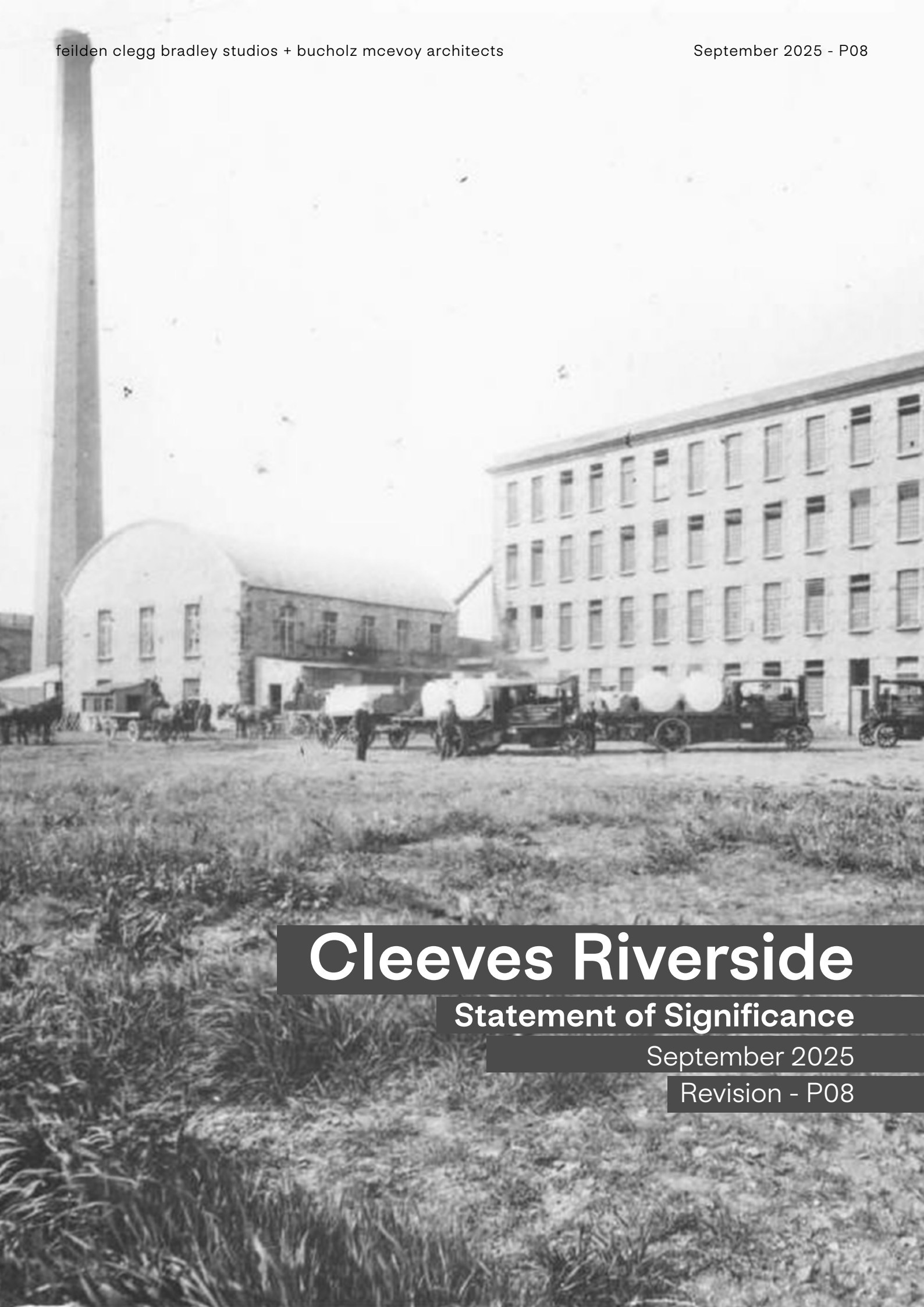


Cleeves Riverside

Statement of Significance

September 2025

Revision - P08

REVISION HISTORY

P01 - November 2020
Initial Statement of Significance building on ACPs work of 2015.

P02 - September 2024
Statement updated to collect information that had emerged since 2020. Site plan added to appendices.

P03 - May 2025
Review of each building developed following further on site inspections with more detail on phasing.

P04 - June 2025
Page numbers updated. Site plan from P02 issue appended.

P05 - July 2025
Refrence to and notes on the Shipyard Site wall included within section 13. Boundary Wall.
Section 5. Infiltration Gallery and Section 14 Reservoir updated to reflect new informaion concerning the submerged piers.
Section 18. summarising social history added.

P06 - August 2025
Issued for planning

P07 - September 2025
Fig.06 and Fig.07 updated to include the strucutres on the former Salesians Site and Shipyard Site.

P08 - September 2025
Description of the 'Curtilage' of Protected Structures expanded. page 1.
Fernbank House section updated to clarify relationship to the Flax Mill Complex. page 51.
Minor updates to descriptive text on page 79.

INTERNAL SIGN-OFF

Written + compiled by: James Sibson RIBA AABC

Research by: James Sibson and Oliver Bladock

Proofed by: Louise Thompson

Date: 22.05.25

Context

Introduction

This assessment has been prepared to guide proposals for the conservation and redevelopment of the Cleeves Factory. The assessment of significance has been undertaken by James Sibson RIBA AABC. James has 20-years of experience working in the historic built environment. He is a Architect Accredited in Building Conservation who has led the repair and reuse of listed buildings from pre- and post-industrial era. Many of these buildings are of national significance and several are of internationally significance. His works includes industrial structures from the late 1700s and 1800s as well as more recent designated buildings. He has prepared statements of significance for buildings dating from the 1400s through to designated buildings built in the 1960s. He has authored detailed statements of significance to inform development proposals for major site and buildings in Bristol and Huddersfield. He has also authored two Conservation Area Character Appraisals for Huddersfield and Islip, Oxford. James has been working on the Cleeves Riverside Project since 2019.

Statement Format

This document is split into two parts. The initial section describes the buildings and their significance. The second part of the document describes the history of Limerick and a narrative of the evolution of the site relative to its operation and the people who worked there.

The observations of the previous reports are not duplicated within this document save to capture matters that are relevant to the assessment of significance of the site and buildings.
Two structures are attributed designation by their RPS and NIAH listings.

Record of Protected Structures (NIAH):
264 / 21512053 – Main Mill Building
265 / 21512059– Octagonal Brick Chimney

The complex holds Regional Significance.
The Main Mill is described as embodying 'Architectural, Artistic and Historic Interest' and the Chimney 'Architectural and Technical Interest'.

The site is not is not located within an Architectural Conservation Area.

Curtilage

"By definition, a protected structure includes the land lying within the curtilage of the protected structure and other structures within that curtilage and their interiors." *13.1.1 - Chapter 13 - Architectural Heritage Protection Cuidelines for Planning Authorities.*

The NIAH description for the Mill refers to the 'vast early industrial building complex'. This description can therefore be used to help define the curtilage for the 'Main Mill' and 'Chimney Stack'. As set out in the guidance, the structures within this curtilage of the complex therefore have potential to inform the significance of the Protected Structures.

Reference to 'early industrial building complex' allows the footprint of the mill complex of the mid to late 1800s to define the extent of land associated with the Mill and therefore, its curtilage. The 'complex' is further described under the Chimney appraisal as the 'Lansdowne Spinning Mill' which also identifies the ownership and operation by the Russell family (flax processing) and Cleeves family (condensed milk manufacture). This further provides constraints within which it has been possible to define curtilage has been defined and therefore identify structures of interest. This approach has informed the assessment of phasing and significance of the site and the many buildings, structures and features within.

Fig.1 View from across the dock, 1890

Executive Summary

Methodology

The significance of buildings has been assessed in accordance with the criteria set out in the Guidelines and the Planning & Development Act 2000 as amended and in line with recommendations set out in Irish guidance 'Architectural Heritage Protection – Guidelines for Planning Authorities' 2011.

This assessment has been undertaken in two distinct phases relative to the proposed re-development of the site. A 2020 desk-based assessment was prepared building on the earlier work by ACP(2015) and Rynne (2005). The 2020 assessment drew upon archival information and published records. This review included reference to:

- National Inventory of Architectural Heritage
- Aerial Photographic Mapping
- Documentary Sources
- Previous Architectural Heritage & Conservation Reports

In 2023 a series of surveys were proposed to record the existing buildings and their condition. In 2024 these surveys were consolidated by the detailed investigations of the Main Mill and surrounding structures afforded. This further information has underpinned a comprehensive review of phasing and clarity on the extent of building fabric surviving from each period of operation.

Assessing Significance

Significance has been assessed under the guidance within the NIAH Handbook and 'Architectural Heritage Protection – Guidelines for Planning Authorities' 2011. The designations of significance have been separated into 'high', 'medium', 'low' and 'negative' the critical observation being that not all of the site's history imbues heritage significance. Significance is determined relative to the site's special heritage interest stemming from its development in the processing of flax and later, condensed milk.

This assessment seeks to place each building within the context of the 'early industrial building complex' and to identify its presence relative to the phases of ownership and operation. By identifying the historic evolution of the site and its buildings, the assessment can offer context to what can be described within the curtilage of significance.

The assessment reviews each building and offers observation of where interest lies and significance relative to the sites special interest.

Fig.2 View from Wellesley (Sarsfield) Bridge, 1870

Heritage Interest

Heritage interests are defined within 'Architectural Heritage Protection – Guidelines for Planning Authorities' 2011 and described under the following headings. Each has been set out here as an abridged summary drafted to focus on how they may apply to the Cleeves site:

Architectural interest – Buildings consciously designed to contribute visually to the character of their setting, beyond the boundaries of the curtilage on which they were built. They respond to the street, road or landscape in which they are situated. Urban design schemes initiated in the past by civic authorities or landlords, aimed to present a more fashionable or coherent appearance to towns or villages, often to stimulate economic growth.

Historic interest – Boundaries in towns and cities offering a record of past urban life. Historical layouts and relationships may be of equal importance to the intrinsic architectural or social character or may be vital to an appreciation of a protected structure which is central to the area. A large-scale purpose built complex of structures can be of socio-historical interest.

Archaeological interest – The retention of archaeological deposits in situ with targeted excavation and conservation. A conservation strategy can protect standing structures.

Artistic interest – The consistent use of crafted materials such as walling and other building materials.

Cultural interest – Public spaces which may facilitate forms of behaviour. Spaces formed to facilitate marks, fairs or outdoor theatre. Some spaces, over time, may have become the focus of cultural activity.

Scientific interest – living elements that form a habitat or an ecosystem that creates a spatial enclosure.

Technical interest - An industrial-heritage landscape designed around a manufacturing process.

Social interest - Special social interest may be found in the juxtaposition of dwelling in existing settings and evidence of the occupants presence.

Site Interest

The site's purpose has been in processing and manufacture, first with flax and then milk. In this respect, significance is largely based in 'Historic', 'Architectural', 'Artistic' and 'Technical' interest. To a lesser extent significance is also found in 'Archaeological', 'Scientific' and 'Social interest' with this present in the recorded history of the site or fragments of past occupation and use, some of which relates to flax processing. 'Cultural interest' has not been identified.

Industrial Building Complex Significance

Summary of Significance – The site contains many buildings some of which retain fragments of the early structures of the Flax Phase. Reflecting the scale of ambition for the reuse of the Mill complex, each building has been appraised individually and by reference to the sites special interest and significance.

For the most part this assessment draws similar conclusions to that of the 2015 assessment. Where difference in significance occurs, it relates to the interpretation of the historical development of the site with an acceptance that not all historic changes have added to heritage significance and in fact some have served to erode the legibility and importance of the site and its designed intent for flax processing. This more detailed assessment has attributed a general limit of positive significance to works before 1927. While this date does not prevent later elements having significance, it does represent both the end of the period in which activities had historical significance and the start of changes that, for the most part, have eroded the legibility of the site. The exception to this rule is the Workshop, which dates to the late 1930s or early 1940s and is of interest for its form of construction.

Structures from the period of the Flax Mill retain high significance as do those of the initial phase of the Cleeve's operation from the period 1884-1895.

Later alterations have been the subject of investigation and analysis to determine how they inform significance. This has been central to informing a balanced assessment of any potential impact or harm that may be caused by their alteration or removal.

Conservation Strategy and Heritage Gain

There is much on the site that dates to its operation post 1927 and which imposes a negative impact on the legibility and authenticity of the site as a unique or rare example of formal, designed Irish industrial architecture. The peeling back of the later accretions will serve to enhance the legibility of the core asset, generating 'heritage gain' by revealing the site in an earlier form.

The heritage gains that can be made will be most successfully achieved by balancing the vision for reuse with the careful retention of significant historic fabric. This statement has been prepared to guide the development of understanding of both the structures and the site in order to enable the preparation of sensitive proposals for the reuse of the buildings and the site. This will inevitably require change and intervention into the historic fabric. Use of this assessment will support a scheme that can place the conservation of heritage at its core.

Contents

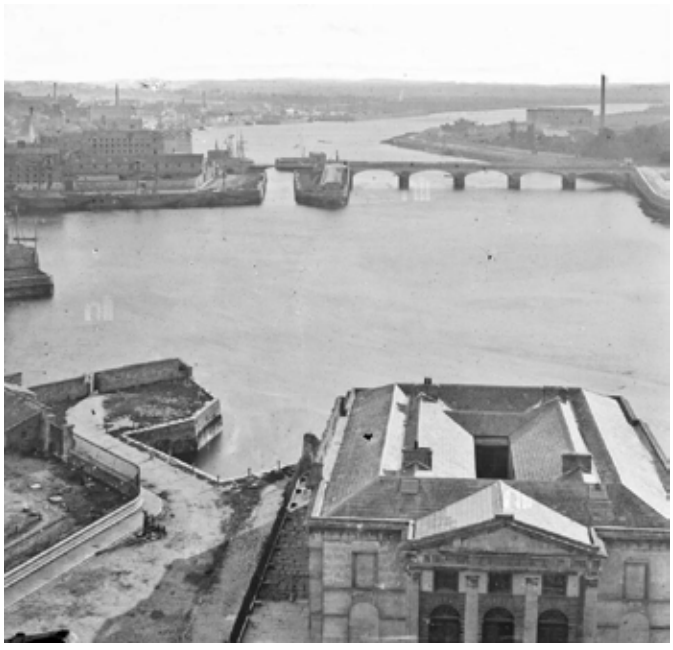


Fig.3 View from the Custom House down the River Shannon, 1870

List of Figures

List of Figures

List of Figures

Fig.4 View looking northeast back across the city

Identification of Existing Buildings

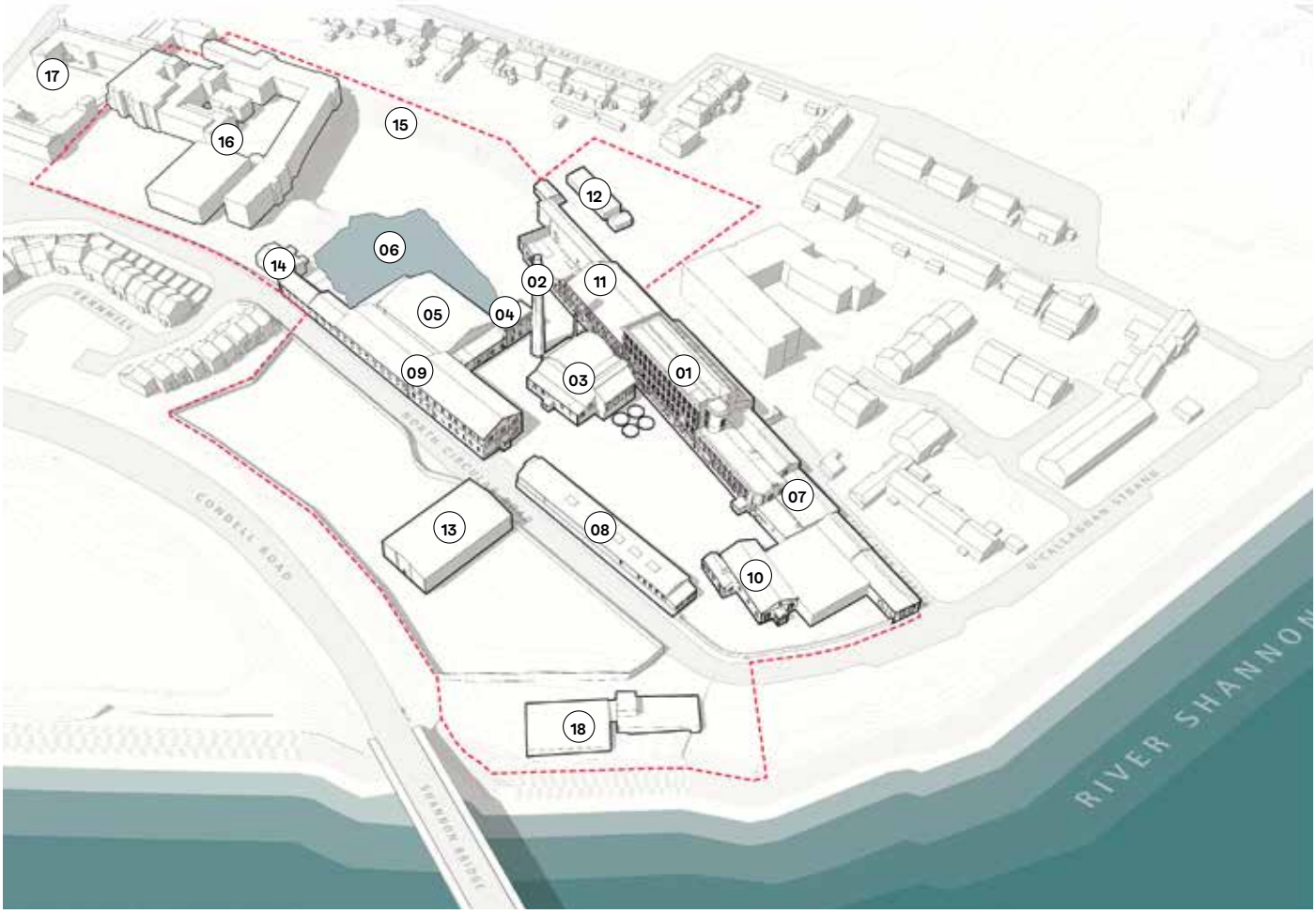


Fig.5 Diagram identifying the existing structures on the site

01 Flax Mill
02 Chimney Stack
03 Boiler / Engine House
04 Water Tank Building
05 Infiltration Gallery
06 Reservoir
07 Linen Store & Offices / Dairy Buildings
08 Workshop
09 Cheese Plant/Packaging/Store (Long Building)
10 Offices and Labotatory Building
11 Weaving Mill / Cold Store
12 Upper Reservoir
13 South Warehouse / Shipyard site
14 Houses
15 Quarry Face
16 Salesian Secondary School - Fernbank
17 Salesian Primary School
18 Rowing Club

Phasing of Buildings

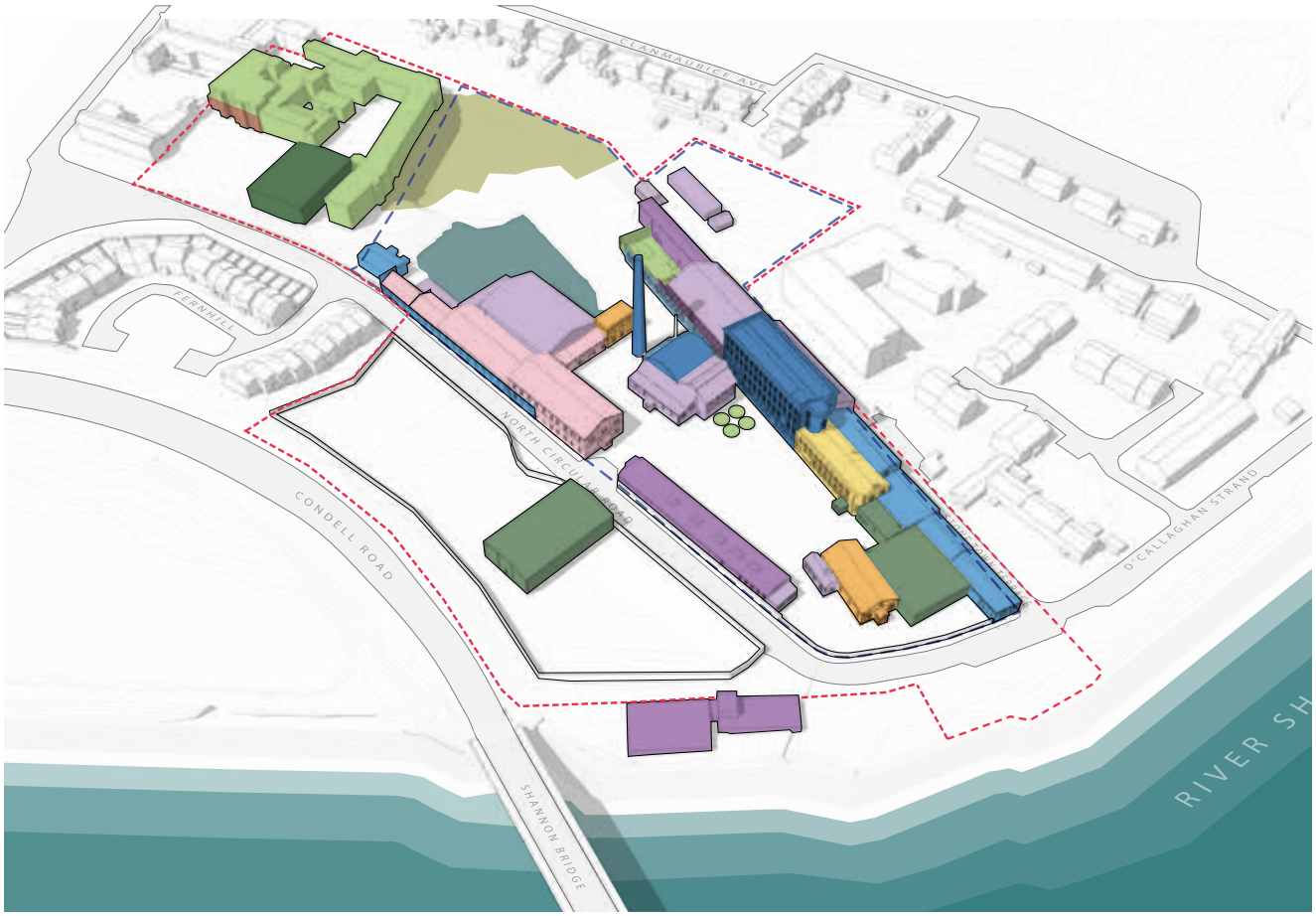


Fig.6 Diagram identifying the age of the existing buildings on the site

Pre Flax - Quarrying
1833

Phase 1 - Flax - 1850 - 1876
1851 - 1853
1854 - 1864
1865 - 1876

Phase 2 - Flour
1877 - 1884

Phase 3 - Condensed Milk
1881 - 1884 (shipyard)
1884 - 1899
1900 - 1927

Phase 4 - Dairy Disposal
1927 - 1950
1951 - 1960
1961 - 1974

Phase 5 - Golden Vale
1975 - 1986
Post 1986

Flax Mill Curtilage
Site Boundary

Timeline of Occupiers, Users & Alterations

Pre-Development Phase (1833 - 1851)

1800	Dry dock and shipyard site present on early maps
1830s	Ferry Cottage
1840	Dock site expands

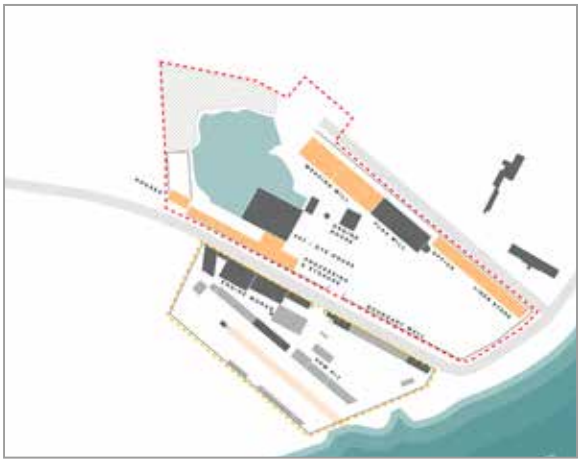
Phase 1 - Flax Mill (1850 - 1853)

1851 - 1853

- Main Mill
- Vat-House / Dye-House (Infiltration Gallery)
- Boiler House
- Chimney (replacement)
- Storage

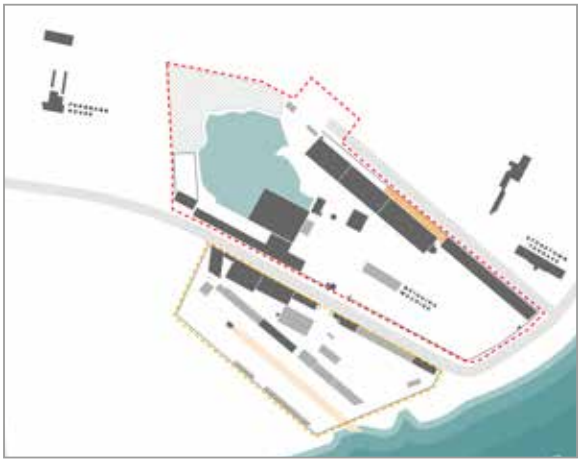
Phase 1 - Flax Mill (1854 - 1859)

1854 - 1855	Weaving Mill
1855 - 1858	Office, Counting House and Linen Store
1856 - 1859	General operation
1858	Shipyard use altered



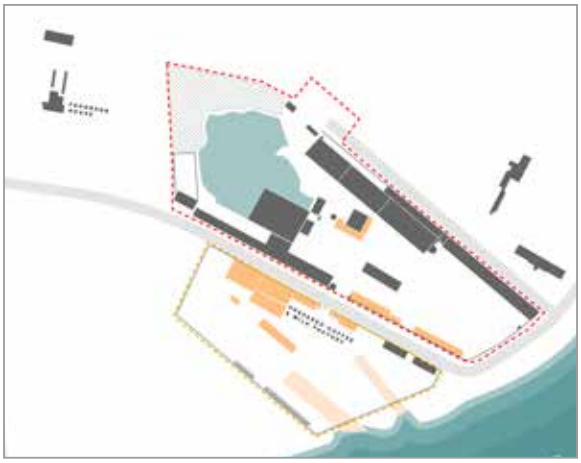
Phase 1 - Flax Mill (1860 - 1876)

c.1865	First Rear Extension to Main Mill
1865 - 1870	Businesses collaborate to boost processing
1870	End of flax processing
1870 – 1877	Vacant
1877	Equipment sold off



Phase 2 - Flour Mill (1878 - 1884)

1877 – 1882	Flour Storage
1870s	Thomas Cleeve tenant on the Ship Yard Site
1880s	Wilkinson family build Fernbank House



Phase 3 - Condensed Milk (1884 - 1890)

1884 – 1889	Milk processing
	• Milk processing moves to site of flax mill
	• Site is adapted and developed
1884	Frederick Cleeve moves into Fernbank House
1890	Chocolate / toffee factory at the shipyard site

Phase 3 - Condensed Milk (1890 - 1927)

1896	Land to the west of the factory sold to Cleeve for use as a pump house and spring
	Dairy building extended
	Office and lab building added
1918	Cleeve's Factory workers unionise
1919	Limerick Soviet
1923	Cleeve's Condensed Milk Ireland is liquidated

Phase 4 - Dairy Disposal Company (1927 - 1940)

1927	Factory in state ownership and operation
	Storey added to former Weaving Mill (cold store)
	Frederick Cleeve sells Fernbank House to the Salesian Sisters
1930s	Workshops built
1940s	Boiler house extended
	Upper resevoir added

Phase 4 - Dairy Disposal Company (1940 - 1955)

1950s	Site rationalised as part of update to operations
	Pitched roof added over the Cold Store
	Dye House replaced with reinforced concrete structure over Infiltration Callery
	Salesian School moved to Fernbank House

Phase 4 - Dairy Disposal Company (1955 - 1974)

1960s	Long building on site of cheese plant largly demolished and reinforced concrete structure added
	The Salesian Sisters undertake major expansion

Phase 5 - Golden Vale (1975 - 1986)

1970s	Operation moved into Golden Vale ownership. The buildings are altered and adapted to permit ongoing operation.
1985	Shannon Bridge constructed.
	Works substantially impacts the former shipyard site. Historic buildings largely cleared.

