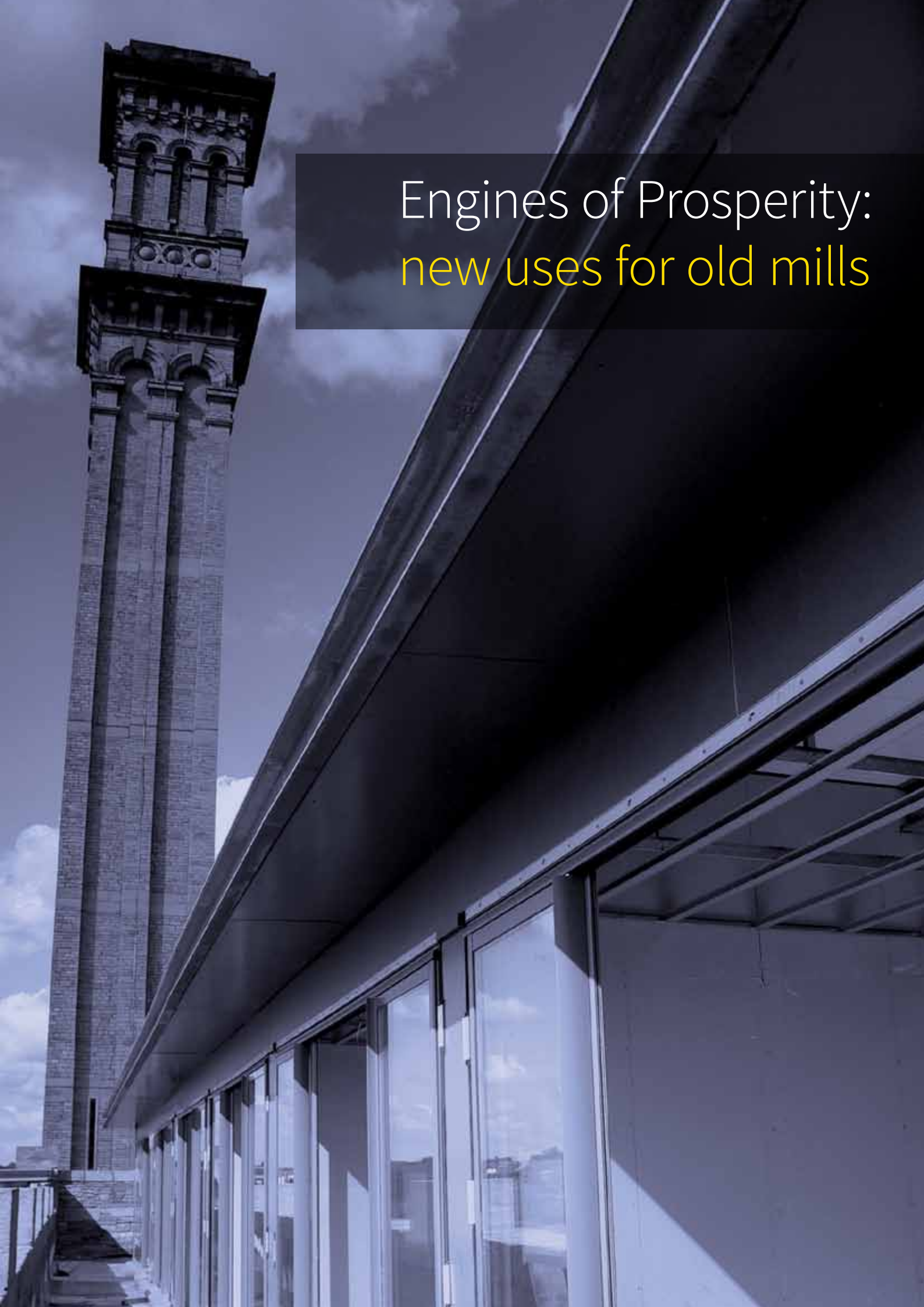

Engines of Prosperity: new uses for old mills

Top: Parkwood Mills, Longwood

Bottom right: Dance workshop at 1912 Mill, Sunny Bank Mills, Farsley

Bottom left: Art worshop at Sunny Bank Mills, Farsley

Cover: Lister Mills, Bradford

Contents

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1.0 Executive Summary

Securing active and sustainable futures for West Yorkshire's vacant and underused textile mills is critical to sustaining the character of these important symbols of the County's industrial heritage. However, their regeneration can also have wider benefits through:

- Acting as a catalyst for the revitalisation of the surrounding area
- Acting as a focal point for local communities
- Creating jobs, investment, new homes and generating additional local tax revenues.

