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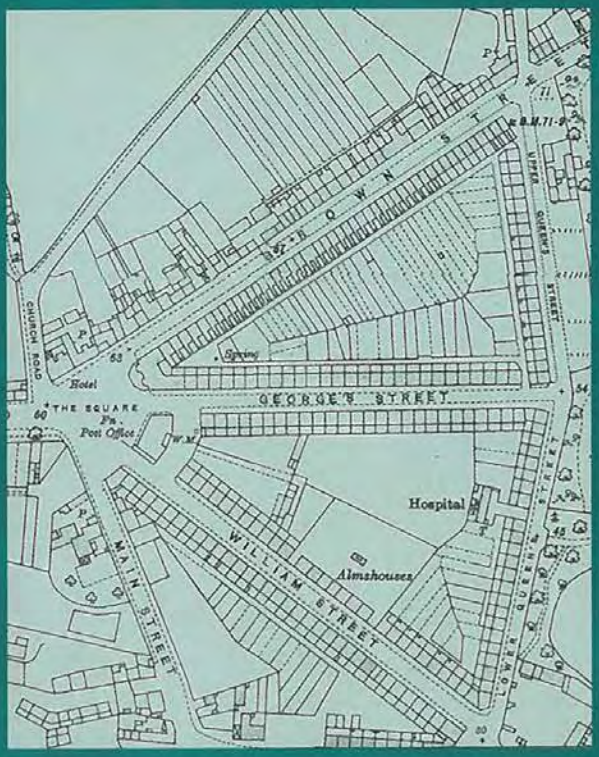
HERITAGE CONSERVATION PLAN

PORTLAW
COUNTY WATERFORD



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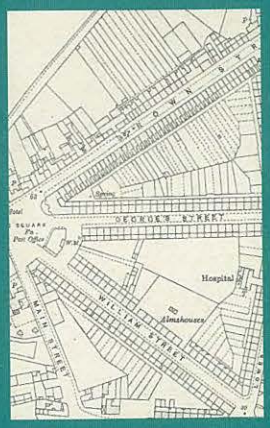

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COUNTY WATERFORD

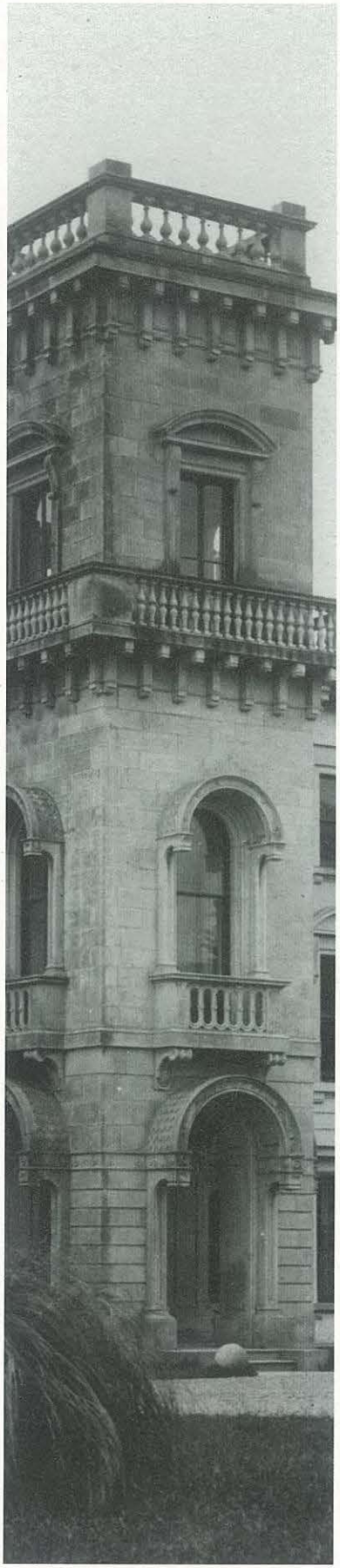
CONSERVATION PLAN

Garry Miley, John Cronin, Mary Sleeman,
RPS Environmental Services and McCutcheon Hogan Planning Consultants

An Chomhairle Oidhreachta
The Heritage Council

Department of the Environment, Heritage and Local Government

Waterford County Council



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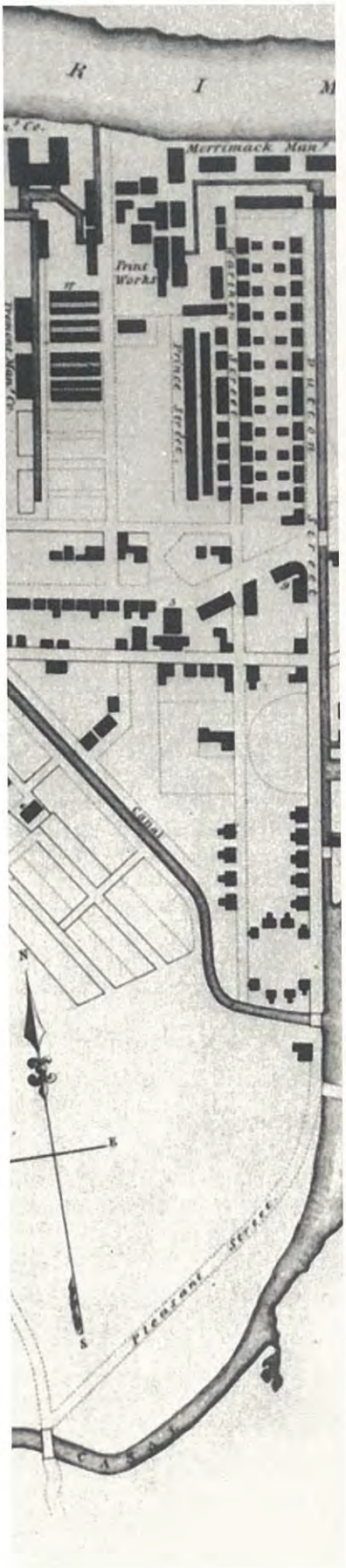
FOREWORD

The industrial town of Portlaw in County Waterford has seen many changes over the years. Originally a designed industrial complex with enlightened social values which reflected international trends of the time, its fortunes have declined, grown and declined again, to the point where its international importance almost disappeared amidst its decaying buildings.

In commissioning this Conservation Plan, the Heritage Council, Waterford County Council, the Department of the Environment and Local Government (now the Department of Environment, Heritage and Local Government), and the local community have once again established the undoubted significance of Portlaw. The implementation of its policies provides an enormous challenge to all. Through the vision contained in the Plan, and the determination to follow through with these policies, Portlaw will once again be set on a course which will reveal its importance to the wider community and secure a sustainable future.

Dr Tom O'Dwyer
Chairperson

Michael Starrett
Chief Executive



INTRODUCTION

The town of Portlaw is located in County Waterford on the north bank of the Clodiagh River just 13 miles north-west of Waterford City. With an interesting and important history, it owes its existence in large measure to the great 19th-century industrialist, David Malcomson, and his establishment of a cotton mill in the town in 1825. The factory that Malcomson built represented a remarkable achievement for its time: a large and innovative structure formed the centrepiece of an interconnected system of canals, weirs, gas works, bleach fields, weaving sheds and foundries. In short, the development of the cotton mill and its support facilities at Portlaw is one of the more exciting episodes in the history of industrial development in Ireland.

However, there is another aspect of the Portlaw story which is perhaps even more interesting than the cotton mill itself. In order to keep the factory supplied with much-needed manpower, the Malcomson family created a Model Village outside its gates — a social and town planning experiment in which the employer took on the responsibility for most aspects of the welfare of the workforce. 'Model' or 'Company' towns were significant innovations in urban planning, particularly in the great industrial centres of England and North America. While, strictly speaking, Portlaw wasn't the first such town to have been founded in this country (religious and other types of 'Utopian' settlements had been established in the 18th century), it is the most significant in terms of its scale and sophistication. It is also the one model development in Ireland which matches the level of achievement of the world-renowned villages found in England, Scotland and America (Saltaire, New Lanark or Lowell, for example). In fact, it is traditionally held that Portlaw was the probable inspiration for the Cadbury brothers' marvellous village of Bournville (outside Birmingham), a development thought by some to represent the pinnacle of this form of social and urban planning.

While the industrial complex and the model development alone should be enough to ensure the town's historic significance, Portlaw has yet more important features:

- The workers' housing was laid out on a Baroque plan, with streets radiating from a central square. This type of town plan is rarely deployed in Ireland.
- The houses were finished with a Portlaw Roof — the gently curving, timber-framed structure which is, perhaps, Portlaw's most striking architectural feature.
- A series of large houses, commissioned by members of the Malcomson family on the periphery of the town, has resulted in a concentration of high-quality work by the architect J.S. Mulvany, one of the most important mid 19th-century Irish architects.

Portlaw's auspicious rise occurred relatively quickly (1825 to 1870). Sadly, it has seen much longer periods of economic depression and neglect. After the collapse of the Malcomson empire in the 1870s, the cotton mill fell into disuse and all of the machinery it housed was either sold for scrap or shipped away. Many of the houses of the model village fell vacant and were eventually demolished. An effort to turn the town's fortunes around resulted in the establishment of a large tanning facility in the old cotton mill in the 1930s. This venture proved a mixed blessing: while new investment brought about a much-needed revival of the town's economic fortunes, it also contributed to the loss of a great deal of fabric from the earlier cotton mill period. There was another unfortunate consequence in that the tanning industry generated a large amount of chemical and other waste, much of it still buried in and around the factory buildings.

Like the earlier cotton factory, the tanning business, too, eventually failed, and Portlaw was returned to yet another prolonged period of economic decline. However, despite difficult times, some of the built fabric from Portlaw's cotton mill days still survives. Because this represents the physical manifestation of an important element of our shared cultural heritage, it is essential that we consider ways in which this fabric can be secured. It is against this background that, in May 2001, the Heritage Council of Ireland, working with Waterford County Council and the Department of the Environment and Local Government, commissioned a Conservation Plan for the town of Portlaw.

The Conservation Plan

It is easy to aspire to the conservation of something which we consider valuable; it is far more difficult to put the framework in place to ensure its conservation. This is particularly so in the case of Portlaw, comprising as it does such a large variety of structures and other artefacts, each contributing to the town's historic importance in a different way.

There is another practical difficulty faced when the subject of a conservation initiative includes a vast, disused industrial building. Such projects inevitably require the investment of large amounts of capital. Investment on the scale required may only be available if a certain amount of change can be accommodated. The challenge, then, becomes to find ways in which necessary change can occur while causing minimum loss of significance to the object we've set out to protect.

In recent years, the problem of managing change in historically sensitive environments has been addressed in a process now widely referred to as *Conservation Planning*. First developed in Australia but recently deployed in the UK and Ireland, the Conservation Plan methodology promotes a step-by-step approach to conservation projects that is often summarised as follows:

- Understand the object which you wish to conserve.
- Assess its significance.
- Assess how this significance may be considered vulnerable.
- Write policies to retain the significance.

This process calls for the participation of all those who have an interest in the protection of the object under consideration and seeks to advance initiatives through consensus and community involvement. The idea is that once the Conservation Plan which addresses the overall situation is in place, specific initiatives or actions (management strategies, option appraisals, development opportunities and so on) will follow. In other words, the intent is to put the general framework in place which provides a context for specific initiatives down the line.

This document represents an attempt to apply the Conservation Planning methodology to the town of Portlaw. It is the result of a prolonged period of research, analysis, discussion, and extensive consultation with the community. It proposes a structure around which the important aspects of Portlaw can best be secured for the enrichment of the community as well as for the enjoyment of future generations.

The Portlaw Conservation Plan has two parts. This publication assesses the background to the development of the town, evaluates the overall significance of the place and addresses the most pressing conservation issues that it faces. The extensive Appendices (available from The Heritage Council) comprise detailed studies, significance matrices and specific initiatives designed to give context to the policies advanced in this publication.

Participants

The Portlaw Conservation Plan was co-sponsored by the Heritage Council, Waterford County Council and the Department of the Environment and Local Government.

The project team engaged to prepare the Plan were:

Garry Miley, Project Coordinator, Architect and Urban Conservationist
John Cronin, Urban Planner and Conservationist
Mary Sleeman, Industrial Archaeologist
RPS Environmental Services, Landscape and Ecological Evaluation
McCutcheon Hogan Planning Consultants, Urban Planners

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- The Portlaw Conservation Plan Steering Committee

  Mary Hanna, The Heritage Council, Chair of the Steering Committee

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- Staff and students of Waterford Institute of Technology, and, in particular, Fintan Duffy and Máire Henry

The project team are also indebted to the authors of some excellent studies previously published about Portlaw, notably those by Tom Hunt, Majella Walsh and Margaret Fogarty, each of which examines specific aspects of Portlaw's architectural and social history. A further study by Dr Frederick O'Dwyer on the works of J.S. Mulvany established the context for a fuller understanding of the architect's achievements in the Portlaw area, and a paper by Desmond Neill provided a clear briefing on the general background to the development of Portlaw. This pre-existing body of work was of the utmost assistance to the project team in formulating the Conservation Plan.

1. DEVELOPMENT AT PORTLAW

A Brief History

The town of Portlaw (*Port Cladhach*: 'Embankment of Small Stones') is located approximately 13 miles to the north-west of Waterford City, in the ancient barony of Upperthird and the parish of Clonegam. The town is situated at the head of the tidal reaches of the River Clodiagh, a substantial tributary of the Suir. In geological terms, Portlaw is located in the Kiltorcan Formation which in turn is part of the Slievenamon-Portlaw Succession. This formation consists of three main lithologies: sandstone, conglomerate and mudstone. In general, the topography of Portlaw is flat to gently sloping, but hills surround it to the north-west and south-west.

1.1 Early Development

The archaeology of the wider hinterland of Portlaw is characterised by a range of site types. Identified field monuments display two distinct groupings — those dating from the Bronze Age and those of the medieval period. Since the Mesolithic period (the earliest phase of human habitation in Ireland), the River Suir and its tributary, the Clodiagh, would have provided early communities in the region with an important source of food as well as a natural transportation route further inland.

Two important developments occurred during the medieval period. The first was the feudal lordship of the Powers (or De La Poers). As Lords of Waterford, the Powers controlled much of the present-day county and built their family seat at Curraghmore where it remains to this day, just west of Portlaw. In the second development, the Rockett family were installed at the castle bearing their name to the north-northeast of the town on the banks of the Suir. During the reign of James I[1], Rockett's Castle came into the possession of Sir Algernon May (the result of the 1662 Acts of Settlement) who renamed it 'Mayfield'. From about 1700 until the early 19th century, the May family had great influence in County Waterford[2] and it was under their stewardship that the earliest urban development began in the Portlaw area. This early settlement, also called 'Mayfield', was situated on the opposite side of the river from where Portlaw stands today, in the townland of Coolfin.

1.2 1825: The Malcomsons

The extent of development that had already occurred in Portlaw by the beginning of the 19th century cannot be accurately stated except to say that it was not extensive. What is known is that there were at least two mills in the area as well as a house, the current Mayfield, which may have had it origins in the middle part of the previous century. However, from 1825 onwards, this situation was to change radically, thanks to the entrepreneurial vision of David Malcomson (1765–1844) and his sons, Joseph and William.

The Malcomson family arrived in Ulster from Scotland around 1660 and by the time of David's birth, they were settled in Lurgan, County Armagh. While his

1 Kinchin-Smith, M. (1992) p. 3
2 *Ibid*, p. 5

father's family were Presbyterians, David's mother was a member of the Society of Friends (Quakers), and he and his siblings were raised in that faith. When his father died in reduced circumstances in the 1770s, David was obliged to move away. In 1784-85, he arrived in Clonmel, County Tipperary, and took a position managing the Anner flour mill. His move to Clonmel is not as unlikely as it might first appear, as the town was then a centre for the textile and flour milling industries. It also had a comparatively large Quaker population and the Malcomsons already had family connections in the area[3]. Over the following 30 years, David Malcomson developed a hugely successful business, the cornerstone of which was the Corporation Mills on Suir Island in Clonmel[4] which he had acquired with the assistance of his brother, John. By 1820, Malcomson was already a very wealthy man and highly respected within the community. While for the purposes of this Plan it is necessary to focus on his work in Portlaw, this must be seen against the background of the network of mainly flour-producing centres which Malcomson had established in Clonmel, Waterford and Carrick-on-Suir and which he continued to develop even as his great project at Portlaw was underway[5].

In the 1820s, David Malcomson became concerned about the fact that his business empire was over-reliant on processing corn. His decision to diversify into cotton was inspired by the visit to Ireland in 1824 of James Cropper[6], a Liverpool Quaker, shipping agent and cotton importer. Cropper believed that circumstances in Ireland were well disposed toward cotton production, given the availability of cheap labour and the abundant source of water power. In his pamphlet 'Present State of Ireland', Cropper also championed the idea that a caring attitude toward the workforce would lead to increased productivity and greater efficiency.

Cropper's message was not lost on David Malcomson. Despite misgivings about his own lack of experience in cotton production, in April 1825, Malcomson leased lands in Portlaw from John Thomas Medleycott and Son for the construction of a cotton mill. This was the first step in an industrial and social experiment on a far greater scale than anything Malcomson had previously attempted. It also marked the beginnings of a major episode in the history of the industrial movement in this country.

The Cotton Mill

The lands that Malcomson leased included the derelict remains of a flourmill, destroyed by fire in 1818, as well as the adjacent Mayfield House. The site was located at a bend in the River Clodiagh where a 14-foot fall provided a natural source of water power. It was to the east of this fall that Malcomson decided to build his huge factory. The six-storey mill was constructed in two phases. The southern (13-bay) section was completed and already in operation by 1825. The northern end (again 13-bay, plus 2-bay link[7]) was constructed between 1837 and 1839. Even today, although in poor condition and with its original top storey missing, the imposing scale of the completed mill structure can still be fully appreciated.

3 See Morley and Neill for more detailed information on the arrival of the Malcomsons in Ireland and David's move to Clonmel.

4 His financial position was further consolidated by the dowry of £1,500 he received on his marriage to Mary Ffennell of Cahir, County Tipperary.

5 In 1827, for example, David Malcomson set up what was described by Shiels as a 'miniature' of Portlaw at Clonmel.

6 Hunt, T. (2000) p. 13

7 Although structurally quite different, the extension was built to match the appearance of the original. The window lintels of the northern section were made from one large piece of stone, but modelled to appear like voussoirs.

Plate 1: View of Cotton Mill from Mayfield House *c.* 1900

An impressive canal was built to connect the factory to the tidal reaches of the Clodiagh at the Old Quay, and raw materials and finished products were shuttled between these two points. Each week, 150 bales of raw cotton, originating in North America and shipped to Waterford via Liverpool[8], were brought to the factory. Raw cotton was processed on machinery imported from Fairbairn and Lillie of Manchester[9]. The process of spinning the cotton yarn began on the sixth floor and was completed at ground level.

An elaborate water system was developed to facilitate production. The basic spinning operation was initially driven by three large water wheels, two of which were substantial for their time[10],[11]. A Mill Pond[12] of 3½ acres was supplied with water by a culvert 7 feet high by 3 feet wide running from a sluice on the Clodiagh at the north end of the mill[13]. At the western end, another culvert discharged onto a water wheel that drove the large plant located inside the pump house. Meanwhile, water needed for other aspects of the milling operations was drawn from the Filter Island that was connected to the pumping plant by a 10-inch cast-iron pipe. The reservoir on the factory roof, for use in the event of a fire, was probably gravity-fed from the holding pond at Milfort House. (Although it is sometimes suggested as being the first of its kind, rooftop reservoirs were being introduced in Derbyshire fabric mills from the late 18th century.)

8 Walsh, p. 41

9 Neill.

10 Valuation house book no. 2 (1847) gives the diameter of Wheel 1 to be 34' and its breadth is 17'. Wheel 2 was directly adjacent to Wheel 1 and fed from the same trough. It had a diameter of 26' and a breadth of 15'. There was also a fourth wheel which worked from a tunnel below the mill and which had an outlet into the canal. Although tradition has it that the two main wheels were the largest in Ireland, the recorded dimensions suggest that they were not that exceptional. Notwithstanding the size of the wheels, from the start Malcomson supplemented water power with steam so that by 1838, steam engines were generating 120-horse power while the watermills produced 200-horse power. By 1850, when cotton production at Portlaw was close to its peak, output from the combined sources of water and steam had reached 500-horse power.

11 Williamson, p. 308

12 Although always referred to as the 'Mill Pond', this name is a bit of a misnomer as it did not supply water to the main mill wheels, but rather acted as a holding pond for the town supply and the mill reservoir.

13 Kiely.

Malcomson's new cotton enterprise was an immediate success[14]. By the 1830s, the operation had expanded and the complex grew to accommodate spinning, weaving, bleaching, dyeing and printing[15]:

- A large single-storey weaving shed and various two-storey buildings were constructed on the south side of the canal. These were connected to the mill structure by cast-iron bridges spanning the millrace. This shed covered almost an acre of ground[16] and was partly roof-lit to provide daylight for the teams of weavers.
- A series of two-storey buildings was constructed north of the mill between it and Mayfield House; one of these structures is thought to have housed the Mayfield factory offices.
- On a corner site inside the entrance gates of the industrial complex, cotton was laid out to bleach in the open air.
- Engine rooms and the associated chimney were located between the millrace and the Clodiagh River.
- Situated on Ivy Walk, the Mayfield foundry cast machine parts for the factory, railings for the various Malcomson private residencies and street furniture for the town.
- A gas works had been developed by 1841, and gas produced by this plant supplied both the mill and the town with lighting.

Village Development

As mentioned previously, prior to the arrival of the Malcomsons, development in Portlaw was mainly focussed on the area south of the River Clodiagh on land belonging to Lord Waterford. This development probably comprised small mud cabins with sod roofs, typical of the time[17]. In 1825, however, there was a need to import and house the hundreds of workers required to man the new mill and, from this point on, the thrust of development north of the Clodiagh was either developed, sponsored or generally supported by the Malcomson family.

The First Malcomson Era Village (1825–1850s)

The Malcomson-driven development of Portlaw underwent two distinct phases during the 19th century.[18] The first phase began after 1825 on lands leased and developed by Richard Curtis, Rev. John Thomas Medleycott and the Malcomson family themselves. The earliest houses of the first development were in the Thomas/Curtis Street area, as well as on Green Island. Although in some respects the development on Green Island may be described as rectilinear in form, the general area appears to have been planned in a haphazard way, perhaps relating to a settlement pattern that had existed before the cotton mill was built.

14 A key figure to the successful establishment and expansion of the new enterprise was Robert Shaw. Shaw was Irish but arrived in Portlaw after a time in Manchester. In time, he was to become a partner in the company and a central figure in its incredible success. For more details on this aspect of the development of the Malcomson enterprises, see Hunt.