Phase 6 - 1986 - Present

2011	End of processing at the site
2015	Site purchased by Limerick Twenty Thirty
	Housing built on the site adjacent to the former shipyard site
	Salesian School closes

Significance of Buildings on Site

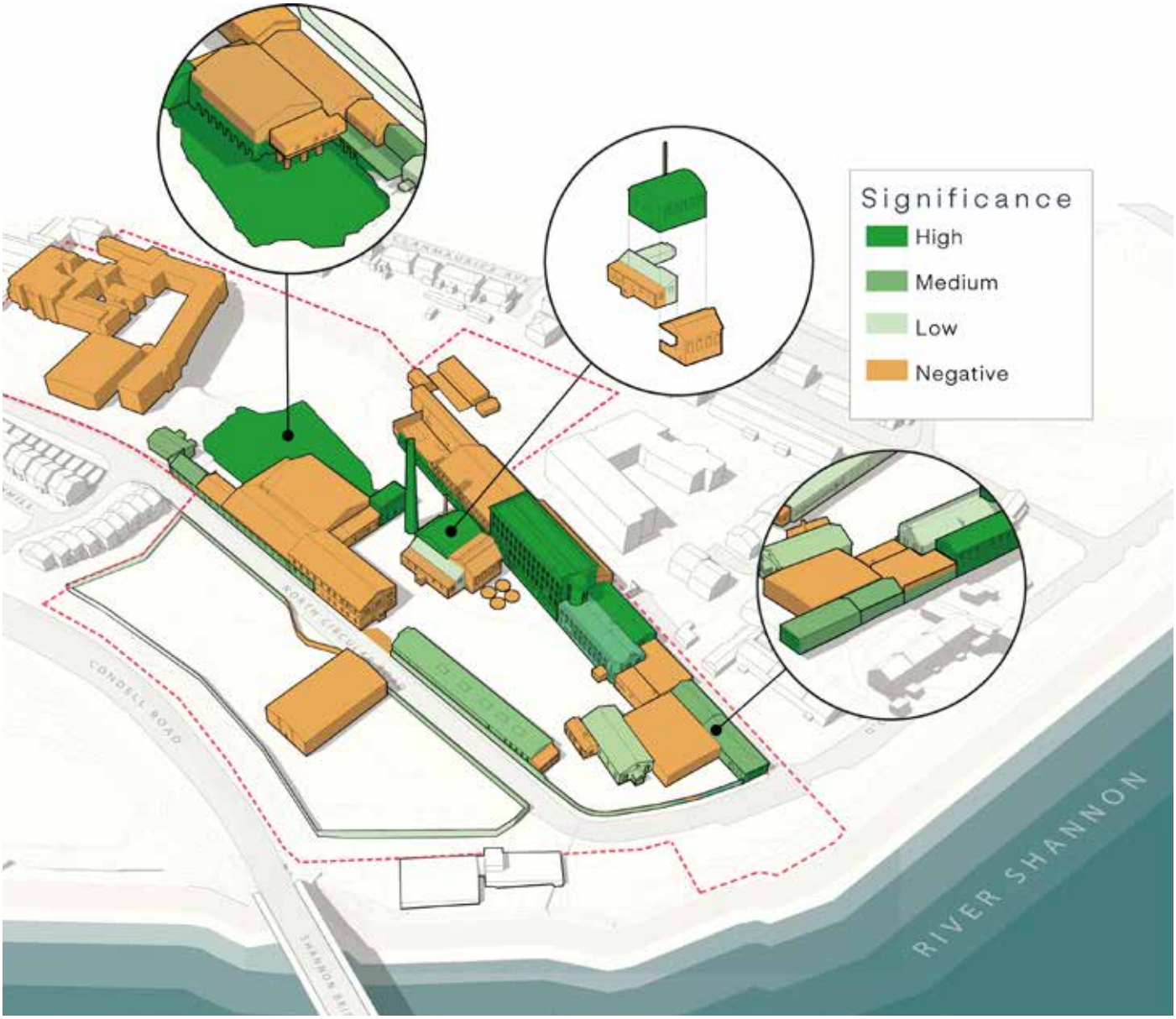


Fig.7 Diagram identifying the significance of the existing buildings on the Flax Mill site

Assessment of Significance

FACTORY COMPLEX

Historical analysis has indicated that the original intention was for a mill complex capable of processing raw flax through to the weaving of linen. The original concept was largely and substantially realised between 1850-1855. As a surviving example of full-scale mechanisation of a fabrication process, the complex of buildings retains collective significance and is of Artistic, Architectural and Technical interest.

1850-1877 - The complex is known to have been contained across two sites both originally operated by J.N.Russell. The flax mill exploited the shipyard site for its construction and later its operation. In the 1880s the shipyard became host to elements of Cleeve's operation prior to expansion on to the disused flax mill site.

1884-1927 - The operation of the site for the processing of milk holds Architectural and Technical interest. The operation of the factory for the processing of condensed milk also retains significance. There is Social Interest arising from the activity of the workers at the conclusion of operation in 1918 – 1923.

1. SETTING

The site is located on the west bank of the River Shannon opposite the city. The area was largely undeveloped prior to the opening of the quarry in 1833. A shipyard existed opposite the site with some housing within the surrounding countryside. Most urban spread focused further north near Thomond Bridge. In the 1850s, the site would have been largely exposed to the weather with a clear aspect over the southern area of Limerick city. Near the site, the development of housing occurred after the opening of the Lansdowne Mill in 1853. By the mid-1900s the surrounding area was a mixture of housing and other low-rise buildings.

The setting of the protected structures is defined by the sites historic curtilage which aligns with the line of the boundary wall and topography cut into the hill site. The shipyard site to the south-east once informed the site's setting however the arrival of the Condell Road and construction of the Shannon Bridge in 1988 redefined the context denuding the site of this aspect.

Setting Significance

Setting of the protected structures is from within the site's curtilage. The complex has a clear sense of enclosure dominated by the Main Mill and Chimney. This has been impacted by the accretion of later buildings obscuring the legibility of the Flax Phase structures. The prominence of the Main Mill and the Chimney hold Architectural, Artistic and Technical interest that is considered under the assessment of each asset. The presence of coeval structures and features is important adding to the sense of the place and its legibility as an industrial site.

The placement of the complex arises from the convenience of the quarry, Shannon, fresh water and wider arable land for the growth of flax. The streets around the site have not influenced its design and have little relevance to the site's heritage interest.

The setting as assessed from within the site's curtilage has medium significance founded in the collective presence of coeval structures and features of the Flax Mill Phase.

2. MAIN MILL (1) - 1851-53
Protected Structure reference - 21512053

The designer of the mills is not known. The form and layout of the main mill is a good example of a steam powered mill typology.

The mill is noted for its fireproof construction, large windows and large spiral stone stairs to afford fire compartmentation of the floors while maintaining good access. Within the building contemporary records describe the line shaft driven by a flywheel twenty feet in diameter[1] with the engine located in the first two bays of the ground floor of the mill.
The construction of the main mill is not unique in its time but does represent a design and technical solution that is now rare. The iron frame construction with load-bearing masonry walls and jack arch floors have 'Artistic interest'. The hollow structure and ventilation strategy that exploited openings below the windows in the external walls are unusual. Similarly the hollow iron columns link to timber box vents in the roof void that once vented through the roof. The ventilation strategy will have afforded air movement creating a cold draft in a wet environment. The dimension of the vents are insufficient to have allowed for the drawing off of dust and fibres as described in contemporary accounts. While they are unlikely to have worked as intended they retain 'Technical interest' nonetheless.

1 The Freeman's Journal, Monday, August 15, 1864.

Rynne's 2005 appraisal adds to this description:

> *A four-storey, 15 bay, 'integrated' flax spinning, with fire-proofed flooring and a fire-proof spiral stair tower at its southern extremity. The main body of the building is constructed of Belfast brick, clad externally with local limestone, cut stone being used to dress the elaborate window and door openings. – On the south-facing elevation, all of the original wooden frames survive, which are set into throw-light opes typical of Ulster linen and cotton spinning mills of the early 1850s.*

Further detailed description is contained in this 2005 report in appendix 1.

Fig.8 Interior of the Main Mill, second floor

Structure

The fireproof construction of the Lansdowne mill is firmly based on established principles exhibited in earlier mills. The load-bearing outer walls are built of dense Limerick limestone quarried on site and laid in a site-made hot mix lime mortar with sand taken from the Shannon[2]. Lansdowne was one of the last to be built of local stone with later mills typically of brick.[3] The stone is dressed six sides, carved units with drafted margin and rock-faced body to jambs and flat arches and in the body of the wall, coursed units of various sizes. The window surrounds are formed of alternating tall and narrow stones each with iron dowels between the units. The north-west elevation is of rough undressed stone. Rynne's 2005 appraisal refers to a structure of Belfast bricks which were presumably manufactured in Ulster and clamp kilns[4]. Bricks are present at the window reveals and used in the formation of the jack arches. The second phase of the Weaving Mill 1855 appears to contain more brick than that of the Main Mill indicating a move away from stone by latter 1855 or an improved supply of brick. A cast iron frame of columns and beams with brick jack arches spanning between the beams to create a load bearing floor with fire-proof properties.

The structural arrangement comprises 15 structural bays with 13 columns. The first two bays are approx. 2925mm (approx. 9ft 7in) forming an engine or transmission zone within the mill. The remaining bays are at approx. 2753 (approx. 9ft). The plan is symmetric with north bay of the centre column line approx. 6200mm wide and the bay to the south approx. 7380mm.(Fig.9)

Ironwork

The frame of the mill was cast by John Rowan and Sons of Belfast in 1851 and 1853. John Rowan (1787-1858) also manufactured machines and had in 1835 sought backing for a traction steam engine, a venture that proved unsuccessful.

Cast Iron Elements - The columns are of cast iron with simple capital. Casting wall thickness of approx. 35mm. Columns are hollow from bottom to top and designed to form a continuous void utilised for ventilation. The columns are designed to slot together. The lower column of a stacked pair has a spigot that extends upward. The beam ends clamp around the spigot and rest on the column head. The

2 ACP - Building Mortar Render Sampling Analysis 6th Feb 2025
3 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P228.
4 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P170.

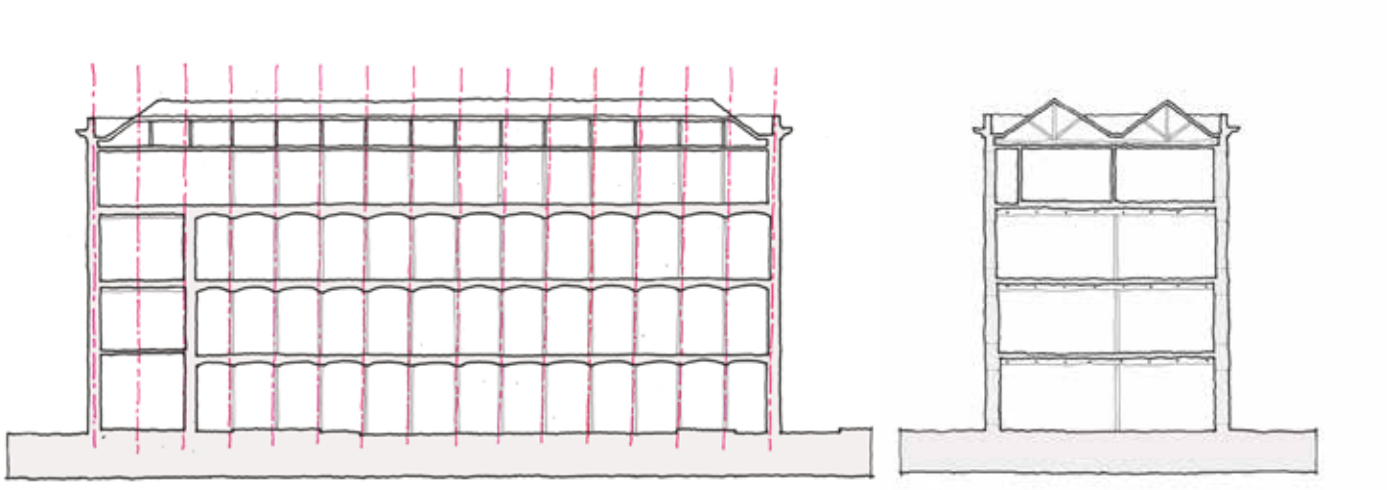


Fig.9 Sketch sections though the main mill

foot of the column above is socketing over and sits onto the beams.(Fig.10) The top of the columns at Level 03 include a shoe that is socketed into the column head. This shoe carries an oak block onto which the roof assembly is secured. Offset from the column heads at Level 03 is an integral cast vent scoop / branch, which allows for air to be routed into the hollow of the column assembly. (Fig.11) This is connected to the roof void via a slim timber box that rises into the roof void above. Columns at Levels 00 and 01 include castings identified for 'York Street Foundry, Belfast' dated 1851, with those on Levels 02 and 03 dated 1853. Columns are coated in paint with a bitumen primer substrate which may be the foundry coating.

Wrought Iron Elements - Wrought iron tie rods provide restraint between beams with connections concealed within the depth of the brick jack arches. There are seven rods in each bay. Each rod is 20mm dia from square profile. Rods loop though the beams at approx. 1800mm centres across the plan. The rods are brought tight with the use of iron wedges where they loop though a penetration in the beams.

In addition to the iron frame an iron flat bar was embedded in the external walls. The band extends around the whole plan at mid height across windows on each level. Formed of lengths riveted and lap joints embedded within the masonry piers. This feature of the structure has become the principal cause of displacement in the external walls due to iron corrosion and masonry jacking.

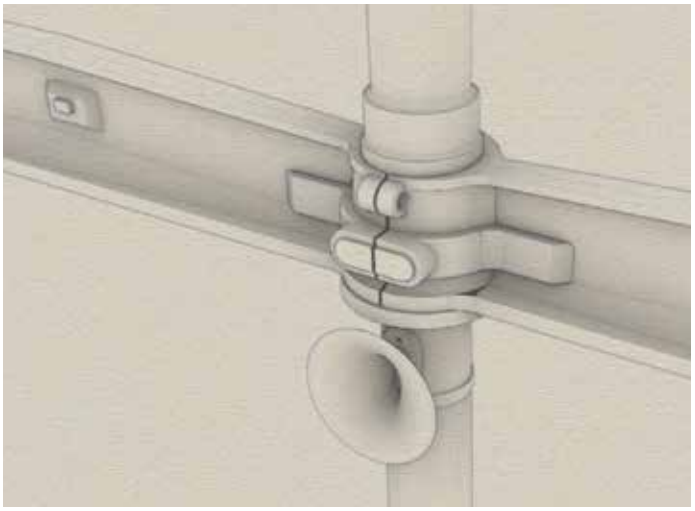


Fig.10 Model of the column and beam assembly with air vent to column

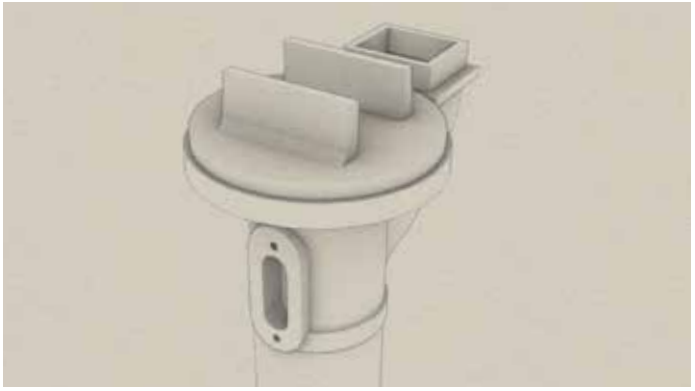


Fig.11 Model of third floor the column head at truss bearing

Fig.12 Window bay with iron band and jacking of masonry

Roof, Parapet and Gutters

The mill is topped with a solid brick masonry parapet with Roman cement render finish. A dramatically over-scaled torus profile cornice extends around the whole of the building. It is presumed to be formed of stone cantilever from the wall head and secured by a substantial parapet wall set over. Later phases of consolidation appear to have been executed in cement applied over the original. Behind the parapet two pitched roofs drain to a parapet gutter that currently drains at two locations. The roof has been recovered in asbestos mineral slate. The gutter is formed from tapering cast iron components. Each is unique and individually numbered. Unlike the structural ironwork, the gutters were cast in Limerick by H.Lee & Sons. (Fig.14)

Fig.13 View along the north parapet.

Fig.14 Gutter casting foundry plate

Windows

A number of the original windows survive. The frames are of a close-grained softwood that has proven to be highly durable although the windows are in poor repair. The frames are 55mm deep with 17mm glazing bars supporting 60 panes of glass. The upper portion of the windows comprise a centre pivot sash with flush jamb at the side and head. The window is set over a stone cill and behind a rebate in the masonry. It offers some degree of weather resistance but was probably made to allow for good ventilation. Each window had a fixed lower portion and a centre pivoting upper portion.

Skills

Rynne notes that the Great Famine of the mid 1840s created a loss of skills in the labour force. This affected weaving and gave rise to a need for mechanisation of the weaving process.[5] The benefits of greater capacity through machine manufacture were clearly the focus of larger factories of the 1850s. The layout of the Lansdowne mill will have been influenced by the operation of the machines that it was to house.

Building Arrangement

Knowledge of the extent of processing on the site can inform a deeper understanding for the extent of the original factory and the form of the fragments of some of the buildings which were to be greatly altered in the following century. The manufacturing process dictated the layout of the mill building and wider factory. The 1864 article in the Freeman's Journal offers a description of the operation of the mill which is summarised here:

Main Mill with direct link to the delivery yard.

Ground floor:
Flax received and processed in the 'roughing room'. Hackling and sorting room which contained five machines (capable of hackling 10,000lbs per day) operated by six boys before passing on to Sorters (16 men working in a cloud of dust). The engine is noted to occupy the first two bays of the mill.

5 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P217.

Then onto the Preparing Room described as spacious with a number of machines operated by women. The flax is passed through a spreading board before moving through the machines and emerging as a regularised tape called a 'silver'. Each silver of 800 – 900 yards is 'doubled' with 29 other silvers and drawn through. Once 'doubled' a single regularised and purified tape is created. It is then drawn and then rolled to achieve a product fit for spinning.

First Floor
The flax is taken on rolls from the preparation room to the spinning room. Thirty machines are operated by 90 women.

Second and Third Floor
Above, the second and third floors were used for wet spinning. The wet process required the floor to include drainage running the length of the building with the operatives working in bare feet and with leather aprons. The floor was cambered to encourage water to drain away. The roof space was typically used to house large cast iron water tanks to feed the spinning machines.[6]

The yarn that was created in the spinning mill was then taken through a boiling and drying process. It was then cleaned and strengthened with a paste including tallow on a brushing machine, then steamed and dried ready for use on the loom.

In the (11) Weaving Mill were 128 looms weaving 60 yards of cloth a day.

Later Changes - Condensed Milk and Dairy Disposal Phases

The Main Mill was stripped of its flax processing machinery following the closure of the operation in the 1870s. Processing of flax and production of linen on the site was so short that the buildings are unlikely to have been subject to much alteration during the Flax Phase. Most changes came with the conversion of the building to meet the needs of milk processing. A lift was installed in the 1950s and the rear of the building was added to with a full length extension

Fig.15 Photo of the site 1954 - Alexander Campbell Morgan (c)

Fig.16 Photo of the site 1955 following the rebuilding and addition of a further storey to the rear extension

in 1955. This was adapted and altered right up until the end of milk processing in 2009. These changes impacted the original fabric and were on the whole negative. Despite these changes, the Main Mill building retains its original form and layout with the second floor surprisingly intact.

Main Mill Significance

The Main Mill remains a key feature of the site and embodies the clearest elements of interest on the site. The Main Mill and other elements of the original flax factory complex retain 'high significance'. There are elements from later phases of use on the site that can be peeled back to better reveal the earlier elements from the Flax Phase. The post 1924 elements are of 'negative' significance.

6 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P231.

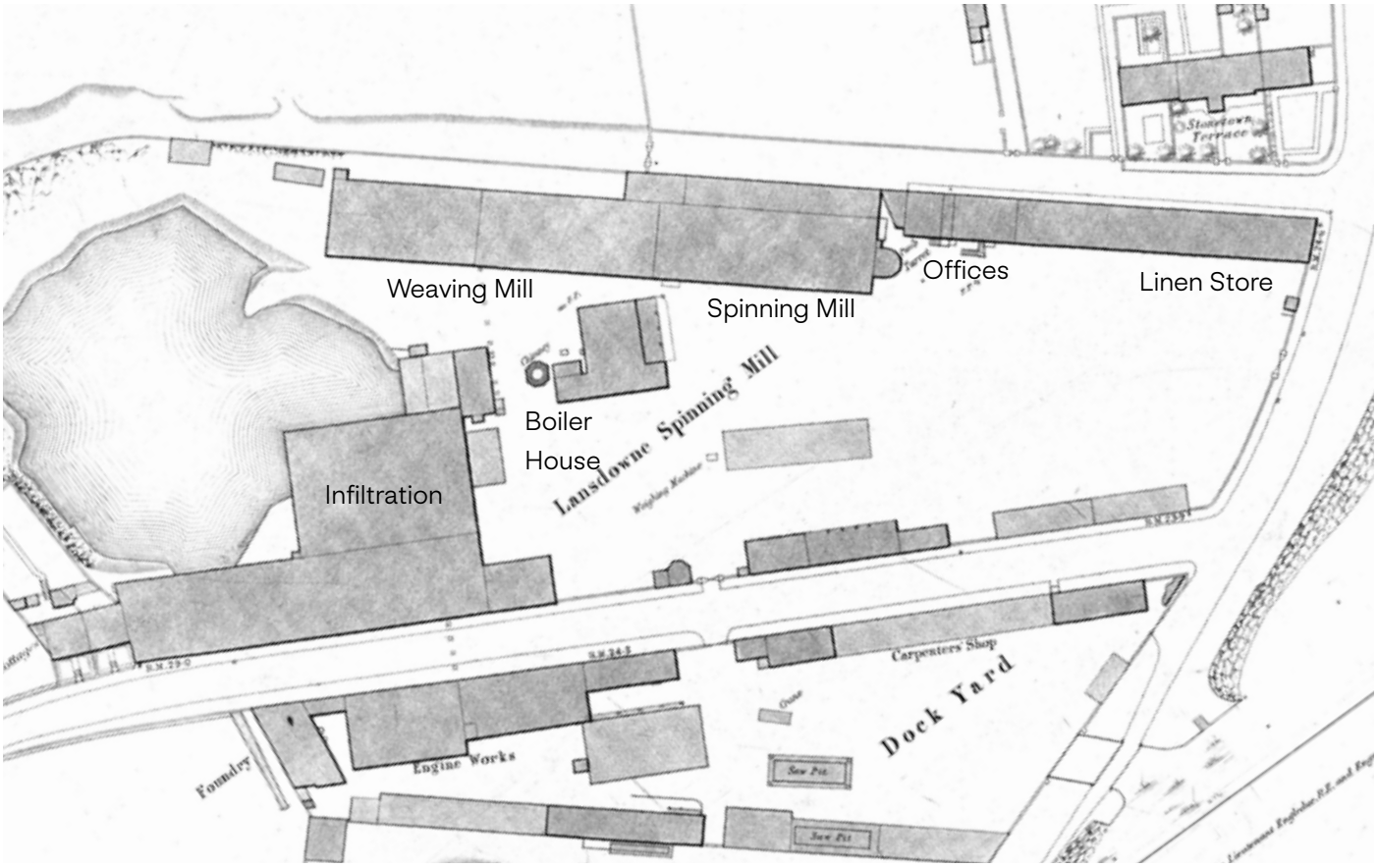


Fig.17 1870 Map of Limerick - Extract of the Lansdowne Site showing the extent of the mill buildings at the time

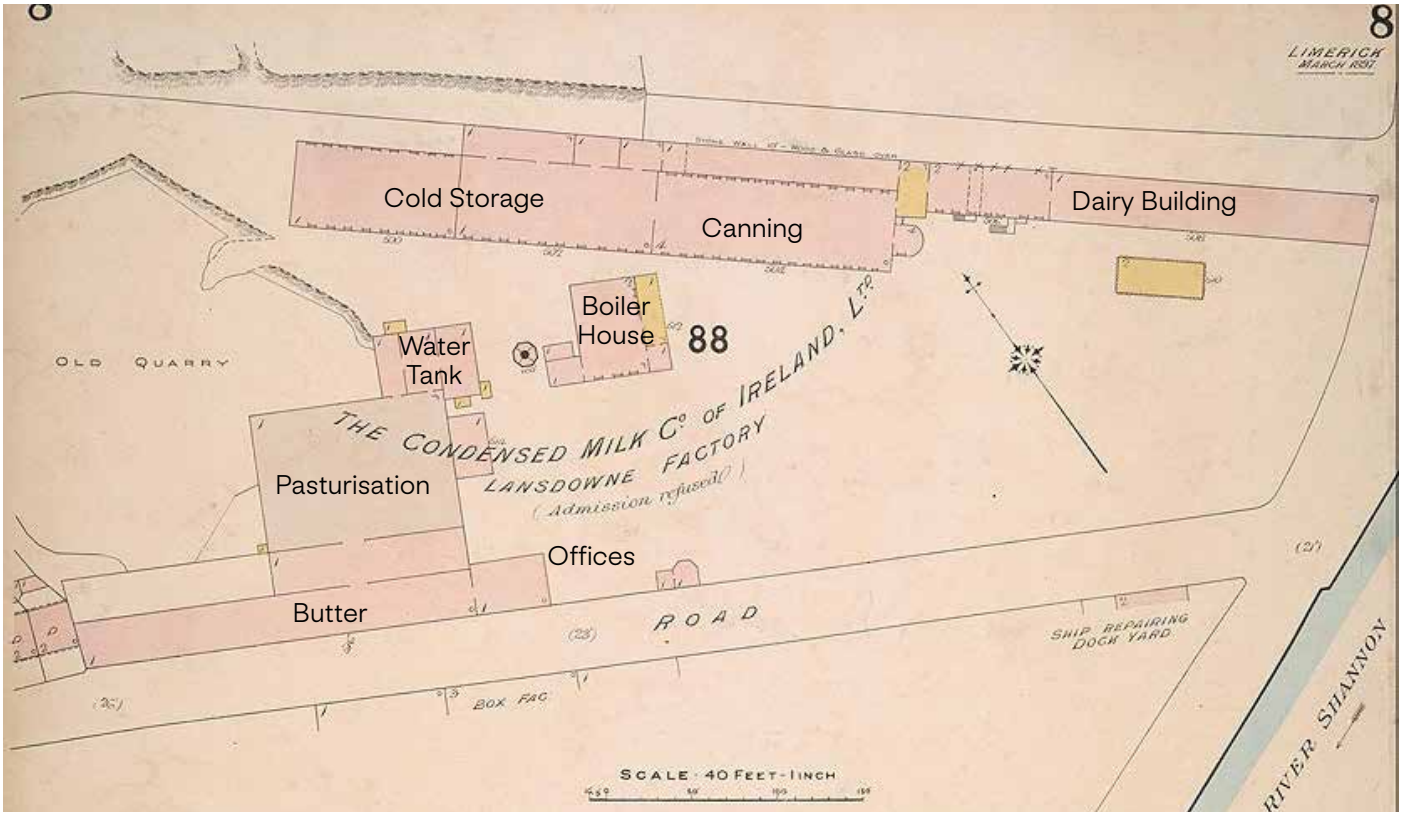


Fig.18 1897 Coad Insurance Map

Main Mill - 4 storeys / Weaving Mill 13 and 10 bays both single storey / Offices 2 Storeys / Linen Store single storey / Rear buildings to both main mill and weaving mills, single storey. Infiltration Gallery single storey, etc. The majority of the site is largely as found at the end of flax spinning in 1870 save for building repurposing and some small scale additions such as the timber framed buildings colored yellow on the map.