Historic England has engaged Cushman & Wakefield and Lathams Architects to produce a study to review and develop best practice in the regeneration of West Yorkshire's textile mills. The study has focused on assessing a combination of recently refurbished and currently disused mills across West Yorkshire. The work has highlighted the scale of the opportunity and the wide range of best practice precedents from recent mill conversion projects. It also underlines that there are a number of positive emerging trends which are creating a renewed impetus for regenerating these important assets:

- Market improvement across the residential and commercial sectors, which is generating increased occupier and purchaser demand for all asset classes including heritage assets;
- Growing developer and investor appetite;
- The devolution agenda which is encouraging local authorities and Local Enterprise Partnerships (LEPs) to invest in regeneration and growth projects and to implement innovative measures (such as simplified planning, direct delivery and intervention) to unlock the delivery of difficult sites and buildings.

The opportunity

The West Riding of Yorkshire has a rich heritage in the textile industry with many of its towns and villages once based around a textile mill. As a consequence there are a large number of textile mills across the County, some of which remain in use for industrial purposes, some have been brought back into use for either commercial or residential occupancy, and a great many remain vacant or underused. These buildings generally offer large open spaces which make them physically capable of being brought back into alternative use.

The scale of the opportunity is vast. There are over 1,500 remaining textile mills in the West Riding of Yorkshire, of which at least 150 have been converted and are in use. Therefore there are approximately 1,350 that are either underused or vacant. Bringing a vacant or under used mill of 2,500 sq m (Gross Internal Area) back into productive use could generate a significant benefit for the local area. Applying standard densities to this floor area indicates it could generate:

- 115 net additional jobs (equivalent to £4.7million of Gross Value Added per annum), or
- 20 new homes

Assuming a mill of 2,500 sq m Gross Internal Area to be representative of the average mill size across the West Riding of Yorkshire and scaling-up the above benefits by the total number of remaining mills (1,365) suggests there is capacity for these mills to generate approximately:

- 150,000 jobs (equivalent to £6.4bn Gross Value Added), or
- 27,000 homes

In view of the quantity of mills the scale of the potential benefits from repurposing mills for new jobs or homes is considerable. These statistics underline the importance that partners collaborate to drive forward the regeneration process putting textile mills at the heart of the "Northern Powerhouse" agenda.

Key challenges facing West Riding of Yorkshire's Textile Mills

Securing the economic functionality and purpose of textile mills is critical to ensuring their conservation. However, many heritage assets, particularly those that are listed, face a number of challenges as a result of high running and maintenance costs and constraints affecting the feasibility and cost of modernisation. Add to this the fact that many such mills are located in traditionally weak market locations where occupier and investor demand is subdued, and it is easy to see why such properties can be viewed as more of a liability, rather than an asset.

Textile mills that are not sufficiently cared for and maintained can quickly fall into disrepair and can lower the environmental quality of an area. Such "dead landmarks" can reduce the attractiveness of an area resulting in a lack of inward investment and growth. Recent experience shows that conversely, integrating historic buildings with regeneration schemes can create popular, vibrant urban quarters which can act as a catalyst for investment.

The key challenges affecting mill regeneration projects are:

- Occupier demand

Some textile mills are located in areas of weak occupier demand. As a consequence rental and capital values are modest restricting the viability of mill redevelopment projects

- Structural condition

Some buildings have been disused for a prolonged period of time which has resulted in deterioration of the fabric and structure of the buildings

- Site constraints

Many sites experience a number of constraints including asbestos, difficult topography and flooding issues

- Cost of adaptation

As a result of the above, the costs of adapting mill buildings and sites are often higher than that of the average building renovation

- Risk profile

Because of uncertainties relating to cost, timing, planning and occupier demand, mill regeneration projects are viewed as high risk ventures by developers and funders.

