build will be distinct (Athens Charter 1931) from and in keeping with the character of the original e.g., new windows openings will be minimal with secret lintel detail and simple pointed ingos. The external stair towers will be in a muted render to not detract from the warehouses. Similarly, a muted render has been proposed to conceal the below ground walls to be exposed until their condition is known. Warehouses 5 and 6 include attic flats which will include dormers with coated steel cladding to be in keeping with the industrial heritage. The platform accesses are proposed as simple concrete decks with painted steel frame and barriers with coated steel canopy to match the dormers.

The garden ground for clothes drying and main play area are to be on the retained section of railway embankment on the northeast side which has been designed to provide level access onto the former rail bridge which, although not currently part of the site, has the potential to be used to provide a connection through to adjacent housing, retail and Cox's Stack. A central Lobby space will accommodate a permanent interpretation display which has been proposed as part of the NLHF funding application. This will help to offset the loss of significance. The fenestration patterns have been set to line up with the rhythm of the existing openings and blind 'openings' as far as practicable and the number of exceptions to this rule have been kept to a minimum. The large format blind 'openings' have been proposed to open up to their original size as far as practicable and all of the existing large format railway platform openings have been retained and reused as window openings. New windows and doors are proposed timber with metal cladding again to be in



Fig 23 and 24. Failed rainwater goods, cement pointing



- KEY:**
- Circulation
  - 1 Bedroom 2 Person unit
  - 2 Bedroom 3 Person unit
  - 2 Bedroom 4 Person unit
  - 3 Bedroom 6 Person unit

Fig 27. Flat type diagram

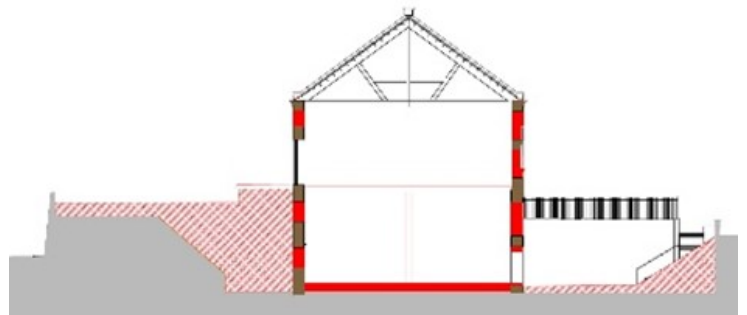


Fig 28 Existing section



Fig 29. Proposed section

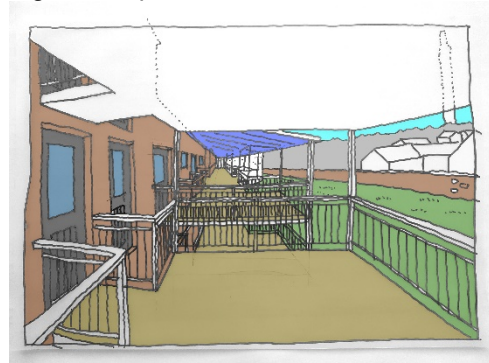


Fig 30. Platform access sketch

keeping with the industrial character of the place. The cast iron pattress plates are to remain as an integral part of the building's archaeology.

## 5. OTHER INFORMATION

HES Listing Reference: LB24975

BARR Reference 4539

DCC Planning References:

21/00856/LBC and 21/00857/FULL

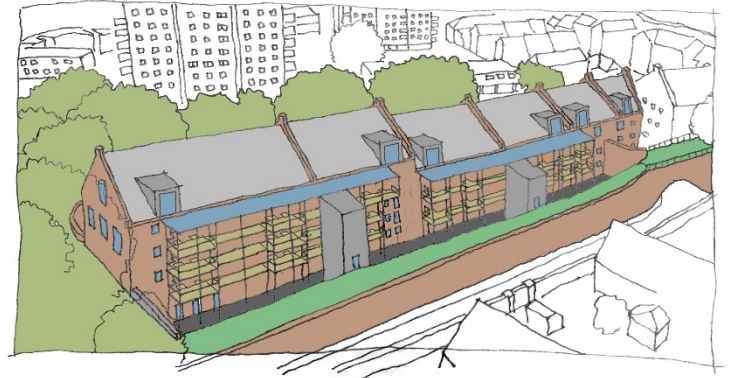


Fig 31. Northeast 3D sketch