3. WEAVING MILL (11) - 1855
Cold Store

The weaving building is largely derelict and has been the subject of substantial change. Its role in the original operation of the site is key and as such it has 'Historic', 'Artistic', 'Architectural' and 'Technical interest'. Due to its current state of repar and its function it may also be described as holding 'Archaeological interest'.

The weaving buildings were built in quick succession. The first of 13 bays in 1854 and the second of 10 bays in 1855. The first is built in the same materials and form as the Main Mill, complete with iron columns, beams and jack arches, as if in readiness to be extended upward. The second is of stone with more brick present in the inner part of the wall. Only the front facade survives.

The first 13 bay weaving mill featured a continuous gap in the soffit that can be seen on a photo of c.1900 (Fig.19) with a glass lantern over. This will have provided much needed light above the weaving looms allowing the quality of the linen to be managed.

Later Changes - Condensed Milk and Dairy Disposal Phases

Both weaving buildings are recorded as single storey on the 1897 insurance plan. This is well into the milk processing phase and after the major renovations of 1887-93. Change to the form and envelope of these buildings appears not to have occurred until after Cleeve's ownership.

The weaving mills were substantially altered after 1927. Under the management of the Dairy Disposal Company (1927-1970) the complex was subject to adaptation and modernisation with most changes appearing to occur in the 1950s. Aerial images from 1947 (Fig.20) show the latter 10 bay building with a second storey and a flat roof. The earlier 13 bay building appears to have a more complex roof-scape. By 1951 the 13 bay building had been enveloped under a single roof. (Fig.21)

The aerial images from the 1950s showing the roof in a tone matching the other roof suggest that this roof was likely new in 1951.

The changes to the Weaving Mill that occurred during the 1950s align with development in other parts of the site. These spaces remained functional

Fig.20 Photo of the site c.1947

Fig.19 The Milk Separating Room c.1900. Formerly part of the Weaving Mill

Fig.21 Photo of the site c.1951

in some form with the building structure and fabrics being managed as they decayed. Into the late 1900s and early 2000s the interior of the 13 bay mill was lined and used for cold storage. By this time the 10 bay building had lost its roof, second storey and first floor serving as little more than a storage yard. The Weaving Mill is currently in a very poor state of repairs nearer ruin tand building.

Weaving Mill Significance

Where the structure and envelope remain largely as built in 1855 the buildings will retain 'high significance'. Where the building is little more than a masonry façade it retains significance only in respect of its value to the wider complex. The later alterations which date to after 1927 are deemed to impose 'negative significance'.

Fig.24 Within first weaving mill, opening in the floor for roof lantern

Fig.22 First floor of the Milk Separating Room.
Formerly phase one of the Weaving Mill. 1951 roof structure with asbestos sheet covering.

Fig.23 Junction between Weaving Mill phases with 1950s first floor over

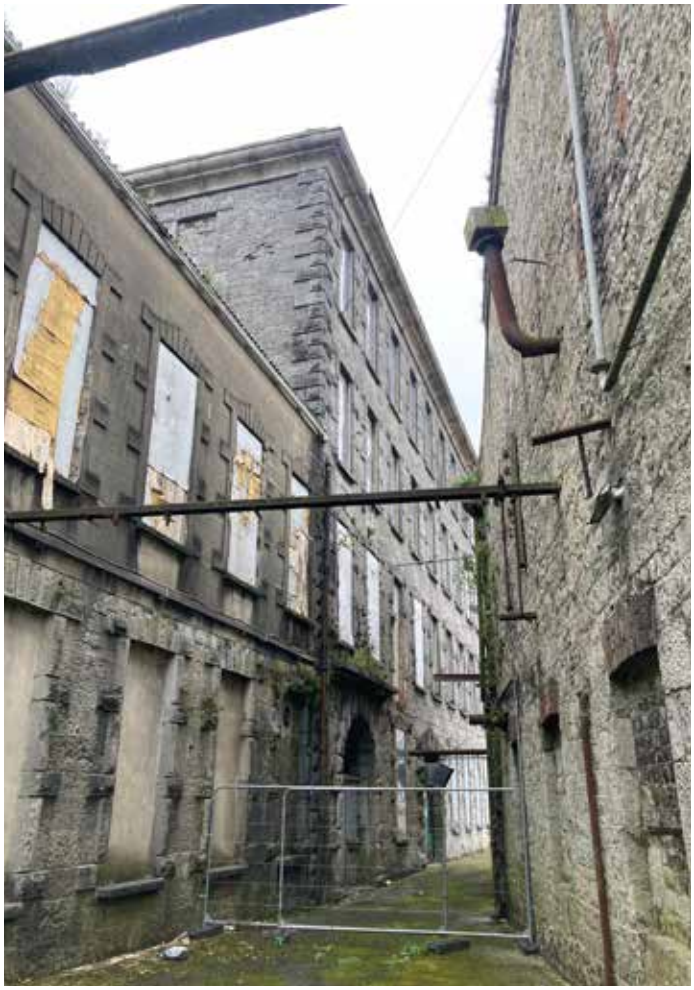


Fig.25 Main Mill 1851-53, Engine House to the right 1884, Weaving Mill 1855; 1951 first floor addition to the Weaving Mill.

4. DAIRY BUILDINGS (7) - 1855 – 1905

This is a collection of structures that extends along the site boundary at Stone Town Terrace. The existing buildings are known to have arrived in phases. The two flax phase buildings replaced a series of cottages which may have still existed while the main mill was being erected and not replaced until 1860. Further buildings were added from the early 1900s wrapping up the flax buildings.

Flax Phase - Counting House and Offices (c.1855)
The building immediately adjacent to the Main Mill is of two storeys and seven bays. It is built in the same form as the Main Mill with solid walls, cast iron beams and columns, wrought iron tie rods and large multi-pane windows. The roof is dual-pitched with coped gables and would have been slate clad and now has asbestos sheet. The elevation onto Stone Town Terrace and that addressing the mill yard were executed in the same manner as the main mill. By contrast, the masonry of the east gable is simple and matches that of the boundary wall. The reason for the heavy construction of this building is not clear. As with the engine bay of the main mill and the first floor of the Weaving Mill, it may have been built in anticipation of alternative future uses.

The condition of this building is much better than that of the Main Mill. It seems likely that this building was never used for wet processing in either the flax or dairy manufacturing periods. The description contained in James Campbell's 1859 report on the mill offers further insight:

"Counting House and Offices - These are very well situated - [offering] - the only mode of ingress and egress to and from the works - through a hall, on each side of which there is an office, from which no person can pass in or out without being observed."

The 1897 Goad Insurance Map shows the extent of this building, with the through passage indicated as described by James Campbell.(Fig.27)

Fig.26 Aerial view of the former offices and Linen Store
RED - Linen Store, Counting HOuse and Office
CREEN - Later addition of the building to the front c.1905

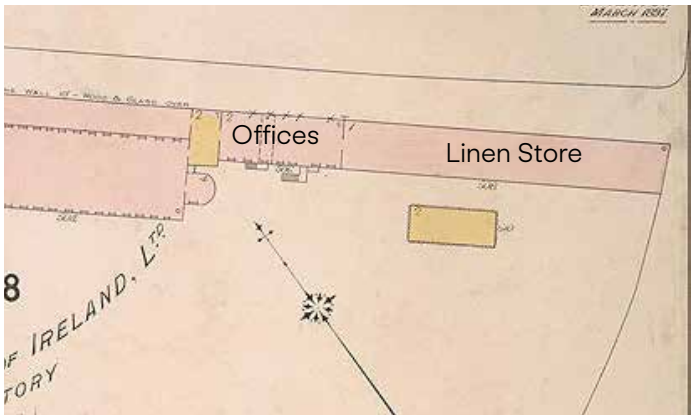


Fig.27 1897 Goad Insurance Map
Note the buildings present and the passage through the Office

Fig.28 Office Building elevation onto Stone Town Terrace,
Former entrance door notable in the 5th bay from the east end

Linen Store (c.1855) - The building extending to the end of the boundary was built as the Linen Store. It is of stone construction with a concrete floor and once had 16no queen post trusses of timber and iron of which 5 are visible. These carried a slate roof which has been replaced by profiled metal sheet. The north and east walls form the boundary of the site. The external appearance matches that of the Main Mill and Weaving Mills. Two blind windows onto O'Callaghan Strand are not reflected in the internal masonry confirming their architectural device as part of the complex's aspiration as a civic venture. The wall along Stone Town Terrace is of coursed rubble with tight joints, presenting the secondary quality of this largely unseen wall. There is one small blocked doorway though this wall.

Fig.29 Office Building (1855) east elevation where the flat roof of the former Linen Store abuts

Condensed Milk Phase

Between 1900 and 1905, the Office was extended and the open space between the mill and adjacent structures was closed. The new building was of two storeys, 10 bays long and mirrored the architectural detailing of the Flax period buildings with a large cornice and parapet. The original windows were multipane matching the style of the main mill. Internally the building is of lightweight construction. The first floor is of timber construction and the roof a steel truss overlined with tin sheets.

At the interface of the new building, Main Mill and Office existing windows were opened up to form doorways allowing for access. The windows of the mill stair were blocked up due to the abutment of the new building.

The placement of this extension must have been driven by operational convenience as it has an awkward presence next to the main mill and creates a series of uncomfortable junctions.

Fig.30 Interior of the ground floor of the Office, largly adapted for use as the 'Dairy Building' in the C20th.

Fig.31 Main Mill stair at the junction of the c.1905 extension

Fig.33 Photos dated 1905 showing Cleeve's operation

Fig.34 Interior of the Linen Store showing the boundary walls from the inside face and queen post trusses above

Fig.32 East gable of the c.1905 extension with later flat roof elements abutting

Fig.35 Cable of the Linen Store onto O'Callaghan Strand

Golden Vale Phase

Further changes were made after the 1970s and into the C20st. A modern store shed was built abutting the gable of the extension and the space between the buildings in-filled with light steel framed structures. None offered consideration of the architecture of the earlier element and all were driven by operational need.

Later Changes

The original buildings of the Office and Linen Store were adapted for use during later phases.

Office - The office has been lined out with much of the historic surfaces concealed. The former entrance and street level windows have been closed over and some windows replaced with vents at first floor. The elevation onto the mill yard has been wholly concealed by the later extension.

Linen Store - The store nearest to the office has had the eaves raised to form a mono-pitch. The interior of most of the store is concealed by later linings. The late C20th extensions have hidden this building within the site.

Dairy Buildings

Office, Linen Store and Extension Significance

The Office and Linen Store hold significance for their function in the operation of the flax mill. The Office has 'Architectural', 'Artistic', 'Historic' and 'Technical interest'. The Linen Store is a simpler structure with some interest for the east gable addressing the street.

The changes imposed as part of the condensed milk operation and since have eroded their legibility and importance of the flax phase buildings. Nonetheless, the c.1905 extension retains some significance for its role during the Diary Phase.

Office - High significance
Linen Store - Medium significance
1906 - Extension - Low significance
Post 1927 Changes - Negative significance

Fig.36 Extension c.1905, ground floor interior

Fig.37 Extension c.1905, elevation onto the mill yard

5. INFILTRATION GALLERY (5) - 1850-1855

The site of the Infiltration Gallery is possibly the earliest area of development for the Flax Mill complex. Maps of the period indicate a structure in this location from the earlier period of operation.

The arched stone and brick plinth was constructed in 1851 over the excavations of the previous year. The lowering of the quarry base created a reservoir for water used in the mill's operation and a critical resource for the steam engine. Submerged piers present in the reservoir indicate that there may have been intent for the original building to extend far over the reservoir / steeping pond.

Flax Phase - The original Dye-House is thought to have had a glazed roof.[1] The presence of a glass roof offering an abundance of daylight reflects the use of the space for dyeing of the thread spun from the flax fibres. Images from the late 1800s and into the 1900s show a dual barrelled roof, a roof form matching that of the of the engine house which dates to 1884.(Fig.39) (Fig.46)

Condensed Milk Phase - The renovation and re-development works of 1884-1889 undertaken to convert the complex to meet the needs of milk processing included works to the Infiltration Gallery and Dye-House. This was converted to use as a Vat House, a core feature of the Condensed Milk Company's process.

Dairy Disposal Phase - Into the 1950s the upper portion of the building was completely renewed. These works were likely to have occurred at the same time as the works to the Weaving Mill. The Dye-House structure was removed down to the masonry plinth of the Infiltration Gallery leaving nothing of the original Dye-House. In its place, a two room warehouse was erected. This is the same structure as present on site today, of reinforced concrete piers with block work infill. Over the walls are lightweight steel roof trusses lined with asbestos sheet. At the

1 The Cork Examiner – 5th December 1855.

Fig.38 Aerial view of the reservoir with the Infiltration Gallery and Dye-House / Vat-House

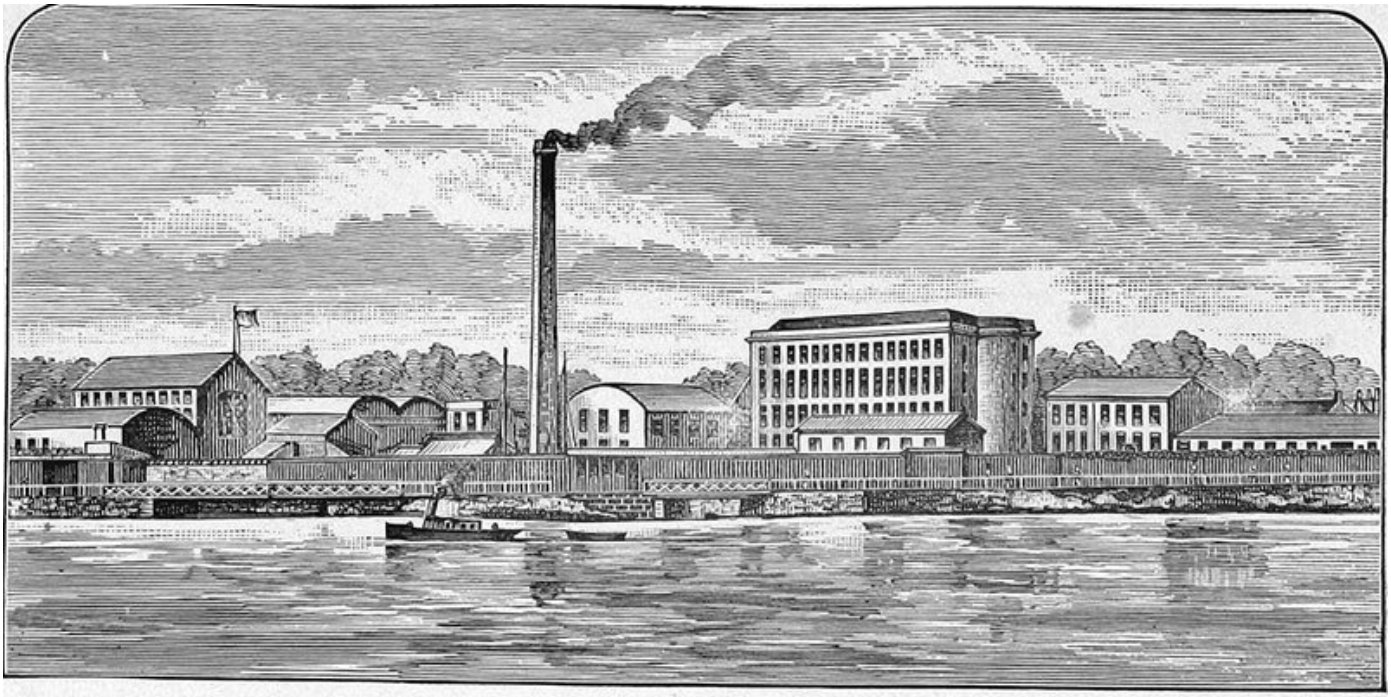


Fig.39 Etching of the site c.1890

wall head, beams span from the external walls onto the dividing wall. These appear to be hung from the trusses. The beams carry ceiling joists for a timber boarded soffit and above expanded metal mesh has been used to reinforce foamed concrete. The walls have been lined with approx 1" of cork overlined in a heavy expended mesh that is secured to the walls with wire. The interior has been rendered with a cement, encapsulating the cork. This appears to have been done to create a cold store.

To the rear is a lightweight building propped on piers rising from the reservoir.

To the front is a lean-to structure formed as a series of covered lobbies / thresholds into the building beyond.

Golden Vale Phase - The building appears to have remained largely in the form it achieved by 1960. Changes after this time were limited to wall linings and large insulated sliding doors to allow the rooms to remain in use.

Fig.40 Cable of Infiltration Gallery, structure over and rear extension

Infiltration Gallery Significance

The Infiltration Gallery / dye-house base has 'high significance' and exhibits 'Artistic', 'Technical' and 'Historical interest' for its unique form and purpose in relation to the Flax mill and later the Condensed Milk Factory. Low significance extends to the residual piers built but unused and hold 'arcaheological interest'.

The loss of the original Dye-House structure leaves nothing of the flax period above the Infiltration Gallery. The c.1955 structure built over, rear extension and front extension are all of negative significance arising after 1927 and for their utilitarian quality.

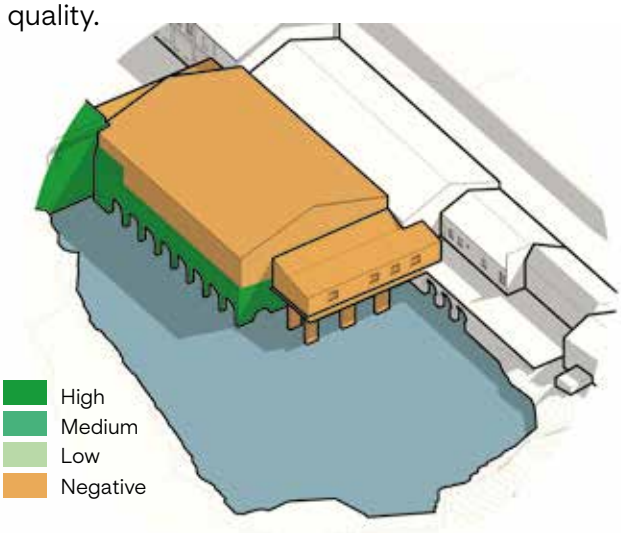


Fig.41 Infiltration Gallery Significance

Fig.43 Front extension c.1960 with vehicle access points. Right infilled

Fig.44 Roof stucture of building over the Infiltration Gallery

Fig.42 Interior of one of the two cold store rooms

Fig.45 Interior of the rear extension over the Infiltration Gallery

6. ENGINE HOUSE / BOILER HOUSE (3) - 1884
(1869 destroyed)

Flax Mill Phase - The Boiler House building present on site is a combination of phases. It is not the first to serve the mill and has been much extended. In newspapers of 1870, the original boiler house was described as totally destroyed. It is not clear what of the upstanding elements remain of the pre-1870 boiler house although the external appearance of the masonry is consistent with that of the Flax Phase buildings. The 1870 plan (Fig.17) and the Goad Map of 1897 (Fig.18) illustrate a footprint that closely matches that of the image from 1900 (Fig.47).

The 1859 account by James Campbell notes of the Boiler House *"This concern is well adapted for its purpose, besides affording a convenient facility for drying yarn"*. A decade later, the presence of combustible material in or above the boilers is noted to have been a factor in the fire of 1869. It seems unlikely that the building was rebuilt before the closure of the complex in 1870. It is probable that some or all of the external walls of the original boiler house were salvaged and reused with the fire destroying the interior, machinery and roof.

Location and Layout - The original boiler house was set to one side of the mill, providing steam to drive the engines that were placed within the first two bays of the ground floor of the Main Mill. Location of the Boiler House adjacent to the mill was well-established good practice due to the risk fire presented. The reason for the eccentric orientation of the boiler house relative to the Main Mill is not clear although it does reflect the orientation of the Infiltration Gallery and Water Tank.

Condensed Milk Phase - The main body of the current structure dates back to 1853 and is thought to have been rebuilt in 1884. A south extension and small west extension are visible on photos and maps at the turn of the C20th. To the north the flue links to the chimney.
The barrel roof profile is visible on early photographs of the site (Fig.46) which also shows the building over the Infiltration Gallery with a double barrel profile.

Fig.46 Photo of the site c.1900

Fig.47 Extract of photo of the site c.1900

Corrugated iron sheeting was in use by the 1840s and may have been used as a roof covering.
The Boiler House form was gradually adapted in the course of its use until the end of Cleeve's ownership.

Dairy Disposal Phase - Between 1940 and 1970 the original building was most altered. A new and substantial element was built to the south side. This has a steel frame with one corner created from a very

large salvaged iron pipe. The roof is a steel truss with tin sheeting. It provided a large single volume with two storeys of accommodation to the north edge including male toilets. The west extension included an electrical sub-station.

Golden Vale Phase - The building continued to be adapted. It does not appear to have been extended save for a small self-contained room on the west side.

Engine House / Boiler House Significance

The Engine House is of 'Artistic', 'Architectural', and 'Historic interest' for its visual presence and construction in dressed stone, presently considered to be of the Flax Phase, and its roof which has a barrel form. The interior of the building dating to both the Flax and Condensed Milk Phases has been lost. The 1853 boiler house with 1880s barrel roof is deemed to have 'high significance'.

The building embodies 'Technical interest' for its roof form and the use of corrugated metal as a roofing material. The later extension is built of lower quality masonry and stucco and is of 'low significance'. The building to the south of the engine house dates to the mid C20th, is of very poor construction and for its impact on the early boiler house, is deemed to have 'negative significance'.

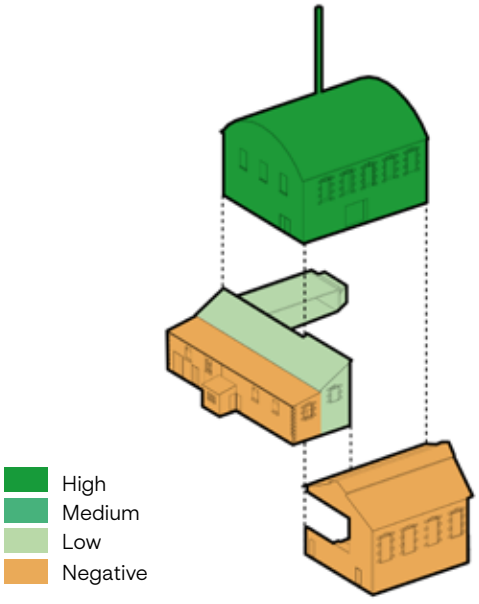


Fig.48 Boiler House Significance

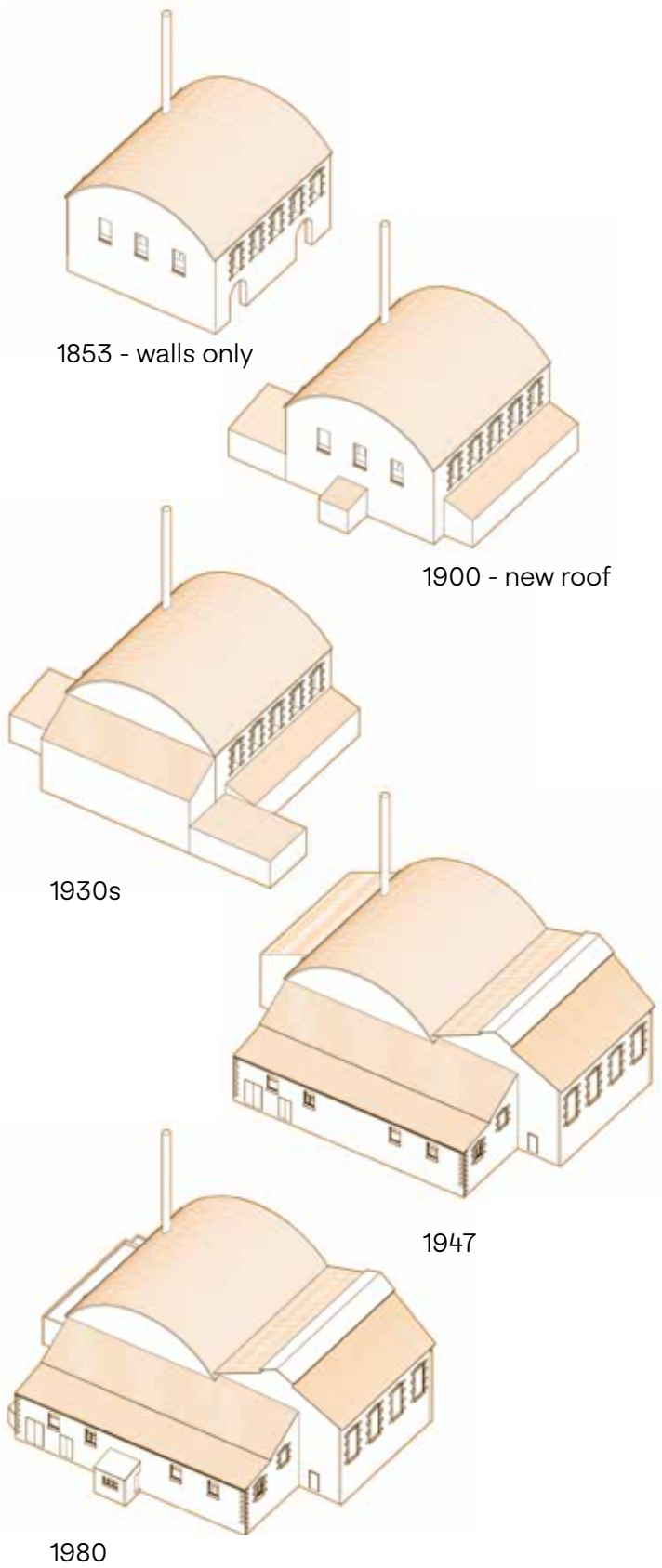


Fig.49 Boiler House Evolution based on analysis of maps and photos

7. CHIMNEY (2) - 1853
Protected Structure reference - 21512069

The original chimney was described as 160ft tall before its destruction due to high winds in 1852. It was rebuilt on a broader footing in 1853. The current chimney is approx 120ft tall, 30ft lower than it was for most of its existence due to a reduction around 2000 to avoid uncontrolled collapse of the upper section.
The chimney was linked to the boiler house by a series of flue structures. The original was likely brick built running partially below ground into the stack.
A later flue ran at high level from the Boiler House into the wall of the chimney. The chimney was adapted with a cast iron receiver to allow the flue to be connected.