Best practice solutions

There are a considerable number of best practice precedents of mill regeneration projects across the county that demonstrate what can be achieved.

Occupier solutions

- Alignment of assets with occupiers who 'like' heritage assets, such as creative industries
- Link to area based strategy for occupier growth
- Utilise public sector machinery to incentivise occupiers (e.g. business rate or council tax discount)
- Promote mixed use on large sites
- Encourage a phased transition from textile production to multi tenanted and mixed use
- Alignment of heritage assets with public sector accommodation requirements
- Create certainty through better planning and historic building guidance.

Design and adaptation solutions

- Enable greater flexibility in the adaptation of buildings including partial demolition and new build on site
- Masterplanning of mill sites
- Promote potential for conversion of mill buildings to houses (as an alternative to flats).

Cost solutions

- Smart cost management
- Early identification / determination of strategy (prior to closure of mill) to avoid period of vacancy and abandonment
- Phasing of site renewal costs
- Utilisation of tax concessions such as Enhanced Capital Allowances
- Off-setting abnormal costs through enabling development.

Business model solutions

- Develop public / private partnering mechanisms to enable conventional 'developer' model to work better on mill sites
- Encourage investors to establish funds targeted at mill assets in locations where uplift is expected over time
- Bespoke help for landlords in terms of finance, guidance and advice
- Provision of clear planning / listed building guidance on what will be acceptable
- Pooling of public sector resources
- Use of 'dowry' to enable transfer of assets to public or third sector groups
- Marketing of opportunities to high net worth individuals.

Funding solutions

- Alignment of Local Growth Fund, European Union funds and Heritage Enterprise to maximise funding availability and impact
- Utilisation of LEP and Homes and Communities Agency (HCA) investment programmes to create greater flexibility than commercial debt / equity
- Use of Tax Increment Financing (TIF) by local authorities utilising business rate income (for commercial occupiers) and New Homes Bonus (for residential uses)
- Consideration of innovative leasing structures whereby the strength of the public sector's covenant can be used to generate capital
- Use of public sector's capacity for borrowing to improve the availability of funds for projects and specifically to equip the public sector with the necessary resources to implement speculative projects.

Recommendations

Taking account of our findings we consider there to be a number of action areas for key stakeholder groups to address in promoting a programme of change and facilitating the regeneration process.

Historic England

- Rigorously apply 'Constructive Conservation' principles to adaptation solutions
- Proactive strategy and action plan for mills at risk in collaboration with the promoters of mill buildings (e.g. developers and property owners) and other key stakeholders
- Create certainty by working with senior officers within local authorities including conservation officers to provide clarification of what is needed
- The Enterprise and Regulatory Reform Act 2013 aims to make it easier to undertake works that do not affect the special architectural or historic character of listed buildings. Historic England can create certainty by working with local authority conservation officers to provide clarification of what is needed utilising planning frameworks / briefs, Local Listed Building Consent and Local Development Orders and Certificates of Immunity / Certificates of Lawfulness where appropriate.

Public sector

- Create West Yorkshire textile mill investment funds through Local Enterprise Partnership co-financed from Local Growth Fund, Historic England, European Structural and Investment Fund
- Local Authorities to consider financing options to address viability gap on priority assets, with seed funding provided by above West Yorkshire fund to limit borrowing risk exposure (potential to merge together with the proposed funds)
- Local authorities to take a more hands-on role in promoting and facilitating regeneration process using resources at its disposal – planning, CPO, borrowing, skills, local tax revenues
- Consider aligning public sector accommodation requirements with heritage assets.

Investors, developers and occupiers

- Work collaboratively with public sector partners to enable constraints to be overcome through funding, planning and other innovative solutions
- Recognise long term investment potential of textile mills and devise bespoke funds to target high rental/capital growth locations
- Look at long term opportunities in areas that will be up and coming – align with regeneration strategies.

2.0 Introduction

Historic England sees the potential regeneration of West Riding of Yorkshire's textile mills forming a key part of the "Northern Powerhouse" agenda, which is intended to bring together the great cities and communities of Northern England to rebalance economic activity across the country. In order to achieve this growth, the North needs commercial, industrial, retail, leisure and residential space, a large part of this need can be provided by bringing underused and vacant textile buildings back into productive use.