15 Kiely.

16 *Ibid*

17 The settlement came to a sudden end when, in 1836, the proprietor levelled about 80 houses, an action that forced nearly all the inhabitants to cross the Clodiagh and take up residence in the relatively new 'Malcomson' Portlaw.

18 Walsh's MUBC thesis is a very valuable resource on the development of the 'model' villages, particularly in relation to the description of the construction of the houses of the 'second village'. Hunt has also done important work in establishing dates for the commencement of the second village. The general context of urban improvement throughout provincial Ireland during this period is well described by Graham and Proudfoot.

Similarly, the development of a row of houses along Brown Street took its form from a pre-existing route linking the Mayfield area back to the Carrick Road. Another terrace of houses was built on a pre-existing route — later to become Queen's Street — to the east of the town. This group of structures was quite short lived and was probably amongst the first to be demolished to make way for the second village development.

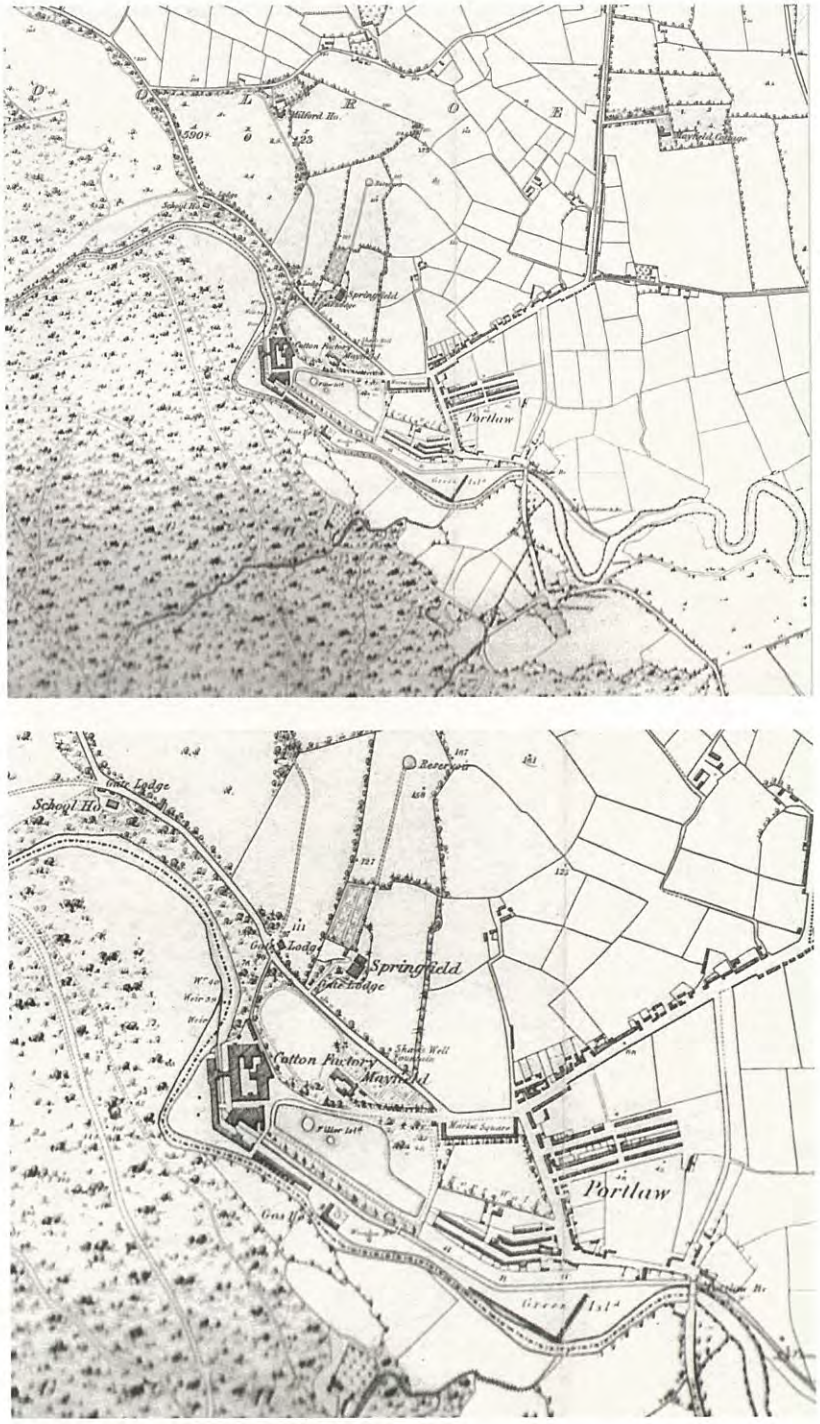


Figure 1: Portlaw: 1842 Ordnance Survey Map

Of greater interest during this first phase is the development which occurred on Market Square as well as in the area defined by Shamrock[19] and Mulgrave streets. The Market Square/Shamrock/Mulgrave Street development appears much more orderly and pre-planned: set at right angles to Main Street, Shamrock and Mulgrave streets are rectilinear and parallel to each other, while Market Square suggests an attempt to create a civic space with an urban character. While the plan which emerged for this area of Portlaw during the first phase of development may have been a simple and economically efficient response to the pressing need to provide housing, there is a suggestion that an orderly pattern of urban development was intended in a way which presages that which was to take place when the second village was created. However, there is no direct evidence to suggest that this plan was the result of any coordinated effort on the part of those responsible. Furthermore, as the Malcomsons themselves were not in direct control of much of the land on which development occurred, their level of input into the first village plan can only be surmised.

From this first village period, there is little precise detail about the construction of the houses themselves. In all likelihood, they were modest structures, perhaps typical of vernacular dwellings of the time: one-roomed, mud or stone walled, and with thatched roofs. The key point about the first phase of development in Portlaw is the rate at which it occurred: in the decade between 1831 and 1841, the population doubled and the town went from being the seventh to the third largest settlement in County Waterford. By the early 1850s (the end of the first phase of development), Portlaw's population was already above 4,000. This incredible rate of growth corresponds directly to the development and growth of the cotton production facility.

Then, however, in the 1850s, a curious change occurred in the growth of Portlaw: development of the first village was brought to a halt. In fact, the first village was gradually demolished to make way for an entirely new settlement. This second or 'model' village had an urban pattern which bore very little relation to the plan of the first phase.

Second Village (1850s–1870s)

The second phase of Portlaw's 19th-century development commenced during the 1850s and continued until the end of the 1860s. This campaign began perhaps as early as 1853 when a large area of undeveloped land to the east of the first village was leased by the Malcomsons.

Unlike its predecessor, the second village followed a comprehensive plan laid out as a *polyvium*, a plan type which had emerged in Renaissance Europe but which, with the possible exception of D'Olier/Westmoreland streets in Dublin, had not been deployed in Ireland previously. The polyvium created triangular blocks with the apex of each triangle meeting at a new open space (The Square, see page 23). This, in turn, was linked to the factory gates by a wide street (Factory Road). It is likely that this Renaissance-inspired town plan was the work of an expert hand. O'Dwyer suggests that the renowned architect, John Skipton Mulvany, may have been involved — shortly after the second village was underway, Mulvany was working for members of the Malcomson family on their

19 Shamrock was later used as the name of one of the first mines opened by the Malcomson-sponsored Ruhr Mining Company.

large new houses on the outskirts of the town. So far, however, no direct evidence has been uncovered to confirm Mulvany's involvement.

George's Street formed the central east-west axis of the new layout of the polyvium, with Brown and William streets forming the diagonals mirrored about the axis. The resultant triangular lots were closed off by Queen's Street. An additional, non-symmetrical, prong of the polyvium was formed by Main Street which, like Brown Street, had been inherited from the earlier development.

Work on the second village began in the mid 1850s on the south side of Brown Street where a two-storey house type was built, starting half-way along the street and eventually extending its entire length. Curiously, this two-storey house type was dropped in favour of a single-storey house on George's, William, Queen's and Bridge streets. Both house types had similar features and the quality of their construction was a great improvement on the previous workers' housing, with most units having four rooms each, a fireplace and chimney, a small range in the kitchen, an oven, and a side tank with a tap supplying hot water[20]. Privies were provided to the rear, with a dry closet and a means for cleaning out. Most notably, all of the new houses built during this period utilised the distinctive Portlaw Roof*, a series of lightweight timber trusses, boarded and finished with fabric. The Portlaw Roof is the most striking architectural feature associated with the town and was later used for workers' housing in Bessbrook, County Armagh, Harold's Cross, Dublin, and Clara, County Offaly. There are also examples at Blarney, County Cork, as well as at nearby Carrick-on-Suir where a terrace of dwellings is almost identical in form and detailing to the single-storey houses of Portlaw, suggesting their development was in some way connected. At Gelsenkirchen in Westphalia, where the Malcomsons had a substantial financial interest in the coalmines managed by William Thomas Mulvany (the architect's brother), the workers' houses were also roofed in the distinctive Portlaw fashion (see page 52).

As development of the second village came to an end in the 1860s, more than 50 two-storey Malcomson-style houses had been built on Brown Street and more than 250 single-storey Malcomson houses on George's, William, Queen's, Bridge and Main streets[21].

Community and commercial activities were mainly located on The Square, where the Mayfield Supply Store and Post Office were situated, along with another structure, the earliest use of which is uncertain, although it was being used as a laundry by the end of the 19th century. However, the most important community structure — a multipurpose building which incorporated the new school facility — was located to the east of the Industrial Complex dramatically overlooking the Mill Pond.

*Generally known as a Belfast Roof, this roof type is always referred to locally as the Portlaw Roof.

20 Kiely.

21 While most of the buildings associated with the first phase of development had been demolished, those on Curtis and Thomas streets as well as on Green Island remained. However, as these were on lands not under Malcomson control, their relationship to the 'Malcomson' villages is difficult to establish.

Plate 2: View along Brown Street 2002

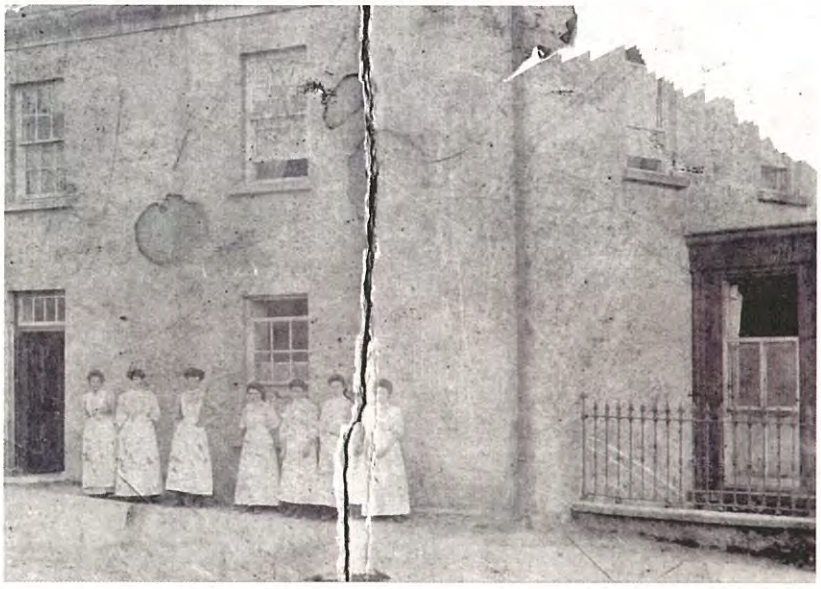


Plate 3: Laundry workers in The Square c. 1895

In addition to the community facilities referred to, the infrastructure of the town was vastly improved. While the privies and dry closets have already been mentioned, a water supply system was also provided — one of the earliest in the country. Fresh water was available from pumps located in a number of convenient positions. The water was initially pumped from the Clodiagh via the Mill Pond to a small reservoir in the grounds of Milfort House, located 1/2 mile from the town proper. The 150-foot drop from the holding pond to the street level provided a more than sufficient fall to ensure adequte pressure[22].

Despite being a comparatively recent occurrence, there is very little documentation available relating to the second phase of Portlaw's development. Thus, fundamental questions about this whole period of the town's history remain unanswered. Clearly, the basic motivation was to improve general living conditions, but why such an elaborate plan? And why should the Malcomsons have started their project at that particular time? The answers to these questions are not yet known and remain the topic of much speculation.

22 See Walsh, p. 45, for further detail.

1.3 Life in the Model Village[23]

When the cotton mill opened in 1825, 250 people were employed, many of them from England where skilled labour was readily available. By 1834, this number had increased to 900. (Shiels notes that after the initial period, Malcomson began employing Irish workers whom he found 'just as expert'.) In the 40 years to 1876-77, the Portlaw cotton factory provided continuous employment for over 1,000 men, women and children, a figure comparable with the numbers then being employed in the large mills of northern England and a statistic that brings another perspective to our understanding of the economic and social situation that prevailed in Ireland in the mid 19th century.

While the commercial success of the cotton factory is striking, perhaps more notable is the way in which the Malcomson family treated its workforce — a phenomenon which is repeatedly stressed and fully discussed in all of the published studies relating to Portlaw's development. Until embarking on the remarkable second village, the Malcomsons' primary concern was education. A children's school had been established as early as 1827, and in 1837, Lewis records that between 80 and 100 children were being instructed in reading, writing and arithmetic by as many as seven teachers. Education facilities, training, lectures and seminars were also made available for the factory workers themselves. It is this aspect of the development of Portlaw — the concern with education — that most identifies it with the famous model settlements founded in 19th-century Britain and inspired by the social reformer, Robert Owen.

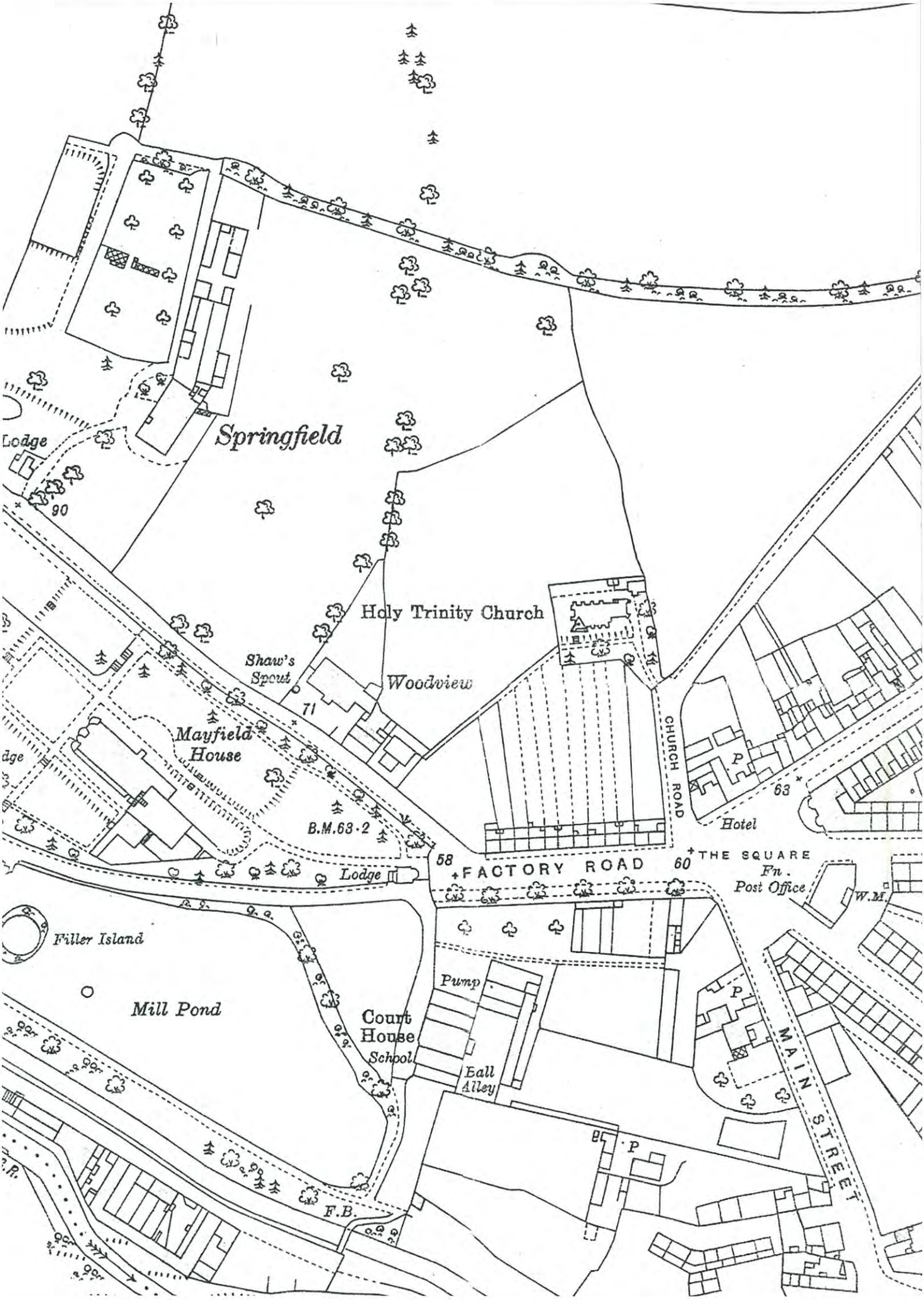
In addition to education, the Malcomsons were concerned for the physical well-being of their employees. On 5 January 1835, Dr James Martin was appointed resident surgeon with a salary of £100 per annum. Dr Martin had an active (some commentators have suggested 'intrusive') interest in those in his care.

The Mayfield Provident Society, an organisation which provided a form of social insurance for the factory workers, was set up in 1835. All workers under the age of 50 were eligible for membership. On becoming ill, they were entitled to cash benefits ranging from 16 shillings to 20 shillings per week for the first four months of illness and one-half of the benefit thereafter. A member bringing illness or accident upon himself due to 'drunkenness, debauchery, rioting, quarrelling or playing at unlawful games on the Sabbath' was ineligible for benefit. The widow or next-of-kin of a deceased member was entitled to a payment equal to six weeks' allowances[24].

Another institution which sheds light on the social structure which prevailed in Portlaw at the time was the Tontine Club. Formed in 1838, the club was intended to encourage its members to save their money. Membership was open to shareholders who paid a weekly deposit of sixpence. At the end of the year, the entire capital with interest was divided amongst the members.

Abstinence from alcohol was generally encouraged (although not insisted upon), and in an attempt to find alterative amusements to the public house, coffee shops were introduced in 1837[25]. However, while the opposite might have been expected in such a structured society, there is no evidence of religious interference.

23 Hunt's various works are particularly strong on the social history of mid 19th-century Portlaw.
24 Hunt, T. (2000), p. 30
25 Kerrigan, pp. 32, 33


Springfield
Lodge
90
Holy Trinity Church
Shaw's Spout
Woodview
71
Mayfield House
B.M.63·2
Lodge
58
FACTORY ROAD
60
THE SQUARE
Fn.
Post Office
W.M.
CHURCH ROAD
P
63
Hotel
Filler Island
Mill Pond
Pump
Court House
School
Ball Alley
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MAIN STREET
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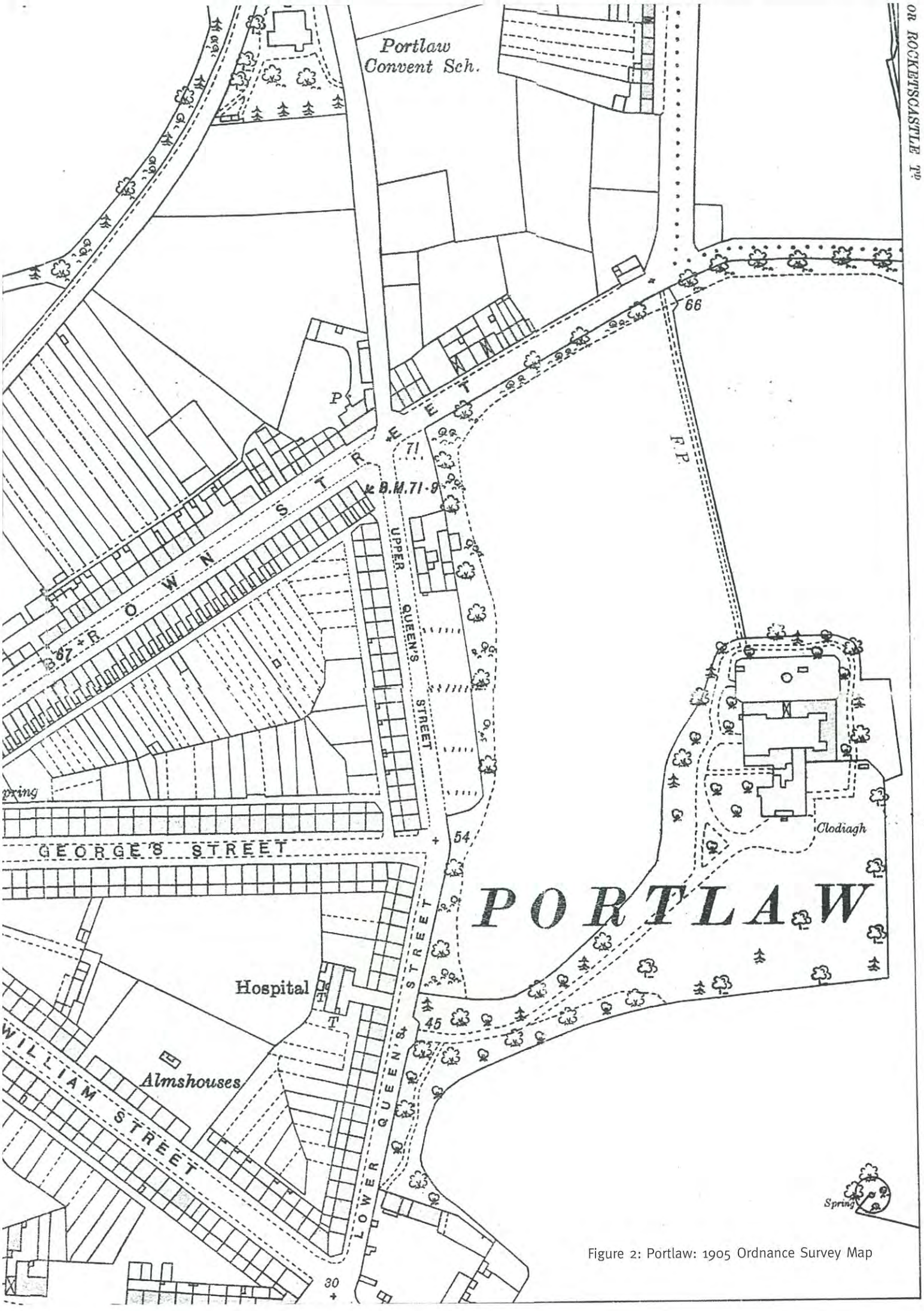

Figure 2: Portlaw: 1905 Ordnance Survey Map

With a large workforce, and the nearest bank located eight miles away at Carrick-on-Suir, there was considerable risk and inconvenience attached to transporting the large amounts of coin and notes necessary to pay wages. The Malcomsons therefore introduced their own cardboard tokens as a means of paying the workers (the earliest tokens were made from leather and were always referred to as 'leather money'). The scheme began in 1834, with the issue of two-shilling tokens. Later, one shilling and four-pence tokens were introduced[26]. Leather money was redeemable within a radius of 30 miles of Portlaw, such was the strength and reputation of the Malcomson firm.