Chimney Significance
The chimney is recognised as a critical component in the language of the fossil fuel-driven steam mills era. It holds 'Architecural' and 'Technical interest' for its visual presence and purpose. It holds 'Artistic interest' for its form and aesthetic. It has significance as a recognisable feature on the Limerick skyline and as such is of both Historical and Cultural interest. Current evidence indicates the stack to be the second on the site yet still dating to the earliest period of operation. The chimney has 'high significance'.

Fig.50 Brick Chimney 1852, with bands and modern capping

Fig.51 Space between the boiler house and chimney

Large brick and stone plinth likely route for original flue with later round opening in the wall of the boiler house providing for a flue in the late C20th

Fig.52 Chimney photographed in 2024

8. WATER TANK (4) - 1884
(1851)

The Water Tank is thought to date to the Cleeve's period. An earlier building was lost in 1852 when the chimney collapsed. The replacement was renewed as part of the redevelopment of the engine house in 1884. It is likely that this is the third water tank building on the site.

The building is of limestone and brick construction with a cast iron tank above. The front and side elevations are of high quality masonry with the back elevation of rubble stone. The cornice continues around the whole of the building. The tank is set over the inner leaf of masonry. The building extends over four storeys with the lower storey visible from the reservoir. The ground floor of the building is used as storage space with windows that match those of the Infiltration Gallery alterations of the early 1950s. The basement is accessed from the exterior lower ground via an opening in the wall. Within the basement space it is possible to see a mid C20th steel frame with in-situ reinforced concrete slab. It is likely that the building as a whole was altered in the 1950s. The ground floor arched opening was in-filled and two openings were punched though the arches of the side elevation. Each had a steel framed window inserted. These changes have reduced the aesthetic simplicity of its original form.
The steel gantry linking the water tank to the cold store is of the Golden Vale phase.

Water Tank Significance
The building is sympathetic to the style of the Main Mill, Weaving Mill and Boiler House. It forms part of the phase of redevelopment undertaken with Cleeve's move to the site. It is of 'Architectural', 'Artistic' and 'Technical interest', and is of 'high significance'.
Elements of the fabric from 1927 onward have impacted the original fabric and are of 'negative significance'. These include the steel steps, pipe gantry, window infills, etc.

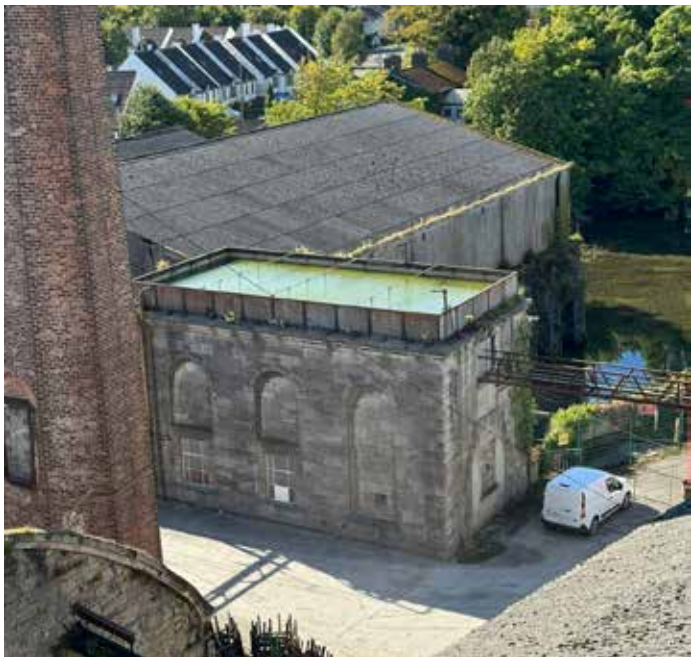


Fig.53 Water Tank building as seen from the main mill roof

Fig.54 Water Tank building from ground level

Fig.55 Water Tank building

Left photo - basement space with steel and concrete floor

Right photo - reservoir elevation

9. OFFICES & CHEESE PLANT (9) - 1853
Much altered & 1955

Flax Mill Phase - Buildings are noted to have existed along this boundary since the flax period. The ground appears to have been made up in part by vaults that step across the edge of the reservoir offering a base over which a series of single storey sheds were built. These were set along the site edge and acted to contain the site. The facade onto the street matches the architectural aesthetic of the wider Flax Mill complex.

The early buildings were all single storey (Fig.57). The aerial image of 1947 shows the long building and smaller adjoining building as they probably existed in 1860 (Fig.56). A fragment of the original long building survives at the interface with the mill managers' houses. This is the building that was labelled the Cheese Plant. The roof of this element is asymmetric with a shallow south-facing pitch and a steep north-facing pitch. The roof form is similar to that of mill roofs where the north pitch was glazed to allow for ample daylight in the processing of linen. The current roof coverings are of metal or asbestos sheet fitted in the late C20th.

Condensed Milk Phase - The western-most part of the building is connected to the adjacent dwelling. This room is domestic in character. It is not clear if this was a later change although there are aspects of the fabric that suggest a change in use. The survival of this end of the long building may relate to the presence of this room and the continued use of it by the residents of the house until the late C20th (Fig.60).

Dairy Disposal Phase - The buildings have been substantially altered in the later phases. The majority of the long building was re-built and the adjacent buildings where demolished and replaced by a reinforced concrete frame building around 1960. Much of the interior of the surviving fragment has been altered by changes since the 1950s. The interior

Fig.56 Photo of the site c.1947

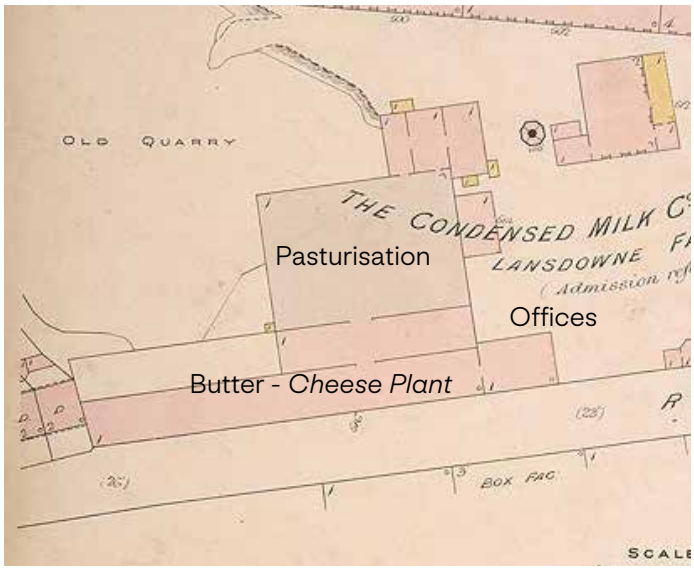


Fig.57 1897 Coad Insurance Map

Fig.58 Roof structure of the long building

of the element in use by the house is largely lost to decay. The facade addressing the street has survived with each window reduced in height. The cills were raised and the masonry below in-filled (Fig.60).

Golden Vale Phase - The building was in use in light processing and picked up the reference to cheese. Changes of this time included the formation of a shop accessed via a door punched though a former window opening. The shop allowed people to cash in their bottle top tokens for rewards. The changes of this phase were largely reductive, seeking to stabilise the buildings and maintain operation.

Office, Cheese Plant (long building) and Packing Store Significance

The fragments of the Flax Phase hold 'Artistic', 'Architectural' and 'Historic interest'. The changes of the Dairy Phase do not add to the building's interest. The changes of the later phases are broadly negative and diminish the building's legibility and value. Given the derelict condition of the building is may be deemed to hold 'Archaeological interest' as an upstanding fragment.

Of the long building, the elements of original fabric of the Flax Phase; the vaulted base holds 'high significance' and the fragment of roof structure and much altered facade holds 'medium significance'.
The changes and structures of the C20th have resulted in the loss of original fabric and as such have 'negative significance'.

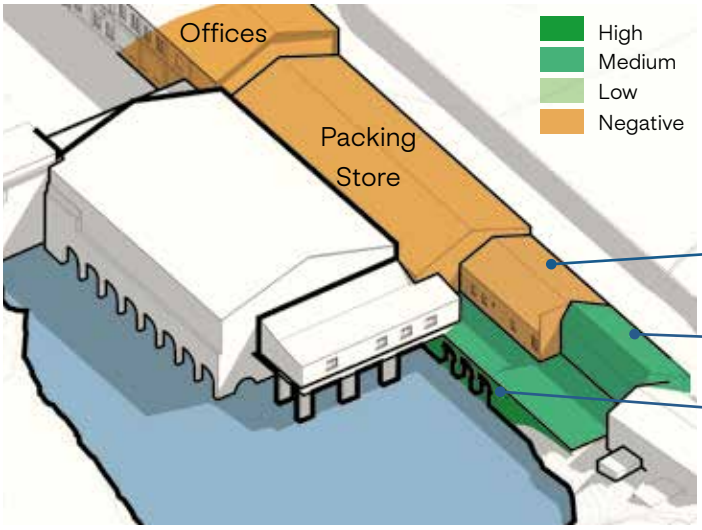


Fig.59 Significance diagram for the Cheese Plant

Fig.60 West room of the long building

Fig.61 Adjusted window opening - shop entrance and reduced height

10. WORKSHOP (8) - 1930s

Flax Mill Phase - The map of 1870 indicates a series of structures along the site boundary. The shading infers that they are a combination of solid-built and lightweight structures.

Condensed Milk Phase - The 1900 photo of the site (Fig.63) captured a two storey building which is replicated on the Cleeve's etching. This may be within the dock site or could be within the Flax Mill site although this is not shown on the 1897 Goad Map (Fig.18). The photo of the mill yard of about the same year shows extensive plant growth in this area (Fig.64), possibly indicating the lack of activity in this area and absence of the buildings identified on the earlier map. None of these buildings seen on the 1870 map has survived.

While these structures backed onto the boundary along the edge of the site, the existing wall is not considered to have been an integral part of these early buildings. Unlike the outward facing façades of the linen store and the long building, the boundary wall in this location is formed of coursed rubble without architectural embellishment. It is considered under the section on the Boundary Wall.

Dairy Disposal Phase - The Workshops were not present until after 1924. They appear in a photo of 1947 (Fig.65) in which the curved roof form and roof vents are visible. The Workshops are predominantly of timber construction with steel posts. The wall addressing the boundary has a masonry plinth with coved cornice top set between the steel posts of the building structure. Above the plinth each bay was timber framed with a 12 pane fixed light. The roof is formed of timber lattice (Belfast) truss with sarking boards and a felt roof. Five rectangular vents / roof lights set above.

Golden Vale Phase - The facade onto the mill yard is much altered and may have been of similar construction to that of the boundary facade. Rendered brick plinth walls are present in some bays with large modern windows set over.

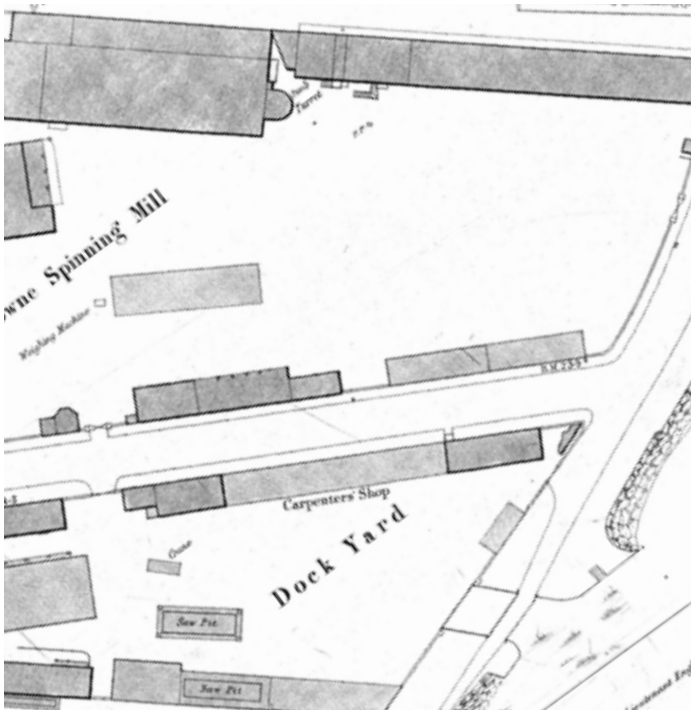


Fig.62 1870 Map of Limerick - Extract of the Lansdowne Site showing buildings and sheds on the site of the later workshops

Fig.63 Photo of the site c.1900 - building highlighted

Fig.64 Extract of photo of the site c.1900 - plants in the yard

The interiors are in-filled in some areas and left as open spaces in others. The exterior has been over clad in profiled metal sheet. The building is presently used for storage.

Workshop Significance

The 2015 ACP assessment reasonably observes that the building is of interest due to its roof structure and period of construction. As a late addition to the site the Workshop do not inform interest or significance relative to flax processing or of the manufacture of condensed milk.

They are however of interest for their form of construction. They may hold some 'Technical' and 'Artistic interest' in their own right. However they are not of the period for which the site holds heritage significance. As such the Workshops are considered to be of 'low significance' but not in relation to the special significance of the site described at the beginning of this document.

Fig.66 Photo of the site c.1947 - Workshop present with windows and curved roof visible

Fig.67 Photo of the workshop roof, lattice truss and vent opening

Fig.65 Photo of the workshop 12 pane window and timber boarded wall

Fig.68 Photo of the corniced plinth and steel posts

11. OFFICE & LABORATORY BUILDING (10) - 1910
ACP ref: 7

Flax Mill Phase - No buildings were present on this part of the site during the flax phase.

Condensed Milk Phase - The OS map of 1900 indicates a building on the site of the office. It is likely that this was the building that housed the laboratory and forwarding office described in the promotional review published in 1898. The building if of masonry construction with smooth face red brickwork to the corners and window openings. The wall panels are lined in a rough cast render. The roof is a shallow pitch. The windows are sliding sash. A steeply pitched roof porch projects from the middle of the south east gable. It has a decorative painted verge over a glazed timber frame. This building addresses the revised pedestrian entrance to the site. The south east elevation is more decorative than the others and access appears to have been via the porch as a single entry point.
A second building present to the north west also appears in aerial photos into the 1950s but is not present on site today.

Dairy Disposal Phase - At some point after 1955 a two room extension was added to the south. The addition is a rendered building with sliding sash windows, a chimney and slate roof.

Golden Vale Phase - The building was adapted and larger, industrial elements were introduced to the north and south east. These do not appear to relate to the operation of the former office building.

Office Building Significance
The Office holds significance as a part of the operation of the Cleeve's business. The form and construction of the building is unremarkable and has no architectural or technical merit. For its purpose as part of the Cleeve's operation it has 'Technical interest' and is of 'low significance'.

Fig.69 OS Map from 1900


Fig.70 Extension to office c.1950


Fig.71 Southeast elevation


Fig.72 View out through the window to the southeast

12. HOUSES (14) - 1854
ACP ref: 11

The presumption is that the houses were built to serve the operation of the flax mill. Mapping suggests that these were present by 1870 and likely built as part of the first phases of development of the Flax Mill. Their form supports their possible use by managers or operators of the site.

Flax Mill Phase
Form and Architecture - The houses are two storey semi-detached with rendered façades, interlocking concrete tiles roofs and deep overhanging eaves. Each is of three bays with a central entrance. The windows are 2 over 2 horned sliding sashes over projecting stone cills. The rear walls are buff bricks laid in Flemish bond with 6 over 6 sliding sashes. The rear first floor elements are horizontally boarded with timber casement windows and a tin roof.

The houses are set back from the street and cut into a shelf in the rock. The back garden are similarly terraced. The front wall of each house has a narrow set of steps directly to the front door. A small garden is present. To the rear, each house has a projecting bathroom and WC which is not shown on the plans but is stylistically of the same date as the house.

Viewing from the street, the left of the two houses is in a more complete form with fewer later phase changes. Both are in poor repair.

Interiors - The left house is described as a clearer example of the original fabric. The plan is divided into front and rear. The narrow entrance hall is contained by a slim set of glazed double doors with over light, beyond which is the kitchen and stairs to the first floor. To the left and right are reception rooms. The front of the house is lighter than the rear due to the house being cut into the hill.
The half landing off the stairs links to the rear bathroom and WC. The opening is decorated with timber panelling and a round topped arch. Each is within the timber-built rear element, set out

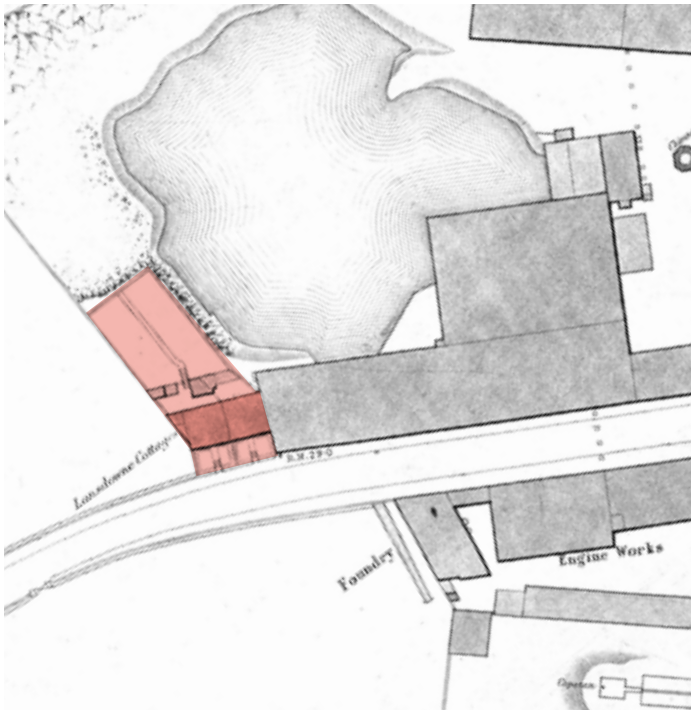


Fig.73 1870 Map of Limerick - Extract showing the houses


Fig.74 House - front elevation


Fig.75 House - rear elevation

symmetrically and accessed via a generous and well-lit space. The doors into the bathroom and WC are glazed, divided into 9 panes of cast glass with yellow glass in each corner.

Fixtures and Fittings
Fireplaces, Ground floor - The reception rooms have surviving Victorian fireplaces, each with an art nouveau fire insert.
Fireplaces, First floor - plain chimney pieces of painted wood or stone with tile inserts and basic fire grates.

Joinery - The stairs are typically Victorian with turned newel posts and balusters.
A simple cyma recta picture rail runs around the reception rooms.
Architraves are typical bead and cyma recta profiles set at the outer edge of a heavy door frame.
Doors are of four panels with brass oval knobs and mortice latches.

Plasterwork - Cornices are relativity decorative. Ground floor with an elegant reed and ovolo profile and beaded frieze. First floor is much heavier and deeply recessed.

Electrics - Some of the early electrical fittings are still present including bakelite switches and ceramic fuses.

Construction - The front of the house is possibly of coursed rubble with external render and an internal timber boarded lining. The boarded walls have been extensively over-papered.
The rear walls are of a buff brick, not noted to be present elsewhere on the Flax mill site.
Internal partitions are of lath and lime hair plaster.

Condensed Milk Phase - It is not thought that the houses changed much in this period. It is likely that the arrival of electricity in Limerick allow for the introduction of electrical lighting in the houses.

Fig.76 Entrance lobby and bathroom

Fig.77 Fireplace with mantel and stair balustrade

Fig.78 First floor cornice and decorative timber arch between stair and rear bathroom

Dairy Disposal Phase - The bakelite switches and fuse board date from after 1927 and are likely to be part of the servicing of the building in the 1940s. The house on the right was also modernised around this time. The replacement fire surrounds date from the 1930s and 1950s. The slim double doors were removed and colourful glass inserted in place of the Victorian over light.

Golden Vale Phase - The left house does not appear to have been changed in this time. Carpets and wall paper may have been renewed. The house on the right was entirely renovated with a new kitchen and bathrooms.

Houses Significance

These houses are not identified within the description of the Lansdowne Mill on the national survey.

The houses are of interest for their possible connection to the mill's operation. They hold 'Historic', 'Artistic' and 'Social interest' for their use as homes to managers at the mill. They hold 'Architectural interest' for the plan form and moderately decorative interior of the right hand house.

They are of 'low to medium significance' for their contemporary function and likely connection to the mill's operation.

Fig.80 Fuses to left house and junction of right house to gable wall of the mill complex - overhanging closed eaves

Fig.79 First floor room of the left house - timber boarded wall and Victorian fireplace

13. BOUNDARY WALL

1851 & Various Changes

The Flax Mill site is contained by a combination of the topography, buildings and a boundary wall. The boundary wall has enabled the site to be secured since the Mill's early operation when a wall extended around the Mill and the Shipyard sites. The boundary wall has been built in different phases. These almost certainly reflect phases of construction and in some instances the rebuilding of the wall.

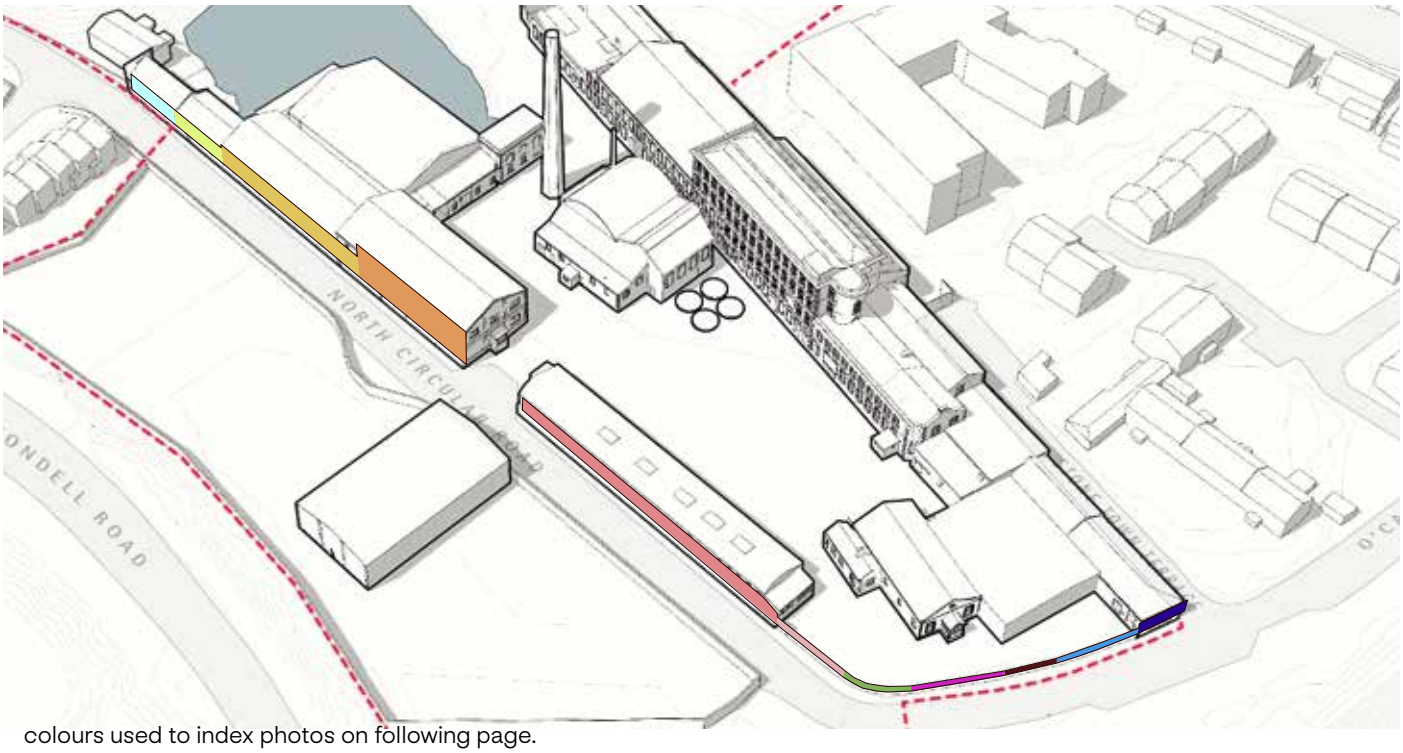
This section is concerned with the walls at the boundary that do not form part of buildings. On the Flax Mill site, the walls of most interest are the length between the Cheese Plant and Linen Store. Diagrams have been included to provide clear context. So that the lengths of wall can be seen in context, the diagrams also identify the sections of wall that form parts of the buildings that sit on the site boundary. In addition, the Shipyard site walls are also recorded with detail on the sites evolution.

The Flax Mill Site

Flax Mill Phase

North Circular Wall - The length against which the workshop was later built is of random rubble with coursing possibly indicating phases of construction as the wall was increased in height. This wall runs along the edge of what is now called the North Circular Road (pink). The wall height appears to have been raised once with limestone.