Purpose of report

2.1 Historic England has engaged Cushman & Wakefield and Lathams Architects to produce a study to review and develop best practice in the regeneration of West Riding of Yorkshire's textile mills. There are two key elements to the brief:

- A review of six 'case study' mills that have been successfully regenerated
- Assessments of the potential of eight 'target' mills that are currently underutilised/vacant.

2.2 The outcomes of the work are intended to be used to promote and share best practice and act as a stimulus for regeneration activity on underused and vacant mill sites.

Background

2.3 Textile mills have helped to define the identity of West Yorkshire for many generations. The first mills started to emerge in the late 18th Century as the Industrial Revolution started to shape the landscape, economy and communities of the region. Few settlements in West Yorkshire are not influenced in some way by their relationship with 'the mill', and the same holds true for many rural landscapes.

2.4 The scale of mill buildings, their solid uncompromising construction and their widespread distribution throughout West Yorkshire creates the impression that they are both ubiquitous and permanent structures. However, without proper care, mills like other building types, fall into disrepair and are ultimately lost.

2.5 The buildings of the textile industry and the wealth they created have shaped the distinctive character of the county [1]. However, because of changing economic trends many have become disused and are at risk of falling into disrepair and ruin. Historic England is committed to working with owners and local authorities to support the repair and adaptive reuse of textile sites, enabling mills to be brought forward for new homes and jobs putting them at the heart of the "Northern Powerhouse" growth agenda.

2.6 Historic England sees the potential regeneration of West Riding of Yorkshire's textile mills forming a key part of the "Northern Powerhouse" agenda, which is intended to bring together the great cities and communities of Northern England to rebalance economic activity across the country. In order to achieve this growth, the North needs commercial, industrial, retail, leisure and residential space, some of which can be provided by bringing the West Riding of Yorkshire's underused and vacant textile buildings back into productive use. There are currently over 1,500 remaining textile mills in the West Riding of Yorkshire.

2.7 The Leeds City Region was at the centre of the Industrial Revolution. The people of West Riding are proud of this heritage. For older generations their lives revolved around work at the mills, which remain important features in our towns, cities and landscapes.

2.8 Whilst the City Region remains the most important centre in the UK for textiles, technologies have changed, the textile industry has declined and many of the mill spaces so dominant in our communities have fallen out of their original use. Many have been successfully converted to new uses. Younger generations are beginning to identify these impressive complexes as places to live or socialise where they have been converted to residences and leisure space. There have also been successful conversions of mills and mill complexes for offices, gallery space and many other uses. The refurbished, modern, mill spaces make a new contribution to the identity of a place, to the local economy and to the Government's agenda to create new homes, business space and to reuse brownfield sites.

2.9 In the mid-1980s Dean Clough and Salts Mill in West Yorkshire were amongst the earliest major industrial reuse projects in this country. A generation on from these pioneering developments, this report looks constructively at how the textile mills can be adapted so that they continue to make a contribution to the heritage story and economy of Yorkshire.

Methodology

2.10 This work comprises:

- Research of case studies which illustrate successful mill conversions
- An assessment of possible regeneration solutions for eight under-utilised textile mills.

2.11 Cushman & Wakefield and Lathams have assessed six examples of successful mill conversions in the West Riding of Yorkshire. Through research and direct engagement with mill owners and developers, we have identified why these important mills were repurposed, the

[1] The area covered by this study includes Bradford, Calderdale, Craven, Kirklees, Leeds and Wakefield Local Authority areas, which encompasses both the northern part of the historic West Riding and the former West Yorkshire County Council area.

challenges that were faced in their redevelopment, the approach to design and sensitivity to historic significance; and how the redevelopment was funded and delivered. The outcomes of this work are presented as case studies appended to this report.

2.12 An assessment of eight textile mills in the West Riding of Yorkshire has been undertaken. This has been informed by a site visit to each "target" mill; a meeting / discussions with mill owners or their agents; a high level visual building survey undertaken by a chartered building surveyor and a viability appraisal on proposed alternative uses. Our assessment includes consideration of:

- Market and occupier potential
- Adaptability
- Planning requirements and constraints
- Options analysis
- Viability and funding
- Delivery planning.