What emerges from this brief description of life in Portlaw is that of a progressive, integrated and sophisticated society — to a large extent isolated from the outside world — where the welfare of the mill workforce was given very high priority. It is a picture that does not tally with our usual preconception of the harshness of life suffered by the masses of ordinary people who provided the huge workforce during this great period of industrial expansion. It is also a description of a social structure which is almost alien to our understanding of life anywhere in Ireland, particularly the Ireland of the 19th century.

1.4 The Malcomson Empire

David Malcomson, the initial driving force in the development of Portlaw, retired in 1837 (he died in 1844) and was succeeded by his eldest son, Joseph, marking the end of the era of 'David Malcomson and Sons' and the beginning of the 'Malcomson Brothers'. The income generated from the Portlaw cotton business was, by this time, being channelled into a range of commercial enterprises. Most notably, from the mid 1830s, members of the Malcomson family developed interests in shipping[27], and in 1836, the Waterford Commercial Steam Navigation Company was established, with the Malcomson family as majority shareholders. In 1843, the decision was taken for the company to build its own ships and, to this end, the Neptune Ironworks began production in Waterford City under the direction of Joseph Malcomson. In 1847, the company launched *The Neptune*, the shipyard's first ocean-going vessel, which opened up the first regular service between England and St Petersburg. As it sailed up the River Neva, it was greeted by Tsar Nicholas I in his State barge and by salutes from the ships of the Imperial Russian Navy — the Malcomsons were now established 'players' in the international business world.

Plate 4: The Neptune

26 Went, pp. 75 – 78

27 Irish's various works cover the Malcomsons' shipping interests in great detail.

Shipping was not the only area of expansion. Various members of the family also had financial stakes in the Shannon Fishery Company at Lax Weir, as well as at the peat-works near Castleconnell, both near Limerick City. There were also forrays into the various railway companies which were starting up around the country at that time. In 1853, Joseph and William Malcomson, along with Joseph's son David, became the main shareholders in a coal-mining enterprise (referred to earlier) in Gelsenkirchen, Germany. This enterprise was itself to develop into an operation of grand proportions and has been the subject of study by German academics.

After Joseph Malcomson's death in 1858, control of Malcomson Brothers was passed to his brother, William, who continued to expand the family's interests at home and abroad. In 1861, what O'Dwyer has described as the 'great Malcomson house-building boom' got under way. Joseph's three sons each commissioned houses from the renowned, previously mentioned, 19th-century architect, John Skipton Mulvany, who had earlier completed extensive renovations at Mayfield House for Joseph senior. While Joseph's eldest son, David, built Villa Marina at Dunmore East, County Waterford, brothers George and Frederick each built houses in Portlaw itself: Woodlock House, now Woodlock Convent, and Clodiagh House.

By the mid 1860s, the Malcomson empire had reached its pinnacle, with a diverse range of business and commercial interests in Ireland, Europe and the United States and a bankers' line of credit of two million pounds.

1.5 The Demise of the Portlaw Cotton Industry

Commentators differ on the reasons for the collapse of the Malcomson empire: Neill and Irish suggest that William Malcomson's assuming control of Malcomson Brothers was the significant event. William, they contend, lacked the business acumen of his older brother, Joseph, and their father, David, and diversified activity into too many areas. Hunt argues to the contrary, suggesting that the company's great success during the middle part of the century was due to William's enterprising spirit and that he was simply unlucky to have been at the helm when events outside of his control conspired to bring the company down.

There were some early indicators of the trouble that lay ahead. The first signs are recounted in Morley's memoir in which he suggests that relations between Joseph's wife, Charlotte, and the new company chairman, William, were strained after Joseph's death. This, he contends, led to her withdrawing capital from the company. Then, while the Malcomson ships ran President Lincoln's blockade of the Southern States to bring raw cotton back to the plant, the American Civil War brought a period of uncertainty to the cotton market[28]. Throughout this time, Ireland's corn industry was in decline, and although the Malcomsons had diversified into other areas, they still maintained substantial interests in flour production.

However, the most significant development in the decline of the company occurred in 1866 when the Malcomsons' bankers, Overend Gurney and Co. of London, collapsed with liabilities of over £10 million. According to Morley's account, in addition to the company's losses, the family appeared to enter a period of disarray after the collapse, with some members withdrawing their capital. The situation was compounded by a rationalisation in the worldwide

28 This complex situation has been much simplified. For example, by the mid 1860s, the mill building was not exclusively used for cotton production – some other fabrics were being produced as well. For more detail on this issue, see Hunt's various studies.

cotton industry in the late 1860s which saw more modern production methods introduced in Britain and elsewhere. All of this occurred against the backdrop of the development of the railways which was undermining the efficiency of the water-based system of transport upon which the Portlaw mill depended (efforts by the Malcomson family to bring the railway directly to Portlaw had failed). The situation was reflected in the trade figures: in his review of the Malcomson papers, Hunt records that the firm suffered very severe losses in business on all fronts over the three-year period of 1867 to 1869.

Despite efforts to consolidate in 1874[29], and with pressures mounting in all areas, the firm finally went into liquidation in 1876. As a direct result, the cotton mill at Portlaw was closed down with immediate and catastrophic effect: 1,141 jobs had been lost by 1878[30] and the population in the town declined from a high of 4,351 in 1851 to 1,394 in 1891. Many of the workers and their families were forced to emigrate, some to the cotton-producing towns of northern England.

Various attempts were made to salvage the situation. In 1877, William and Joseph Malcomson (sons of William, the last company chairman) established the Mayfield Spinning Company and managed to preserve some form of cotton production at the plant. In 1887, the brothers also formed the Mayfield Dairy Company for the manufacture and sale of creamery products. William continued the business of cotton spinning with a staff of about 100 until 1904. Then, after the final closure of the cotton factory, the Mayfield Dairy Company converted a large portion of the factory for its own use. However, with the outbreak of World War I in 1914, this enterprise, too, finally came to an end. A visit by George Cadbury in 1907 to investigate the possibility of establishing a production facility brought about no new investment. The equipment which had once driven the mill was sold for scrap and the remainder (allegedly) shipped to Britain at the outbreak of World War I to aid the war effort.

In short, the collapse of the Malcomson enterprise in the 1870s sent Portlaw into an extended period of decline. The 1901 census showed that 112 houses, a third of all houses in the village, were vacant. The town's gloomy prospects are best summed up by the Reverend Power, writing in 1910:

'[Portlaw's] former prosperity is difficult to conceive by those acquainted only with its poverty of to-day, when the merry shuttle's song is replaced by the song of the wind through the tenantless streets.'

There was to be no improvement whatsoever in Portlaw's fortunes until the middle of the 20th century.

1.6 Portlaw in the 20th Century

Like many other rural communities in the newly established Free State, Portlaw found itself in dire economic straits in the early 1930s. A recently formed Fianna Fáil majority Government set about tackling the country's terrible economic situation by sponsoring large-scale industrial enterprises in particularly disadvantaged areas. In Portlaw, a new company, Irish Tanners Ltd, was assisted in establishing a massive tanning facility in the ruins of the old cotton mill. It was opened in 1935 by the then Minister for Industry and Commerce, Seán

29 See Morley.
30 Hunt (2000), p. 76

Lemass. This was an era of protectionist trade, and with Government initiatives aimed at sheltering local production from foreign competition, the new business was initially a success. In the first five years of operation, various extensions and alterations were made to the original mill so that, apart from the exterior walls, little original material is left.

Then, in 1945, work began on an enormous new mass concrete building to the north of (and almost completely dwarfing) the original mill structure. This new modern-style building ran parallel to the earlier mill, with the space between both structures covered over with massive steel trusses to form a vast, wide-span industrial shed. Further extensions followed as the tanning business diversified to accommodate new processes in shoe-making and leather treatment and to keep up with the huge demand for leather products — mainly boots — brought about by the advent of World War II.

Development continued in 1956 when the Leather Board began vulcanising soles (it closed shortly afterwards following a fire). Then, in 1958, as demand for leather products declined, Waterford Rubber and Plastics was officially opened. From a building located in the south-western corner of the site between the river and the canal, it produced injection moulded plastic soles and heels.

A company called Protein Foods was set up to process some of the waste fleshing from the tanning factory. The useful waste was stored in vats prior to being processed and exported to the UK where it was incorporated into dog meal. This particular wing of the business was very successful; for a time, supply could not keep up with demand. As a further spin-off from the hide treatment operation, animal fat was exported to England to make soap and candles.

Another strand of production was developed when Waterford Leathers began its operations in the early 1970s. This company produced a patent leather and was located in the former school/courthouse.

During this period, Mayfield House continued to be used, providing office space for Irish Tanners, while the Gate Lodge was occupied by a succession of families who worked in the industrial complex.

In addition to these major interventions, a series of other structures was built to facilitate the tanning and plastics industries. Notably, two large tanks containing water for the boilers were located near the head of the canal. A third large tank, containing oil, was located along the banks of the river. Filter beds and settling ponds were constructed in the south-eastern area of the site, as well as at the location of the former weaving sheds; liquid waste from the tannery was pumped to these beds prior to being discharged into the canal.

Apart from the tannery itself, the most obvious change to have occurred in the area is the infilling of the Mill Pond. According to the 1902 survey, the pond covered 3.649 acres (plus a smaller area of 0.690 acres). During the lifetime of the tannery, the pond was completely filled with industrial waste, to the point that small mounds of material now rise above the general level of the surrounding ground.

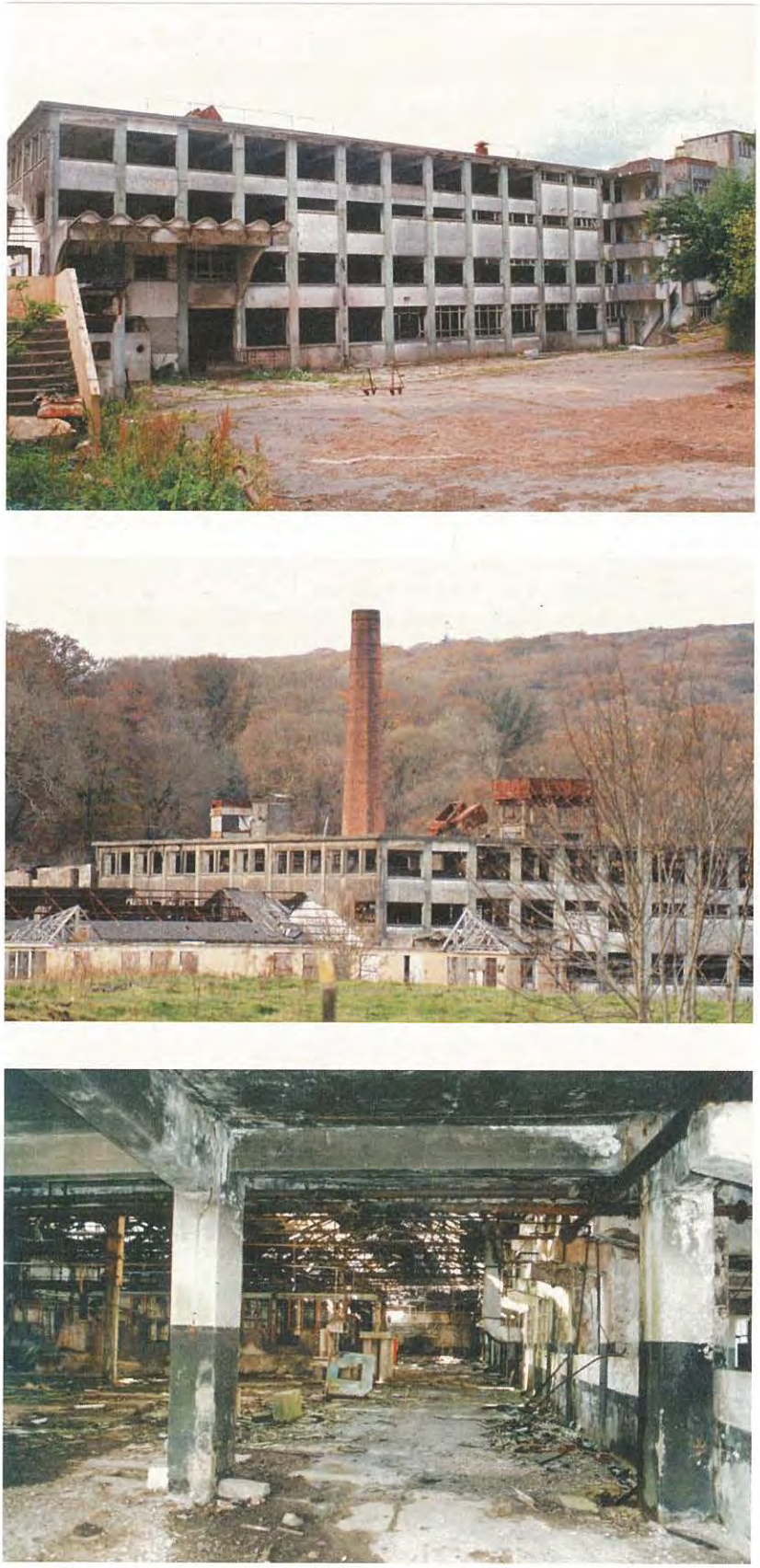

Plate 5: The 1945 Tannery buildings

While this period of development in the industrial complex is generally seen as being to the detriment of everything that had gone on before, there were some notable developments. For example, before the new plant was connected to the ESB grid system, power was generated from coal-fired stationary steam engines. The substantial remains of two of these engines, both by Robey of Lincoln, remain *in situ* and one in particular — the *Uniflow* — is of considerable importance. The uniflow engine is distinctive in that steam flows in one direction only on each stroke (as opposed to the more common contra-flow system). The main advantage is that the temperature at each end of the cylinder remains the same. It is generally recognised that the uniflow represents the culmination in steam engine technology.

Plate 6: The Robey Uniflow Engine, one of two steam engines installed during the Tannery phase. This is an important piece of the industrial heritage but remains vulnerable through exposure to the elements

The 20th century saw changes in the village of Portlaw as well. Malcomson houses of the model village were falling into disuse from as early as the 1880s. At various stages from the mid 20th century on, model village houses were removed to make way for new County Council schemes. In 1940, Waterford County Council built 40 two-storey houses on George's Street; 24 two-storey council houses were built on Queen's Street in 1950; and in 1972, the County Council built 23 houses on William Street. While the removal of the earlier structures is understandable given the levels of dereliction that must have prevailed at the time, the effect which the new intervention had on the streetscape of the model village was unfortunate. In particular, the degree to which the architectural character of Queen's and George's streets was affected can be gauged by a comparison to William and Brown streets where sufficient earlier fabric remains to give a clear sense of how the intact model village must have appeared.

Plate 7: Modern view of single-storey buildings on William Street

The development of the tanning and plastics factories in Portlaw brought much-needed economic impetus to the town in the 20th century. Their demise was a protracted and much-publicised affair which took place against the backdrop of an Irish economy which, by the mid 1980s, was in recession, as well a climate of increased international competition in industrial production. An Foir Teoranta, the State rescue company, appointed a receiver to the Irish Leathers Group in June 1985. The company was purchased by the Kilkenny-based International Hide and Skin Company which kept part of the plant in operation for a short time before finally closing it altogether. The cessation of all manufacturing activity at the site had very serious social and economic consequences for the local economy.

Late 20th Century to Recent Times

In 1995, the Portlaw Industrial Complex was sold to its present owner, Mr Michael O'Shea (of Portlaw and New York). Despite his efforts, however, the complex, including Mayfield House and Gate Lodge, has not been put to reuse. With the passage of time, exposure to the elements, vandalism and so on, all of the structures located within the complex have deteriorated and many are little more than ruins.

One of the main factors inhibiting redevelopment of the industrial complex is the issue of tanning-related waste being dumped in the Mill Pond and elsewhere. Various efforts have been made to address this issue. So far, however, this has involved the removal of liquid waste only. A plan for the removal of solid waste from the Mill Pond itself was not implemented.

In recent years, it can be said that the town of Portlaw has increasingly been seen as a dormitory for Waterford City, a perception reinforced by the considerable residential development that has occurred around the town during the economic boom years of the late 1990s. It is important to stress, however, that the model village area has not appreciably benefited from the Celtic Tiger economy. Here, the effects of the closure of Irish Tanners in the mid 1980s still resonate within the community.

2. CRITICAL EVALUATION

Portlaw's Development and its Contribution to Our Cultural Heritage

The previous section provided an outline history of the main developments which occurred in Portlaw during the 19th century. The purpose of this section is to place these developments within a wider context and thereby arrive at an assessment of the town's significance. This will not be an easy task. For a start, Portlaw is not one single entity, but the sum total of a range of different artefact: a social experiment, an unusual town plan, a cutting-edge cotton production facility, an extraordinary roof truss, a string of beautifully designed private houses, a huge State-sponsored employment project, and so on. In an attempt to understand why this occurred, we are obliged to take a broad look at events which were taking place elsewhere, particularly in the industrial centres of northern England and the north-eastern United States where social and town-planning experiments related to industrial development were more common.

To establish a proper context, it is proposed to review the following topics which are considered central to Portlaw's development:

- Ideal, Model and Utopian communities and the link between cotton production and 19th-century urban planning
- The Polyvium: a Baroque planning typology
- The Malcomson Family
- The 19th-century buildings of Portlaw
- The effect of the tanning industry on Portlaw

It is hoped that, despite the diversity of material to be tackled, the various strands can be brought together to form a comprehensive backdrop to the Portlaw experiment.

2.1 Ideal, Model and Utopian Communities: The Link between Cotton Production and 19th-century Urban Planning

We are accustomed to thinking of our cities and towns as complex urban forms representing a balance of often competing commercial, political and cultural forces. However, in the tradition of Utopian planning, highly organised communities were developed in accordance with a single, overarching plan which sometimes governed not only the layout of streets and squares but also how individual members of the community should live their lives.

Much has been published about this type of development. The main commentators agree on the chronology. However, there is no general agreement in relation to how they should be categorised. Some writers limit the use of the term 'Utopian' to those cities of literary fiction described by Thomas More or Tommaso Campenalla; others use the term to describe cities aspiring to achieve

perfect geometrical form. Despite the lack of an agreed format, it is possible to suggest a categorisation which is useful in advancing our understanding of developments at Portlaw.

Religious Communities[1]

The term 'Utopian' was popularised by Thomas More's Renaissance text about an imaginary, culturally and intellectually enlightened society. While 'regimented' urban settlements existed prior to the Renaissance, they were generally inspired by the rule of a monarch, the need for a special type of defence, or the devotion to a supreme being. The notion of a segregated settlement based on the acceptance of a shared ideology by a community in search of enlightenment is a post-Renaissance phenomenon. Some of the earliest manifestations of this type are found in the settlements of religious sects such as the Moravians and the Huguenots[2,3]. These settlements were often completely segregated from the larger community and had regulations in relation to size, location of community buildings, and the general arrangement of dwellings. The roots of future Ideal, Model and Company developments are found in these early religious experiments.

Ideal Communities

A second and related strand[4] of the Utopian planning tradition emerges in the late 18th century with the works of social reformers such as Robert Owen and Charles Fourier. These enlightened thinkers were motivated by a perceived need to respond to the radical changes then occurring in society as a result of the Industrial Revolution. Common themes emerge in their proposals:

- Completely new communities developed in the countryside, far away from the grime of the newly industrialised cities
- Populations limited by size
- Large community buildings and improved housing
- A new order for society based on harmony, community and education for all and, sometimes, common ownership of property

Within this strand of thinking, the works of Robert Owen have a special significance for Portlaw. Born in Newtown in Wales in 1771, Owen spent some years of his early life near Birmingham, England, not far from a Moravian religious settlement which some commentators have suggested is likely to have had an influence on his early philosophy. He had already established a spinning business in the Midlands before meeting and marrying, in 1797, the daughter of the owner of a large spinning mill in New Lanark, outside Glasgow. Owen bought the mill from his father-in-law, David Dale, and immediately set about developing his first 'model community'. His reforms advanced on two levels. First, the

1 Although it is not widely known, several religious and social groups founded 'Utopian' settlements in Ireland in the late 18th century. The Moravians founded a religious community in Gracehill, County Antrim, in 1746. Another religious community was founded in 1784 in New Geneva, County Waterford. There was a short-lived mid 19th-century experimental community established at Ralatine, County Clare based on the ideas of Robert Owen.

2 The distinction made here between 'holy cities' and 'religious settlements' is that holy cities were often an expression of the mystical elements of a form of belief where patterns of symmetry and, sometimes, astrology influenced the urban plan. The religious settlements were more often an expression of a philosophy of how ordinary daily life should be lived.

3 Tens of religious sects were responsible for 'ideal' or segregated developments in the 18th and 19th centuries. They included other groups such as the Harmonists, the Inspirationists, the Mormons and the Congregationists.

4 This categorisation cannot be considered strict: The 'Utopias' created by religious groups like the Harmonists were, in some ways, more directly based on social ideologies than an expression of devotion to God.

physical environment was improved and new housing was built for the mill workers. More important, however, were the reforms he introduced for the cultural improvement of the workforce, particularly in education.

The centrepiece of Owen's project at New Lanark was the New Institution. Opened in 1816, it comprised a non-sectarian educational, social and recreational centre providing free, full-time education for 2-to-14 year olds, as well as a venue for adult classes, public lectures, dances and meetings. The curriculum was structured to ensure that a balance was achieved between vocational knowledge and the need to enjoy 'agreeable recreation'. There was to be no corporal punishment of any kind; instruction was to be by means of conversation; fixed hours were to be abolished; and excursions into the countryside were to be arranged so that children could enjoy 'superior surroundings'[5].

In 1813, Owen published his seminal *A New View of Society* in which he detailed many of the ideas, particularly on education, which he had implemented in New Lanark. Moving to America in 1825 (the year of the 'founding' of the 'Malcomson' Portlaw), Owen published his radical plan for a new ideal town. Although his attempts to put the plan into practice at New Harmony[6], Indiana, were an almost immediate failure, his ideas were widely published and extremely influential: a now famous drawing of his model village by Stedman Whitwell went on show at the White House.