O'Callaghan Strand - As the wall turns onto O'Callaghan Strand (green, purple and burgundy) the construction changes to squared, coursed rubble. The curved section (green) closely resembles the early building of the site with sight joints. There is a straight joint where the wall may have been rebuilt (purple). Square stone gate posts are also present. These are visible on the 1870s map likely serving as the primary vehicle route in and out of the site. This would have ensured all traffic passed the main office and counting house. Pedestrian access was via the passage through the office. Past the access the wall is taller. There are four, possibly five distinct bed joints with slightly varying stone used in each lift. The joints are tight. It is likely that this wall was built over a period of time in the 1850s.



colours used to index photos on following page.

LONG BUILDING STREET ELEVATION

CHEESE PLANT & OFFICES

BOUNDARY WALL

BOUNDARY WALL

LINEN STORE

Feilden Clegg Bradley Studios

Condensed Milk Phase

North Circular Wall - no obvious changes in this period.

O'Callaghan Strand - The access routes were changed in this period. Photos from the 1940s show the former entrance blocked up, likely occurring long before the photo was taken. The rebuilt section of wall has wider bed joints and an additional pedestrian entrance has been formed.

Dairy Disposal Phase

North Circular Wall - This was raised in red bricks and capped in cement. This likely occurred at the same time as the construction of the workshop.

O'Callaghan Strand - no obvious changes

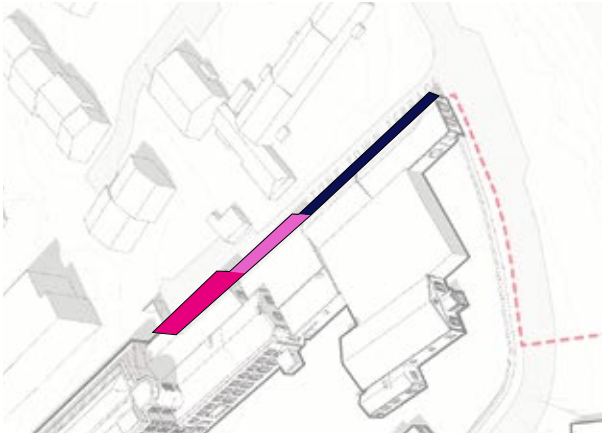
Golden Vale Phase

North Circular Wall - The main entrance was rebuilt with the access set back to allow for modern large vehicles.

O'Callaghan Strand - pointing and recapping in cement in various areas.

Flax Mill Boundary Wall Significance

The wall has been altered and adapted during the evolution of the site operation. The elements of the boundary wall that have not been part of a building hold 'Historic interest' for their function in securing the site. They hold 'Technical interest' for their function in enclosing the flax mill site. Historically, they are the most publicly accessible part of the site. The early parts of the wall hold 'medium significance'. Modern openings are of 'negative significance'.



LINEN STORE and OFFICE (DAIRY BUILDING)

The Shipyard Site

The Shipyard site is likely to have been walled in a similar form to that of the Flax Mill site. The historical evolution of the Flax Mill site will have been influenced by the pre-existing operation of the Shipyard site. The 1870s map shows a busy site complete with a foundry, carpenters' shop, engine works, two saw pits and a crane. The south east is enclosed by a wall with a gated entrance that lead to a slip way. The remnants of the early wall and gate posts are still present today. A slip way was present to the south. Historic records show that the Cleeves initial business venture for roasting coffee started on this site in 1881. The etching of 1890 captures the shipyard site, some of its buildings and an enclosing wall. The 1897 Coad map does not show the site but does capture structured at the edge of the North Circular. These include the single storey buildings, a three-storey box factory (engine works on the 1870 map) and a two-storey workshop described as 'ship repairing dock yard'. It is likely that the box factory was for timber boxes used by Cleeves.

The 1919 deed plan shows the division of the site. The 'dock yard' and west extent appearing to be in separate operation. This is also reflected in the 1932 aerial photograph of the site.

A photo of 1955 shows many single storey sheds including barrel roofed structures. The building noted as the box factory on the 1897 plan can be seen as a 10 bay three storey warehouse with a large, pitched roof.

The construction of the Shannon Bridge in 1985 required the clearance of the south extent of the site. By this time the dock yard had been wholly roofed. Most of the earlier building to the west extent of the site were still present. Between 1987 and 1994 the site was cleared. All the buildings were demolished and a new reinforced concrete warehouse built. By 2007 the west extent of the site had been re-developed for housing.

Boundary Wall

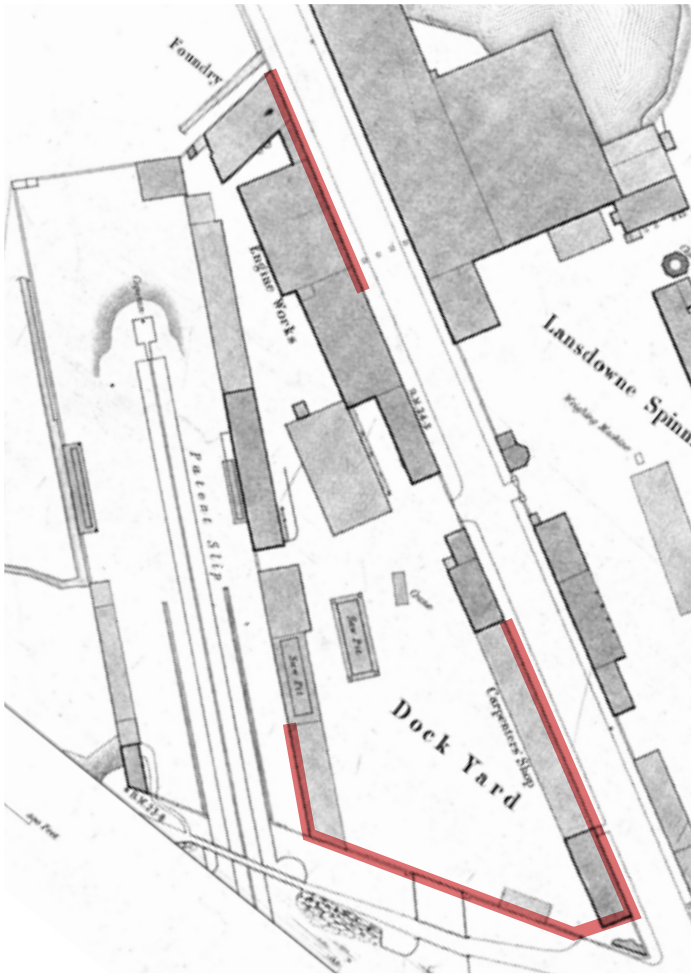
The boundary wall of the Shipyard site is formed of remnants of the buildings that once ran along the North Circular. The surviving walls is formed of fabric that has been much altered due to the clearance of the site. The wall enclosed a site that is now in use as a car park with a warehouse and storage space used the rowing club.

Pre-Flax Phase

Elements of the façades of former workshops, the warehouse / engine works, and the forge are likely present in the walls of the earlier buildings along the North Circular and the shore line that is now a passage between the site and the rowing club.
The walls are built of limestone with some red brickwork where window openings once existed.

Flax Mill Phase

It is not clear how the site was used during the operation of the Flax Mill. It appears to have been a separate operation and is not mentioned in historic records.



approx location of historic masonry

Fig.81 1870 Map of Limerick - Extract of the shipyard site

GABLE and FACADE of former CARPENTERS SHOP

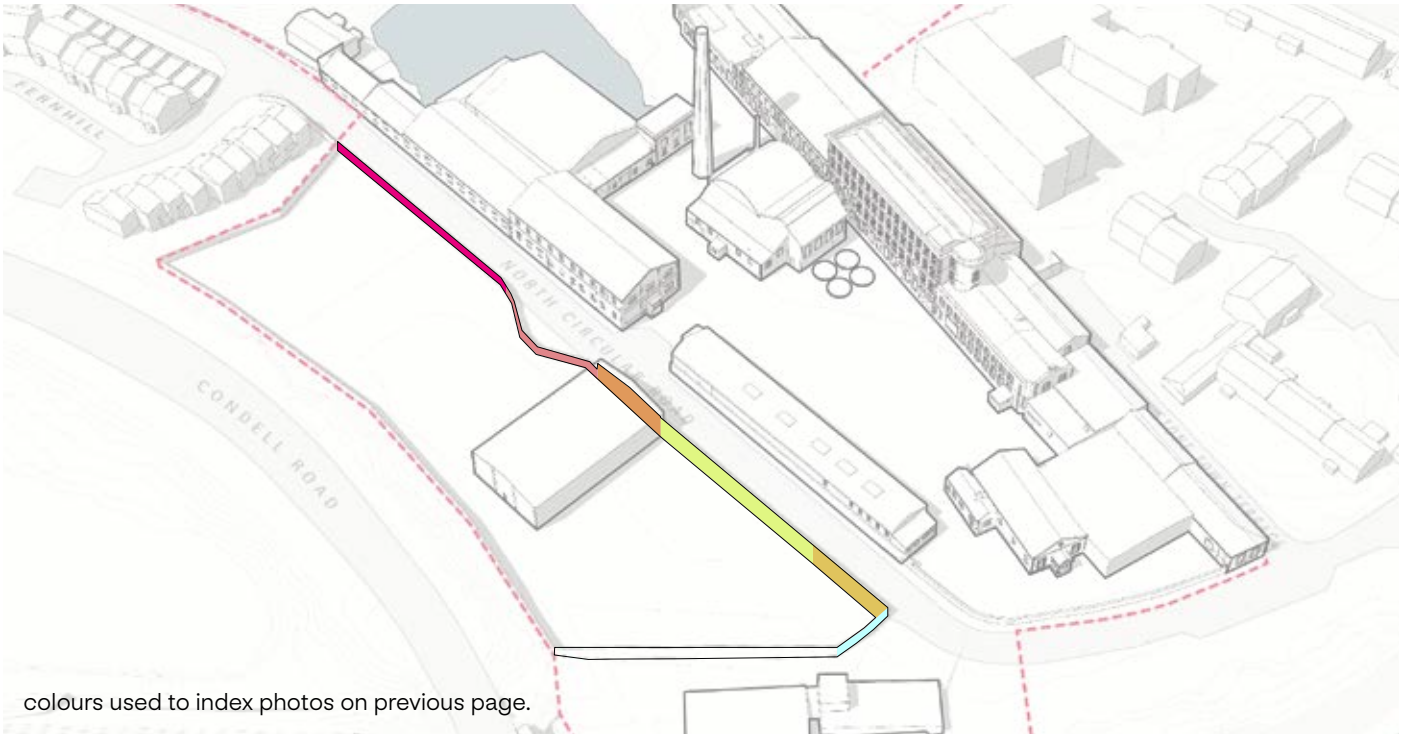
FACADE of former WORKSHOPS

former WORKSHOPS

WAREHOUSE

CARPARK ENTRANCE

FACADE of former ENGINE WORKS



colours used to index photos on previous page.

Condensed Milk

The arrival of the Cleeves into the former engine works indicates some degree of change. It is known that their initial operation utilised facilities on the shipyard site but there is no evidence that they developed activities here save for the box factory. It's not clear that this influenced change to the boundary wall although the walls were changed in this time. Steel framed windows are still present blocked up within the walls.

Dairy Disposal Phase

The walls have several large openings though them with steel lintels. It is likely that these walls were opened up to allow for continued use of the workshops and storage buildings. These openings are not closed over.

Golden Vale Phase - Demolition

The walls to the south extent, opposite the rowing club may have been raised around this period. Cement rendered brickwork set over the wider earlier wall used as part of the sheds that were present from the 1960s. Around 1990 the site was cleared leaving only the former building fronts as enclosure to the site from the North Circular. The boundaries to the Condell Road (1987) and housings (2007) are of modern construction. A length of wall approx. 56m was removed to make way for the warehouse and replaced with a low rise wall with painted steel railings and an access way into the car park.

Openings in the enclosing wall are generally closed with concrete blocks or poured concrete.

A new reinforced concrete warehouse was built replacing a section of the earlier boundary wall.

Shipyard Site Boundary Wall Significance

The site was not used or designed for flax processing or developed as part of the condensed milk processing. It was a pre-existing industrial site that informed the development of the quarry and supported the operation of the Cleeves business. The walls are the fragments of demolished buildings that establish the corridor of the North Circular Road that ran between the two sites. This is of interest as the setting for former industrial activities but the shipyard site wall is not of the Flax Mill Complex.

The surviving fragments of wall that record the history of the buildings that once stood behind hold 'Archaeological interest'. The wall holds minimal significance to the Flax Mill's operation and has been identified as of low significance. The fabric dating after the early 1900s is of negative significance.

14. RESERVOIR - (6) - 1850

The quarry was opened in c.1833 and used to supply stone for construction of Sarsfield Bridge (1835).
The quarry continued to supply stone when needed for building major works in Limerick. This supplemented stone salvaged and recycled from the dismantling of older structures in the city.

Flax Mill Phase - The quarry was the primary source of stone for the work in the construction of the Lansdowne Mill and later the reconstruction of the engine house and extension of existing buildings on the site. Quarrying activity included lowering the base of the 1833 quarry to create a sump for the reservoir. This served the Flax Mill to allow the flax to be soaked and as a source of water for processing.

Condensed Milk Phase - The reservoir provided fresh water for use in the Condensed Milk Factory. The source of water was critical to operation and one of the reasons for both businesses occupying the site.

Dairy Disposal Phase - It is not clear if the reservoir was altered in this period.

Golden Vale Phase - In the 1950s the reconstruction of the building over the Infiltration Gallery mat have exploited the pre-existing piers submerged within the reservoir.
The north edge of the reservoir basin was in-filled some time in this period to increase the margin between the quarry wall and water.
The reservoir is now an important feature for ecology.

Reservoir Significance
The reservoir has 'Scientific interest' and 'Technical interest'. It is of 'high significance' for its role in the design and operation of the factories. The later changes such as the infilling of the edge has 'negative significance' due to it eroding the legibility of the earlier form of the reservoir. The piers within the reservoir are assessed under section 5. Infiltration Gallery.

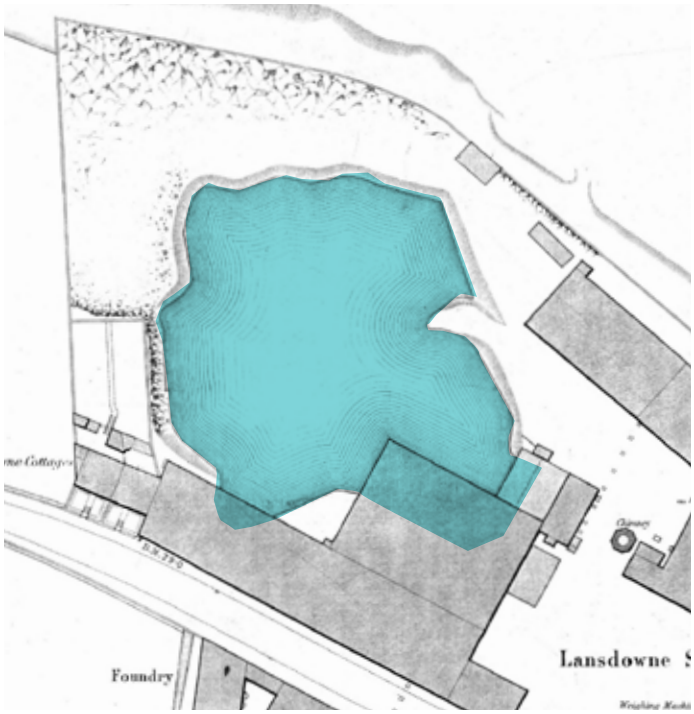


Fig.82 1870 Map of Limerick - Quarry and reservoir


Fig.83 Aerial photo with 1960s piers visible


Fig.84 View over the reservoir looking north

15. UPPER RESERVOIR (12) - 1947
ACP ref: 9

Flax Mill Phase and **Condensed Milk Phase**
The land above the site does not appear to have been used for the operation of the site in its first 100 years.

Dairy Disposal Phase - The structures to the north of the Main Mill were built in the C20th during phased of modernisation. Aerial photos from 1947 and 1951 show a series of concrete reservoirs partially set into the ground. By 1952 a pump house had been added.

Golden Vale Phase - The structures appear unchanged and were likely maintained with new equipment when required. The buildings are in a derelict state of repair.

Upper Reservoir Significance
Significance is based on the use and operation of the site in the processing of flax, production of linen and later the processing of milk. These structures post date these periods. They hold 'negative significance'.

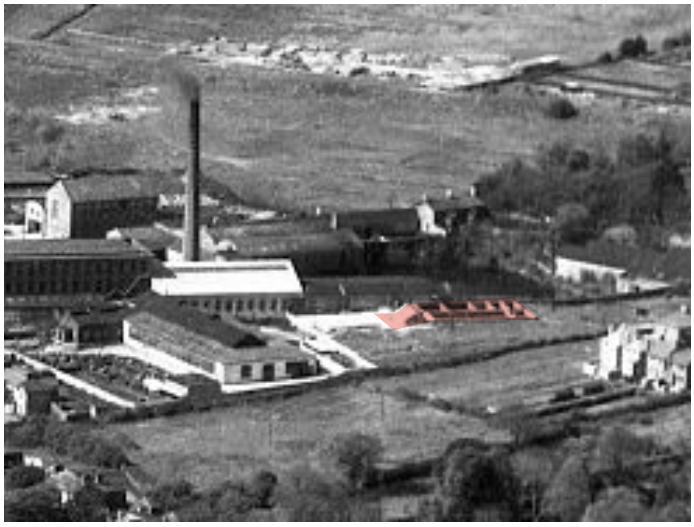


Fig.85 Photo of the site looking south over the upper reservoir c.1951

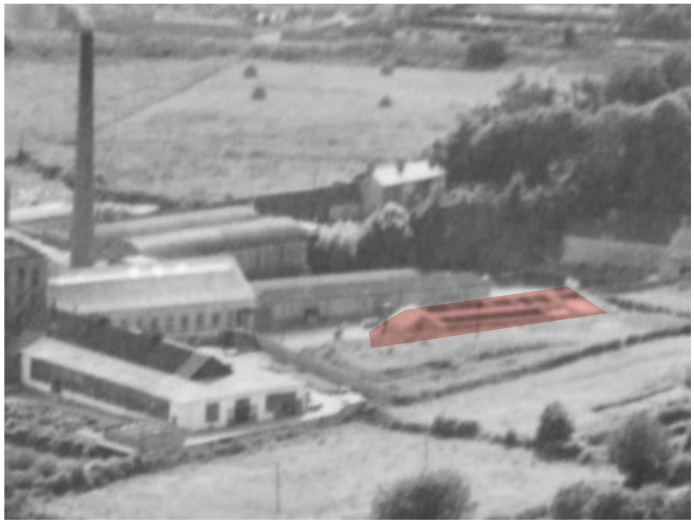


Fig.86 Photo of the site looking south over the upper reservoir c.1951

16. MISCELLANEOUS

The following structures of the later C20th period are deemed to have 'negative significance' due in the most part to their occurrence after the key phases of historical significance on the site and impact on the integrity of the complex of the Flax and Milk phases:

- Modern steel sheds
- Concrete surfacing
- Silo bases
- Mechanical services and associated plant structures
- Entrance gates

Fig.87 Remnants of the upper reservoir

17. FERNBANK HOUSE (16) - c.1880

Location - Salesian School is located on the site to the west of the former Flaxmill / Cleeve's Condensed Milk Factory. Within the range of the school buildings is the much-altered Fernbank House which has given its name to the site.

Heritage Designation
The former Salesians Secondary School and Fernbank House are outside the curtilage of the Protected Structures of the Mill and Chimney Stack. It is beyond the extents of the early industrial complex. It does not inform significance of the Protected Structures.
The former private dwelling of Fernbank House is now much altered having been extended to meet the needs of the former school.

Fernbank House appears in the 'Irish Historic Towns Atlas - Limerick' identified as 'Substantial House', F14.

The house is not of sufficient significance to warrant protection due to the Cleeve family connection. The much-altered form and appearance of the house also challenges the likelihood that it could meet the rigorous standard for formal protection in its own right.

History - Fernbank House appears to have been built as a private dwelling after 1880. A brief reference on 'Open House Limerick[1] ' links a Mrs Sarah Wilkinson to Fernbank in 1891. It is likely that the house was built for the Wilkinson family and later sold to the Cleeve's family.

The census for 1901 records Frederick C Cleeve, 49, as the head of the house and Jane Cleeve, 41, as his wife. There were eight people living at Fernbank, Mr and Mrs Cleeve, their two sons Frederick C.A. and Charles, a governess and three domestic servants. Frederick became the managing director of the Condensed Milk Manufacturing plant in 1908 following the death of his brother Sir Thomas Cleeve.

Fig.88 Fernbank House c.1910

Fig.89 Fernbank House c.1930

Fig.90 Photo of the rear of Fernbank House c.1951

1 https://www.openhouselimerick.ie/ohl-festival-2021/distinguished-villas/
Note the image on the website does not appear to be Fernbank House

The Salesian School moved to Fernbank in 1924 following its sale by Frederic Cleeve to the Salesian Sisters. Aerial photos of the late 1940s and 1950s offer grainy images of the site that infer little change had occurred between 1924 and the early 1950s. From the 1960s onward the house and grounds were subject to major change and development up until its sale to the city in 2020.

Architecture

The house's original form and design was of a grand Victorian villa. Maps of the 1880 to 1900 period indicate a double-fronted property. Photos of the house show it with large venetian sliding sash windows, deep bracketed eaves, decorative verges and tally slates to the roof. A large timber porch with access to the west aspect indicated the entrance and a dormer with a round window in the wall above. The 1900 OS also captures buildings to the rear, likely stables and a large glass house in the grounds.

Shortly after 1900 the original building appears to have been extended, doubling in size. The photo of circa 1910 capture a new element with a mansard roof lined with decorative scalloped roof slates set behind a stone coped parapet. The roof has small dormer windows offering a French aesthetic. The windows had an Edwardian aesthetic. Both buildings appear to have been rough rendered over a stone plinth.

The house is likely to have remained as the Cleeve home until 1924 when it was purchased by the Salesian Sisters. This date aligns with the sale of the factory following failing trade between 1919 – 1923. The buildings appear to have been little altered between 1924 – 1950s. The 1919 deed plan recording the sale of land to Cleeve's still shows Fernbank with

Fig.91 Photo of the front of Fernbank House and Salesian School c.1955

its Victorian footprint although this may simply be out of date. Aerial photography of 1951 taken from the north-east aspect captures the Cleeve's site and Fernbank House from the rear. The mansard of the c. 1900 extension and gables of the earlier Victorian building are visible with a flat roof extension housing the kitchen and other new buildings to the rear.

The school buildings were extended and adapted to meet the needs of their growing school. Major construction appears to have been in progress in 1955. By this time, many of the trees sheltering the site from the south had been removed.

Further expansion took place around the 1970s when the buildings were increased in height with the loss of their pitched and mansard roofs. This additional capacity allowed for cellular accommodation on the top floor. The building was also extended to the rear. The conglomeration of the C20th phases serving to unify the earlier elements into a single large building.

Internally the south facing rooms of the original Victorian villa retain the windows, linings and other details. Public consultation in 2023 resulted in the following description of the interior being submitted by Dr Paul O'Brien.

Original encaustic tiling retained. The window over the porch - features a pair of round-headed windows in a singular dressed opening. The original projecting two-storey square-profile bay window to the east [survives]. The front door opens up to a distinctive entrance hall having carved pitch pine ionic columns with modern partition infill walls and door subdividing the original reception area. This reception area, originally part of the entrance hall, contains a particularly fine original carved oak fireplace. It features Celtic and heraldic motifs in relief which reflects the Celtic Revival period of the late nineteenth century. The fine hand turned carvings are continued on the newel posts of the main staircase, the spindles, and the newel post lamp. The high-quality interior wood carving may be a rare example of the work of the Ahane School, or the noted cabinet maker and joiner, J. P. Lynch of Bedford Row. All the principal doors in the house are original oak doors with their bronze door furnishings intact. Fernbank also features hidden sliding shutters and brass fittings manufactured by Thomas Hassett of Limerick. These shutters rise vertically from the sill and are in working order and are a rare example of this type of shutter system. There are many other features of this house intact such as cornice mouldings, timber panelling, tiled and wooden fireplaces, and lincrusta papered ceilings of the late Victorian period.

Fig.92 Aerial photo of the school 2025

The rooms to the rear and on upper floors of the original houses have become much altered. The interior of the c.1900s building does not survive to the same extent as the Victorian villa. Major structural changes have occurred with the loss of the roof and addition of a storey. These changes extend to the rear with a chapel and classrooms. The original and early buildings have been subsumed within the Salesians estate which is predominantly of the mid and late C20th.

Fernbank Significance

The house is not a part of the Flax Mill and as such does not hold significance as a curtilage structure. Public consultation in 2023 highlighted the interest that exists in Fernbank House. The consultation included reference to the link between the Cleeve family and the house.

Of the buildings, in their much-altered form the original and early domestic parts of Fernbank House retain some 'Artistic interest' but do not relate to the design or operation of the Flax Mill site. In their current form the exteriors are quite unlike the designs of the earlier buildings. Some of the interiors survive as a mixture of early and adapted fabric. The building overall has not been legible as a dwelling for many decades. Changes since 1924 would be deemed to be erosive to the building's significance as an historic house. The period of use as a school resulted in changes that have altered the historic building form and use.

In 2024, an Architectural Heritage Assessment by the Conservation Officer determined that Fernbank House did not pass the high bar for designation as a Protected Structure and as such it was not added to the RPS.