2.13 The lessons learned from the exemplars of best practice have been used to inform how the eight target mills in the West Riding may be successfully redeveloped and it is the intention that this evidence is disseminated so that the reuse and adaptation of historic buildings can be shared with local authorities, landowners, developers and other stakeholders to further promote the role that textile mills can have in place-making and in delivering economic growth.

Structure of report

2.14 This report is structured into four main sections, following this introduction, we present the case study and target mills which are the subject of this work. We then analyse the lessons of best practice in Section 4, before presenting our conclusions and recommendations in Section 5.

2.15 We present the six case studies in Appendix 1 and our analysis of each of the target mill sites in Appendix 2.

Top: Ricci's Tapas, Dean Clough, Halifax

Middle: 'Walk-in movie night' Marshall's Mill, Leeds

Bottom left: Farsley Festival at Sunny Bank Mills, Farsley

Bottom right: Salts Mill World Heritage Day, Saltaire

3.0 Sampled Textile Mills

Approach to selection

3.1 The selection of the case study textile mills was carefully considered. All mills were in the West Riding of Yorkshire and were selected to ensure a mix of:

- Size
- End uses
- Financial delivery vehicles
- Locations.

3.2 The purpose of this was to illustrate the role such mills play in place-making and in achieving Government aspirations for housing growth and economic revival.

3.3 The selected case study mills were:

- Victoria Mills, Shipley, Bradford
- Peckett Well Mill, Wadsworth, Calderdale
- Parkwood Mills, Huddersfield, Kirklees
- Sunny Bank Mills, Farsley, Leeds
- Marshall's Mill, Holbeck, Leeds
- Tower Works, Holbeck, Leeds.

3.4 Similarly, target mills were selected to achieve a mix of the following:

- Size
- Location (urban and rural)
- Geography.

There are over 1,500 remaining textile mills in the West Riding of Yorkshire. The selection of the case study and target mills was carefully considered to illustrate the role such mills play in place-making; and in achieving Government aspirations for housing growth and economic revival.

3.5 The selected target mills were:

- Drummond Mill, Manningham, Bradford
- Low Mill, Keighley Bradford
- Dalton Mills, Keighley Bradford
- Prospect Mill, Thornton, Bradford
- Old Lane Mill / Rawson's Mill, Halifax
- Old Town Mill / Mitchell's Mill, Hebden Bridge, Calderdale
- Carlinghow Mill, Batley, Kirklees
- Parkwood Mills, Longwood, Kirklees.

3.6 It should be noted that all mill owners / the developers of case study and target mills gave their consent to have their property included in the study. Where approval was not secured the mills were excluded from the study which explains why we have not been able to include a mill from within each local authority area.