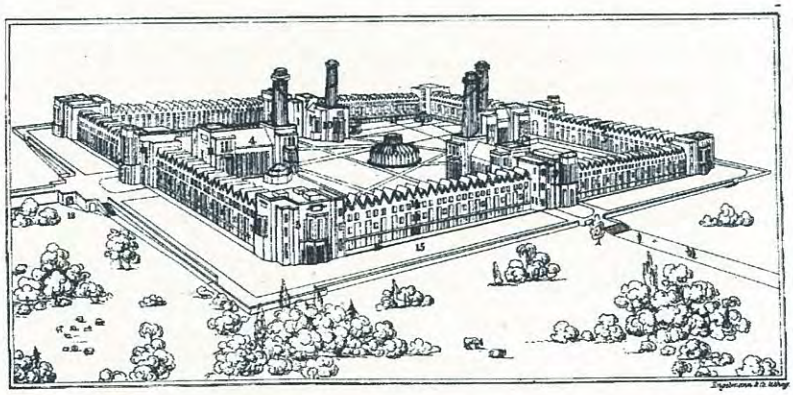

Plate 8: The Stedman Whitwell drawing of Owen's community at New Harmony, Indiana, 1825

Owen's new model village was to measure 1,000 feet on each side and would house no more than 1,200 people. He was specific about the arrangement of buildings within the square and their uses. The family lodgings were to be located on three sides. On the fourth side would be a dormitory for all children 'exceeding two in a family' or more than three years old. Manufacturing buildings were to be located outside the quadrangle, alongside the stables and the farm buildings. What was proposed was a self-sufficient industrial/agricultural unit with the residents working shifts in the modern industrial building and growing their own food in communal fields.

Owen's influence on the development that was to occur in Portlaw must be considered significant. In addition to the world-renowned projects he had completed in Scotland and North America, Owen had previously been involved in attempts to establish experimental communities here in Ireland (there was a

5 A number of contemporary accounts quoted in popular publications suggest that the reality of life in New Lanark fell somewhere short of Owen's vision.

6 New Harmony had already been established as a Utopian society by George Rapp and his followers, the Harmonists. The community struggled as members returned to more mainstream religious groupings. When Owen bought the town from Rapp, the streets were already laid out and the main community buildings had already been built. Part of Owen's difficulty at New Harmony was that he tried to impose his new plan on the existing one but found this unworkable.

short-lived Owen-inspired settlement in County Clare). Furthermore, it is recorded that William Allen, a Quaker and one-time partner of Owen at New Lanark, had visited David Malcomson in Clonmel in 1826; it can reasonably be assumed that areas of common interest were discussed. Central tenets of Owen's work are evident in the Malcomsons' achievements in Portlaw: the focus on education, the provision of high-quality accommodation, the enjoyment of the countryside, and so on. However, some central elements of Owen's thinking are not reflected in Portlaw: ideas to do with common ownership of property, for example, and the total self-sufficiency of the community. The question of influence in relation to geographical location is more difficult to assess: whether it was the need for a source of water power or the desire for isolation from wider society that drove David Malcomson to Portlaw is still a matter for speculation. Nevertheless, the sense of Portlaw's isolation from the wider community is an important aspect of its development and is directly related to Owen's philosophies. It is also an important element of Portlaw's essential character.

The Link between Cotton Production and Urban Planning

Unlikely as it might first appear, a direct relationship was to emerge between the type of ideal development outlined above and the industrial production of fabrics, particularly cotton. The development of the cotton industry in the 1700s dramatically transformed the cultural landscape of much of northern Europe and, at least in the case of northern England, it was to form one of the main strands of the social transformation we now know as the Industrial Revolution.

Traditionally, the major textile used throughout Europe had been wool until, in the 1600s, imported cotton from India threatened to supplant it. In Britain, the powerful wool merchants succeeded in having the importation of Indian cotton banned for a time. This move created a void in the market and entrepreneurs began importing raw cotton from the West Indies and Brazil and weaving it into cloth at newly constructed mills. The Lancashire area in particular thrived as the rivers and (later) the coalmines were an abundant source of power and the moist climate was ideal for cotton spinning and weaving.

The new cotton industry became associated with a form of urban development characterised by the construction of small clusters of vernacular style houses — where much of the work occurred — around stone mill buildings. However, from the mid 18th century on, new methods of cotton production were developed which were to have a radical effect on the nature of the towns which grew up around the mills. Chief among the new technologies were[7]:

John Kay's Flying Shuttle: In 1733, John Kay (*c.*1704–c.1780) invented the flying shuttle. This device was an improvement to looms that enabled weavers to weave faster. The original shuttle contained a bobbin onto which the weft yarn was wound. It was normally pushed from one side of the warp to the other by hand. Large looms needed two weavers to throw the shuttle. The difference with John Kay's device was that the 'flying' shuttle was thrown by a lever that could be operated by one weaver.

James Hargreaves' Spinning Jenny: The first machine to improve on the spinning

7 *The Industrial Revolution* by Henry Dale and Rodney Dale provides a very good background to the technological advances which occurred in fabric production during the 18th and 19th centuries. It is quoted extensively throughout this section.

wheel was invented by James Hargreaves (*c.*1720-1778) some time in the 1760s; he named it the 'spinning jenny', after his wife. The new hand-powered jenny produced several threads at once and increased a spinner's output eight-fold.

Richard Arkwright's Water Frame: In 1769, Richard Arkwright (1732–1792) patented his spinning machine. He had intended it to be powered by a horse but the first models were powered by water wheels, so the device came to be known as the 'water frame'. The frame was the first powered textile machine. It marked the move away from traditional domestic manufacture toward factory production where a single power source could drive many machines.

Rev. Edmund Cartwright's Power Loom: In 1784, Edmund Cartwright (1743-1823) produced his first powered loom. The loom removed the last major manual component from the weaving process. The new looms worked faster and for longer, and were more reliable than their human-powered counterparts.

These innovations had a significant impact on the relationship of the cotton mill to the local community, but it was Cartwright's power loom which was to have the greatest effect. The essential change was that all elements of the cotton production process now moved back to the mill and away from the surrounding houses.

At the same time, the infrastructure supporting the developing cotton industry was rapidly changing. New canals delivered the raw material directly from the port to the mill (these were later replaced by the railways); foundries made replacement metal parts; schools were built to train the new workforces; quarries and brick foundries were opened so that all the necessary facilities could be built. Throughout northern England, bankers, importers, exporters, traders, underwriters and insurers set up practices wherever the mills were located, as well as at Liverpool, the port at the centre of the new trade.

Here in Ireland, the older cottage-based production had been a success in the 18th century[8]. But the new production technologies which fuelled the industry's growth in northern England were not introduced so that, by the beginning of the 19th century, production of cotton had been reduced to virtually nothing.

The one significant exception to all of this was at Portlaw, where David Malcomson successfully established a cotton production facility which matched the scale and output of the great cotton-producing centres of England.

The Cotton-Producing Company Towns of North America

It was previously mentioned in relation to the early cotton towns that they 'sprang up' like hamlets around the new mills without conforming to a particular plan. This pattern was to change in the United States during the early to mid 19th century as Cartwright's power loom made its way across the Atlantic. In order to justify the capital expenditure on the new technology as well as to improve overall efficiency, larger scale production became an economic necessity. Soon, a workforce which was larger than the existing cotton industry hamlets could provide was required. The traditional sources of labour (the existing cities and towns) were very often remote from the power source (the rivers), and the new cotton companies had to devise ways to attract workers away from

8 The situation in the north of Ireland is not quite so easily categorised, where cotton production was strong in the 18th century and went into decline between 1825 and 1835, mainly through the innovation of the 'wet flax spinning process' which brought about a deliberate move away from cotton and back to linen production.

established communities. Company Town sponsors were obliged to address the complex logistics involved in creating new communities and some were influenced by the philosophies of Owen and other social thinkers, many of whom were by this time based in North America. The area was pioneered by Francis Cabot Lowell, whose ideal plan for a cotton town was 'both simple and functional':

'...The factory district was to be located along the river between it and a parallel canal that was to bring water to the mills. A major road was also to run parallel to the river at a distance of perhaps a quarter of a mile. Between the canal and the road lay the rows for employee housing. The road served as a spine of the town, and here would be the stores, churches and public buildings. Beyond the road the land could be developed for private residences...'

Lowell died in 1817. The first town built to the Lowell plan (Lowell, Massachusetts), was completed in 1822[9]. It was to form the model for many industrial villages throughout the north-eastern United States, most of them engaged in the production of cotton. A visitor to Lowell in 1830 remarked that it had 15,000 inhabitants:

'... a pile of huge factories, each five, six or seven stories high.... By the side of these larger structures rise numerous little wooden houses, painted white, with green blinds, very neat, very snug, very nicely carpeted... All around are churches and meeting houses of every sect...' [10]

As an influence on developments in Portlaw, the American cotton towns can only be surmised; we have no concrete evidence to suggest that David, Joseph or William Malcomson had any detailed knowledge of the work of Cabot Lowell[11]. However, there are clear parallels between the 'Lowell' plan towns of Massachusetts and both phases of development in Portlaw, particularly Portlaw's second village where we find clear segregation of uses, rectilinearity in the town plan, high-quality worker housing, and so on. However, there are some significant differences. The American examples were often designed for larger communities, sometimes the result of a number of industries setting up beside each other on the banks of a river. Secondly, the paternal relationship between the employer and employee was not as much a factor in the United States as it was in Portlaw. Lastly, in the American examples, the mill and residential buildings are frequently located within sight of each other, unlike at Portlaw where there appears to have been a deliberate attempt to isolate the residential area from the industrial.

9 The new plan, devised by Lowell's followers, was actually a departure from his original. An extra canal was added and the linearity which Lowell had espoused was moderated.

10 It is interesting to note that there was an Irish connection with the town of Lowell. By 1831, 500 Irish labourers were involved in the construction of the canal and factory. However, unlike the mill workers, the Irish labourers were obliged to live in wooden shacks. While the children of the factory workers enjoyed excellent school facilities, the 150 children of the Irish labourers attended a single-room school house. At the very least, this Irish connection suggests that industrialists and others back in Ireland may have been familiar with the nature and scale of company towns being built in the United States.

11 We do know that the previously mentioned James Cropper had business interests in New York prior to his contact with David Malcomson in 1824. There were also connections between the cotton mill towns of the Midlands/Northern England and their counterparts in North America. Belper is notable in this regard.

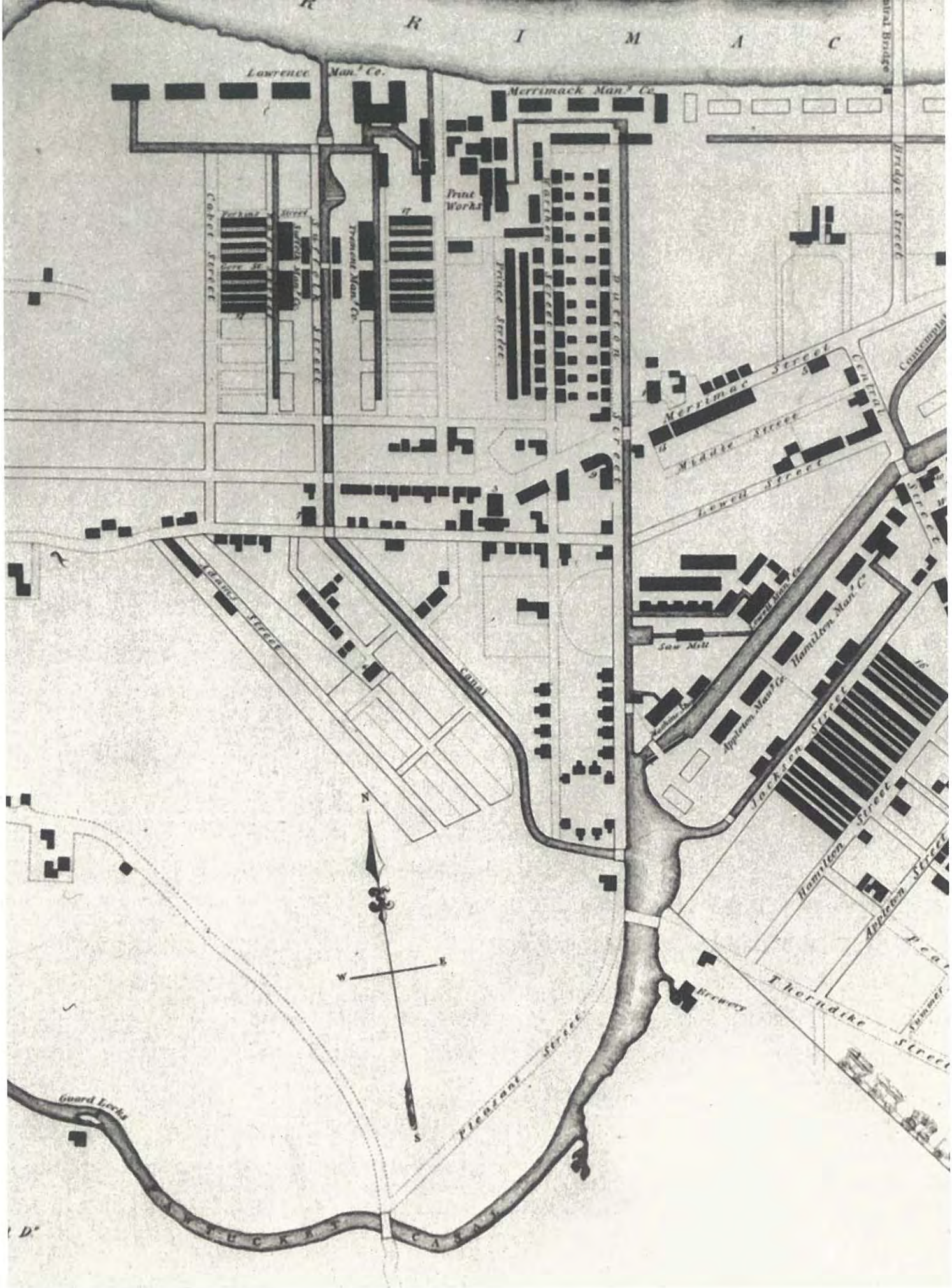

Figure 3: Lowell, Massachusetts 1832

Model Villages in Britain and Ireland

There are many examples of 'ideal' or 'religious' community development in Ireland, England and Scotland during the 18th and 19th centuries. In general, these tended to be short-lived experiments about which we now have little information. There are also several late 18th-century examples of 'industry' related model developments in Northern England (Belper and Cromford in Derbyshire, for example), Scotland (New Lanark) and even here in Ireland (Prosperous)[12]. Undoubtedly, these modest experiments (New Lanark is the exception) would have served as models for the type of village that was created during Portlaw's first phase (1825-50). However, in the context of Portlaw's second phase, two developments are particularly important for their proximity, for the fact that they incorporate some of the sophisticated planning of the North American cotton towns, as well as for the fact that they include Owen-inspired motifs, notably 'The Institute'. These developments are at Bessbrook (1846) and Saltaire (1850).

Bessbrook

Bessbrook, in Country Armagh, was a traditional linen-producing town associated with the Nicholson family when, in 1846, the entire site was purchased by John Grubb Richardson. Richardson's choice of site was influenced by '... an aversion to be responsible for a factory population in a large town...'. Concerns for social improvement, previously seen in Owen's experiments, again emerge: the new town would have no public house, no pawn shop and no police. Bessbrook represents an advance on the first village of Portlaw in a number of instances that foreshadow the design of Portlaw's second village:

- The new town was conceived as a carefully planned development, with the main streets arranged around two squares, Charlemont and College.
- The workers' houses at Bessbrook represented an improvement in terms of their size as well as the facilities they incorporated. Most had yards and individual privies.
- Worker facilities, intended '... to do them good in every sense...', were provided for in well-planned, centrally located buildings which had a civic presence.

There is little doubt that developments at Bessbrook influenced Portlaw and vice versa. The Richardsons and the Malcomsons were related through marriage (a small development of housing in Bessbrook in the latter half of the 19th century was finished with the distinctive Portlaw roof). There are similar Owen-inspired elements in the organisation of both towns, as well as a similar sense of paternalism on the part of the employers. Although it was a major advance on Portlaw's first village, Bessbrook was a more modest development than Portlaw's second village. In particular, it lacked the ambitious and dramatic town plan that elevates Portlaw into the higher tier of 19th-century model developments. Furthermore, although much of its planning and development occurred shortly after Bessbrook's commencement, the construction of houses in a number of different styles continued after the 1850s, and particularly in the 1860s when there was an influx of workers. In other words, while Bessbrook was conceived of as a model development, it wasn't built in one coherent style (as at Portlaw or Saltaire) and a certain amount of *ad hoc* development continued until the end of the 19th century.

12 This is an incredibly complex area that cannot be adequately addressed in the context of this study. Consider, for example, the series of almost 50 Colonia, isolated model industrial communities, that were established in Catalonia during the 19th century

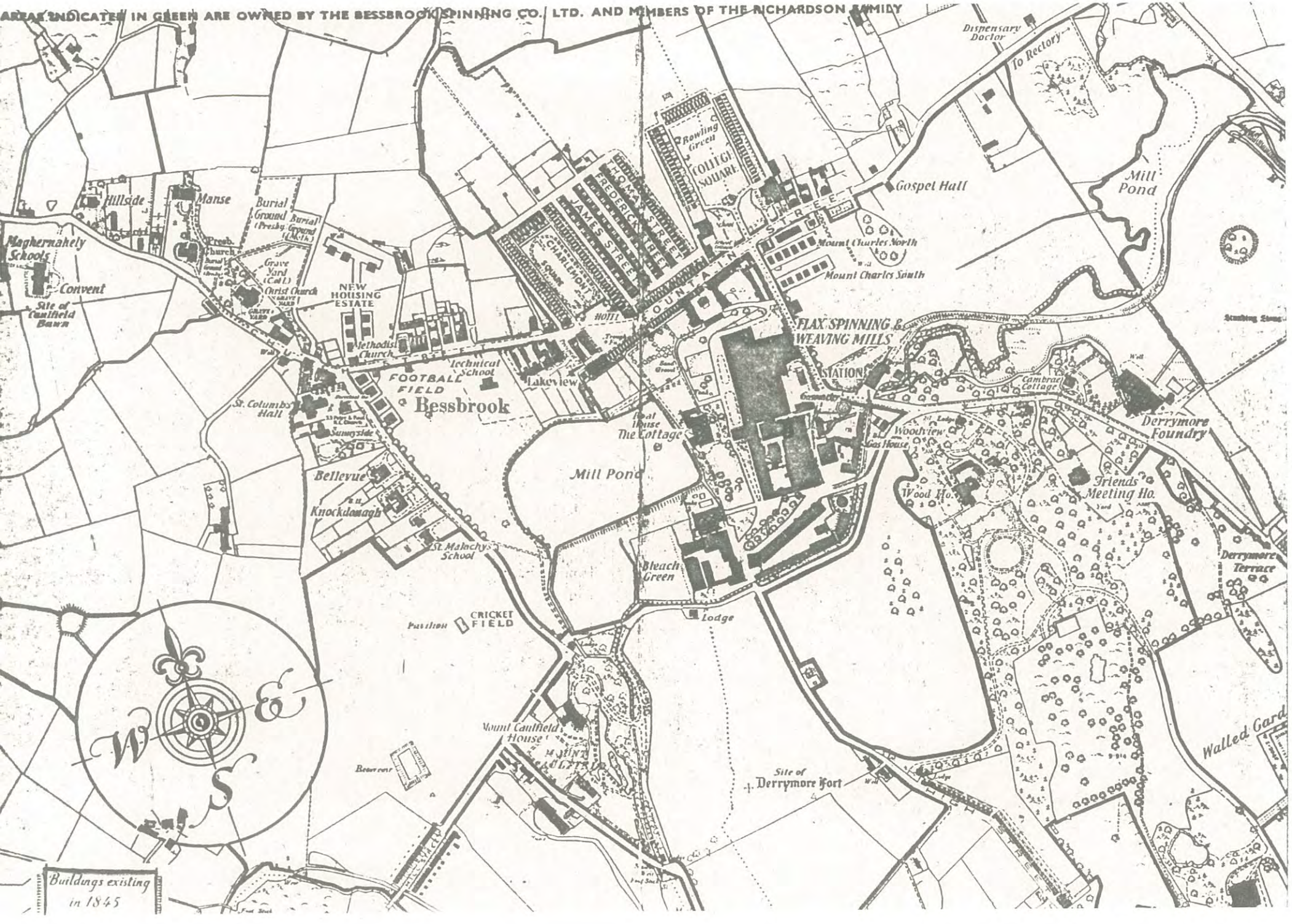

Figure 4: The Model Village at Bessbrook, c. 1845

Plate 9: Workers' housing in Bessbrook

Saltaire

Saltaire was founded by Titus Salt near Bradford, Yorkshire, in 1851. Already a successful textile producer and trader in his own right when he entered the family business, Titus Salt became wealthy in the early 1840s by focusing his efforts on the production of alpaca. Despite his success and wealth, Salt was deeply affected by the living conditions of the industrial workers in the then booming city of Bradford which, of all the newly industrialised cities of northern England, had become synonymous with poverty and squalor:

'...In the course of last week I have visited some of the most filthy and wretched abodes that the mind of man can conceive, in which misery of the lowest description was personified... there are scores of wretched hovels, unfurnished and unventilated, damp,... and surrounded by stagnant pools, human excrement and every thing offensive and disgusting to "sight and smell". No sewers, no drainage, no ventilation. Nothing to be seen but squalid wretchedness on every side...'

(*Bradford Observer,* 16 October 1845)

In developing his model community, Salt was again motivated by the now familiar themes of welfare, moral well-being and cultural improvement. Particular attention was paid to education, both for the children in the community (at the factory schools), and the continuing education of the workforce (at the Institute). 'Beer Houses' were not permitted and a modest pension was paid to retired factory workers. Almshouses were constructed to accommodate 60 retired workers 'of good character'.

While industrial 'set piece' villages had already been founded in industrial northern England (Belper, for example), the ambitious scale, strict gridiron plan and segregation of uses at Saltaire resembles the towns which followed the Lowell model in the north-eastern United States. Buildings with central community functions were used to create a distinctly urban architecture — the Church, Institute and school are beautifully designed buildings located at prominent places and introducing a sense of civic hierarchy into the community.

Plate 10: Aerial view of Saltaire

Of the industrial, model and company towns reviewed in the course of this study, Saltaire appears to have the most parallels with the development of Portlaw's second village:

- The patriarchal relationship between employer/developer and workers is analogous.
- Both towns were conceived as ambitious urban design projects intended to be read as 'set pieces', with segregated uses and carefully considered boundaries.
- The dates are significant. Saltaire was designed in 1850 (by Lockwood and Mawson). Much of its construction was completed by 1855 (although works continued until the mid 1870s), around the time that the second village at Portlaw was about to begin.