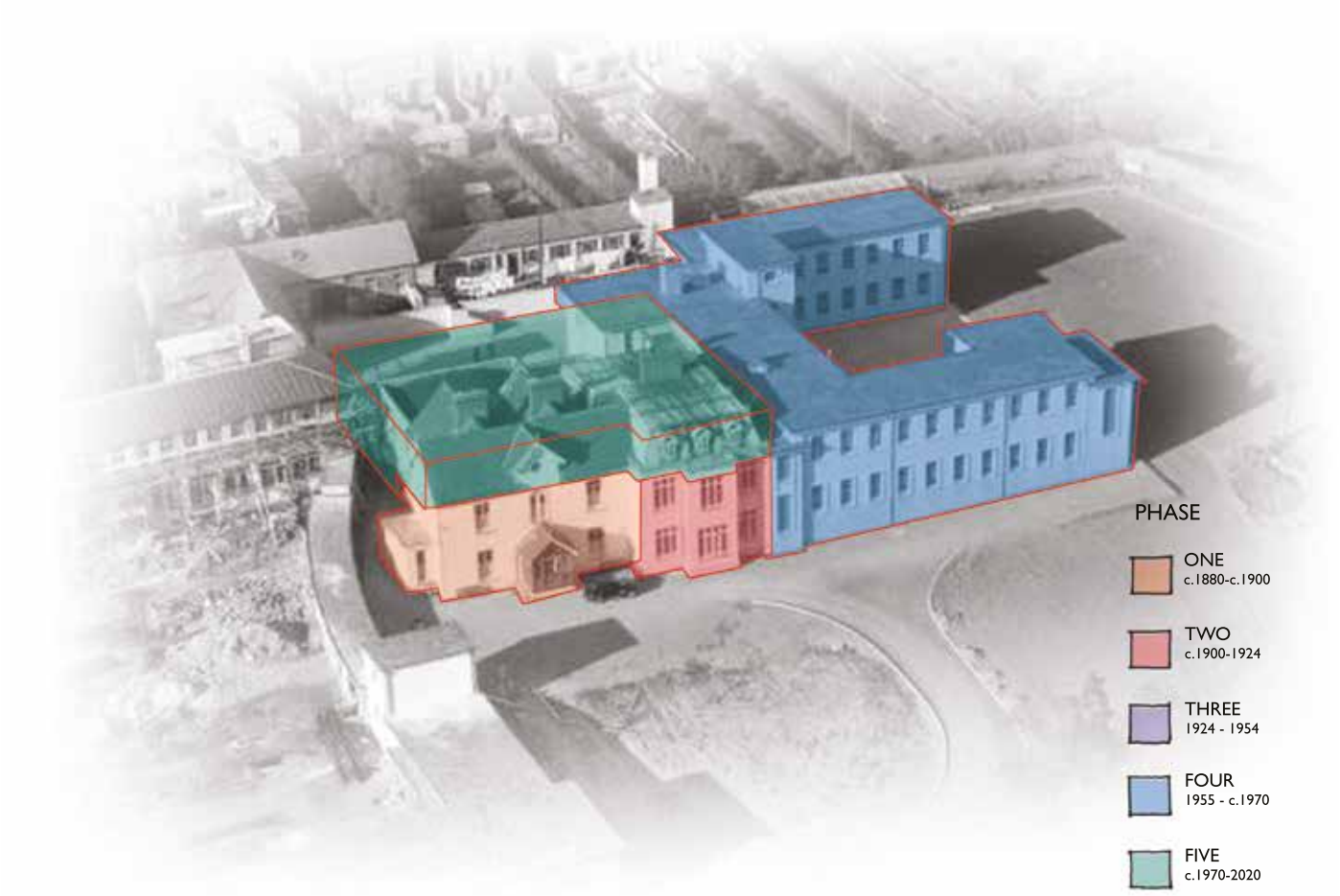


Fig.93 Phasing diagram for Fernbank House and Salesian School

18. Cleeves and the National Dairies Social History

The Flax Mill and subsequently the Cleeves factory will have served as a major employer in Limerick. It would have affected to multiple generations of the same families and acted as a cornerstone of social culture to those connected to the business.
Cleeves provided employment to factory workers and local farmers who supplied milk daily. The factory served as a linchpin of rural life for towns and villages with creameries tied to Cleeves. The social calendar of many towns revolved around milk deliveries, paydays, and factory schedules. Families will have structured their routines to the demands of the condensed milk business. For the business, men worked as engineers, transport drivers, and milk testers, and women played vital roles in packing, quality control, and cleaning, often while raising families and running farms. The Cleeves business was one of the first industrial employers for rural women.

The social history of the site following its rebirth in the late 1920s allowed for pre-existing social structures to be maintained.

1910s–1920s: Nationalism and Social Upheaval
War of Independence: Cleeves factories, particularly in Limerick and Cork, were caught up in the turbulence. There are accounts of disruptions due to curfews, strikes, and local IRA activity.

Labour Movements: Workers participated in early trade union activism. The 1919 Limerick Soviet, although short-lived bolstered the spirit of solidarity influenced attitudes among workers. This was a factors in the final years of Cleeves operation which transitioned to national ownership in 1927.

1930s–1950s: National Pride and Self-Sufficiency
Irish Industrial Identity: Cleeves became a symbol of the Free State's drive for economic independence. Condensed milk was seen as a product that could compete with British imports, and it was promoted as a healthy, wholesome Irish product for families.

Wartime Impact: The factory thrived during WWII due to food shortages and the need for preserved goods. Workers had guaranteed employment, which was rare during the economic hardships of the time.

Community Events: Like many major employers it is likely that the workers arranged and participated in sports days, dances, and Christmas parties forming community traditions. These events often brought together employees, their families, and local dignitaries.

Fig.94 Advert for milk from the Nationalised dairies

1960s–1970s: Modernization and Cultural Shifts

Social Mobility: Jobs at Cleeves became stepping-stones for young people into more modern lifestyles. The steady wage meant families could afford education for their children and engage in consumer culture (TVs, cars, etc.).

Women's Changing Role: Women began to take on more supervisory roles within the factory, reflecting wider changes in Irish gender dynamics. There was a strong culture of female camaraderie, with knitting circles and singing groups emerging from the workforce.

1980s–1990s: Decline and Nostalgia

Economic Pressures: Globalization and European competition made small-scale condensed milk production less viable. As production was consolidated into fewer locations, smaller plants closed.

Job Loss and Social Impact: As layoffs occurred, towns experienced rising emigration, particularly of younger workers. Local shops and services also suffered as factory wages disappeared.

Oral Histories and Memory

The University of Limerick Glucksman Library contains oral histories of Limerick some of which capture working life of the mid C20th and reference to the Limerick Soviet. There may also be other existing archives with oral histories that describe life at Cleeves. These could be explored as part of deeper research into the lives of people connected to the operation of the site in the processing of milk.

Reimagining the Space

The former Cleeves site in Limerick has been used for art installations, university research labs, and public events. This reuse is both practical and symbolic, connecting past industry with future creativity. In 2018 the Flaxmill site was one of six venues used to host the EVA International Biennial. In 2019 Open House Limerick included the site in a series of tours in the city.

Fig.95 A Cleeves promotions lorry parked outside the Flax Mill in the 1960s - Source 'Limerick, A Strole Down Memory Lane' Publication.

Historical Development

Fig.96 Etching of the edge of the Shannon at the site, c.1786

Historical Context

At the tidal limits of the Shannon the river divides to capture an area of land. Upstream, it flows from the east looping northward dramatically before turning east again as it flows out into the estuary. Within the river's loop it splits around an area of land. Below the island the river is defended by the natural barrier of the rapids at Curragour. It is here that Limerick was built.

King's Island is bounded to the east by the Abbey River and to the west the Shannon River. Access by water was restricted by the depth of the water on both sides of King's Island. The approach to the island was afforded natural defences in the form of marshy banks to the west. Entry to the island was achieved at the Merchants Quay on the south west tip. The site of King's Island afforded Limerick a naturally defensible location with strong trading links to the interior and out to the Atlantic.

The Viking longphort (ship camp) from circa A.D. 830 is recognised as the earliest known settlement of Limerick. (Fig.97) The camp was located next to the river at Athlunkard to the east of modern Limerick where the river turns northward to form its loop. Current understanding hypothesises that this earlier settlement was lost to conflict and re-founded on the current site of the city, on King's Island in the early 10th Century.[7]

7 Irish Historic Towns Atlas – Limerick. P1. RIA, 2010.

Fig.97 Artist impression of the Viking longphort structure

Little archaeological evidence exists for the Viking town on King's Island however contemporary records describe the battle of Sulchaóid A.D. 967 and illustrate a town of wealth and productivity that have been considered indicative of a significant trading port.[8]

The Anglo-Norman period from the ninth to the twelfth centuries saw the development of the town to the south of the fort. St Mary's Cathedral was founded in 1168 by the Last King of Munster, Domnall Móe Ua Briain and is reported to be the oldest occupied building in Limerick. It is around this time in 1176 that the first bridge is reported on the site of Baal's Bridge[9] (Fig.98). The granting of burgages in 1197 was a significant step in the formation of the town's landscape. By the thirteenth century the

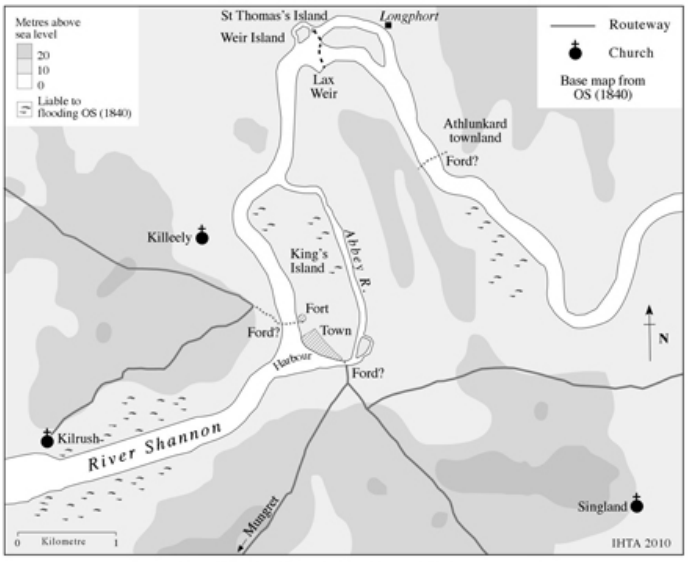


Fig.98 The location of the Viking town

city had developed around the fort with the early street patterns aligning with those visible in the city today.

The medieval town was a centre of commerce and manufacture. The harbour provided a haven for shipping and allowed for the control of trade. A marketplace within the city afforded trading of goods and materials with mills and fisheries core to trade. From 1235 a bridge linked King's Island to the west on what is now the site of Thomond Bridge. By 1200 St Mary's Cathedral and St Nicholas church are recorded within the walls of the city and to the south the church of St John is noted at the southern end of Irish Town. Other churches are recorded beyond the city (Fig.99).

The city continued to develop from the 1300s with the phased repair and re-construction of the city walls and bridges. The following century offered greater economic stability. Between 1395 and 1495 the walling of Irish Town progressed and was complete by the end of the century.

8 Irish Historic Towns Atlas – Limerick. P1. RIA, 2010.
9 Irish Historic Towns Atlas – Limerick. P2. RIA, 2010.

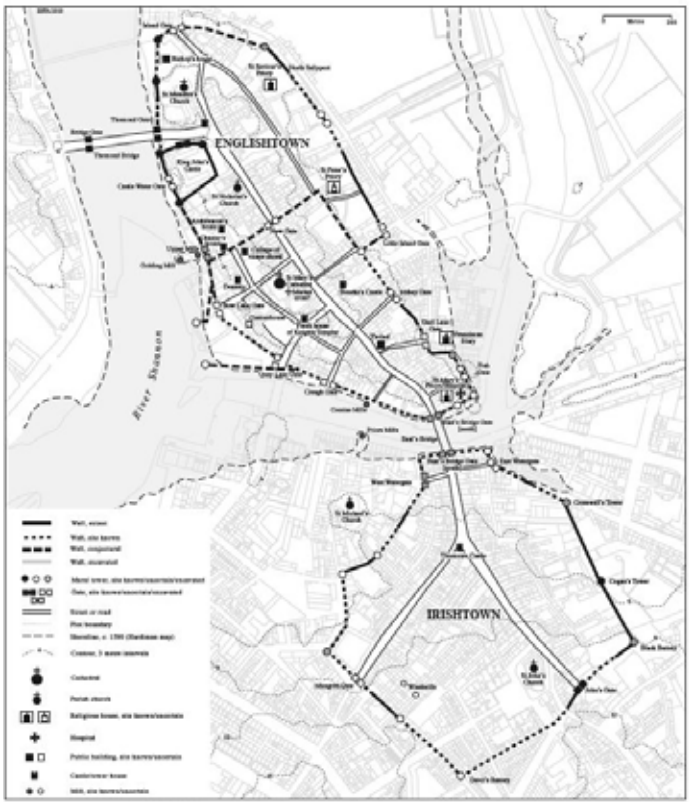


Fig.99 Map of Medieval Limerick

The expansion of the town to the south represented a significant increase in land from 14 to 27 hectares.[10]
By 1477 a small number of mills were reported in the city. The Hardimann map of 1590 illustrates the existence of mills either side of the Abbey River (Fig.100). The increase in commerce and manufacture afforded the improvement of the quay in 1497, also illustrated on the map. St John's Gate located at the south extent of Irish Town was the primary point of access into the town from the country to the south, east and north.

By the 1500s the town was well established as a significant trading port. The strong construction of the town's walls and quality of the housing is noted in text of the time.

The Reformation and the dissolution of the monasteries influenced commerce and the politics of Limerick. Lands once owned by the Church were granted to those favoured by Cromwell. This included the land to the south of King's Island, beyond the walls of Irish Town and which would later become the site of New Town.

---

10 Irish Historic Towns Atlas – Limerick. P4. RIA, 2010.

Fig.100 Map of Limerick, c.1590

The 1600s witnessed the fortification of parts of the walls and the castle. The aging fabric of the tower and castle were repaired and improved. The middle part and end of the century witnessed a number of actions. In 1642 the citizens of the city supported the Irish Confederacy action against the English Protestants. The undermining of the east curtain wall and siege of the castle resulted in the eviction of the Protestants to Dublin. In 1652 Cromwellian forces under the command of Henry Ireton constructed extensive works as illustrated in William Webb's map of 1651 (Fig.101). On 27th August 1690 the city repelled the attack of William of Orange. While the walls of Irish Town were breached the 14500 Jacobite troops stationed in the city devastated the attacking forces killing approximately 3000 of William's 25000 men for a loss of just 400.

In the mid period of the 1600s the city developed to the west. Mills, quarries and settlements extended out from the Thomond bridge along Sexton St, Cashel's Lane and New Road to the north (Fig.104). It is in this period

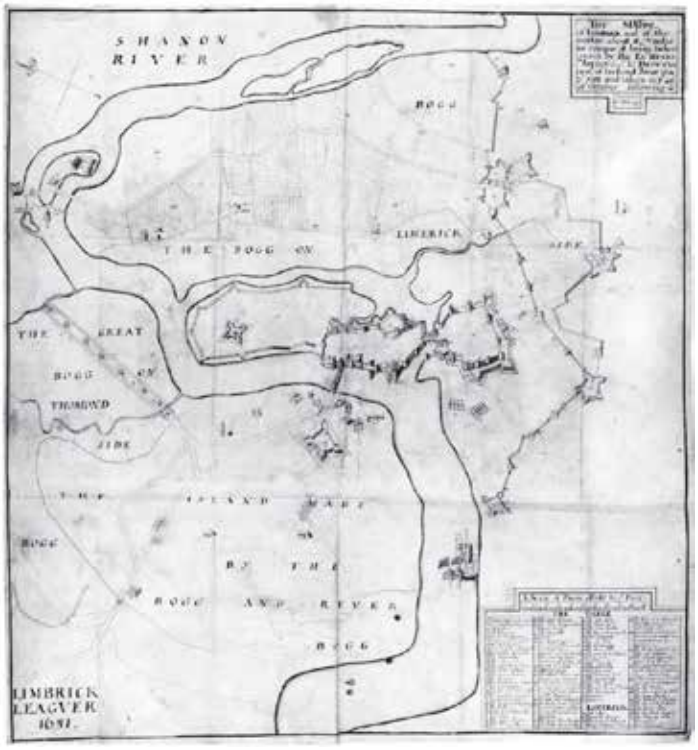


Fig.101 Map of Limerick, c.1651

that expansion of the formal occupation of the lands to the west of Limerick are first recorded. By the 1660s Sir William Petty had completed a cartographic study of Ireland known as the Down Survey (1655-56). Having first been rewarded with lands by Cromwell he was fortunate to remain in favour after the Restoration, and was knighted in 1661 returning to Ireland in 1666. Through his descendants the lands were first owned under the titles of Baroness Shelburne (1688-1708) and then ultimately the Earl of Shelburne (1675-1751). The lands moved with the title and by the nineteenth century the land to the west of Limerick in the Parish of St Nicholas were in the ownership of the Marquess of Lansdowne.

Fig.102 Map of Limerick, c.1685

Between 1710 and 1740 leases for tanneries, breweries, malt houses, storehouses and slaughterhouses were registered. The city's buildings were gradually renewed with a good number influenced by the Dutch style. William Eyre's maps for 1752 illustrate the densely constructed interior of Irish Town noted to have many houses re-built taller and with cellars resulting in earlier archaeology being obliterated[11] (Fig.103)(Fig.104).

11 Irish Historic Towns Atlas – Limerick. P8. RIA, 2010.

Fig.103 Map of Limerick (excerpt), c.1752

Fig.104 Map of Limerick (excerpt), c.1752

Christopher Colles' map of 1769 clearly illustrates the expansion of the city beyond the lines of the historic city walls (Fig.105). The map indicates the gridded street pattern of New Town to the south of Irish Town. To the west the map indicates the expansion of properties extending out into the country. At this time there is no indication of the occupation of the west bank of the river beyond Curragower Mill (1642).[12] Reference to the mill in 'Images of Curragower Falls, Old Limerick Journal 1976' describes it as the only one of its kind in Ireland at the time of the etching and was subsequently lost to fire in 1860.[13]

12 1642 annotated on the RIA Atlas. 1672 attributed in article of 1980 – Old Limerick Journal Vol. 2.

13 Limerick Chronicle 12 Jan 1982

Fig.105 Map of Limerick, c.1769

By 1715 the land to the south of English Town and the west of Irish Town had been reclaimed from the river and developed to form the Mardyke Quay (Fig.106). Eyre's map illustrates the formalisation of this previously undeveloped area including 'New Bridge'(Fig.103) and the mill known to date from the medieval period and seen on Hardiman's map of 1590 (Fig.107).

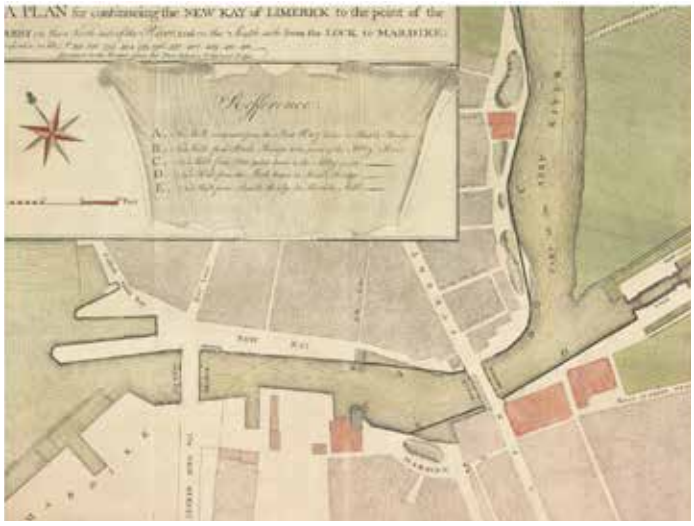


Fig.106 Map of Mardyke Quay, c.1764

The Georgian period witnessed dramatic change, moving from a fortified city with clear medieval form and structure to a city that was expanded and laid out anew. The demolition of the city walls commenced in 1760 and was progressed in parallel with the improvement of the existing quays and addition of George's Quay. By 1769 the medieval mills had been removed and replaced by Charlotte's Quay and Custom House Quay.

In 1715 the proposal to link Dublin to Limerick and the Shannon via canal was mooted.[14] The Grand Canal at Limerick was commenced in 1755 with the cutting through to the Shannon upstream. The Grand Canal commenced from Dublin in 1757 the same year that the Sankey Canal opened between St Helens and Widnes in England. By 1761 the Bridgewater canal had opened linking Manchester to Liverpool. The Grand Canal's first use commenced in 1775.[15] This paralleled the Golden Age of canal construction and operation in Britain from the 1770s to the 1830s. By 1817 the Grand Canal was operational from the Shannon at Limerick exploiting sections of the river inland via Killaloe which had to be improved to make them navigable. The improvements enabled increased trade and operation along the river and into the country. The advent of the railway in 1849 impacted the use of the waterways resulting in a halving in freight from over 100,000 tonnes in the years before.

By 1786 the city's expansion and transformation to a modern manufacturing and trading hub was well

14 Ireland's Inland Waterways. Ruth Delaney 2004.

15 Irish Historic Towns Atlas – Limerick. P8. RIA, 2010.

established. C.J.Sauthier's map of 1786 shows the expansion of the New Town (Newtown Pery) with a number of quays extending from Ball's Bridge into and south along the Shannon. It is on this map that the west bank is first noted as 'North Strand', occupied by a poorhouse south of Curragour Mill (Fig.107).

Fig.107 Map of Limerick, c.1786 by C.J.Sauthier

The development of the town closely followed the north south grid illustrated in Colles' map of 1769. By 1823 the occupation of the streets was largely complete. The 'Irish Historic Towns Atlas' notes:

"Judith Hill's analysis of the area stresses the imposing uniformity and austerity of the Georgian terraces, no doubt influenced by the architecture of Dublin which it closely resembles. Subtle variations in style from the 1760s to the 1830s are subsumed under a broader adherence to a common set of principles that leaves an impression of uniformity even though the terraces and individual buildings were built by different hands over a long period."

The New Town offered Limerick a fresh outlook and new prospects. With a focus on the emerging fashions the city could be considered among the most important in Ireland and Great Britain. The formality of the architecture resonated with the elite and elevated the city's status as a place to do business.

The city of the 1840s remained economically active despite the impact of the Great Famine of 1845 – 1849. The population of the City peaked at 48,785 in 1851 declining dramatically to 39,393 by 1871 and would not return to the 1851 levels for more than a century.

The second half of the nineteenth century witnessed the economic expansion of the city. Its global reach as a port city was underpinned by the Victorian entrepreneurial classes supported by the imperial trading networks.

The Union Workhouse was built north of the site of the Lansdowne Quarry in 1839-1841. This signalled the next phase of westward expansion outside the confines of the three historic cores of the city. Workers housing was erected along the new Ennis Road setting out the first that would become a series of new roads and a network of suburban housing in the following century.

The city continued to expand into the 20th Century with improved transport networks enabling it to continue a trend of modernisation. As each new phase of post-industrial technology arose Limerick maintained its status as the urban centre of Munster. The city maintained its urban density with an increasingly developed suburb. Industrial activity of the city continued to be dominated by food processing business and increasingly modern technologies replacing older trades and crafts that were no longer required.[16]

16 Irish Historic Towns Atlas – Limerick. P10. RIA, 2010.

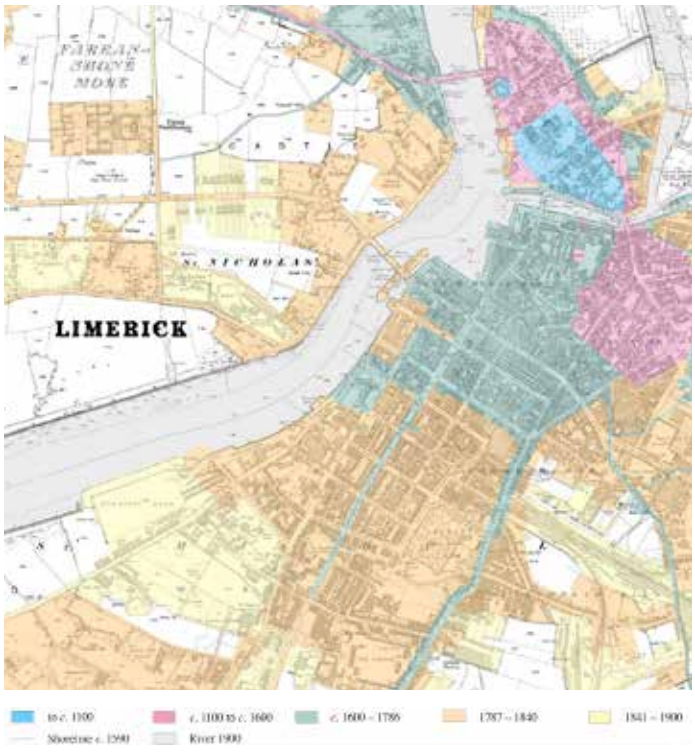


Fig.108 Growth of Limerick, to 1900, by Eamon O'Flaherty

The construction of Shannon airport in the 1950s influenced the importance of Limerick as a jumping-off point for transatlantic flight. The economic stimulus and business strategies developed around the airport proved a significant means to maintain Limerick's economy.

Following greater commitment to housing subsidies from the 1930s a significant number of public housing schemes were built across the city but by the 1960s the city faced a severe housing crisis. Following the development of large masterplans to both the east and west of the city centre over the next two decades, by the 1980s Limerick Corporation had provided 1200 new homes with significant development along the northern banks of the Shannon.

In the same period shipping developed considerably with a new tanker terminal and alumina extraction plant built along the estuary which first refined before exporting the raw materials. This established a period of rapid economic growth that then occurred in Ireland between 1995 – 2010. This resulted in the establishment of both the Technology Park, later the University of Limerick, and the Limerick Institute of Technology, giving Limerick the reputation of Ireland's Silicon Valley.

In the twenty years prior to the 1960s the number of pupils in the city doubled with little change in schooling capacity. As a result a number of new schools were developed across the city. Among these was the Salesian Secondary School on the site, built as an extension to the primary school established at Fernbank house in 1924 by the Salesian Sisters (Fig.110) (Fig.111).

In the 1970s traffic studies had established the need for another river crossing, and in 1988 Shannon Bridge was opened crossing from Lower Mallow Street to the south on to the dockyard site to the north connecting to the North Circular Road (Fig.112). At the time of writing, locations for another river crossing are being consulted upon.

Fig.110 Salesian School c.1932

Fig.111 Salesian School c.1955

Fig.112 Construction of Shannon Bridge, 1986

The Site

The lands to the west of Limerick remained sparsely populated until the 1700s. Two kilometres from Thomond Bridge to the west of the site sits St Munchin's Church (National Monument No.366) which is thought to be the oldest building in Limerick dating from the eleventh century.

With the exception of Curragower Mill there is little detail of the occupation of the west bank of the Shannon before the 1700s. By 1760 housing was present on the west side centred around the approach to the city across Thomond Bridge (Fig.113).

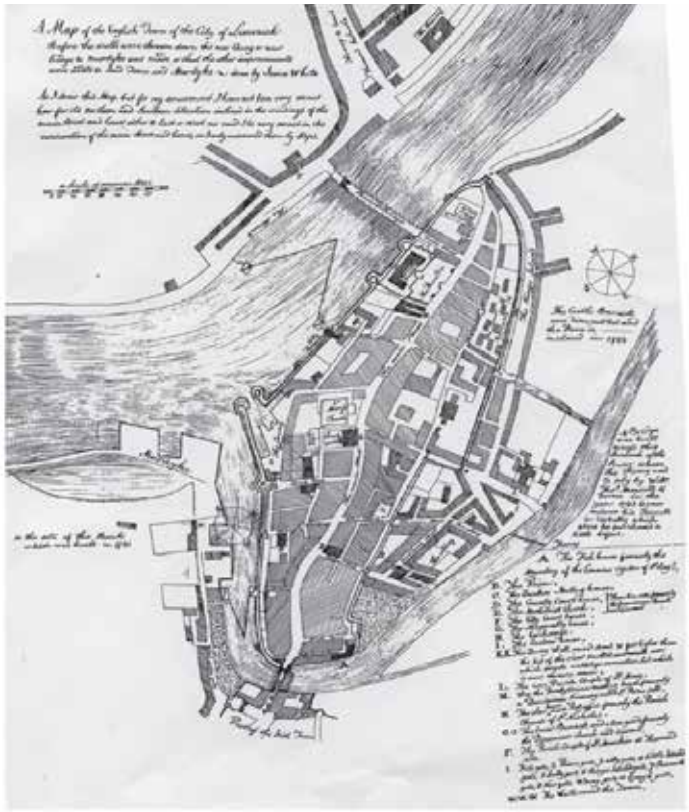


Fig.113 Map of Limerick, 1760 by James White

The city map of 1827 illustrates the creation of the Strand Road and the North Strand as additions to the older medieval routes (Fig.114). A 'House of Industry' is noted on the North Strand possibly representing the newest additions to the emerging western suburb. The Wellesley Bridge (1835) (later renamed Sarsfield bridge) was built to designs by the engineer Alexander Nimmo and based on the Pont Neuilly bridge near Paris. Texts of the time make it clear that the opening up of the western approaches was considered a critical part of the future economic expansion of the city.