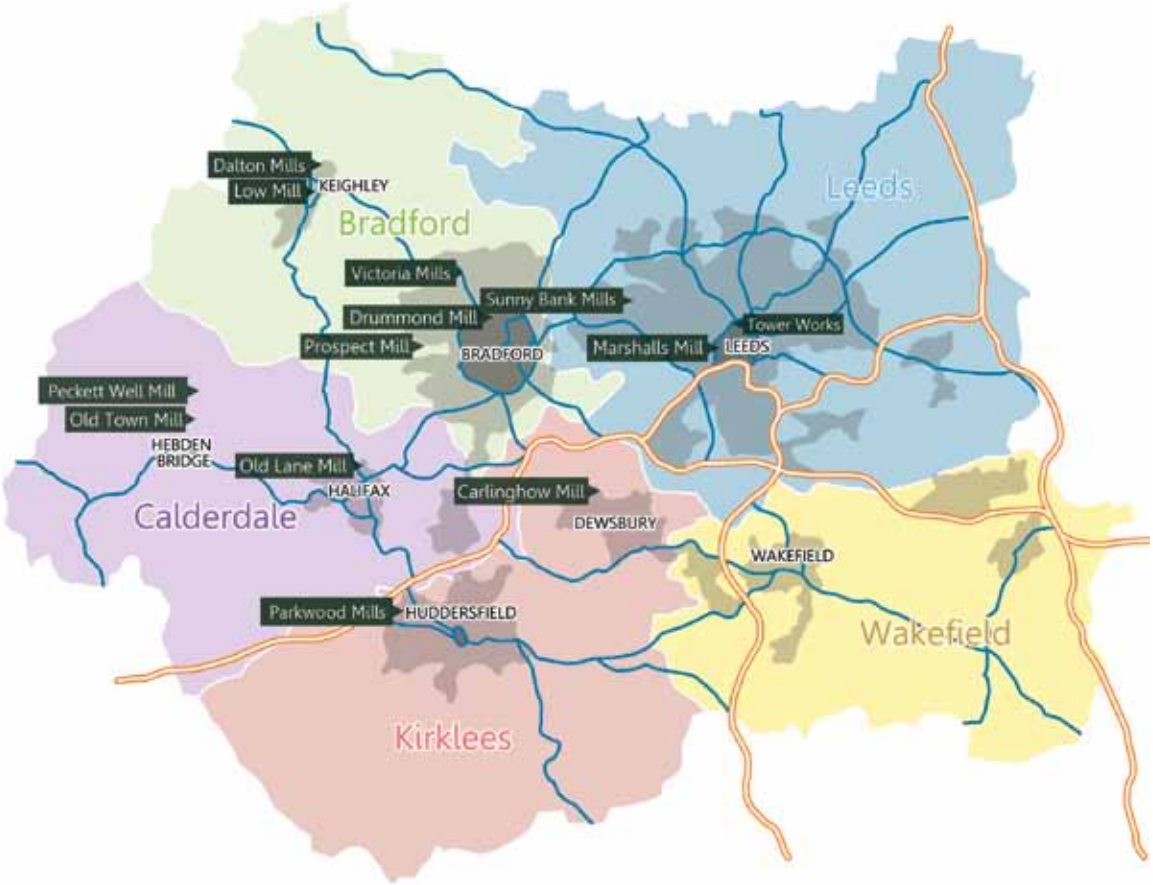


Figure 3.1 shows the location of the case study and target mill sites.

Case Study Mills

Victoria Mills

3.7 The Grade II listed Victoria Mills is a worsted mill located in Shipley, 5.6km north of Bradford and is set within the buffer zone of the Saltaire World Heritage site. Victoria Mills comprises Old Mill which was built in 1873 by Henry Mason to manufacture worsted coatings and dress goods; and New Mill which was constructed some 15 years later. Victoria Mills was one of four significant mills in Bradford (Salt's, Lister's, Drummond and Victoria). Victoria Mills was fully integrated – wool arrived on the top floor and the processes took place on site from wool to finished cloth. In 1958, the mills were acquired by Solomon Jerome a cloth merchant. Cloth production continued until 1992 when the mills closed.

Above: Victoria Mills, Shipley, Bradford

3.8 New Mason Properties purchased the derelict site in 2003 and commenced a £70m redevelopment programme which included the conversion of Old and New Mills into 57 and 53 apartments respectively and the creation of new build residential units. The 449 unit residential development comprises one, two and three bed luxury apartments which include roof gardens, balconies, landscaped gardens, tennis courts, a gym, beauty studio, café and convenience store in a riverside setting. The scheme was completed in 2008 and has won several awards including the RICS Award for Building Conservation and the ResiProps Award for Best Mill Conversion.

Peckett Well Mill

3.9 Peckett Well Mill is a Grade II listed, cotton weaving mill which specialised in fustian – a heavy cloth used for corduroy and moleskin. The mill, engine house, chimney and weaving shed date from 1840 to 1858 and are listed.

Right: Peckett Well Mill, Peckett Well, Calderdale

3.10 The mill was rebuilt after a fire in 1873 and later traded as Cords Ltd. The mill provided the main source of employment in the village. Weaving continued at the mill until 1998 when it was then used for textile storage. Peckett Well mill is situated on a south-west facing hillside in the village of Peckett Well, 3.2 km from Hebden Bridge, 47km west of Leeds and 48km north-east of Manchester.