However, the parallels in development between Portlaw and Saltaire serve to highlight some important differences:

- The residential area of Saltaire is a basic gridiron, compared to Portlaw's elaborate polyvium.
- The houses, church and public buildings of Saltaire are in a grander, more typically classical, style than those at Portlaw.
- Saltaire's mill (completed in 1854) is closer to the other structures in the town and has a more commanding presence. This is very unlike the arrangement at Portlaw where the mill building was at some distance from the houses of the second village.

Notwithstanding their differences, the parallels in development between Saltaire and the second village at Portlaw are compelling. Further comparative study would doubtless prove fruitful.

Additional Cultural Influences

Before leaving the general topic, it is important to stress that the concepts of 'ideal' development and social experiment were not obscure subjects pursued by academics alone. Here in Ireland, while public debate in the mid 19th century may have focussed on issues of national identity, religion and land, the major issues of the day in northern England, for example, were the radical changes being brought about by rapid industrialisation: the movement for Household Suffrage, the works of Robert Owen, the Parliamentary Reform movement, agitation for and subsequent publication of the People's Charter, the *Communist Manifesto* and so on. It is also interesting to note that, in 1844, Benjamin Disraeli published a popular novel, *Coningsby,* in which the central character of Mr Millbank represents an ideal of service, who:

'... with gentle blood in his veins and old English feelings, imbibed, at an early period of his career, a correct conception of the relations which should subsist between the employer and the employed. He felt that between them should be other ties than the payment and receipt of wages...'

Mr Millbank builds a village for his workforce with a church, clerical residence, schoolhouse and institute. There is little doubt that the Malcomsons would have been familiar with literature of this type, as well as the general course of public debate outside Ireland.

2.2 The Polyvium: A Baroque Planning Typology

A review of the early ideal communities is helpful in understanding the ideology behind community life at Portlaw. However, it does not explain the unusual street plan for the village area. The most striking aspect of the second village in Portlaw (apart from the roof) is the layout of the streets on which the workers' dwellings are located: Brown, George's, William and Main streets fan out radially from The Square with a linearity not found elsewhere in small-town Ireland[13]. Similarly, larger scale planning exercises in Ireland do not appear to have had a direct influence on the design of Portlaw either.

Plate 11: The Square in Portlaw — 1900 and 2002

13 The argument here has been greatly simplified. See Graham and Proudfoot for a detailed examination of the nature of urban development throughout provincial Ireland in the late 18th and early 19th centuries.

- The 18th-century development of Georgian Dublin is widely regarded as an important achievement in urban planning. Founded on the leasehold system already popular in London, a grid of streets and squares was laid out over large tracts of land. The urban form which resulted — long, regular streets linking (usually) private squares — is distinctive to Dublin and similar to the Georgian pattern found in Limerick. However, it cannot be seen as having a direct influence on the form of Portlaw.
- Elements of Baroque planning may be ascribed to the works of the Wide Streets Commissioners who were responsible for establishing rules relating to development along (the now) Pearse, Dame, Abbey and O'Connell streets in Dublin in the 18th and 19th centuries. Amongst other objectives, the Commissioners sought to maintain minimum widths for designated streets as well as to create 'set pieces' along a Baroque planning model for Parliament, Westmoreland and D'Olier streets. However, it is difficult to draw a direct line of comparison between these and the later exercise at Portlaw.

Again, to gain an appreciation for this aspect of Portlaw's development, it is necessary to look at what was occurring elsewhere, particularly at post-Renaissance urban planning experiments in continental Europe.

Baroque or Grand Manner Urban Planning

The emergence of Baroque town planning in continental Europe begins in the 16th century and is tied to the radical changes which had occurred in society following the Renaissance, Reformation and Counter-Reformation. Advances in science and the discovery of the New World provide the context for the creation of towns and cities which reflected the newfound wealth of the leading European powers as well as the new cosmopolitanism of the ruling classes. The form of urban planning which emerged during this period — Baroque or Grand Manner — had a number of recognisable elements:

- Streets *amplae, rectae et pulchrae* (wide, straight and beautiful), sometimes tree lined.
- Public squares designed to reflect their civic function, often the backdrop for military pomp and pageantry, and linked to other public spaces by wide 'diagonal' streets creating vistas. These streets often radiated from a central source in the form of a trivium or polyvium.
- Large public buildings in the highest of architectural styles and placed in the most important locations at the axes of main thoroughfares or terminating important vistas.

The radial plan referred to clearly has a relevance in the context of Portlaw. The trivium (or polyvium, where more than three streets are involved) is sometimes defined as:

'.. a meeting of three radial streets at, or their divergence from, a piazza... [having] enormous potential to concentrate an urban area of variable size upon a crucial rallying point to which all traffic will flow, or conversely, from which all traffic will

fan out evenly... In the planned trivium, the central prong is axial, and the side ones in equal or near equal relationship to it; and there is always a square at the source space of the three prongs...'

The first two experiments in trivium planning occur in Rome around the 1530s. The Banchi Trivium and the Popolo Trivium were introduced to bring order onto an existing medieval street pattern. The trivium form slowly became popular, with its most notable application at Versailles. The 18th-century example found in St Petersburg is interesting for the fact that, as at the earlier Roman examples, the northern prong already existed as a main thoroughfare — the southern prong was introduced to complete the symmetry. The evidence suggests that this was also the case (albeit on a much smaller scale) in Portlaw. (At this point, it is worth remembering the Malcomson-owned ship, *The Neptune,* which was greeted by the Tsar and the Imperial Navy as it sailed into St Petersburg on its maiden voyage in 1847. Is it possible that the merits of Baroque polyvium planning were discussed?)

Baroque triviums and polyviums are typically the planning units found in larger cities. In terms of model or industrial town development, only one built example was found which might have served as a model for Portlaw. This is at Chicopee, Massachusetts, located at a fall near the mouth of the Chicopee River where:

'... the Lowell [plan] was refined and rather tentatively, symmetrical diagonal planning elements were introduced. Three streets radiated outward from a common point... This little essay in Milltown Baroque at Chicopee, Massachusetts, was apparently unique...[14]*'*

It is also important to point out that urban planners in continental Europe were publishing plans for model villages or 'workers' cities' during the 19th century. Some of these plans, like Adolphe Bruggraeve's diagram for a model city of 1852, have similarities to the type of development that was about to occur in Portlaw.

Figure 5: The Trivium town plan at Chicopee, Massachusetts

14 Reps.

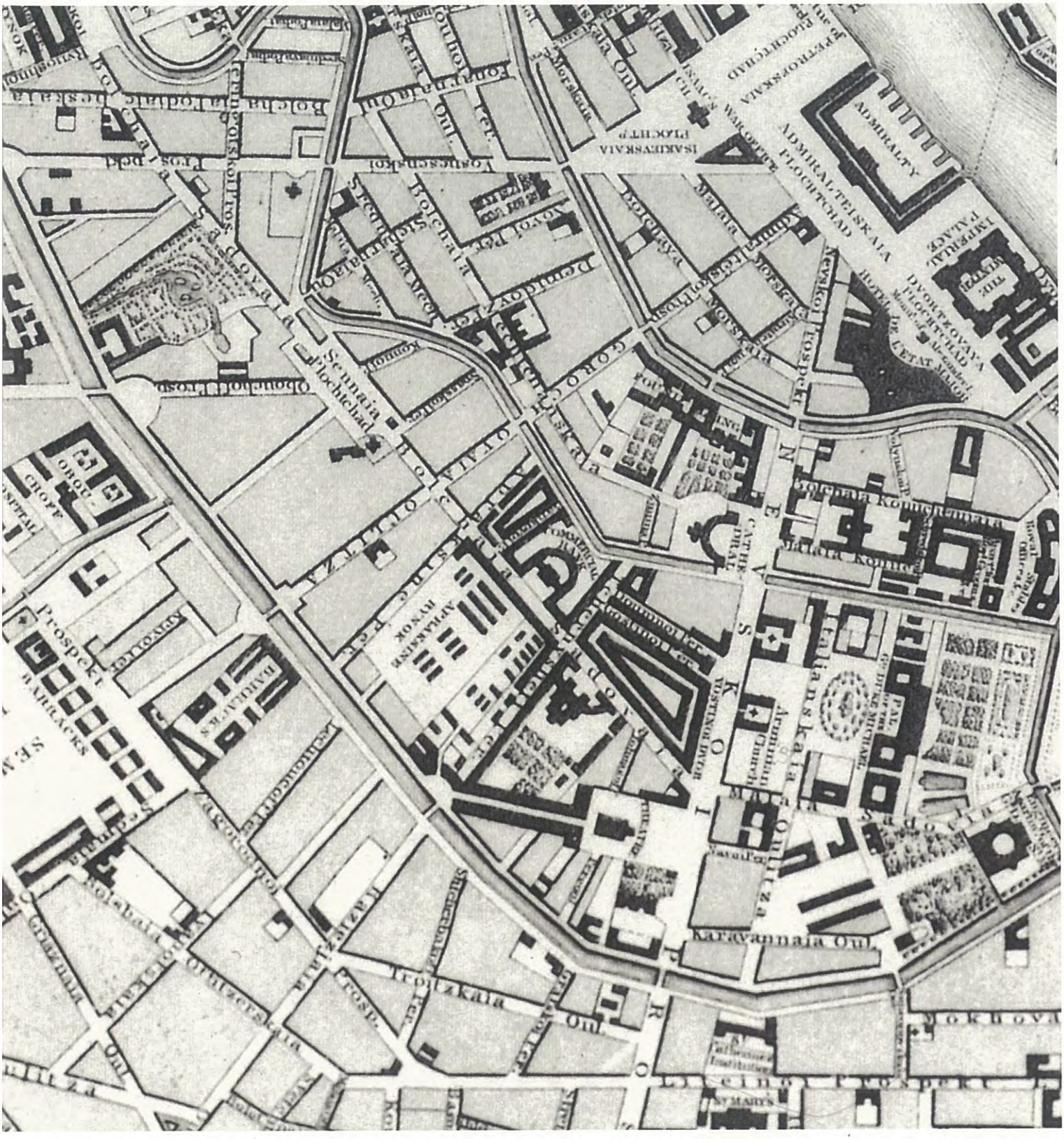

Figure 6: The 18th-century Trivium at St Petersburg

2.3 The Malcomson Family

A study of the context in which Portlaw was developed would not be complete without some reference to the Malcomson family itself and the inclination exhibited by various members to engage in socially progressive projects.

The Malcomson family's commitment to the improvement of the living conditions of those who worked for them is the most striking element of any study that has been written about them. There is no doubt that the general living conditions in Portlaw were considerably better than those found elsewhere in Ireland at that time. The dwellings of the second village were large, with rear yards, kitchens and privies. Outside, the streets were wide and airy and the backlots were generous and uncrowded. The children were educated in a fine school building. Beautiful countryside was close at hand and day trips to Waterford and Killaloe (by train) were frequently organised. Although the hours put in at the factory were long, work finished earlier in the summer months and there was plenty to do during free time. The Malcomson family's encouragement of cultural and self-improvement programmes, such as the Tontine Club and the Provident Society, has also been outlined. This aspect of life in Portlaw has been fully described in important studies by Hunt, Walsh and others. What emerges from these works is a picture of a very special social environment: something approaching an idyll in the countryside where every reasonable step is taken to improve the life of the industrial worker.

However, there is another aspect to the Malcomson contribution which requires some small elaboration — the fact that they were Quakers. All commentators on the social history of Portlaw have referred to the influence of the Quaker ideology on its social structures which on the one hand encouraged the individual to pursue social and economic success, while on the other insisted that power, money and influence must always be used for the good[15]. It is no coincidence that many of the great industrial families in England and Ireland at that time were Quakers — the Cadburys, Frys, Levers and Richardsons amongst others — and in many of the commercial empires created by these families, there was a strong concern for the welfare of the workforce which led to the creation of such remarkable model establishments as Bournville, near Birmingham, and Port Sunlight, outside Liverpool. The bond between employer and employee was underpinned by the idea that the happier and healthier the workforce, the better the commercial return. The approach is summarised by Hunt:

'...The range of paternalistic social provision made available to the residents of Portlaw carried the essential stamp of Quaker benevolence which distinguished much of their nineteenth century economic enterprises throughout Britain...'

Perhaps the best example of the Malcomsons' benevolence is illustrated by some events which occurred in Portlaw during the Great Famine. The social and historical context leading up to the most tragic event in Irish history is well chronicled and need not be repeated in detail. Briefly, the early part of the century was a period of comparative success for the merchant classes. The repeal of the Penal Laws allowed Catholics to engage in open commerce; the country generally benefited from a limited industrialisation; and, while poverty

15 See James Walvin, *The Quakers: Money and Morals*, 1997

and hunger were widespread, there was a marked increase in the population. This, of course, was to change in the most dreadful way beginning in the 1830s with the first failures of the potato crop. However, against the backdrop of this national catastrophe, the Malcomson cotton enterprise in Portlaw continued to prosper. Despite periodic concerns over the supply of raw material from the southern United States, production at the mill continued in an upward trend during the 1840s. As a result, the residents of Portlaw were spared the worst of the disaster. The Malcomson family were also committed to alleviating the circumstances of those living outside their own area through their involvement in the Central Relief Committee, an organisation which had been set up by the Society of Friends. Malcomson family members were amongst its most active participants.

Of particular significance is the suggestion that Portlaw may have functioned as a place of refuge during the worst years of the Famine. Evidence to support this is derived from a letter of 1850 on behalf of the rate-payers of the Portlaw Electoral Division to the Irish Poor Law Commissioners pleading special circumstances in relation to their rate burden[16]. A number of interesting facts emerge from this letter.

The then Lord Waterford (the principal landlord in the area, owner of the Curraghmore Estate, neighbour and sometime rival to the Malcomsons) had, as early as 1836, begun demolishing the homes of his poorest tenants in 'Old Portlaw' (now Coolfin) to reduce his Poor Law rate liabilities. The dispossessed were forced to move across the river to live in 'New Portlaw'. The situation had reached some form of crisis in the 1840s, resulting in an influx of those seeking refuge, '... most of whom are bordering on pauperism, and who having little or no work within [Portlaw's] limits are mainly depending on casual employment in the Curraghmore division...'. In other words, the Malcomsons were accepting refugees into their division and paying the resultant increase in the Poor Law rate. This, in itself, casts the Malcomson family's achievement at Portlaw in a particular light.

2.4 The Buildings of Portlaw

Previous paragraphs in this section have attempted to establish the town's significance by setting a 'global' context which places the developments that occurred in Portlaw within a framework of international events. Since an assessment of the significance of the town cannot be arrived at on this basis alone, it is now necessary to review aspects of the structures and other built artefact which contribute to Portlaw's uniqueness.

Cotton Mill Building and Related Industrial Structures

The cotton mill is perhaps the most important of the structures associated with the Malcomson enterprise. The mill was built in two parts. The earlier, southern 13-bay portion, was finished in 1825. It was 260 feet long, 47 feet deep and 72 feet tall and was built in what might be considered a traditional fashion, with timber beams spanning from front to back and supported mid span with a cast iron column. In terms of construction, the northern 13-bay extension of 1837-39

16 From the introduction of the Poor Law regulations in 1836-38, landlords around the country began to demolish their Class 4 dwellings – those housing their poorest tenants – in order to reduce their liability for the Poor Law rate. This forced labourers to move to other areas controlled by less severe landlords.

being introduced into factory town dwellings in northern England at the time where, for example, back-to-back and multi-family buildings were built to cater for the specific needs of the people who were intended to live in them.

More can be said of the dwellings of the second village which are important in a number of respects.

In his 1981 thesis, Denis MacNeice[22] traces the history of the development of factory worker housing in Armagh and Down in the 19th century. A number of trends can be derived from this study which are echoed in the development of the second village at Portlaw:

- Houses tend to increase in floor area to an average of 450–600 square feet, particularly around 1850.
- A two-over-two plan typology emerges around the middle of the century with single-storey structures containing sculleries, kitchens and privies attached to the back (as on Brown Street, Portlaw).
- The rear yard becomes a feature of most developments (again, as at Portlaw).

Not specifically referred to in the MacNeice study is the floor-to-ceiling height which, in Portlaw, is typically 11 feet (on both floors of the two-storey dwellings on Brown Street), reflecting a concern for fresh air and daylight.

The roofs of these houses represent a technical advance on the vernacular type construction used in earlier model villages. First, the house was spanned by a light, curved, lattice truss in memel pine. These trusses were assembled to a standard specification, increasing efficiency and cutting down on expensive labour. Their finish, too, was a departure from traditional vernacular techniques: layers of tarred cloth were applied to timber boards which were, in turn, fixed to the lattice trusses.

Finally, from our 21st-century perspective, all 19th-century buildings may seem old-fashioned. However, it is important to bear in mind that the houses of the second village were quite radical for their time. Typically, factory worker housing of that period was not too dissimilar from the rural vernacular; however, the curved, felt-covered roofs of the Portlaw buildings had no precedent in Irish vernacular[23] architecture. Similarly, the simple rendered façades appear stark in comparison to the more ornate, brick-finished and bow-windowed terraces that were beginning to be developed in the new suburbs of Victorian Dublin and Cork.

22 'Factory Workers' Housing in Counties Down and Armagh', Denis Stewart MacNeice, PhD thesis, Queens University Belfast, 1981

23 See MacNeice.

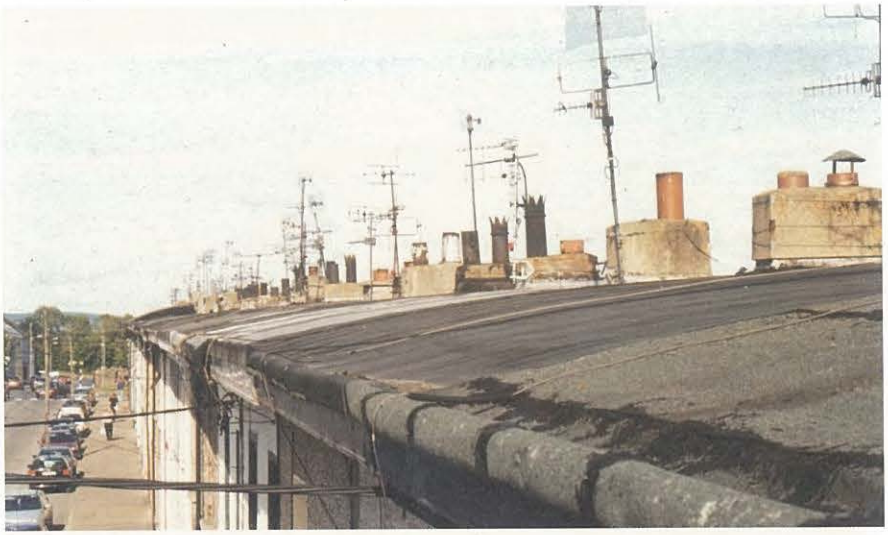

Plate 13: The Portlaw Roof

Plate 14: The decorative barge-board, once a feature of the dwellings of Portlaw, has now almost vanished

Plate 15: Portlaw roofs on workers' housing at the Mulvany Coal Works, Gelsenkirchen

2.5 The Works of J.S. Mulvany[24]

Another of the strands woven into the significance of Portlaw which requires review is its association with the architect, J.S. Mulvany, who was responsible for the design of a number of fine buildings in and around the town.

One of the most significant architects in Ireland of the mid 19th century, John Skipton Mulvany was born in Dublin in 1813. He served his apprenticeship with the highly regarded architect, William Deane Butler, but it was through his contacts with the wealthy 19th-century Quaker families that he got his

24 See O'Dwyer (2000) for a detailed biography of Mulvany and an excellent evaluation of his work. The study is referred to extensively in this section.

opportunity to explore his own architectural capabilities. Initially, his work centred on the buildings related to the development of the railways but as his influence grew, he received prestigious commissions to design houses for those families who were involved in funding the new railway system. Mulvany developed a long working relationship with the Malcomsons which, no doubt, was cemented by the fact that his brother, William Thomas, was tied into their mining ventures in Germany.

Much has already been written about the quality of Mulvany's architecture. His work has a significance for us now for a number of reasons. While most of his finest projects were in the Classical style, he experimented in the '... other less orthodox styles...' which were emerging in the latter half of the 19th century and which, in themselves, are precursors of the very earliest experiments in 'modernism' which were to emerge before the end of the century.

Even within the language of his predominantly Classical style, Mulvany's work is instantly recognisable through his trademark treatment of certain features, notably his modelling of façades and window opes as well as his exaggerated cornices and overhanging eaves, many of them adorned with large, heavy modillions. There is also a sense of elegance and refinement in all of Mulvany's designs. His work represents the highest achievement in architecture in Ireland at that time.

Mulvany's work in the Portlaw area includes the designs of Woodlock and Clodiagh houses, the Schoolhouse/Courthouse, the beautiful Gate Lodge serving both Mayfield and the industrial complex, and extensions to Mayfield itself. It is significant that a town as small as Portlaw should have such a large concentration of Mulvany's work. Furthermore, the variety of styles in which he worked is well illustrated in such contrasting structures as Woodlock and Clodiagh.

2.6 Irish Tanners and 20th-century Interventions in Portlaw

The history of the Irish Tanners' involvement at the industrial complex in Portlaw is outlined in some detail in Section 1. Its significance to the cultural history of the town is very difficult to assess. In general, it can be said that the tannery and the enterprises which it spawned were qualified commercial successes[25]. From the point of view of the economic health of the local community, their arrival was an extremely important event, providing much-needed work to a population isolated from the larger employment centres during a period of great economic difficulty. It also provided the impetus for a series of Local Authority housing developments along Queen's, George's and William streets which injected new energy into the town. Furthermore, the role of the Irish Government in establishing the business is illustrative of the political and economic landscape which existed in the country at that time as the newly formed State struggled to come to terms with independence.

However, viewed from another perspective, the intervention of Irish Tanners can be said to have had a detrimental effect on other aspects of the town's cultural life. To facilitate the new tanning facility, much of the interior of the cotton mill,

25 The new enterprise was responsible for leaving us with at least two important artefacts of industrial significance – the Robey engines referred to earlier.

including some fabric which would now be considered of great significance, was entirely removed; other buildings to the north of the mill were completely demolished. The 1945 tannery extension was of such a scale that the new intervention completely dwarfed the 19th-century structures; these vast concrete buildings continue to have a dominating presence in the local landscape. Similarly, the area around the canal and river was built up with new and unattractive structures, notably the rubber sole factory, while the wheels pits, sluice gates and other elements of the canal system were left to deteriorate. Perhaps most significantly, solid waste from the tanning process — leathers, chemicals and dyes — were dumped in the Mill Pond to the point that the outline of the pond is now almost indiscernible from the surrounding landscape. The degree of damage that has been caused to the local environment, as well the cost of mitigation of such damage, can only be guessed at.