The Lansdowne Quarry was opened in 1833, recorded as a limestone quarry in the 1840 OS, un-named on the map of 1870 and as a reservoir by 1900. Later analysis within this text suggests the disused quarry was exploited in the processing of Flax. The quarry may have been the source of stone for the Wellesley Bridge and properties along the North Strand.

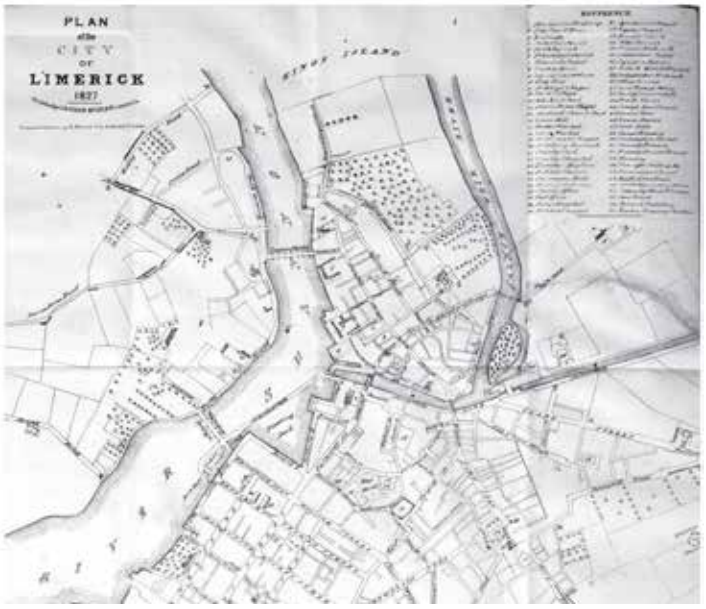


Fig.114 Map of Limerick, 1827 by George McKern

By 1840 the development of the west bank had progressed with new housing typically toward Thomond Bridge and industry along the North Strand (Fig.115). A series of houses labelled 'Ferry Cottage' occupies the site on maps of this period. These remain in the initial phase of the Flax Mill. To the west a slipway is illustrated on the site of a small dock (Fig.116). This was the site of the Limerick Shipping Company, owned by John Norris Russell. This represents the extent of development along the western water's edge.

Fig.115 Map of Limerick (excerpt), 1840

Fig.116 Map of Site c.1840

By 1850 the site had been identified for development as a Flax Factory. J.N. Russell (1774-1859) was a significant business owner whose company J.N.Russell & Sons was the biggest miller of maize in Ireland by the end of the 19th Century. In 1810, Russell had built Newtown Pery Mills, the largest flour mill in Ireland, and between 1835 and 1857 had purchased five other flour mills in the vicinity of Limerick.

The addition of the Flax Mill will have added breadth to the Russell business and allowed them to better exploit supply chains that formed part of their existing business activities.

At the time of J.N.Russell's death in 1859, the family company ran the largest shipping business in the port of Limerick. From then the company was run by three of his sons, with J.A.Russell taking control of the Flax Mill at Lansdowne (Fig.117). At this time, the running of the mill was assessed by James Campbell. In 1864 Peter Tait, owner of the local Limerick Clothing Factory purchased shares in the company.

By 1870 a fall in demand for flax caused the mill to close and the site remained vacant for six years until it was reopened as a flour mill. This work continued on the site until 1884 when the flax mill was bought by the Condensed Milk Company of Ireland. The rest of Russell's milling concerns were taken over by Goodbodys in 1898.

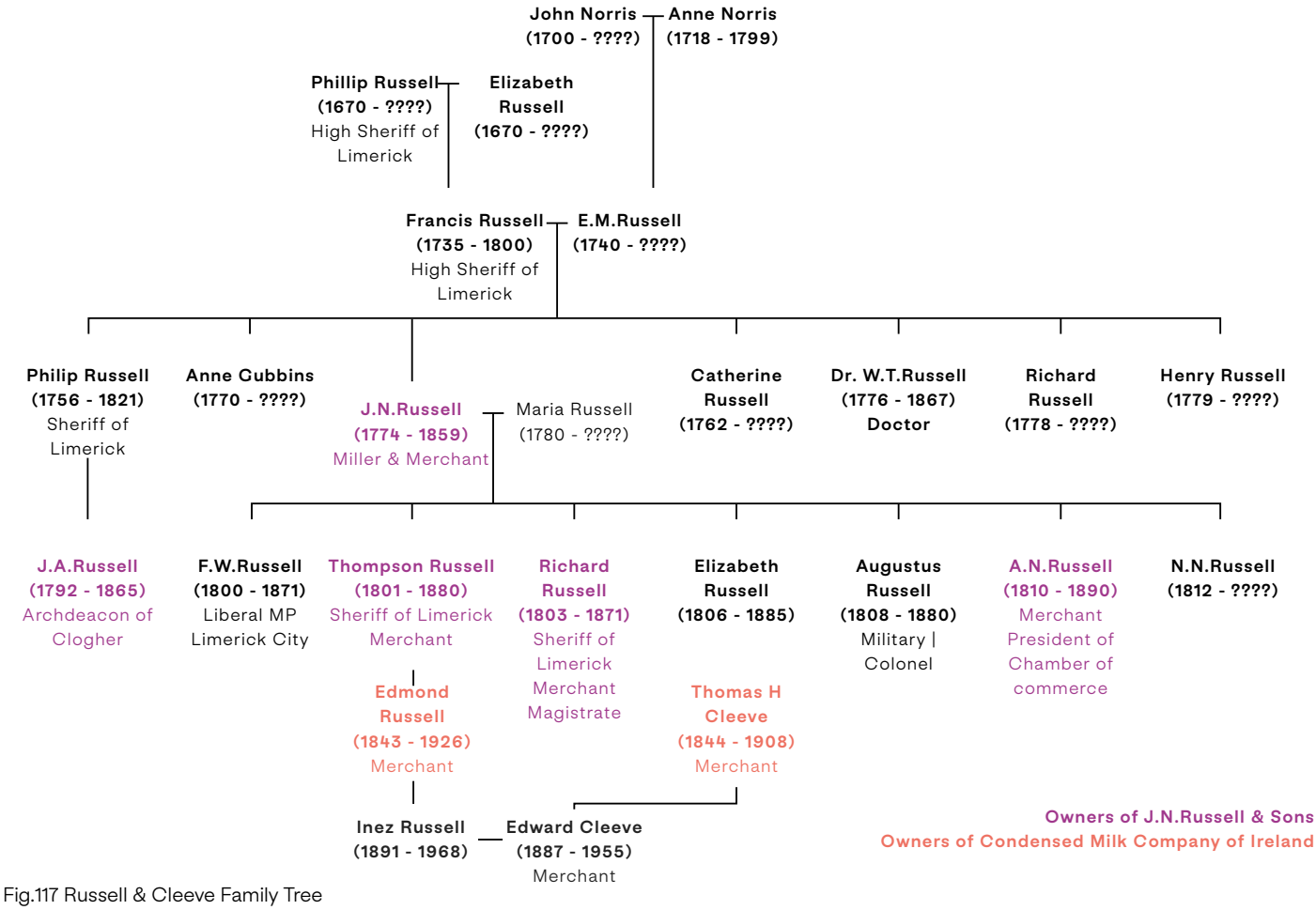


Fig.117 Russell & Cleeve Family Tree

Phase 1 - Flax (1850 - 1876)

It was in 1840s that the Quarry Road works were expanded and new quarries were opened up on both sides of the Shannon. [17]Industrialisation influenced the landscape of the city with the expansion of milling and economic phases that influenced the production of linen. Until the second part of the nineteenth century flax processed within Ireland was almost wholly grown there with approx. 7000 acres in Munster.[18] The success of the Ulster flax mills inspired the industrialisation of linen production in the south. Ulster acted as the source for skill to guide the designs for new factories. By the 1850's steam power emerged as a means to significantly enhance production. The J.N. Russell owned Newtown Perry Mill (1810) was substantially enhanced with the addition of Limerick's first steam engine in 1827 (Fig.120). Other steam powered mills were to appear in Limerick in the following years including Carryowen Steam Mills (1850), Mount Kennet Corn Mills (1849), Lansdowne Spinning Factory (1853) and Bannatyne's Mills (1874).

By the 1850s much had been learnt from the cotton mills of England and Northern Ireland. Rynne notes that 'the mechanisation of Ireland's textile industries is broadly analogous to that of Great Britain'.[19] The form and layout of spinning mills was largely resolved following a period in the development of steam engines, spinning machines and weaving machines. It was in the second part of the nineteenth century that the four stages of the process; preparation, spinning, weaving and finishing began to be more commonly undertaken on a single site.[20]

On the west side of the road the Russell owned shipyard had been operational in the years before 1850. It contained 'powerful machinery – [that could] cut a bar of iron more easily than you would slice an apple – and punch a hole in an iron sheet'[21] (Fig.118). This suggests that steam power may have also been exploited at the forge supporting the context for the development of the Flax Mill in its early years. The proximity of a forge to the quarry will have aided the works. Facilities such as this aided the development of the site.

This arrangement was not unique. The Murrays' Mills complex in Manchester built 55 years earlier and the world's oldest non-fireproof steam powered cotton mill was erected at the direction of the Murray brothers, Scottish machine makers who had initially set up a workshop on a site adjacent to their workshop. It is also of note that their strategy to contain the main stages of processing within a locked compound of mill buildings with a reliable water source in the form of a canal basin ensured the successful operation of their mill for decades (Fig.119).

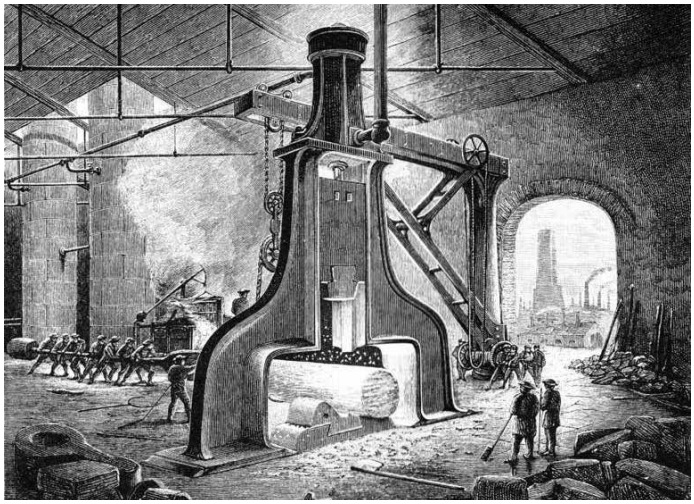


Fig.118 Engraving of a steam hammer, c.1871

Fig.119 Plan of the completed complex at Murrays' Mill, Manchester.

17 Irish Historic Towns Atlas – Limerick. P9. RIA, 2010.
18 Industrial Ireland 1750-1930. Colin Rynne 2015 – P205
19 Industrial Ireland 1750-1930. Colin Rynne 2015 – P207
20 ibid
21 The Cork Examiner – 5th December 1855.

In late September 1850 'a very handsome factory intended for the manufacture of flax'[22] was reported to be near operational on the outskirts of Limerick. The occasion of the story was the arrival of a large water tank weighing four tons reaching the quays from Clasgow possibly destined for J.N. Russell's skutching mill at Roxborough which it appears was amassing a stock of flax to be prepared for spinning.[23] A year later the Russell skutching mill at Clonlong is also reported to be active in a similar capacity.[24]

The purpose of Lansdowne Mill was described in social terms as a means to 'effect any improvements in the conditions of our fellow countrymen.'[25] a philanthropic tone which is a common theme of the reported activities of the Russell family. Caution should be exercised as the social context of the period was harsh. Working hours in other Limerick factories of the 1850s were reportedly long, starting at 6am and not finishing until 6pm for some and 7am to 8pm for others.[26] The Factory and Workshop Act 1878 prohibited women from working more than 56 hours a week, a clear indicator of the measures to address what must have been substantially longer hours across the industry.

Fig.120 Staff at Newtown Pery Mill, 1935

Early reporting captures the activity of J.N. Russell in his efforts to open the factory however there is little news of the people involved. The early reports offer no evidence to identify the architect of the Lansdowne Mill. The newspapers of the time afford some insight into the evolution of the site in the first few years. The buildings were built of cut limestone quarried on the spot.[27] The quarrying of the stone is noted to have created the pit in which the fly wheel could be located and the space for the tanks that stored the spring water.[28]

The building that became known as the infiltration gallery was built over the sunken area of the quarry that created the pond. The stone arched plinth is described as set over 'vats of stone' which must have served to store the water but could also have been used to steep the flax. The article notes 'over those vats of stone [the arches] support the broad floors of the new Linen factory, which, half roofed with glass, is filled with light from above.'[29] The description offers a vivid account of the building's form affording analysis of the remaining fragments. The glazed roof, long since lost, suggests ample daylight was important offering some idea for the potential use of this building. Other flax mills of this period and earlier relied upon large well-lit buildings for dyeing. The dyehouse at Ditherington Flax Mill (1798) is a single storey building built around 1850 which relied upon long clerestory windows to allow ample daylight to penetrate the room below. A similar building may have been built over the reservoir at the Lansdowne Mill in 1855 and with consideration of the operational arrangement of the site it is likely that the dyehouse was located on this part of the site.

Fig.121 The dyehouse at Ditherington Flax Mill

22 The Limerick Reporter and Tipperary Vindicator – 20th September 1850.
23 The Cork Examiner – 20th November 1850.
24 The Morning Advertiser – 20th June 1851.
25 The Limerick Reporter and Tipperary Vindicator – 20th September 1850
26 A Stitch in Time. A History of Limerick Clothing Factory. Sharon Slater. p12.
27 The Cork Examiner – 5th December 1855.
28 ibid
29 ibid

Within its first period of operation the Mill's chimney required re-construction. A severe storm struck Limerick harbour on Christmas eve 1852 destroying a ship in the quay and causing extensive damage to buildings. The chimney is described as having been 160 ft tall but of too narrow a base to resist the force of the wind.[30] The top two thirds were lost as was the boiler house onto which the chimney collapsed. The chimney was rapidly re-built in its entirety over a superior foundation.[31] The current chimney is a protected structure (Golden Vale, Chimney – Reg no – 21512059) noted to be 120ft tall and having been reduced by 30ft in the recent past.

Fig.122 The Flax Mill chimney visible from the Cathedral, c.1870

The initial phase of construction appears to have taken three years including the excavation of the quarry base to create the reservoir. Development continued after initial manufacture had commenced. A number of offices, stores and other buildings are described in the newspapers of 1855. Of particular note is 'the first engine-house' containing a 60 horsepower engine. This would have been a substantial engine and coupled with its presence in its own building helps clarify the possible layout of the site. It is likely that the barrel roofed building which still exists, was the location of the original engine house that burnt down in January 1869.

By 1855 the main mill, reservoir, 'infiltration' building and engine house were all in place. Within the complex 50no. weaving looms were in operation with plans for 800 more.[32] The physical description of the weaving building indicates that the lower floor was in place and the upper floor under construction and probably not available for use until late 1855 or 1856. It is likely that the offices had been built along the main road and that the site's boundary was complete as a necessity for the secure operation of the business and site.

The introduction of the sewing machine to Limerick in 1856 by Peter Tait bolstered the move to mechanised manufacture. By 1857 N.J. Russell is thought to have employed sewing machines in the Lansdowne Flax Mill for the manufacture of canvas bags.[33] Industrial action over the perceived loss of work arising from the new machines lead to the workers strike in the city in 1858. Tait and Russell's factories were among those identified.

At the death of J.N. Russell in 1859 the mill was passed to J.A. Russell who commissioned a review of its operation. The 1850's had been noted as a challenging environment for the cultivation of flax with the mill's operation stymied by low yields and poor quality flax arising from the preparation process.[34] This review was undertaken by James Campbell of Belfast who provided a comprehensive account of its construction and operation.

The building has been erected with great care and attention to thorough ventilation, thereby providing for the health and comfort of the people employed in the different departments of works. Besides having lofty ceilings, ventilation is promoted by small openings in the side walls, under the windows cills, and also, by holes in the hollow cast-iron columns or supports, close to the ceilings, in which is inserted a bell-mouthed opening, well calculated to draw off dust from the hackling, tow-carding, and preparing machinery, and the heated vapour from the spinning-rooms, especially when it is understood that the discharge from the columns is outside the roof.[35]

Campbell's appraisal offered detailed observation of the existing works recognising elements of quality and foresight while also offering areas for improvement. He identified significant failings in the operation of the spinning machinery providing critical observation of a failure to understand the correct method for maintenance.

30 The Limerick Chronicle – 29th December 1852.

31 The Limerick Chronicle – 15th January 1853.

32 The Cork Examiner – 5th December 1855.

33 A Stitch in Time. A History of Limerick Clothing Factory. Sharon Slater. p129.

34 The Cork Examiner - 25th January 1864 : 'when the messers' Russell first established their Flax Factory, and the efforts made in the county by growing flax to aid their project; but it failed as no proper means were to be had for preparing the flax for sale.'

35 James Campbell Report 1859 - Andy Bielenberg 1995

'it is greatly to be regretted that you had not the good fortune to procure the services of a person properly qualified to manage the business connected with your 4,000 spinning spindles, in such a manner as to have held out reasonable encouragement for any early extension for the business, which was as the only change of remuneration for you enormous outlay'.[36]

Campbell noted that the 'rough flax' was bought at open market or from merchants indicating that the method for procuring the raw material had remained unchanged since 1851. He offered a significant observation that illustrates the fuller extent of processing on site:

"the yield of dressed flax is from four to seven pounds per 112lbs. of rough flax less than the quantity it should be, notwithstanding that your machine is equal in quality and in principle to any of the kind in general use – I conclude, therefore, that there is too much reason to doubt the efficiency of your roughing, hand-dressing, and assorting departments."

The 'dressing' is a process that entails the breaking, scutching and heckling of the flax confirming that the raw flax was supplied to the factory. This accords with the earlier report that the 'process of steeping, skutching, etc. will be gone through at the mills.'[37] The extent of the process is further described in the 1864 article in The Freeman's Journal and the Notice of Sale of 1870 which lists 14 portable skutching machines. Rynne notes that by 1860 of the 1045 scutching mills in Ireland just 8 were in Munster, the majority 1017 being in Ulster.[38] He also notes that 'The scutched flax, which made up approximately 10 per cent of the entire plant, could, when divested of its waste, be transported more economically to the spinning mill.' However, in the south of Ireland, the scarcity of scutch mills and the absence of proper flax markets effectively stymied attempts to encourage flax growers in the 1850s.'[39] Knowledge of this context permits the view that the ambition of the Lansdowne Mill at its inception was for the complete processing of flax from plant to linen.

The use of the reservoir in the former quarry as a source of water for the resting of the flax seems logical and is supported by earlier accounts of the formation of the vats.[40] Rynne notes that 'after harvesting, flax was soaked in water for about two weeks in retting dams or flax ponds'.[41]

From the purchase of the raw flax Campbell's report covers its initial processing, entailing the crushing of the flax to separate the woody part from the stem before scutching it and then hackling. Once the raw material has been processed it was ready for carding which entailed the combining of the different fibres into a homogeneous mix. The arising product could then be spun and finally processed for yarn or cloth before dyeing.

The changes that may have arisen following Campbell's report are not referenced, however an account of a meeting of politicians, business owners and landowners in Limerick in 1864 captures the context of the time and indicates that changes were being sought to improve the better and more effective growing and processing of flax. The climate was one in which flax had not been successfully developed as a raw material for industrial production in Limerick. In pursuit of improvement, advice had been sought and Campbell's guidance had influenced changes to the processing of the flax. At the meeting Richard Russell described "the hot water process recommended - for preparing flax, its failure and the great loss resulting from it to his firm. The hot water process injured the flax and [the new company] should advise the people to prepare the flax in any other manner." – They had introduced new machinery into their factory, and he invited anyone wishing to be informed on the manufacture of the raw material to visit their concerns where they could see the entire process."[42] The report offers an indication that the early years probably employed traditional flax steeping methods with the hot steeping being trialled post 1860 but to the detriment of the factory's production.

The same article from 1864 records the political ambition to encourage the profitable cultivation of flax in Limerick at the time when it was noted Ireland was haemorrhaging its young men to America where a living, however hard, could be more easily made. "In 1860 the value of the flax sown in Ireland was £2,000,000, and in 63, it had increased to not

36 James Campbell Report 1859 - Andy Bielenberg 1995
37 The Limerick Reporter and Tipperary Vindicator – 20th September 1850.
38 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P208 & 467.
39 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P209.
40 The Cork Examiner – 5th December 1855.
41 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P207.
42 The Cork Examiner – 25th January 1864.

less than four million".[43] The volume and value of flax was agreed to be increasing with no indication of the market stalling. The production of Flax was largely undertaken in Ulster. In Munster production fluctuated from 1850 to a peak in 1864 indicating the unfounded optimism of the members of the meeting. Flax production plateaued below the 1864 peak and collapsed between 1870-1875.[44]

The Flax Factory is thought to have worked successfully through the 1860s under the management of J.A. Russell. Fire damaged the mill in 1864. The Southern Chronicle of 25th May 1864 reported a fire in one of the sheds in the yard. The fire was attributed to the hot weather causing the tarred timber roof of the shed to combust. The fire was limited and the loss extended to the shed and its content but no further. The location of the shed within the complex is not clear.

In 1864 Peter Tait became a share holder in the Flax Mill.[45] [46] A character of great inspiration and interest Peter Tait embodied the entrepreneurial ambition of the Victorian age rising to become mayor of Limerick in 1865, 1866 and 1867 before a dramatic decline due to his unpopular conservative politics. His activity generated significant shipping links as well as a link to his substantial clothing factories across the Shannon. Tait's involvement may have been little more than a minor share holder but must have served as a symbolic partnership with political and financial benefits.

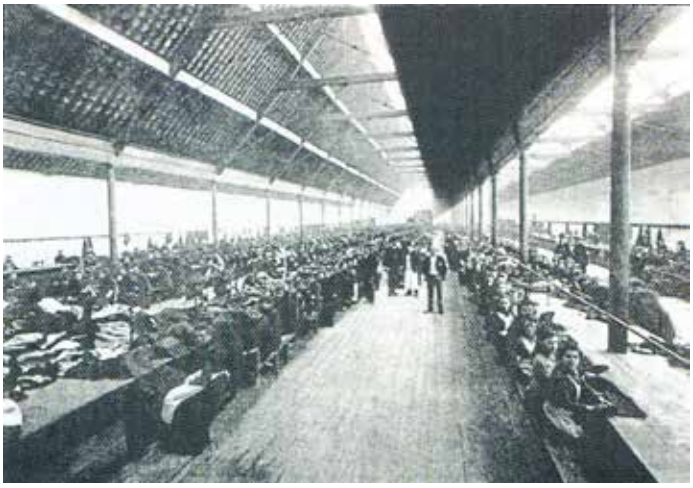


Fig.123 Inside Limerick Clothing Factory owned by Peter Tait

After 1865, in the final four years of operation the cottages to the north boundary were replaced by a long shed and two storey store building. It may be that these were built as robust replacements to the building lost to fire in 1864. Their location would suit the storage of linen prior to its shipping from the site.

In 1869 an extensive fire broke out in the "engine-house, over which were situated the drying lofts for flax. – the whole of the engine-house, where all the operatives' machinery was worked, was in flames, and the steam had to be quickly let off from the boilers. – the engine house and drying lofts – were burned to the ground, - but the main building escaped the fire. Nearly 1000 hands, mostly females, will be thrown out of work."[47] Other reports of the time note that the mill remained operational. Less than a year later the Cork Adviser of 4th April 1870 reported the closure of the mill as a consequence of the depressed nature of the linen market. 'J.N.Russell and Sons appear in Slater's Directory of 1870 as 'flax spinners and linen manufacturers', the valuation lists recorded in November 1870 that the 'mills are not now working'.[48] A detailed map of this time offers a detailed indication of the scale of the operation on site at the time of its closure.

Despite the ambition and joint venture proposed by the leading names of Limerick industry five years earlier,[49] the collapse in flax production lead to the mill becoming unviable leading to its permanent closure. The Limerick Reporter and Tipperary Vindicator 11 January 1870 advertised the sale of all the machinery of the 'Limerick Flax Company Ltd' at the Garyowen Flax Mill.[50] The article records the sale of machines to purchasers from across Ireland and Britain. The spinning frames were reportedly sold to a customer from the US.[51] By 1870 it is clear that commercial flax spinning and weaving was at an end in Munster. The closure of Lansdowne Flax Mills brought an end to steam powered flax processing and weaving at the site. The mill remained unused and in 1876 it was cleared of much of its machinery.[52]

43 The Cork Examiner – 25th January 1864.
44 Flax Cultivation in Ireland – WJ Smythe - 1988
45 Sir Peter Tait, Kevin Hannan – Old Limerick Journal, Winter Ed. 1994.
46 The Cork Examiner – 25th January 1864.
47 The Dublin Evening Mail, 27th January 27 1869.
48 Andy Bielenberg, UCC, 1995
49 The Cork Examiner – 25th January 1864.
50 Andy Bielenberg, UCC, 1995 footnote 8.
51 Limerick Reporter – January 1870.
52 Belfast News Letter – 22nd December 1876

Fig.124 OS Map from 1870

Phase 2 - Flour (1877 - 1884)

Minutes from the 'Board of Guardians' indicates that between 1870-1877 Lansdowne Flax Mill lay unused and without function.[53]

The drought of 1875 caused significant disruption to the Russell's flour mills. The contraction in production must have promoted a review of assets and no doubt guided their action in the following period. On 12th December 1876 the shipyard site adjacent to the mill was host to a three-day auction. The machinery of the Flax Mill was sold with much of it being disseminated leaving Limerick and even Ireland.[54] The clearance of the site is considered a precursor to the establishment of the site as part of the warehousing for flour from the Russell's flour mills.