3.11 Mango Homes purchased Peckett Well Mill from the company who ran it in 2003 as they have an interest in redeveloping historic buildings. Mango Homes agreed to purchase the site, appointed local architects and initiated discussions with Historic England regarding the potential for redevelopment of the mill. Mango Homes completed the redevelopment of the oldest elements of the mill complex in Phase 1 including converting the multi-storey mill into seven apartments, the engine house into a three bedroom home and the weaver's cottage – Bobbin Cottage. Phase 2 of the development comprised six three bed town houses (Type T Weaving Sheds) and 11 three and four bed homes (Type M weaving sheds). The development now comprises 26 two, three and four bedroom residential units.

Left: Parkwood Mills, Longwood, Huddersfield

Parkwood Mills

3.12 The Grade II listed Parkwood Mills complex is located in the village of Longwood, 4km from Huddersfield, 32km from Leeds and 40km from Manchester. The integrated Room and Power woollen mill was constructed in the mid to late 19th Century for the firm of John Broadbent and Sons, and tenants. The main buildings of the group are numbered 1 to 8. Mill 1 is the earliest surviving mill, built in the early 1850's on the site of John Broadbent's first mill.

3.13 By 1887 the tenants included spinners, manufacturers and one dry finisher. In November 1887 the Broadbent's acquired the finisher's company and it became the Longwood Finishing Company Ltd, remaining in the hands of the Broadbent family until 1910. Longwood Mills closed in 2001. The mill is a complete and unique example of the development of a large Room and Power business which returned to single company ownership in World War I.

3.14 Developer PJ Livesey purchased the site in 2005 to redevelop it for apartments. They selected Parkwood Mills as it was a mill complex, rather than a stand-alone mill building. PJ Livesey converted all but two of the mill buildings into 183 high quality one, two and three bedroom apartments including penthouses.

Sunny Bank Mills

3.15 Sunny Bank Mills is located in Farsley, 10km west of Leeds, 7km east of Bradford within the Farsley Conservation Area; the mills are not listed. The complex dates back to 1829 when it was developed by a group of clothiers including Mr John Gaunt, an ancestor of the current owners. The mill expanded in 1850 through the acquisition of land known as Sunny Bank. The site continued to develop throughout the 19th Century, employing over 800 people. By the 20th Century, the mill was one of Leeds' premier worsted spinners and weavers and consolidated its reputation as one of the finest cloth producers in the world. The textile industry gradually declined from the 1920s onwards. Sunny Bank Mills continued producing high quality wool cloths until 2008 when production ceased after almost 180 years.

3.16 In 2010, the 6th generation of the Gaunt family embarked upon the regeneration programme of Sunny Bank Mills driven by a desire to re-establish an employment centre in Farsley and to create high quality commercial floor space.

3.17 Sunny Bank Mills offers employment space ranging from 46.45 – 1,393.55 sq m (500 – 15,000 sq ft). There are currently 60 businesses occupying the site ranging from creative businesses, engineers, textile artists, architects and a children's play gym.

Right: Sunny Bank Mills, Farsley, Leeds

Marshall's Mill

3.18 Marshall's Mill is a Grade II* former flax mill which was part of a mill complex constructed 1791-92 by English industrial pioneer John Marshall. John Marshall was the most important industrialist in Leeds in the first half the 19th Century after Benjamin Gott. It was originally a four storey mill, drawing water from the nearby Hol Beck. Following the installation of a steam engine to assist water power, the mill became the world's first mechanised flax factory and rapid expansion of the mill followed with the addition of Mill 'B' in 1794 adjacent to a warehouse built to service the original mill. As the business continued to prosper further mills, warehouses, engine houses, and reservoirs were added on the south side of Hol Beck. The six storey Mill 'C' was added in 1815-16, Mill 'D' followed in 1826-27, and Mill 'E' (which is aligned to the roadside and joined Mill 'C' to Mill 'D') in 1829-31. Temple Mill, in the form of an Egyptian Temple, was built between 1838 and 1841.

3.19 Marshall's Mill was used for spinning and bleaching flax. The complex employed over 2,000 workers and when completed, was one of the largest mill complex's in the world with over 7,000 spindles. Marshall & Sons ceased production in 1886 and the company was taken over by other textile manufacturers.