Meanwhile, within the town, County Council housing developments resulted in the loss of more than half of the houses built by the Malcomsons as part of the model village. While the motivation for this redevelopment is understandable given Portlaw's reduced circumstances in the mid 20th century, these interventions had a radical and detrimental effect on the character of Portlaw's streetscape as well as on the unique arrangement of the rear lots which had been generated in the second village. This contrasts starkly with, for example, Saltaire where much of the original fabric (housing, mill and community structures) still survives and is being put to good use — a fact that contributed to the designation of Saltaire as a World Heritage Site in 2001.

However, the changes brought about by the arrival of Irish Tanners must be seen in the context of their time. The new enterprises brought much-needed support to a community which had suffered economically for much of the early part of the 20th century. And while in the year 2003, early 19th-century mill buildings may be considered to have a great historic importance, from a 1930s perspective, these structures may have had less cultural significance to the community.

3. STATEMENT OF PORTLAW'S CULTURAL SIGNIFICANCE

3.1 Executive Summary

- The story of Portlaw's development is one of the most interesting episodes in the history of 19th-century Ireland.
- Portlaw is a Model Village. It joins a select class of important 19th-century urban and social developments in Europe and North America where a progressive and enlightened approach was taken toward the welfare of the industrial workforce.
- Portlaw is in an elite grouping of major industrial and social experiments achieved by the great 19th-century Quaker families.
- Portlaw's setting is important. Inspired by the ideas of Robert Owen, the town was developed in geographical isolation from the wider community.
- The construction of the cotton mill ranks in scale and technological achievement with the great 19th-century industrial towns of England and North America.
- The houses of the model village, with their distinctive Portlaw roofs, have an almost unique architectural quality for their time.
- Portlaw's form is inspired by the Baroque tradition of urban planning. This makes it exceptional both in the context of Irish urban development as well as that of model village design.
- There is a concentration of important architectural designs by the great 19th-century architect, J.S. Mulvany, in and around Portlaw.
- Portlaw has a distinct industrial character similar to that found in some northern English towns but rarely found elsewhere in Ireland.
- The massive intervention led by Irish Tanners during the 20th century restored Portlaw's economic fortunes. It was a significant Government-sponsored initiative and an important indicator of public policy in the early years of the new State.
- Portlaw has the potential to reveal much more about Irish life in the 19th century. While much of its history has been uncovered, more remains to be explored.
- Portlaw's cotton industry continued to thrive during the Great Famine. The town's inhabitants were protected from one of the bleakest episodes in Irish history.

3.2 Definition of the Historic Place

All of those aspects of the built fabric of the town of Portlaw which owe their existence to the development by the Malcomson family of a cotton mill on the Clodiagh River during the 19th century will be considered the Historic Place.

3.3 Significance of the Historic Place

Portlaw's cultural significance exists on a number of levels. There are issues of significance which relate to the entire artefact. Others relate to particular aspects of the artefact. From the litany of the many interesting aspects of Portlaw's development, several stand out in defining Portlaw's particular importance.

- *The story of Portlaw's development is one of the most interesting episodes in the history of 19th-century Ireland.*

  The history of mid 19th-century Ireland is defined by famine, destitution, widespread emigration and social injustice. In our common perception, the Industrial Revolution then taking place elsewhere never really happened here. Against this background, the development of Portlaw represents a fantastic contrast. It is a rare, exciting and fascinating story of Irish industrial success: the development of a huge production facility, providing high-quality employment for hundreds of people, using the latest in technology and competing with the might of the recognised industrial powers in a new international market. It is a story from our past which deserves wider recognition.

- *Portlaw is a model village. It joins a select class of important 19th-century urban and social developments in Europe and North America where a progressive and enlightened approach was taken toward the welfare of the industrial workforce.*

  Portlaw belongs in a classification of renowned social/industrial developments know as model villages. Including New Lanark, Saltaire, Bournville and Port Sunlight, they were influenced in their development by the radical thinking of social reformers like Robert Owen. While similar exercises of this type had been attempted in Ireland previously, Portlaw represents the pinnacle and is the only one to have rivalled the scale and sophistication of better-known model towns in England and North America.

  Portlaw is also related to the tradition of 19th-century American company towns where urban development was specifically related to the production of cotton. Many company towns were founded on the back of industrial cotton production in the United States but only one of any significance developed in Ireland: Portlaw.

- *Portlaw is in an elite grouping of major industrial and social experiments achieved by the great 19th-century Quaker families.*

  The Quaker family is one of the paradigms of 19th-century industrialism. Often from humble beginnings and quickly turning knowledge of the new industrial techniques to their advantage, the Cadburys, Frys, Levers and other families created vast industrial empires within a few generations. An important component of these achievements was the concern exhibited for the welfare of their workforce. Improvement of working conditions, commitment to continued education, and sponsorship of socially progressive initiatives are evident in all the histories of the industrial empires created by the Quaker families of the period. The development of Portlaw is firmly in this tradition of Quaker achievement.

- *Portlaw's setting is important. Inspired by the ideas of Robert Owen, the town was developed in geographical isolation from the wider community.*

  An important aspect of Portlaw's development relates to its setting. While there is some debate as to why the specific location was chosen, it would appear to have been influenced by Owen's ideas relating to geographical isolation and relationship with the surrounding countryside. The hills to the south and west have the effect of reinforcing the sense of isolation from the outside world. Similarly, when viewed from these hills, the plan of Portlaw's model village and the scale of the industrial buildings can be appreciated for the exceptional form they represent in the Irish landscape.

- *The construction of the cotton mill ranks in scale and technological achievement with the great 19th-century industrial towns of England and North America.*

  The cotton mill complex at Portlaw was one of the most technologically advanced in Ireland during the mid 19th century. Records show that the mill buildings' design incorporated many technical innovations: at its height, the cotton mill's output matched that found in the mills of Lancashire; the canal, mill wheels, weir, fish pass, chimney, gas works, water supply system, as well as the various workshops which supplied working parts to the mill, all formed part of an integrated industrial system. This level of industrial self-sufficiency is not characteristic of general development in 19th-century Ireland.

- *The houses of the model village, with their distinctive Portlaw roofs, have an almost unique architectural quality for their time.*

  Worker accommodation in contemporaneous model villages tended to be influenced by prevailing vernacular or classical styles of the time, as at Saltaire or the mill towns of Armagh and Down. The Portlaw houses, with their curved roofs and plain façades, foreshadow the Modern Movement style and would have represented a non-conservative architectural approach for the 1860s. The austere outward appearance of the houses of the second village belies a generosity of accommodation rooted in concerns for utility, hygiene and fresh air. The use of the Portlaw truss was an innovative form of construction which gave the Portlaw streetscape one of its unique features. While similar curved roofs occur in other Irish towns (Blarney and Carrick-on-Suir) as well as in Germany, Portlaw has the largest number.

- *Portlaw's form is inspired by the Baroque tradition of urban planning. This makes it exceptional both in the context of Irish urban development as well as that of model village design.*

  The urban design of the second village with its use of the polyvium form derives from the intent to create a town in the Baroque or Grand Manner tradition. There are few 18th- or 19th-century examples of Baroque or Grand Manner town planning found in Ireland.

  While later villages/towns associated with specific industries were to take on a formalism or 'idealism' in their planning, developments contemporaneous with Portlaw tended toward the gridiron type (i.e. Saltaire and Lowell). Only one previous example of the use of the trivium/polyvium plan was found in relation to planned industrial towns (Chicopee Falls, Massachusetts).

- *There is a concentration of important architectural designs by the great 19th-century architect, J.S. Mulvany, in and around Portlaw.*

  A number of Malcomson family members involved in the milling enterprise built (or renovated existing) substantial homes on the periphery of the town. Some of these structures were designed by John Skipton Mulvany. The Gate Lodge at the entrance to the Mill Complex as well as the School/Courthouse are also to Mulvany's design. It has been argued (though not proven) that he may have had a significant part in the layout of the town and the design of the dwellings themselves.

  Mulvany's ability to express and innovate in a range of architectural styles is evident from the variety of work found in and around Portlaw. Such a collection of fine work by an important figure in Irish architecture is of national significance.

- *Portlaw has a distinct industrial character similar to that found in some northern English towns but rarely found elsewhere in Ireland.*

  Portlaw's industrial roots lend to it a particular urban character which is similar to the mill towns of northern England and the mining towns of Wales and northern France. This character results from the juxtaposition of typically urban elements — long, straight streets of small dwellings — against the backdrop of a rural setting, sometimes exaggerated (as it is in Portlaw) when set against wooded hills. While towns of this character are not uncommon in the more traditional industrialised countries, they are a rare occurrence in Ireland — Portlaw is perhaps the best example.

- *The massive intervention led by Irish Tanners during the 20th century restored Portlaw's economic fortunes. It was a significant Government-sponsored initiative and an important indicator of public policy in the early years of the Irish State.*

  An additional layer is added to the significance of Portlaw's history through the establishment of the tannery in the mid 1930s. The scale of this intervention, the amount of construction required to house the new enterprise, its impact on the local environment, as well as its Government sponsorship, make this a highly significant event, not only in the evolution of Portlaw but also in the early history of the State.

  A further important point must be mentioned in relation to the development of the tannery: two Robey steams engines installed as part of the development are rare and late examples of the use of the industrial steam engine. The Robey Uniflow engine is considered to be the pinnacle of steam engine design.

- *Portlaw's cotton industry continued to thrive during the Great Famine. The town's inhabitants were protected from one of the bleakest episodes in Irish history.*

  A further level of Portlaw's social significance is that its inhabitants, buoyed by the success of the cotton industry, escaped the worst extremes of the Great Famine. In fact, there is evidence to suggest both that the community continued to thrive during the late 1840s and that benefits were extended to those in distress from neighbouring areas who were not directly involved in the Malcomsons' Portlaw enterprise. In other words, Portlaw was a place of refuge during that terrible period of Irish history.

- *Portlaw has the potential to reveal much more about Irish life in the 19th century. While a much of its history has been uncovered, more remains to be explored.*

While much original and important artefact has been lost without record, a significant amount of the workers' dwellings, the urban plan and the original buildings of the industrial complex remain. The town can therefore be considered a cultural amenity as well as a source for further detailed academic study in a wide range of areas including social history, industrial archaeology, architecture and urban design.

3.4 Matrix of Significance

In advancing the *Statement of Significance* of *Portlaw*, it becomes clear that it is not possible to make specific reference to all of the important objects which comprise it: in order to define a general significance, extraordinary individual elements (such as the fish pass, the 'jack' vaults in the cotton mill, the mill wheels, the gate lodge etc.) are barely even mentioned.

It is therefore necessary to devise a method whereby each constituent element is labelled and its contribution to the Historic Place is graded according to specific criteria. Therefore, a *Matrix of Significance,* included in the Appendices, itemises (insofar as this is possible to do) all the main artefacts found within the Historic Place, the way in which these may be considered vulnerable, and the means by which this vulnerability is to be overcome.

4. THE CONSERVATION OF PORTLAW
General Issues, Vulnerabilities, Threats and Policies

4.1 Executive Summary

- The Historic Place that is Portlaw comprises a large number of important buildings and other significant artefact, each requiring conservation responses tailored to their specific vulnerabilities. Together, they present a conservation project of a very large scale.

- The execution of a large and complex conservation project requires a particular level of organisation to ensure success. This level of organisation is not currently available in Portlaw.

- The first step in conserving Portlaw's significance will be to put in place the structures required to match the scale of the project. This will involve the establishment of a Conservation Body as well as the engagement of a full-time Conservation Coordinator to implement the policies of the Conservation Plan.

- It is unrealistic to imagine that sufficient resources will be in place all at once to tackle the various conservation problems which face Portlaw. Pilot Projects should therefore be selected to set the process in motion as well as to raise awareness about Portlaw's history and significance. The criteria for selecting these projects will be that they are achievable in a short period of time (*i.e.* during the tenure of the Conservation Coordinator) without the need for substantial funding. Most of all, they should be capable of attracting public attention.

- Aspects of the conservation of Portlaw that relate to specific buildings or artefact are outlined in Section 5. While the issues, threats and policies raised in Section 5 are of great importance to the conservation of Portlaw, the short-term focus of a coordinated conservation effort will be on those issues raised here in Section 4.

- The conservation of Portlaw must be seen as a long-term project requiring continuing determination and resolve from all those involved.

- Statutory protection should be afforded to all those structures in Portlaw that contribute to its historic significance.

4.2 Methodology

Issues concerning the conservation of Portlaw are complex and varied. Some relate to the vulnerability of the entire Historic Place. Others relate to the threats posed to the numerous elements which comprise the Historic Place. A detailed list of all of these elements, the threats facing them, and the recommendations designed to address the threats would result in a very cumbersome plan.

Therefore, this section of the Conservation Plan will focus on those issues and threats which have the most effect on or have a general application to the entire Historic Place and for which priority should be given in future conservation initiatives. Detailed policies, objectives or recommendations which relate to specific buildings or other artefact within Portlaw will typically be addressed in Section 5.

It is proposed that issues raised here will be the focus of the initial effort in the conservation of Portlaw. As the process of conservation gets underway, however, it may happen that opportunities are presented to implement policies outlined in Section 5 in the short to medium term. If this proves to be so, the prioritising of Section 5 issues will occur in a structured way, following the consideration of the Conservation Body and Coordinator.

Conservation Principles

In all cases, policies proposed to address the threats faced by the Historic Place or parts of the Historic Place have been based on the ICOMOS *Charter for the Conservation of Places of Cultural Significance* (The Burra Charter, 1998), a copy of which is included in the Appendices.

4.3 Conservation Issues: Vulnerabilities, Threats and Policies

4.3.1 Initiation of the Conservation Project

Concept for Conservation

The fundamental problem facing Portlaw is that there is no ordering concept in place for how it is to be conserved. In the absence of such a concept, future development is set to continue in the *ad hoc* and (sometimes) inappropriate way which characterised previous interventions.

Scale of the Conservation Problem: Organisation

Reference to the *Matrix of Significance* in the Appendices gives an indication of the number of separate elements which comprise the Historic Place as well as the range of responses which will be required to ensure their conservation. Taken together, they constitute a project of enormous scale — a project more likely to be encountered in a large urban area rather than in a small rural town. If, however, a conservation project of this scale were to be attempted in a larger urban area, it might be expected that the panel assembled to tackle it would include the Local Authority, An Taisce, the Civic Trust, the Chamber of Commerce and any number of locally active organisations and private businesses which bring with them the expertise, funding, infrastructure and access to authority and information required to make the project a success. However, due to its size and remote location, resources of this type are currently not available in Portlaw.

Scale of the Conservation Problem: Need for Multilateral Approach

A further important point should be stressed in relation to the scale of the conservation project at Portlaw: the defined Historic Place has two significant components: (a) a Model Village; and (b) the remains of a large Industrial Complex. Both of these components face threats to their future (the reasons are discussed elsewhere) yet each relies on the other to justify its historic significance.

It is important that the conservation of Portlaw be seen to advance on both fronts: *i.e.* implementation of policies aimed at conserving the Model Village must be advanced in tandem with those aimed at conserving the Industrial/Mayfield Complex.

Taking account of the issues raised above in relation to the scale of the conservation project, it becomes clear that the response required calls for the establishment of a professionally organised representative body which implements policies and initiatives through a dedicated Conservation Coordinator. Until such a structure is in place, all aspects of the cultural heritage of Portlaw remain vulnerable.

Financial Constraints

Large amounts of money will be required to implement even some of the policies, objectives and recommendations outlined in this document. Funding on the scale required is unlikely to become available from State or Local Government sources alone. This situation presents a sustained threat to the loss of important fabric and character of Portlaw. Therefore a structured approach must be taken both in identifying sources of funding to assist in the conservation of Portlaw and in their allocation.

Policy 1 It is recommended that a Conservation Body be constituted to oversee and implement the Conservation Plan. This body should comprise representatives of the local community, the Local Authority (and, if necessary other statutory organisations), special interest groups (*e.g.* An Taisce or members of the local business community) and such others as are required to address the scale of the problem which is faced in the conservation of Portlaw.

Specific Objectives of Policy 1: The proposed Conservation Body will be responsible for: spearheading conservation initiatives; distributing information to the local community; representing the community in dealings with the Local Authority, the Heritage Council, etc., as well as in liasing with international organisations such as ICOMOS, the Historic Towns Forum etc. It should also: establish contact with similar organisations in other model settlements, *e.g.* at New Lanark, Bournville, Saltaire and others; oversee the implementation of the Portlaw Conservation Plan; and review the Conservation Plan on a regular basis. While initially the Conservation Body may be considered as having an advisory role, it will be understood that the set-up and function of the Body will evolve

as circumstances permit. For example, it should be understood that, if it proves necessary to advance aspects of the conservation work, or if it facilitates the disbursement of possible grant funding, the Conservation Body may be established as a Trust or other legally recognised entity.

Policy 2 The Steering Committee advising on the production of the Conservation Plan will seek sanction from Waterford County Council, the Heritage Council and the Department of the Environment, Heritage and Local Government to engage a consultant who specialises in locating funding sources. The aim of this exercise will be to seek such funds as would be required to appoint a full-time Conservation Coordinator for a period of two years. The Conservation Coordinator would be answerable to the proposed Conservation Body (see Policy 1). The Conservation Coordinator will also be charged with seeking out possible sources of funds to ensure that the position of Coordinator will continue beyond the initial two-year period and for as long as necessary for the full implementation of the Conservation Plan.

4.3.2 Public Awareness

While the local community has a strong sense of Portlaw's history, the wider community is less aware of the town's importance. For instance, Portlaw is not a designated Heritage Town, appearing only as a passing reference in popular travel guides and receiving no special attention, for example on road maps. While publications and studies are available for reference, there is no one popular or 'coffee table' type document to highlight the town's uniqueness. As a result, the history of Portlaw does not inspire the sense of excitement, interest and pride that it might in the wider community.

Policy 3 The Conservation Coordinator will advance initiatives to raise awareness of Portlaw's unique architectural and social significance amongst the wider community.

Specific Objectives of Policy 3: Local and national newspapers as well as specialist magazines *(History Ireland, Archaeology Ireland etc.)* will be provided with prepared feature articles for publication. Proposals will be made to national TV and radio, independent producers etc. regarding media segments relating to Portlaw's history. Direct contacts will be made with international organisations and bodies, particularly those specialising in Utopian/Model settlements (English Heritage, The Historic Towns Forum, The Utopian Society etc.) with a view to organising seminars, tours, lectures and other public events. All other similar initiatives to raise the awareness of Portlaw will be taken as circumstances arise or as directed by the proposed Conservation Body.

4.3.3 Professional Advice on Conservation Initiatives

In the past, changes have been made to significant structures and artefacts within Portlaw which, while often well intentioned, have led in some instances either to the loss of character or loss of important material. It is impossible to

prevent change from occurring: even the most important structures require routine repair and maintenance. However, to ensure that the qualities which make Portlaw so special are not further eroded, it is important to establish the principle that all conservation projects in Portlaw are properly advised in relation to conservation techniques.

Policy 4 Advice from conservation professionals in an appropriate discipline will first be sought before works are carried out to buildings, parts of buildings or other artefacts that comprise the Historic Place.

4.3.4 The Industrial/Mayfield Complex

Due to the visual and organisational relationship that has traditionally existed between the industrial structures and Mayfield House — a relationship which persists despite their current condition — it is appropriate that issues, threats and policies affecting these structures are considered in tandem.

Scale and Use

The structures forming the Industrial/Mayfield Complex are vast by any standards (see Section 5). None of them is in use and all are in a derelict condition or worse. Given these circumstances, it is difficult to envisage how the buildings within the complex will be reused.

Deterioration

Constant exposure to the elements, accidental damage and years of vandalism have meant that all the structures of the complex are continuing to deteriorate.

Vision for the Future

At the moment, there is no clear vision for the future development of the Industrial/Mayfield Complex. This lack of vision makes it difficult to advance a coherent framework of policies, objectives, priorities or schedules to prevent further loss of important material and secure reasonable uses for buildings capable of being reused. In the context of an overall idea for the future development of the Industrial/Mayfield Complex, smaller projects can be isolated and set in motion. The absence of a clear plan for the future of the complex means that such projects cannot even be identified.

Tannery Buildings

In many areas, the interventions and extensions carried out by Irish Tanners and other enterprises during the 20th century had a detrimental effect on the fabric and setting of the earlier mill structures. While some of these later buildings have an intrinsic significance, their importance is not of the order of those structures developed as part of the cotton enterprise. In fact, the presence of some of the tannery and rubber factory structures may be said to be inhibiting the conservation of the older ones.

Contamination

The waste product generated during the operation of the tannery was dumped in the Mill Pond or stored in barrels or vats throughout the site. As no waste register was kept during the operation of the tannery, the precise nature of the material that was dumped is not known. An EPA analysis[1] of 1995 indicated that significant amounts of chemicals and other substances associated with the tanning process were present in the Mill Pond. As the pond is unlined, it is likely that these substances are contaminating the groundwater in the vicinity as well as seeping into the nearby canal.

The same EPA test suggests other likely sources of contamination relating to the storage of chemicals in barrels and vats away from the Mill Pond. As in the case of the dumping in the Mill Pond, neither the scale nor the precise nature of this additional source of contamination is fully understood. This lack of information is, in itself, inhibiting progress in relation to reuse of the entire Industrial/Mayfield Complex and is, therefore, a threat to its future.

Clarification of Extent of Statutory Protection

While the mill building and Mayfield House are included on the Record of Protected Structures, the general nature and curtilage of the statutory protection afforded to them has yet to be established. As a result, there is a lack of clarity as to the nature of works which would be permitted at the site and which would not affect the character of the protected structures and would not, therefore, require prior planning approval. In itself, this circumstance is inhibiting progress in the conservation of the Industrial/Mayfield Complex.

Policy 5 It is of fundamental importance that the proposed Conservation Body should seek funding to complete the study commenced by M. C. O'Sullivan & Co. Ltd (May 2001) which investigated the nature, extent and feasibility of removal of all or part of the contaminated material located at the Industrial/Mayfield Complex.

Policy 6 Any steps which can reasonably be taken to mitigate the problem of contamination and which would make the area around the Mill Pond safe for use should be taken in the context of a strategy for future development of the whole Industrial/Mayfield Complex. No remedial steps will be taken which would inhibit the eventual removal of all contaminated material from the site.

Policy 7 All reasonable, easily effected measures that would prevent further loss or damage to significant structures, artefacts or other material (for example, boarding up Mayfield House) will be identified and implemented.

Policy 8 The Planning Authority, working in cooperation with the current owner of the Industrial/Mayfield House Complex, will investigate all legislative avenues already available for the conservation of the relevant structures through their inclusion on the Record of Protected Structures. These initiatives will include the preparation of a

1 See MCOS 'Phase 1 – Preliminary Investigation into Remediation of Portlaw Tannery, Portlaw, Co. Waterford', May 2001, pp. 16, 17.