The Lansdowne site is thought to have become a site for storing flour although very little evidence has been found to offer an account of the use of the site in this period. 'The post-famine depopulation of Ireland and the consequent decline in the Irish grain acreage, coupled with the arrival of cheaper American flour to Britain, had a catastrophic effect on Irish flour mills; so much so that by 1885 two-thirds of Irish flour mills had gone out of business.'[55]

In 1881 Thomas Cleeve moved his business operation into the former engine house and adjacent buildings at the north west extent of the former shipyard site. His operation was concerned with the processing of coffee.

Fig.125 View from the floating docks towards the site c.1875

53 Munster News – August 1874 - Board of Guardians
54 Belfast News Letter – 22nd December 1876
55 Colin Rynne – Industrial Ireland 1750-1930. 2015. – P264.

Phase 3 - Milk (1881 - 1927)

In 1881 Thomas Cleeve's coffee roasting business began operation in a building at the Russell's shipyard. Thomas Cleeve was a Canadian of English extraction who first came to Ireland as a teenager to work for a agricultural machinerymaker J.P.Evans & Co. Cleeve was evidently entrepreneurial and keen to exploit the opportunities a commercial centre such as Limerick afforded. His initial venture quickly evolved into processed milk and the manufacture of dairy products for home consumption and export. The comencement of condensed milk processing is not specifically documented although it is thought that this occurred while Cleeve was still located in the main building on the shipyard site. An 1883 newspaper article reports:

"A new condensed milk, manufactured by a Limerick firm, styled the Condensed Milk Company of Ireland, Lansdowne, Limerick, - promises to be a very large and prosperous undertaking. The factory, which is situated in the centre of the principal milk producing [centre] of Ireland, enables the company to draw their supplies from the finest pasture lands in the world. – A visitor going through the factory will observe that one of the most important processes through which the milk is put through is the heating of it by degrees in a vacuum pan to a certain temperature". [56]

The initial outlay was modest by comparison to the future investment. An article of early 1884 notes the condensing equipment cost £7000. [57]

The economic environment for creameries of the mid 1880s was one of change. Mechanisation of the processing of milk had emerged in the previous decade however there were failings in both business operation and mechanical processing.[58] The transition required dairy farmers to engage in a new kind of business to ensure a secure supply of milk to the creameries. By February 1884, 35no. farmers were supplying milk to the Cleeve's factory, which was processing 15,000l of milk daily; approx. 4500 tins.[59] While a large volume of milk this is not yet on a truly industrial scale which may support the theory that, in the first period of manufacture Cleeve's operated from the shipyard site.

By 1884 Thomas Cleeve is known to have acquired the former Flax Mill site and set up for the manufacture of condensed milk and butter. The infrastructure required had been explored in Cleeve's initial activity of 1883 and 1884. The upscaling in production required larger plant, more power, water and space. This need drove the re-construction of the Engine House and Boiler House and a new building built over the former dyehouse platform.

The formation of the 'The Condensed Milk Company of Ireland', registered in Liverpool, is reported in The Munster News and Limerick and Clare Advocate on Wednesday August 25th 1886. Demand for milk grew. In May of the same year Cleeve purchased 'The National Condensed Milk Company' in Mallow for approx. £1940, consolidating

56 The Shields Daily News, Saturday, 8th December 1883.

57 The Preston Chronicle and Lancashire Advertiser – 23rd February 1884.

58 Journal of the Society of Dairy Technology – Vol 46, No.4 November 1993.

59 The Preston Chronicle and Lancashire Advertiser – 23rd February 1884.

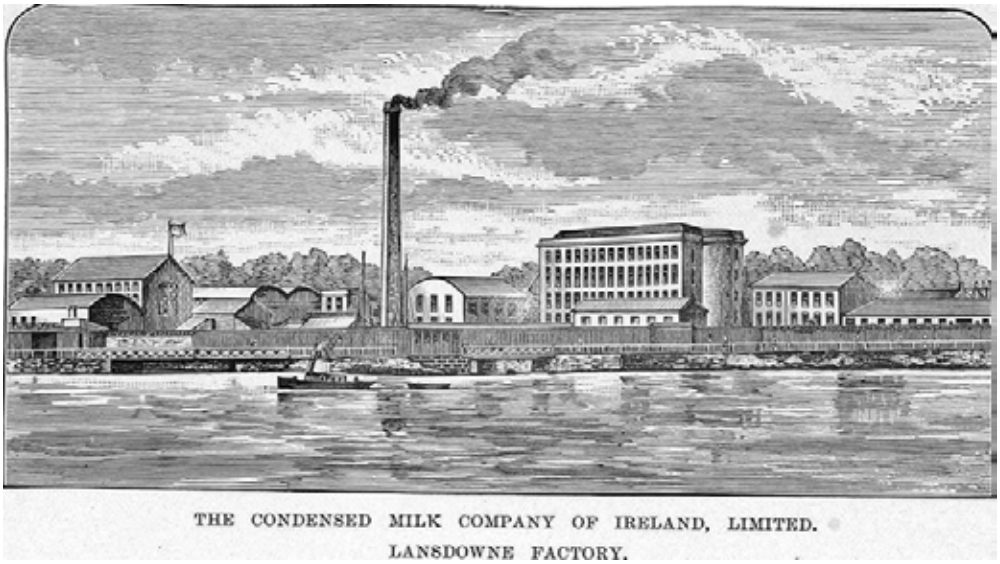
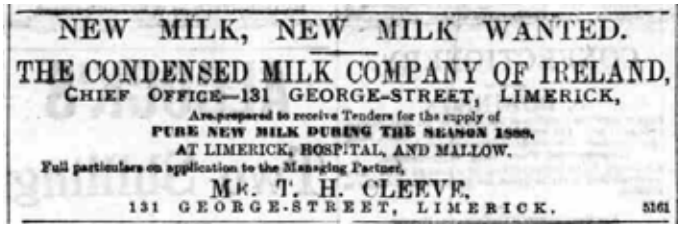


Fig.126 Etching of the site c.1890


NEW MILK, NEW MILK WANTED.

THE CONDENSED MILK COMPANY OF IRELAND,
CHIEF OFFICE—131 GEORGE-STREET, LIMERICK,
Are prepared to receive Tenders for the supply of
PURE NEW MILK DURING THE SEASON 1888,
AT LIMERICK, HOSPITAL, AND MALLOW.
Full particulars on application to the Managing Partner,
MR. T. H. CLEEVE,
131 GEORGE-STREET, LIMERICK. 5161

control of production and access to the market. [60]
Fig.127 Advert for condensed milk. Flag of Ireland - 7th January 1888

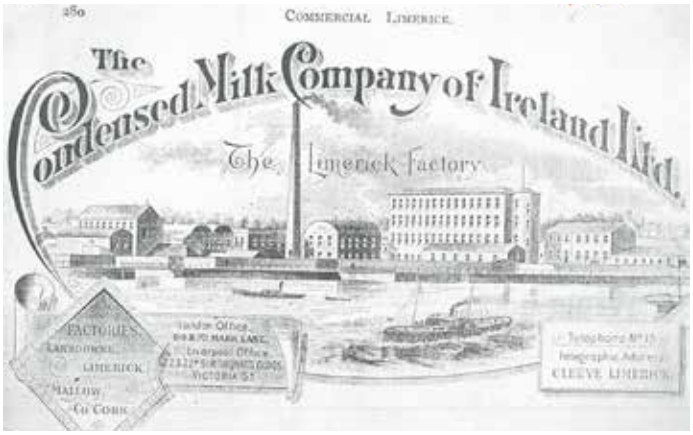


Fig.128 Advert for the Condensed Milk Company c.1892

By 1889 Thomas Cleeve had been joined by his brothers. They developed a network of creameries in Munster and expanded the operation at the Lansdowne site. By the early 1890s the site was well developed. An etching from 1893 indicates the operation across both the Lansdowne site and the ship yard with multiple buildings. This was most probably commissioned to celebrate and promote the development of the business and affords a clear picture of the re-development of the site in the earliest phase of its uses in the manufacture of condensed milk (Fig.126). An advert of the time duplicates the view in an illustration that lists the factories at Lansdowne, Mallow and Cork (Fig.128). A phone number 'No13' suggests this is after 1893 when telephones were first available in Limerick .[61] In the same year, 1893, an interview with Thomas Cleeve captured the quality of pasture, density of herds that grazed them, their proximity to the Limerick and the other creameries and the advanced nature of the technology at the disposal of The Condensed Milk Company. Of note was the daily production of 60,000 tins of condensed milk from 10,000 cows, approx. 200,000 litres of milk, a substantial increase on production of 1883.[62]

60 The Dublin Evening Mail, Wednesday 16th May 1888.
61 The Growth and Development of the Irish Telephone System – A J Litton - 1961
62 The Cork Daily Herald, Thursday, 6th July 1893.

Fig.129 Location of well and land purchased by Cleeve

In 1896 Cleeve's had purchased land to the west to exploit a well for what must have been spring water.[63] This has been reported as a tidal pond in later documents although the use of salt water is unlikely and would have been available more locally. The spring water was pumped from the well to the factory through pipes laid in the ground (Fig.129). An increase in production and activity on the site appears to have been broadly consistent from 1884 to 1896. In consideration of the contemporary reports it is likely that the Cleeve's factory was substantially developed by 1893 with ongoing development an inevitable aspect of the factory's existence.

The renovation of the former Mill from 1884-1893 is reported to have required the investment of £100,000.00[64] and entailed the conversion of the existing buildings. Much of the cost will have been invested in the equipment required in the operation of the condensed milk plant.
The journey of the milk in the manufacturing process started with its delivery to the factory via horse and cart. From the delivery yard it was sampled by tasting to confirm

63 Deed of sale – 1896 / copy 4th July 1919. Map No.5 and Lot 17.
64 The Condensed Milk Company of Ireland (ltd) – A Monster Irish Industry Reviewed – 8th July 1898 & The Cork Daily Herald, Thursday, 6th July1893.

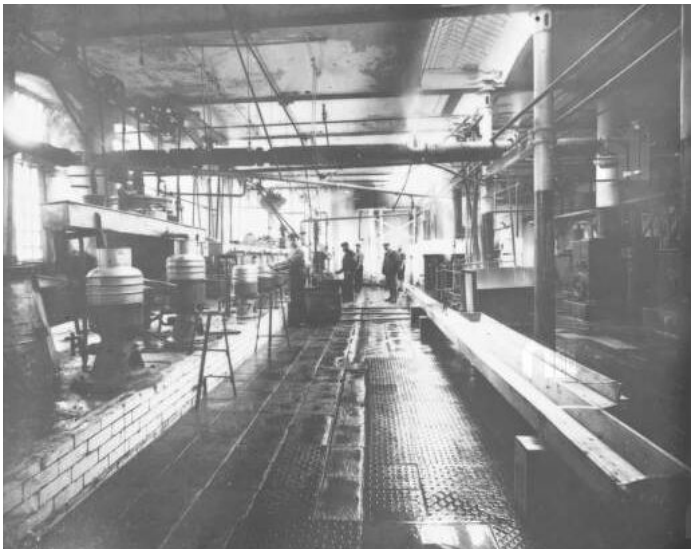


Fig.130 The Milk Separating Room c.1900

its quality. It was then decanted into vats over fine mesh filters (Fig.130). Once in the system it was pasteurised (72 °C for 15 minutes in the pasteurising room). The milk was then cooled, it is not clear if this was a rapid process, and conveyed via pipes to tinned copper vats for high temperature heating when sugar was added. This 'cooking' process was carefully managed until the milk had achieved the required consistency. The cooked milk was piped to condensers 'large elliptically-shaped vessels of copper, each measuring 9 feet by 6 feet, also called vacuum pans, which had a capacity of 15,000 gallons.' From here the condensed milk was cooled in 'iced-water [where it was] rotated, until cooled'. It was then piped to large cisterns and onto the tinning machines. This process required the milk to remain within the piped system from pasteurization until canning.[65]

65 The Condensed Milk Company of Ireland (ltd) – A Monster Irish Industry Reviewed – 8th July 1898

Cleeve's sought to maintain stability in its production by ensuring the supply chain was both robust and controlled. From the early 1900s the business began to purchase steam wagons to manage the collection of milk from the creameries around Munster. An article of 1910 describes 10no. steam wagons that have been purchased over several years from 1904.[66] These wagons would have required facilities on site to allow for their daily storage and maintenance (Fig.131). The early adoption of new technology was a common strategy for Cleeves. Following a significant increase in the cost of tin solder in 1908, the company invested in the procurement of a tin making machine that used seaming methods that did not rely upon solder.[67] As a consequence the Cleeves factory also manufactured its own tins (Fig.132) and the wooden boxes in which the tinned product was shipped. The labelling and dispatching department was the final stop for the milk before it left the site. By 1899 the production had reached in the region of 100,000 tins a week.[68]

66 Commercial Motors - 13th August 1908
67 Commercial Motors - 5th May 1910
68 The Irish Daily Independent, Tuesday 30th May 1899

Fig.131 Photo of Cleeve's fleet of steam motors. 1908

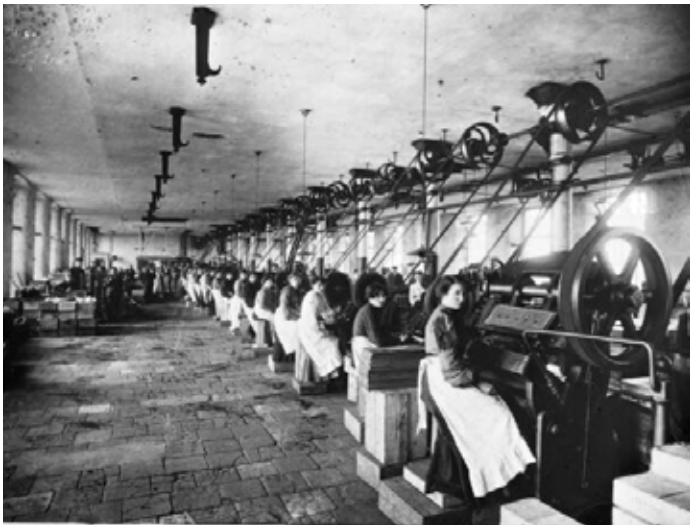


Fig.132 The Can Making Room c.1900

Fig.133 Advert for Davy, Paxman and Co Galloway Boiler - c.1887

The 1899 account offers insight into the steam plant describing five Calloway boilers 'each 30 feet by 7 feet. The engines are by Davy, Paxman and Co – and develop 300 horse-power'[69] (Fig.133). These boilers were typical of steam powered factories of the day. The boilers will have been installed in the engine house adjacent to the chimney and their power distributed via steam pipe and belt drive to the adjacent buildings.

In addition to the production line there was also a laboratory and forwarding offices. The laboratory is described as 'supplied with every appliance which modern science has produced'.[70] The precise arrangement of the buildings is not known however some guidance is afforded an approximation of the layout as described in an insurance plan of the time with a limited number of historic photos providing some support.

69 The Condensed Milk Company of Ireland (ltd) – A Monster Irish Industry Reviewed – 8th July 1898

70 ibid

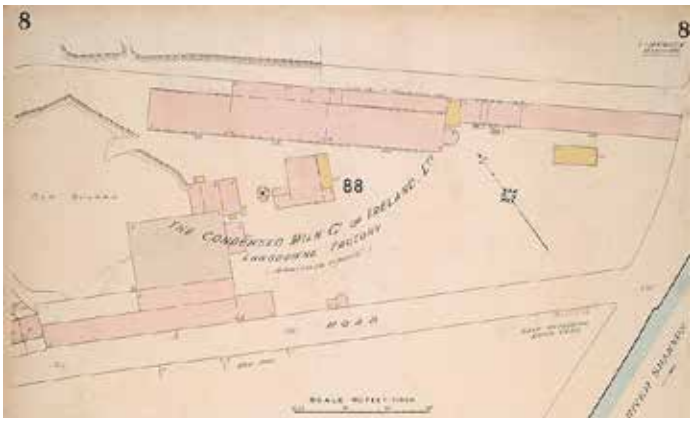


Fig.134 Insurance Plan of Cleeve's Factory from 1897

The insurance plan illustrates the building on the site at the time of the description and includes their height in storeys. All are a single storey tall save for the engine house, main mill, the eastern extension and a building in the east yard which no longer exists. The box factory is noted to be on the shipyard site in the building that hosted Thomas Cleeve's initial venture in 1884.

The map of 1900 shows further expansion of the main site with the shipyard site apparently partitioned, Cleeve's manufacturing to the rear (Fig.135). This map also identifies the benchmark on the gable of the long building addressing the North Strand and 'WM' to denote the weighing machine presumably located next to the delivery point for the milk arriving on site.

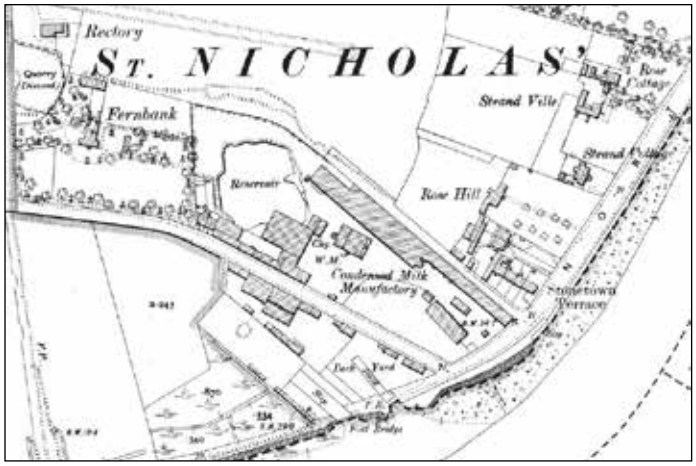


Fig.135 OS Map from 1900

In 1900 Thomas Cleeve received a knighthood in recognition of his achievements.

In 1907 a fire caused substantial damage to the Cleeve's factory at Mardyke.[71] The damage is reported to be the result of explosion and fire. Production capacity must have been affected making the operation at Lansdowne critical to maintain the business. Sir Thomas Cleeve died in 1908 and his brother Frederic became managing director. In the following years the business grew significantly. Following the outbreak of World War I, employee numbers rose to 3,000 as the Condensed Milk Company became a major supplier to British forces (Fig.136).

71 The Northern Whig, Saturday 28th September 1907

Fig.136 Cleeve's Condensed Milk & Confectionery advert, 1919

In 1913, the Dublin Lockout acted to promote acute awareness of the power of the labour movement. The dockers sought to establish a union for fair representation in the face of controlling and at times punitive employment terms. James Connolly lead the labour movement from 1914 to 1916 introducing his theories on socialism which were heavily influenced by Marx.[72] In 1917 The Irish Transport & General Workers Union established a branch in Limerick. Within a year the Union had successfully recruited the Cleeve workforce as members.

72 Austen Morgan (1989). James Connolly: A Political Biography. Manchester University Press. p. 17.

Fig.138 Aerial photo of Site, 1932

By 1919 the rising power of the workers inspired the formation of the 'Limerick Soviet'. The unionised workers of the Cleeve's factory debated action and on the 12th April 1919 voted to strike. The committee elected to identify the movement as 'Soviet' and lead a general strike across the city.

The self-declared Irish Soviet operated for just two weeks from 15th - 27th April 1919 in protest against the British Army's declaration of Limerick as a Special Military Area. The short-lived Limerick Soviet brought the Cleeve's company's headquarters to a standstill. Although normal business did resume Cleeve's company would never fully recover from the industrial action taking by the employees in 1919 (Fig.138).

Industrial action was to continue. The dockers strike of early 1920 impacted a number of factories and businesses in Limerick. Cleeve's agreed terms to ensure its coal supply could be maintained thereby avoiding the temporary closure of the factory.[73]

73 The Munster News and Limerick and Clare Advocate, Wednesday, 21st January 1920.

In 1922 the workers again seized the operation of the Cleeve's factory hoisting the red flag of the Labor movement over it. The action may have exceeded the unions' ambition; the papers record the union stating that they wish to "dissociate themselves from the collection now being made on behalf of the employees of the factory."[74]

The 1919-1921 period was also characterized by a substantial drop in the price of milk dramatically affecting Cleeve's operating figures and no doubt impacting the ability of the business to address the observations and actions of its workers.

The Irish War of Independence (1919-1921) saw many attacks on the Factories and Creameries owned by the Cleeves and considerable damage was done to the business by these actions. Damage was caused by Crown forces, despite the Cleeves being Unionists, and Irish Nationalist attacked facilities as they saw the Condensed Milk Company as a symbol of British rule. This issue would eventually be resolved with the Cleeve's company paying compensation to the farmers. About sixteen of Cleeve's factories would close following this event.

74 The Munster News and Limerick and Clare Advocate, Wednesday, 17th May 1922.

Fig.139 Aerial photo of Site, 1932

In 1923 the company Directors announced the liquidation of The Condensed Milk Company. Between December 1923 and late 1925 the company was owned by a local syndicate led by Andrew O'Shaughnessy while a permanent owner was sought. The company was purchased by Lovell & Christmas who were 'big English wholesale provision merchants'.[75]

75 The Munster News and Limerick and Clare Advocate, Saturday, 17th October 1925.

Phase 4 - Milk (1927 - 1974)

In 1927 the Free State Government established a new semi-state body (the Dairy Disposal Company) to regulate and rationalise the industry. The new governmental body took control of the Condensed Milk Company noting that the factory must not be allowed to become derelict and recognizing the importance of maintaining the operation of the site for the processing of milk.[76] The Cleeve's name continued with the manufacture of sweets adjacent to the main milk processing factory. The Dairy Disposal Company company operated under State control until the early 1970s.

In this period the operation of the site began its managed decline. The buildings were adapted to suit the operation of the factory with new buildings arising ad hoc. The engine house was first extended to the west, and then to the south; sheds were built up against the wall of the North Circular and the weaving mill appears to have had a new roof stretching over a wider footprint. A number of smaller accretions also appear (Fig.140). The post Cleeve's period offers little to no significance to the history of the site or its purpose.

76 The Munster News and Limerick and Clare Advocate, Saturday, April 23rd 1927.

Fig.140 Aerial photo of Site, 1955

Fig.141 Aerial photo of Site, 1969

Phase 5 - Milk (1975 - 2020)

By the 1970s the Government decided to break up the Dairy Disposal Company and transferred ownership of creameries to a number of local farmer cooperatives. By 1974 the Condensed Milk Company was sold to one of these, Colden Vale, a subsidiary of the Kerry Group. In this period larger changes occurred to the buildings, all of which appear to have accelerated the decades of managed decline since 1927. Although there has been no sight of specific records of changes to the construction on the site in this period it is thought that the buildings to the North Circular were largely demolished with those remaining substantially altered.

Fig.142 Construction of Shannon Bridge, 1985

The final remnant of the original family business, Cleeve's Toffee, continued until 1985 when the company which had purchased the brand was liquidated. It is around this time that the large building on the shipyard was demolished. The construction of the new 'Shannon Bridge' which commenced in 1985 had a huge impact on the dockyard site resulting in its clearance and the loss of almost all buildings save for parts of the boundary wall.

Fig.143 Construction of Shannon Bridge, 1985

In 2011 milk processing stopped and the site became vacant once again. Its presence in the city remained with the chimney soaring above the skyline to the west. It has remained in intermittent use as host to arts and other city events.

The site was afforded heritage protection in 2005 when the chimney and main mill were added to the Record of Protected Structures. The description identified the broader significance of the site while offering no explicit curtilage.

Appendix

Fig.144 Aerial view of the site c.1955

The Lansdowne Spinning Mill / Cleeves Condensed Milk Company

Site Curtilage Explanation Note

Phasing
Phase 1- 1850 - 1877 - Flax Mill
Phase 2 - 1878 - 1883 - Flour Mill
Phase 3 - 1884 - 1890 - Condensed Milk - initial period
Phase 4 - 1891 - 1923 - Condensed Milk - later period
Phase 5 - 1927 - 1973 - Dairy Disposal Company
Phase 6 - 1974 - 2020 - Golden Vale
Phase 7 - 2021 - 2024 Disuse

Extent of the Mill Complex
The major interest is within the curtilage of the former Lansdowne Spinning Mill site. The map of 1870s shows the industrial site at its most resolved from with the curtilage largely defined.

The former Lansdowne Spinning Mill built by J N Russell was substantially in place be 1877. Under the ownership of the Cleeve's family (1884 to 1923) it was subject to phases of development to allow for the processing of milk. The Cleeves initially commenced commercial activity on the site of the shipyard before expanding their operation onto the Lansdowne site.

The two protected structures of the Mill (21512053) and chimney (21512059) and are described as part of *"A vast early industrial building complex built by the Russell family taken over by the Cleeves family who embarked on the construction of the condensory building."*

Heritage significance is deemed to be present in the elements of the industrial site built and operated by both the Russell ad Cleeves families. While the former shipyard site is of interest relates only in its role as enabling the construction of the mill site and as home to the Cleeves business.

Changes to and Definers of the Industrial Site's Curtilage
North The hill rises-up behind the Mill complex. This has been developed in phased in the course of the C20th. The open ground just north of the spinning mill was adopted for water storage tanks.

East Defined by O'Callaghan Strand and the enclosing wall of the site. The edge of the shipyard site has been adjusted by changes to the public realm.

South The mill site is defined by the enclosing wall and buildings that address the North Circular Road. This road divides the mill from the former shipyard site. The Condell Road has impacted the south boundary of the former shipyard site redefining its extent.

West The housing to the edge of the former shipyard site appear to respond to the historic boundary line. The quarry wall is a clear definer of the extent of the industrial sites western boundary.

Existing measured building survey information taken from Geodata Chartered Land Surveyors survey drawings received 11/09/2020.

Dimensions are not to be scaled from this drawing.

Drawing to be used only for the purposes it was issued for.

Drawings are to be used as an indication of the building as found and have been augmented to record observations from site visits for the explicit purpose of informing the repair of the structure and envelope. Site measurement will be critical for any construction activity.

0 5 25m

Protected Structures
Main Mill - 21512053
Chimney - 21512059

Curtilage of Historic Mill Site
Curtilage of Historic Shipyard site
LTT Ownership

Drawing to be printed in colour
Existing site information is subject to survey
Feilden Clegg Bradley Studios LLP accepts no liability for use of this drawing by parties other than the party for whom it was prepared or for purposes other than those for which it was prepared

FeildenCleggBradleyStudios LLP

Bath Brewery
Toll Bridge Road
Bath BA1 7DE

t 01225 852545
f 01225 852528
e bath@fcbstudios.com

Revision	Date	Description
P01	XX.XX.2024	Issued for Section 5 application

Job/Drawing No: CRP01-FCBS-1A-00-DR-AA-1001
Revision: P01
CRQ - FLAX MILL PHASE 1 REPAIR
SITE LOCATION PLAN
Status: S2
Scale :1:1250 @ A3
Drawn: Bath Studio Checked: JS
FCBS Project No: 2027-1