'declaration' report which clarifies the type of work that can be carried out at the Industrial/Mayfield Complex. Such work would not affect the character of the structure and would not, therefore, require planning approval.

Area Action Plan

Policy 9 Future development at the Industrial/Mayfield Complex will follow a structured approach and will take account of the proposed Area Action Plan for the site (see Section 3.2.1 (g) Portlaw Local Area Plan 2002-2008, p. 13).

Policy 10 Without prejudice to the proposed Area Action Plan referred to in Policy 9, future development will be guided by the following principles:

- Phased development of the site (or parts thereof) will not occur on an *ad hoc* basis. All phases of development must occur in the context of the vision set out in the proposed Area Action Plan.
- New development will take account of the industrial character of the site.
- Primary access to the site will continue to be from the existing main entrance and Gate Lodge.
- The sense of a 'visual barrier' concealing development at the Industrial/Mayfield Complex from the Model Village will be retained.
- The potential of the Industrial/Mayfield Complex to provide an amenity to the local community will be exploited.
- The relationship between Mayfield House and the Industrial Complex will be respected in future development. Traditional routes and paths linking both structures, as well as the view taking in Mayfield House from the factory buildings, will be retained.
- The cotton mill building will form the focus of future development at the complex.

Specific Objective of Policy 10: The preferred route for procuring a use for the Industrial/Mayfield Complex will be as follows:

- The project will be advanced on a 'partnership' basis involving the complex owner, the Conservation Body, the Local Authority and other groups having reasonable jurisdiction.
- A detailed structural assessment will be carried out on all 'key' structures within the complex.
- Following a limited 'community planning workshop' exercise and advice from the Conservation Body, a preferred mix of uses will be outlined for future development of the site.
- An options appraisal study will be carried out by qualified consultants and working within the parameters of the agreed preferred uses.
- A feasibility study will be carried out by qualified consultants on preferred options.

- The 'Conservation deficit' will be identified (*i.e.* that element of the works required to be carried out at the site relating to the conservation/preservation of important fabric that would normally be seen as adding to the normal costs of the development of the site).
- An architectural competition brief will be developed for preferred use options.
- A staged design/development competition will be held with assessment of submissions to be weighed on the basis of appropriateness of development of the site.

The above outline for approaching the re-use of the Industrial/Mayfield Complex is based on current practice for similar projects in the UK. As the process of regeneration and conservation of large industrial heritage sites in the UK and elsewhere is continuing to evolve, the Conservation Body will stay abreast of best practice and modify the approach to securing a new use according to circumstance.

Policy 11 In the event of future development at the Industrial/Mayfield Complex, buildings identified as 'key' on the Matrix of Significance (see Appendices) will be retained, protected, consolidated, restored (if necessary) and reused (if possible). Intrusive structures will be removed except in instances where proposals for creative architectural interventions work to enhance 'key' buildings or the Historic Place in general.

Policy 12 Should policies 9 and 10 fail to produce acceptable proposals for future development within two years of the publication of the Conservation Plan, the Conservation Body will re-evaluate the situation, consider all options (including statutory options available to the Planning Authority under the terms of the Local Government [Planning and Development] Act, 2000) and will advance revised policies, objectives and recommendations in relation to the Industrial/Mayfield Complex.

which ones? CPOs?

4.3.5 The Model Village Loss of Original Fabric

More than half of the houses which formed part of the model village in Portlaw have now been demolished. Of those which remain, original architectural details (bargeboards, multi-pane sliding sash windows, fenestration pattern on Brown Street, roof finish etc.) continue to be removed or altered, diminishing the architectural character of the town. None of these dwellings is included on the Record of Protected Structures, with the result that gradual loss of architectural detail is likely to continue.

Similarly, the nature of 20th-century development which has occurred in the model village (new housing schemes, paving finishes, street surfaces, overhead cabling etc.) has contributed to a general loss of character. The 'Architectural Conservation Area' provisions of the Local Government (Planning and Development) Act, 2000, are designed to address this circumstance. However, Portlaw is not currently designated an Architectural Conservation Area.

Adaptability of Dwellings

Through the public consultation process which formed part of this study, it was established that there is some concern over the possibilities for extending the houses of the model village. It is generally felt that the houses are too small[2] to facilitate the requirements of modern family life. Until now, extensions to the rear of the dwellings have been carried out without conforming to an overall plan. The net result has been that the regularity which once characterised the town is being eroded.

Similarly, there is a perception that the houses of the model village cannot be adapted to take account of current building regulations. For example, there is hearsay evidence (not borne out in limited field survey) to suggest that the party walls of some of the dwellings extend only to ceiling level so that adjoining attics form one continuous space, thereby creating a hazard. This perception has led to a feeling amongst some in the community that the houses are not worth the effort of conserving.

Appreciation of Architectural Value

Certain aspects of the design of the houses (notably the curved roof) are not universally appreciated for their heritage significance and are considered unattractive. Some local residents have expressed a preference to have the Portlaw roof replaced with a traditional pitched roof and, indeed, this has already begun to happen on Bridge Street.

Policy 13 It is recommended that the one- and two-storey dwellings which remain from the Model Village be included on the Record of Protected Structures.

In relation to Policy 13, a photographic record of the street façades of the single and two-storey houses of the model village is included in the Appendices. This record will be used as the baseline for existing conditions on the relevant streets. In the event that the dwellings are added to the Record of Protected Structures and/or

2 The one-storey structures are typically 450 sq.ft.

included in an Architectural Conservation Area, future changes to the exterior of the dwellings would require planning permission. Once such changes have been completed, the owner of the building will supply a new photograph for inclusion on the baseline record.

Policy 14 It is recommended that the Historic Place of Portlaw be designated an Architectural Conservation Area.

Policy 15 It is recommended that the proposed Conservation Body issue a booklet to all owners of houses of the model village which are proposed for inclusion on the Record of Protected Structures. Such a booklet would explain the implications of the protected status conferred on their properties, the availability of conservation funds for protected structures, and the nature of alterations which would generally be permitted. (An outline of the proposed format of this booklet is included in the Appendices.) The booklet will also explain the implications of 'designation' under the Town Renewal Scheme 2000, and the possible advantages that may accrue to owners in the context of building conservation.

Policy 16 It is recommended that guidelines be established which will assist dwelling owners in preparing plans for extensions or other forms of development at their properties. These guidelines will take account of the character and regularity of the existing houses and rear yards and will address scale and location of development, preferred materials and finishes, and remedies for bringing the dwellings into closer compliance with the building regulations.

4.3.6 Setting, Urban Plan and the Industrial Landscape

Development Pressures and the Impact on Urban Character

Much of the character of the Historic Place relates to its industrial beginnings. The streets of the workers' dwellings are long, regular and with little variation and there is the sense of a typical urban density and concentration of uses transplanted to a rural setting.

A further aspect to Portlaw's significance is its urban plan: the Baroque-inspired trivium which was previously identified as having great significance in the Irish context.

As the greater Portlaw area becomes more attractive for future development, particularly for larger housing estates, it is important that the character of the town as well as its unique plan form are retained.

Loss of Form and Civic Function in Public Spaces

In plan, the combination of Portlaw's Square and the Factory Road would suggest that that the town is well served by good quality urban spaces; however, this is not reflected in the field. Historic photographs indicate that in an earlier period,

The Square had distinct architectural qualities defined by its form, the simplicity and uniformity of the surface finishes, a general lack of clutter, and strong views along Brown, George's and William streets. The Square also functioned as the commercial and civic centre of the village. Through time, both the architectural and civic importance of The Square have been eroded; the area is now characterised by an unsympathetic traffic circle and ill-defined use.

Linking the two principal components of the Historic Place — the Industrial/ Mayfield Complex and Model Village — Factory Road would have been a lively component of the urban fabric and an important civic space. However, with the Mill Complex now closed, Factory Road currently serves no practical use. Its northern and southern boundaries have lost all of their original fabric. Unless its function as a point of connection between the village and the Industrial / Mayfield Complex is re-established and a clear direction is taken on consolidating its form, there is a danger that Factory Road may cease to exist in the form in which we currently understand it.

Important Views to and from Portlaw

While Portlaw had clearly advantageous topographical characteristics as a location for the cotton milling enterprise (being located at the point where the Clodiagh River was both navigable and capable of providing a source of power), it also provided a very attractive setting for the new town. The views from the town to the north and east are not exceptional, but those to the south and west are extremely attractive. The wooded hills establish a setting for Portlaw and help to reinforce the sense of its geographical independence.

Similarly, views of Portlaw from the hills to the south and west give a clear picture of the town's unusual plan as well as the relationship of the Industrial/Mayfield Complex to the Model Village. There is a risk that development in the surrounding area will diminish this important aspect to Portlaw's setting.

Policy 17 It is recommended that an integrated plan be put in place to address the conservation of The Square and Factory Road, as well as to establish firm guidelines for future development in this sensitive area.

Specific Objectives of Policy 17: Landscape enhancement of The Square and Factory Road and the development of designs for the control of traffic which are sympathetic to the heritage significance of The Square and its potential to provide a central civic space for Portlaw. The possibility of sensitive mixed-use development along the south side of Factory Road to restore its significance as a vibrant urban space and some of the civic nature of its urban form.

Policy 18 Developments within the Model Village and the Industrial/Mayfield Complex will recognise the value of Portlaw's industrial landscape and trivium plan. Developers will be encouraged to bring forward proposals which imaginatively respond to and seek to uphold these important elements of the town's historic significance.

Policy 19 Views to the south and west of Portlaw have been defined as critically important to its landscape setting. Sensitivity to these views will be a criteria in adjudicating proposals for future development around Portlaw.

4.3.7 Mulvany Buildings

Reference was made earlier to the importance of the contribution of the 19th-century architect, J.S. Mulvany, to Portlaw. There is a concentration of some of the architect's finest work within the defined Historic Place. In the absence of specific policies to raise their overall profile, as well as to ensure proper maintenance and repair, their importance as a grouping is under threat (see also Section 5.6 and related policies).

Policy 20 The proposed Conservation Body will take all steps necessary to promote awareness of the existence of an important collection of buildings designed by the 19th-century architect, J.S. Mulvany, including the publication of an information booklet, installation of explanatory signage etc.

Policy 21 The owners of buildings designed by J.S. Mulvany will be encouraged to seek conservation funding from the Local Authority to research and record their structures.

Policy 22 It is recommended that the proposed Conservation Body encourage educational institutions such as the Schools of Architecture and Building Technology of WIT, DIT, CIT and UCD to undertake surveys, studies etc. of the surviving buildings in order to help identify and catalogue authentic external and internal fabric.

4.3.8 Social Significance and Oral Tradition

Allied to the lack of public awareness, and of greater concern to the long-term cultural significance of Portlaw, is the absence of a locally accessible repository for the collection, cataloguing, archiving, display and interpretation of locally available records, photographs and other items that assist in revealing Portlaw's past. This has meant that information relating to all phases of the development of the town has been (and will continue to be) lost.

Furthermore, a number of people living in and around Portlaw were employed in the Industrial/Mayfield Complex before all production ceased there in the 1980s. Their recollection of that period of the town's history was frequently drawn upon and played a vital part in advancing this Conservation Plan. Similarly, during the course of this study, it became apparent that members of the community have had stories handed down to them from Portlaw's earlier Malcomson era. This oral tradition represents a critical part of Portlaw's cultural history. It is important that the value of this aspect of the town's life is recognised and that efforts are made to record this valuable material.

Policy 23 The oral history of the development of Portlaw is a vital contributor to the significance of the Historic Place. The proposed Conservation Body will sponsor a project to record the recollections of those

members of the community who had direct connections with the 20th-century tanning and shoe-making enterprises or who have had histories passed on to them from Portlaw's Malcomson era.

Specific Objective of Policy 23: The Conservation Coordinator will advance this project by contacting institutions (*e.g.* the Department of Folklore, University College Dublin) with specific expertise in recording folklore and oral histories.

Policy 24 A methodology will be established for identifying, collecting (where possible), cataloguing and archiving (where appropriate) all records of Portlaw's significant past.

Specific Objective of Policy 24: It is envisaged that a central location will be established to house archival information which would be made available to those who wish to advance their understanding of the history of Portlaw.

4.3.9 Pilot Projects

All actions required to secure the conservation of Portlaw cannot be tackled at once. It was suggested at the start of this section that a way of getting the 'larger' conservation project started was to focus on a small number of achievable Pilot Projects. These projects would set the scene for long-term conservation initiatives in Portlaw and, more importantly, would be capable of attracting attention and thereby raise awareness about Portlaw's unique history.

It is envisaged that the identified Pilot Projects would be overseen by the proposed Conservation Body and implemented by the Conservation Coordinator.

While the actual projects undertaken during the Pilot Phase should be ratified by the proposed Conservation Body in response to circumstances prevailing at the time, the selection of projects suggested below provides a sense of the type of activity envisaged.

Pilot Project 1

Design competition for the development/conservation of the Industrial/Mayfield Complex

Policy 10 of the Portlaw Conservation Plan alludes to a 'design-development' competition to secure a use and, therefore, facilitate the conservation of the buildings in the Industrial/Mayfield Complex. While the preferred approach would be to include the entire Industrial/Mayfield Complex in the design brief, it is understood that this may not be feasible for practical reasons, in which case the brief should include at least the buildings of the Industrial/Mayfield Complex, including the Mill Pond.

Working in tandem with the current owner of the Industrial/Mayfield Complex, it is proposed that a number of design-developer teams should be invited to submit proposals for development of the Industrial/Mayfield Complex. The brief supplied to the competing teams would include detailed information on the architectural/historic value which has been placed on the buildings forming part of the complex. (The significance ratings which have been awarded to the buildings of the Industrial/Mayfield Complex are outlined in the Appendices.) The competing schemes

would be judged on the quality of their design and their financial feasibility, and also on how closely they adhere to the policies outlined in the Conservation Plan and proposed Area Action Plan.

While considerable funding would be required to launch and publicise such a competition, the benefits would be considerable in raising an awareness of Portlaw's historic significance amongst architects and developers and indeed the wider community.

Pilot Project 2

Information Booklet for Residents of the Model Village

A very achievable project (outlined in the Appendices), it is proposed that each resident of the Model Village would receive an information booklet stating why their dwelling is considered architecturally and historically special and offering practical suggestions on how the significance of their dwelling can be maintained or restored. The purpose of such a publication would be twofold:

- Raise immediate awareness about the significance of Portlaw.
- Facilitate and encourage all local residents to seek conservation grant assistance from the Local Authority, the Heritage Council or other sources.

Pilot Project 3

Collection of Loose Material

Window frames, coping stones, roof trusses and various other items of importance are found lying unprotected in several areas, particularly within the Industrial/Mayfield Complex. If no action is taken, these artefacts will deteriorate through exposure to the elements or will be otherwise damaged or lost. A comparatively easy project to organise, and one which would involve the local community, would be a 'gathering up', identifying and cataloguing of such artefact. Working in conjunction with the County Archive, with the professional advice of a museum collection specialist and taking account of the Heritage Council's Guidelines in relation to collections, remnants of the Cotton Mill and Mulvany buildings could be collected for temporary indoor storage, while larger pieces could be identified for temporary protection in *situ*. This project would provide the means of commencing the arduous and long-term task of cataloguing all available material relating to Portlaw.

Pilot Project 4

Design of a storage and archiving facility for Important Historical Material

Following on from the proposed Project 3 and in line with Policy 24, this project would involve the promotion of a competition for the design of a central location for the proper storage and archiving of material important to the history of the Historic Place. It is envisaged that such a facility would be located in an existing (or part of an existing) structure within Portlaw.

The ultimate aim of this project would be to create a facility where important material relating to all phases of the development of the town could be safely stored and catalogued, and which would be made accessible to those wishing to carry out more detailed research. The short-term advantage of the project would be to attract the attention of construction industry professionals to the town and to raise awareness of Portlaw's importance.

Pilot Project 5

Portlaw Publication

A considerable amount of information is already available in relation to Portlaw's history. Some of this material has been interpreted in academic as well as in small commercial publications (notably, previously mentioned works by Hunt, Walsh and O'Dwyer). The Lawrence photographic collection has fine prints of Portlaw from the early 20th century, and the early edition Ordnance Survey and Valuation maps are important reference sources.

It is proposed that the information already available about Portlaw should form the basis of a popular 'coffee table' style book with photographs, maps and illustrations which highlight the intriguing history of the town.

Pilot Project 6

Restoration/Renovation of a typical Model Village dwelling

A number of the houses of the Model Village type are currently in the ownership of the Local Authority. It is proposed that, should one of these dwellings become vacant, Waterford County Council might develop plans and specifications for restoration and creative adaptation. A project of this type, which would investigate possibilities for extending the structures, might serve as a prototype for future development in privately owned houses in Portlaw.

While the Conservation Coordinator would be expected to advance other initiatives which have been identified in this section as well as in Section 5, it is envisaged that the six proposed Pilot Projects outlined above would comprise the core responsibility of the Coordinator's initial period of tenure. The feasibility of progressing these projects would depend very much on the availability of appropriate funding. However, should it become apparent that funding would not be made available for any one of the Pilot Projects, the proposed Conservation Body would then immediately set about substituting it with another for which funds were likely and which, again, would fulfil the main criteria of generating awareness (for example, see Section 5 on the Robey steam engines).

Policy 25 The project of conserving the Historic Place of Portlaw will commence with a number of Pilot Projects. These projects will be capable of being completed within a reasonably short time frame (for example, 18 months to two years) and will have the dual goals of raising public awareness of the historic importance of Portlaw as well as achieving the conservation of significant aspects of the Historic Place.

5. THE CONSERVATION OF PORTLAW

Issues, Vulnerabilities, Threats and Policies relating to Specific Structures, Artefacts and other Material that comprise the Historic Place

5.1 Introduction

In Section 4, the main vulnerabilities, threats and policies affecting the whole of Portlaw were outlined; for ease of legibility, only those threats having an impact on the 'overall' significance of the town were discussed. During the course of this study, however, many more issues emerged which have important implications for individual aspects of Portlaw's cultural significance.

As mentioned, the scale of the conservation project at Portlaw is such that an attempt to tackle all the issues at once is neither practical nor advisable — clearly some system of prioritisation is necessary. Therefore, in order to advance the larger project, the policies outlined in Section 4 have been targeted for immediate attention. However, circumstances are likely to change as the project progresses which may permit policies outlined within the present section to receive a higher priority. If this proves to be the case, it is important to bear in mind the need for organisation in the decision-making process: implementation of aspects of the Conservation Plan on an *ad hoc* basis should be avoided.

5.2 Vulnerabilities, Threats, Specific Objectives and Recommendations

What follows is a statement of the key areas of vulnerability faced by important individual elements of the Historic Place. Typically, these areas may be broadly categorised in relation to:

- Mill, Tannery and Other Structures related to the Industrial/Mayfield Complex
- Industrial Artefact
- Townscape and Buildings of the Model Village
- J.S. Mulvany designed buildings and other significant structures located within the Historic Place
- Archaeology
- Ecology
- Landscape

Where possible, reiteration of Policies 1 through 25 (see Section 4) has been avoided. In the interests of clarity, however, a certain amount of duplication has been necessary.

5.3 Mill, Tannery and Other Structures related to the Industrial/Mayfield Complex

Policies relating to the future vision and use of the entire Industrial/Mayfield Complex were discussed in Section 4. The policies contained in that section also made some direct references to the Tannery Buildings and Mill Pond. Specific threats faced by other individual buildings and structures within the Industrial/Mayfield Complex are outlined below.

General Problems of Deterioration

At the outset, it can generally be said that all of the structures located in the Industrial/Mayfield Complex remain vulnerable to loss of fabric through exposure to the elements, accidental damage or vandalism.

- Extensive vegetative growth is causing problems for stone structures in and around the canal, particularly around wheel pit 3 and at the base of the south elevation of the mill wall.
- Spalling, rupture and delamination of stone as well as a general loss of fabric are to be found in all masonry structures.
- Timber rot and rust are problems virtually everywhere.

This general threat of deterioration will continue unless immediate protection can be afforded.

5.3.1 Mill Building

The Mill Building has been identified as 'key' to our understanding of the Historic Place. However, this structure has changed greatly over time so that comparatively little of the original, historically significant fabric actually remains.

Furthermore, the removal of the topmost 1½ storeys of the structure has reduced the architectural impact of the entire canal area, leading to a diminished sense of place.

Policy 26 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of important fabric from the Mill Building. Wherever possible, measures should be put in place to protect sensitive areas of the structure from further deterioration through exposure to the elements.

Specific Objectives of Policy 26: Invite students from Waterford Institute of Technology (or another similar institution) to complete an architectural survey which would generate scaled plans, sections and elevations of the building. Develop a schedule of temporary works aimed at protecting the significant aspects of the structure from continued deterioration, seek funding for this work and complete. Obtain professional advice on the structural integrity and suitability for reuse of all aspects of the Mill Building.

See also Policy 4.

Policy 27 In the context of future development, the topmost 1½ storeys of the Mill Building should be reinstated, either as part of a restoration project (relying on existing documentary sources) or as an imaginative architectural response to a development brief for the reuse of the building.

5.3.2 Canal System

The Weir, Head Race, Canal, Wheel Pits, Fish Pass and Sluice Gates have been identified in the *Matrix of Significance* as 'key' to our understanding of the Historic Place (see Appendices). These structures are faced with specific and related threats:

- The canal system is a very important part of the cultural fabric of the local community. However, access to the public is not currently possible and, therefore, its value as a cultural amenity is not available to be enjoyed.
- A current proposal (Autumn 2002) to breach the weir at the top of the canal system, restoring the original line of the Clodiagh River, would make these structures even less likely to be reused, thus making their protection more difficult to achieve.
- There is insufficient flow of water to the mill race from the river for the fish pass to be used. This, therefore, renders this particular element of the system vulnerable to continued deterioration.
- The original stone structure of the weir has been encased in concrete and there is superficial evidence that it is suffering from the type of problem often associated with the mix of lime and cementitious materials (cryptoefflorescence etc.). A similar situation pertains at the walls of the head race as well as parts of the canal walls.
- The lack of a formal maintenance programme in relation to the river, weir and canal means that debris — mainly large tree trunks — arrive in the canal when the Clodiagh is full, causing damage to the canal walls and wheel pits as well as to what remains of the sluice gates.

Policy 28 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of important fabric from the elements of the canal system. Wherever possible, measures will be put in place to protect sensitive areas of the system from further deterioration through exposure to the elements.

Policy 29 In the context of the future development of the Industrial/Mayfield Complex, a detailed specification will be put in place describing a strategy for the conservation of important material in the canal system, as well as for appropriate interventions to facilitate its reuse.

Specific Objectives of Policy 29: The proposed Conservation Body will negotiate with the Fisheries Board and other entities having jurisdiction to reach agreement on the long-term protection of items of cultural significance within the canal system and the Industrial/Mayfield Complex in general.

5.3.3 Chimney

The chimney has been identified in the *Matrix of Significance* (see Appendices) as 'key' to our understanding of the Historic Place. Its significance is particularly vulnerable for the following reasons:

- The structure is large, so renovation works will require considerable sums of money. Ongoing maintenance will be expensive, yet the chimney is unlikely to be reused. This combination of factors means that the protection of the chimney will remain lower on a list of priorities than the protection of structures for which a financial return can be expected.
- Like all tall structures, it is vulnerable to lightning damage.

Policy 30 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of important fabric from the chimney. Wherever possible, measures should be put in place to protect sensitive parts of the structure from further deterioration through exposure to the elements.

Specific Objectives of Policy 30: A study of the chimney should be undertaken to determine its structural integrity. Specifications will be put in place to consolidate the chimney structure and to include details for an appropriate and realisable maintenance plan. Specifications for consolidation will include the installation of a lightning conductor.

Policy 31 In the context of the future development of the Industrial/Mayfield Complex, a detailed specification will be put in place describing a strategy for the conservation of the chimney.

See Policy 4.

5.3.4 Piping, Culvert and Chamber

Since the culvert and piping system directing water from the Clodiagh River to the Mill Pond, and from there to the holding pond at Milfort House, are not easily accessed, their condition cannot be assessed. Their vulnerability lies in the lack of information that exists about them.

Plate 16: Mill Pond, School House and Mayfield House *c.* 1900

Similarly, the underground piping which formed part of the water supply to the Model Village is not readily accessible. As a result, information relating to this system is difficult to acquire.

However, the chamber which formerly housed the equipment which pumped the water from the Mill Pond to the holding pond at Milfort is still accessible, although all of the original fabric has been removed and the structure itself is in poor condition.

Policy 32 It is recommended that a notification system of the possible existence of historically important material should be put in place to alert work crews embarking on projects in and around the Model Village, Industrial/Mayfield Complex and Milfort House. Should such material be discovered, the Local Authority Conservation Officer should be informed before material is disturbed or covered up.

Policy 33 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of important fabric from the pumping chamber. Wherever possible, measures will be put in place to protect sensitive parts of the structure from further deterioration through exposure to the elements.
See Policy 4.

5.3.5 Remains of Buildings which formed part of the Cotton Production Process and located adjacent to the Main Mill Structure

As outlined in the Matrix of Significance (see Appendices), elements of buildings which would have formed part of the cotton mill complex are to be found included in structures created for the tanning and rubber moulding factories or standing in isolation. These elements are in derelict or ruinous condition and are suffering from unprotected exposure.

Policy 34 In the context of future development occurring in the Industrial/Mayfield Complex, the fragmentary remains of buildings adjacent to the mill which once formed part of the cotton production process will, where possible, be retained and incorporated. However, where such retention is not feasible, material will be recorded in an approved manner before removal. Any items of architectural detail or other interest will be stored.

5.3.6 Cotton Mill Bridge

Identified as original to the mill complex and significant to its historic importance, the Cotton Mill Bridge has been modified from its original condition but retains some of its original stone fabric. The condition of this bridge will continue to deteriorate unless steps are taken to intervene.

Policy 35 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of fabric to the Cotton Mill Bridge. Wherever possible, measures will be put in place to protect sensitive parts of the structure from further deterioration through exposure to the elements.
See also Policy 4.

5.3.7 MAYFIELD HOUSE

(see also Section 4)

It is recognised that Mayfield House qualifies for inclusion in Section 5.6 which focuses on issues of vulnerability to the buildings in Portlaw designed by J.S. Mulvany. However, the proximity of Mayfield to the factory complex, the traditional organisational/visual connection they share (through the common entrance and lodge), as well as the fact that they are in common ownership, mean that both these structures have a special relationship and that conservation proposals should therefore be considered in tandem.

Plate 17: Mayfield House c. 1900 and 2002

Although not to his original design, Mayfield House was modified by J.S Mulvany in the 1850s. The resultant structure, now in derelict condition, has many fine features. Enough of the original fabric remains to establish that this is a building of architectural quality (a brick arch beneath the conservatory section of Mayfield bearing onto an iron tee is an unusual feature for mid 19th-century construction).

The condition of Mayfield House is continuing to deteriorate with material lost through regular acts of vandalism.

Mayfield House has been identified as 'key' to the understanding of the significance of the Historic Place.

Policy 36 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of important fabric from Mayfield House. Wherever possible, measures will be put in place to protect sensitive parts of the structure from further deterioration through exposure to the elements and, in particular, vandalism.

Specific Objectives of Policy 36: All loose material identified as belonging to Mayfield House should be gathered up, identified and stored in an appropriate manner for possible restoration. Similarly, immediate steps should be taken to temporarily secure all *in situ* material to prevent further loss.

Policy 37 In the context of the future development of the Industrial/Mayfield Complex, a detailed specification will be put in place describing a strategy for the conservation of important material in Mayfield House, as well as for appropriate interventions to enable its reuse.

See also Policy 4.

5.3.8 Gate Lodge

The Gate Lodge to the Industrial/Mayfield Complex is shared with Mayfield House and was designed by J.S. Mulvany. It has been identified in the *Matrix of Significance* (see Appendices) as one of the structures 'key' to our understanding of the Historic Place. However, the Gate Lodge (attendant cast iron gates and stone pillars may be considered part of the curtilage) is in extremely poor condition, with a great deal of original fabric lost to vandalism. Without intervention, the condition of this building is set to deteriorate further.

Plate 18: The Mayfield Gate Lodge, one of the five Mulvany-designed buildings in the Portlaw area

Policy 38 Working with the owner of the Industrial/Mayfield Complex, all reasonable steps will be taken to prevent further loss of important fabric from the Gate Lodge. Wherever possible, measures will be put

in place to protect sensitive parts of the structure from further deterioration through exposure to the elements.

Specific Objectives of Policy 38: Working on the basis of a measured survey which has already been carried out by students of WIT as part of this study, a schedule of temporary works should be put in place to afford protection to the Gate Lodge (including gates and pillars), funds sought and works completed.

Policy 39 In the context of the future development of the Industrial/Mayfield Complex, a detailed specification will be put in place describing a strategy for the conservation of important material in the Gate Lodge, as well as for appropriate interventions to enable its reuse.

See also Policies 4, 9 and 10.

5.4 Industrial Artefact

5.4.1 'Loose' Industrial Artefact

Wooden horses, flat boogies, cutting benches, tanning drums, weighing scales, rendering vats, fire doors, toggling machine, drying machine, dust extractors, split padding machine, water pump and rubber soles are among the items strewn around the Industrial/Mayfield Complex. All are deteriorating through exposure to the elements etc. While many of these objects may not be of exceptional importance, unless they are systematically sorted and stored, an aspect of the significance of the Historic Place will be lost. (Policy 25 in Section 4 addresses this issue directly.)

However, while a considerable amount of industrial artefact remains from the 20th century, far less is apparent in relation to the earlier use of the area during the cotton factory era. It is to be anticipated that during the proposed 'gathering up' and cataloguing exercise, more material relating to the earlier use will be uncovered. It is therefore necessary to maintain a flexible approach so that additional policies can be put in place as new material becomes available.

Similarly, while it is generally accepted that most of the important material relating to the cotton mill was moved to England on or around the start of World War I, the process of trying to track down some of this material could possibly yield important information.

Policy 40 It will be an objective of the Conservation Plan that an ongoing effort will be made to track the movement and whereabouts of industrial material moved from the cotton mill.

5.4.2 Robey Steam Engines

Both of these significant objects which relate to the use of the Industrial/Mayfield Complex during the 20th century have developed rust from their continued exposure to damp. It is also evident that some elements of the engines have been damaged, broken or removed, either through neglect, vandalism or by accident. Continued deterioration can be expected unless these objects can be protected.

Policy 41 All reasonable steps will be taken to provide temporary protection to the Robey Steam Engines to prevent their further deterioration through vandalism and exposure to the elements.

In tandem with Policy 41, it is recommended that a schedule of temporary works be put in place for the engine house which would provide temporary protection to the engines. Funds should be put in place and works carried out.

Policy 42 It is recommended that specialist consultants and contactors draw up a specification for the restoration of the Robey engines. Tenders are to be sought from qualified contractors for the completion of the works with a view to having the engines remain *in situ* and accessible to the community. It will be the duty of the Conservation Coordinator to identify sources of information (*e.g.* the Industrial Heritage Association) in relation to funding, both for the specification of works and the restoration of the steam engines.

5.4.3 Mechanical Elements

Mill Sluice Gates

The principal functioning elements of the sluice, i.e. the gates themselves, have been removed. The remaining fabric is in poor condition and continues to deteriorate. It is vulnerable to the elements and vandalism.

Main Gate-Opening Mechanism at Gate Lodge

The metal parts associated with this mechanism have high scrap value and, as they are very visible, are vulnerable to theft. Furthermore, these elements remain vulnerable to deterioration through exposure to the elements. (The condition of the gearing mechanisms located underground has not been evaluated.)

Policy 43 To prevent their further deterioration through vandalism and exposure to the elements, all reasonable steps will be taken to provide immediate protection to the mill sluice gates and main gate-opening mechanisms at the Gate Lodge.

Policy 44 It is recommended that specialist consultants and contactors draw up specifications for the restoration of the mill sluice gates as well as the main gate opening mechanisms at the Gate Lodge. Tenders are to be sought from qualified contractors for the completion of the works.

5.5 Townscape and Buildings of the Model Village

Issues relating to some of the structures forming part of the Model Village, as well as its unique urban plan, were addressed in Section 4. However, there are a number of additional ways in which the cultural significance of the Model Village area may be considered vulnerable. The main areas of vulnerability are outlined below.

5.5.1 Paving, Cabling, Landscaping and Street Furniture

Over time, the original paving surfaces which would have formed the footpaths and carriageways along Brown, George's, Queen's, Main, Bridge and William streets have been replaced. Similarly, electric street lights, telecommunication systems and other artefacts of 20th-century life have been introduced. Sometimes, the effect of these 'enhancements' (or the disturbance to original fabric caused to bring them about) has had a detrimental effect on the character of the Historic Place. In the absence of strategy for future interventions of this type, it is likely that the character of the Historic Place will continue to be affected.

Policy 45 A regime of surface finishes for footpaths, kerbs, road surfaces, pedestrian crossing areas, burying of cables, street lighting and other street furniture should be established. It must be sensitive to the historic nature of Portlaw and capable of being implemented on a phased basis.

5.5.2 Loss of Fabric relating to the 'First' Village

While there appear to be no above-ground remains at Shamrock and Mulgrave streets or at Market Square, there are visible remains of the houses of the 'first' village at Green Island and Thomas Street. These are not formally protected under conservation legislation. In the absence of protection or policy, it is likely that the fragmentary remains of these structures will continue to deteriorate and an important part of the history of Portlaw will be lost.

Policy 46 It is recommended that the remains of dwellings forming part of the 'first' village on Green Island, Curtis Lane and Thomas Street be fully recorded in an approved manner.

Policy 47 It is recommended that the remains of dwellings forming part of the 'first' village on Green Island, Curtis Lane and Thomas Street be designated an 'area of archaeological potential'.

5.6 Mulvany designed Buildings and Other Buildings located within the Historic Place

In Section 4, policies were outlined in relation to the body of work by the 19th-century architect, John Skipton Mulvany, which is found within the Historic Place of Portlaw. However, specific policies relating to individual Mulvany designed buildings were not detailed in Section 4 and it is proposed to address this issue below[1,2].

5.6.1 Woodlock House

Situated on the Carrick Road leading north from Portlaw, Woodlock House is used as a nursing home and convent. While secure for the short term, with religious vocations in decline, there is an inherent threat to the medium to long-term use of Woodlock House and the associated structures.

1 Mayfield House and Gatelodge are important parts of the Mulvany *oeuvre*. However, as these buildings are integral with the Industrial/Mayfield Complex, policies relating to their conservation are included in Section 5.3.

2 For more detailed information on Mulvany's work, see O'Dwyer.

Plate 19: Woodlock House 1900 and 2002

Generally in good condition, original fabric has been lost from Woodlock (pediment over the entrance, windows etc.) and the structure remains vulnerable to further incremental change.

Policy 48 Working with the current building owners, it is recommended that a conservation strategy be put in place to ensure that further incremental loss of detail does not occur at Woodlock. This strategy would seek to explore the issues in relation to future use as well as the nature, design, density and location of future development within the structure's curtilage.

5.6.2 Milfort House

Milfort House has deteriorated to a shell and the physical/structural integrity of the building becomes more vulnerable with each passing year.

Demesne features such as a garden folly, a tree-ring, farm buildings and a farm entrance designed by Mulvany in the form of a Roman triumphal arch still survive. The reservoir which supplied both the town and the factory with water is also located close by. As these are not included on the Record of Protected Structures, they remain vulnerable to deterioration or complete loss.

Policy 49 The ruined remains of Milfort, along with associated demesne features such as the farmyard, archway, garden folly and tree-ring, should be included on the Record of Protected Structures.

Specific Objective of Policy 49: Any proposed new development within the former demesne of Milfort should recognise the value of the relict estate features. Potential developers should be encouraged to bring forward proposals which imaginatively respond to the presence of these features in terms of layout, design and materials.

5.6.3 Clodiagh House
Development in Attendant Grounds

Although recently renovated for reuse with attention paid to the conservation requirements of the structure itself, policy relating to the attendant grounds of Clodiagh House remains an issue. The grounds associated with Clodiagh House are a defining boundary with Portlaw's unique streetscape. Recent development has taken place within the grounds of Clodiagh and there is a threat that, in the absence of clear policy, future development will serve to diminish the impact of the town's unusual plan.

Plate 20: Clodiagh: Another of the houses designed by J.S. Mulvany

Similarly, the walled garden to the rear of Clodiagh is a particularly fine feature, although it remains vulnerable to inappropriate development in the absence of a specific policy to conserve it.

Loss of Important Material

Fine ironwork from the main entrance gates to Clodiagh House has been removed from its original location and left exposed on the lawn to the east of the main house. It is likely that other original fabric relating to the house is lying loose in the attendant grounds and will continue to deteriorate unless an effort is made to retrieve it.

Policy 50: A detailed strategy will be advanced for future development within the attendant grounds of Clodiagh House to ensure that it does not have a negative impact on the significance of Portlaw's unique plan.

Policy 51: All ironwork and other important material which lies scattered in the demesne of Clodiagh House should be gathered up and identified. Where reasonably achievable, elements should be restored and returned to their original location.

5.6.4 Courthouse/School

The Courthouse/School is currently in a derelict state. Internally, the building is without original fabric, though several Portlaw trusses remain *in situ* in a badly damaged roof. Although recently proposed for inclusion on the Record of Protected Structures, the condition of the Courthouse will continue to deteriorate unless action is taken to consolidate it.

Policy 52: Working with the building owner, all reasonable steps will be taken to prevent further loss of important fabric from the Courthouse/School. Wherever possible, measures will be put in place to protect sensitive parts of the structure from further deterioration through exposure to the elements.

Specific Objectives of Policy 52: Working on the basis of a measured survey which has already been carried out by students of WIT as part of this study, a schedule of temporary works should be put in place to afford immediate protection to the Courthouse/School, funds sought and works completed.

Policy 53: A detailed specification will be put in place describing a strategy for the conservation of important material in the Courthouse/School, as well as for appropriate interventions to enable its reuse. See also Policy 4.

5.6.5 Important Structures within the Historic Place

The following structures are not amongst those designed by J.S. Mulvany. Nevertheless, they are considered to be buildings which make a 'key' or 'significant' contribution to the Historic Place and which therefore require that their specific vulnerabilities and threats be addressed with specific recommendations.

Springfield House

Associated with the family, Springfield is one of the few Malcomson houses that was not designed or altered by J.S. Mulvany. Nevertheless, Springfield is an important component of Portlaw's history, and the character of the structure and its attendant grounds make a positive contribution to the Historic Place. Unless carefully considered, future development at Springfield has the potential to have a negative impact on the character of Portlaw.

Woodview House

Located to the south of Springfield House, this modest structure was the home of the Portlaw's resident surgeon, Dr Martin, during the Malcomson era of development and, therefore, has considerable significance in terms of the social history of Portlaw. Unless carefully considered, future development at Woodview has the potential to have a negative impact on the character of the Historic Place.

Shaw's Spout

Located on the road adjacent to Woodview, this small, obscure font is of considerable social significance to the community and is vulnerable to change through lack of formal protection.

Mercy Convent

It is thought that the former Mercy Convent building began as another 'Malcomson House'. The structure has undergone a number of phases of modification, alteration and extension. The group of buildings is unoccupied and (at the time of writing) is believed to be for sale. Future development at the site, unless carefully considered, could potentially have a negative impact on the Historic Place.

Market Square Buildings:

Mayfield Supply Store, Laundry, Dispensary and Post Office

Located in The Square and an integral part of the Model Village development, these structures have been identified as 'key' to our understanding of the significance of the Historic Place. Not currently included on the Record of Protected Structures, loss of architectural character is likely to continue in all instances.

Plate 21: The Square and Factory Road c. 1900

Hospital

This structure is probably the location of the Cholera Houses (later referred to as the Fever Hospital) which were associated with the first village at Portlaw. The hospital was named 'Dr Martin Hospital' in honour of Portlaw's resident surgeon. The building was extensively modified in the late 19th century and again on a number of occasions during the 20th century. Nevertheless, since it may contain some fabric from an earlier structure, and because it is associated with Dr Martin, this building makes an important contribution to the social significance of the Historic Place.

Almshouses

Located along the north side of George's Street, these building were originally of the typical 'one-storey type' of the second Model Village. They were modified in the late 19th century by the then Lady Waterford to create retirement homes for former workers at the Curraghmore Estate. While the original built fabric has been altered, this development has in some ways contributed to the social significance of the structures. However, the general threat of loss of architectural detail and the use which applies to the other structures within the second Model Village also applies to the Almshouses.

Portlaw Bridge

This structure is of historic importance and is vulnerable through lack of formal statutory protection.

Remains of Footbridge on Bridge Street

Dating to the first village, the fragmentary remains of this structure are in poor condition and, without some form of statutory protection, a gradual deterioration will continue.

River Walls, Bridge Street

Important to the character of the Historic Place, these walls are vulnerable to loss of fabric or inappropriate repair unless afforded statutory protection.

Holy Trinity Church (Church of Ireland)

Holy Trinity Church is included on the Record of Protected Structures and is in a good state of repair. The threat to the future of this structure lies in uncertainty of use and ability to maintain — the local Church of Ireland community is small and churches such as Holy Trinity are falling into disuse all over the country.

The context and visual amenity of the building is also vulnerable to the potential for development on the green-field site located immediately to the south.

Policy 54 It is recommended that the following be included on the Record of Protected Structures: Springfield House, Woodview House, Shaw's Spout, Mercy Convent, Mayfield Supply Store, 'Laundry', 'Dispensary', former Post Office in Market Square, Hospital, Almshouses, Portlaw Bridge, Old Footbridge, and River Walls along Bridge Street.

Policy 55 It is recommended that a conservation strategy be put in place to explore issues in relation to the future use, maintenance and setting of Holy Trinity Church.

5.7 ARCHAEOLOGY

There are few extant (upstanding) archaeological remains in the vicinity of the town of Portlaw. Only one archaeological field monument (a possible ringfort) has been identified within the area. As it is not included in the Record of Monuments and Places for County Waterford, it is not afforded any protection under the National Monuments Acts. The site itself and its rural setting may come under threat as housing on the periphery of the town continues to expand.

Elsewhere in Portlaw, there is the possibility of fragmentary sub-surface remains of three significant post-medieval sites. Of these, only one is located within the defined Historic Place: the 17th-century ironworks thought to be located close to the former cotton mill.

Policy 56 In the event of specific large-scale development proposals for the periphery of the town, the Local Authority will seek advice in relation to archaeological mitigation measures.

5.8 ECOLOGY

A detailed report relating to ecological issues within the greater Portlaw Study Area is included in the Appendices. This report indicates that the majority of those areas of ecological significance located within the Historic Place are included either within a 'candidate' Special Area of Conservation (cSAC) or within one of two National Heritage Areas (NHAs). While the protection to these ecologically sensitive areas has not been fully implemented, steps are in place to ensure that this will soon be the case.

However, it can be seen from Table 2.1.2. and Figure 3a (see Appendices), that Sites 6 (Holy Trinity Church), 7 (Court House), 9 (Mayfield House and Lodge), 10 (Mill and Tannery), 19 (Clodiagh House) and 24 (Grotto) are not included in the cSAC or NHAs although they include material of ecological or potential ecological significance. This significance is vulnerable in the event of future development.

Policy 57 In the event of specific development proposals for the above-mentioned areas, it is recommended that joint guidelines be put in place to ensure that the vulnerability of the ecological heritage is addressed and accommodated in proposals for the protection of the built heritage.

5.9 Landscape: Groups of Trees and Areas of Special Planting

Subsequent to a review of the landscape of Portlaw and its environs, the following areas which are vulnerable to redevelopment pressures due to the absence of statutory protection have been identified as important to the cultural heritage of the Historic Place:

- Circle of trees at the holding pond, Milfort House
- Trees and shrubs directly adjacent to Clodiagh House and in the rear garden
- Trees and shrubs adjacent to and to the north of Woodlock House
- Trees to the north of Mayfield House

Policy 58 It is recommended that those trees identified at Milfort House, Clodiagh House, Woodlock House and Mayfield House be included for protection in the Portlaw Development Plan.

Ivy Walk

Traditionally, the Ivy Walk (which runs behind Mayfield House and links it with the Industrial/Mayfield Complex) has been considered an amenity for the local community. Due to its fragile nature (it is defined by shrubs and trees), there is a danger that this important element of Portlaw's cultural significance will be lost completely unless a plan is put in place to protect and maintain it.

Policy 59 In the context of a proposal for overall development in the Industrial/Mayfield Complex, it is recommended that the Ivy Walk be restored and reinstated as an amenity available to the community.

Specific Objective of Policy 59: In the short term, it is recommended that (working in conjunction with the building owner) the maintenance and upkeep of the Ivy Walk be considered a 'community project', possibly in conjunction with the local national school and overseen by the proposed Conservation Coordinator.

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An Chomhairle Oidhreachta

The Heritage Council

Kilkenny, Ireland. Telephone: +353 56 70777. Fax: +353 56 70788. E-mail: heritage@heritagecouncil.com

Cill Chainnigh, Éire. Teileafon: +353 56 70777. Faics: +353 56 70788. E-mail: heritage@heritagecouncil.com

www.heritagecouncil.ie

An Roinn Comhshaoil, Oidhreachta agus Rialtais Áitiúil
Department of the Environment, Heritage and Local Government

Waterford County Council

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