3.20 The fire-proofing measures incorporated into the design of the mill include cruciform cast iron columns, iron floor beams and brick arches.

3.21 Marshall's Mill includes circa 2.1 hectares of land in the Holbeck area of Leeds. The triangular site is bounded by Bath Road, Water Lane, Marshall Street and Union Place and lies within the Holbeck Conservation Area. Marshall's Mill underwent some initial refurbishment work in the mid-1990s before the site was subsequently purchased by igloo Regeneration who undertook a further renovation of the mill complex.

3.22 Workspace ranges from 93 - 930 sq m (1,000-10,000 sq ft). Tenants include Flashtalking, a UK-based global online advertising technology provider; Interface – a specialist IT recruitment agency; and brand & design agency Robot Food who moved from Tower Works due to expansion to take up a larger office space in Marshall's Mill.

Left: Marshall's Mill, Holbeck, Leeds

Right: Tower Works, Holbeck, Leeds

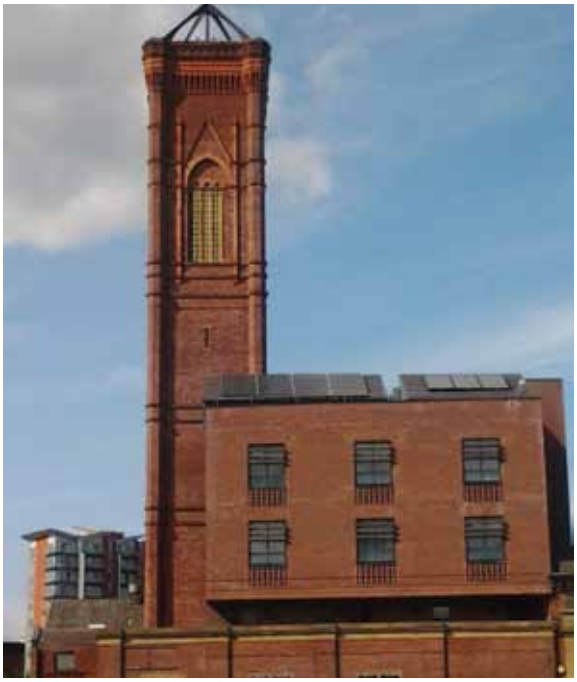
Tower Works

3.23 Tower Works is a former factory, distinguished by its three listed Italianate towers and includes two Grade II* and three Grade II listed structures. It was founded by T. R. Harding to make steel pins for wool, flax, cotton and silk combing and for carding cloth in the textile industry. The original buildings were erected by Thomas Shaw in 1864 -1866. The works were extended in 1899 by William Bakewell.

3.24 Tower Works was acquired in 2005 by Yorkshire Forward, the former Regional Development Agency. Following the closure of the Regional Development Agencies, the site was transferred to the Homes and Communities Agency

3.25 In 2006 a masterplan was created for the area surrounding the site known as Holbeck Urban Village area which was adopted as supplementary planning guidance. Planning permission was granted for the redevelopment of the site in 2009 comprising a mix of circa 18,580.62 sq m (200,000 sq ft) of office space, 130 apartments and ancillary retail and leisure uses. The permission allowed a mix of demolition and refurbishment with the buildings of highest historic significance being retained alongside proposals for new build.

3.26 The first phase of the site was carried out directly by the Homes and Communities Agency, completed in 2011, which involved the creation of 1,115 sq m (12,000 sq ft) of managed office space alongside site preparation works for subsequent phases. The Homes and Communities Agency subsequently undertook significant enabling works on the remainder of the site and then led the development plans for the remaining phases of the extant planning consent.



Target Mills

Drummond Mill

3.27 Drummond Mill was a Grade II listed mill located in Manningham, Bradford. It was built in 1861 to the designs of Lockwood and Mawson. The large five storey rectangular spinning mill had 26 close set windows to side ranges to each floor. Fronting Lumb Lane was a three storey brick warehouse range. A spinning shed block linked the three storey range with the five storey block which in turn had a link south to the engine house. At its east is a chimney stack with a tall, slender octagonal shaft and a console bracketed crown. Following a fire in January 2016, much of the mill was destroyed.

3.28 The freehold interest in the property is held by a private company who have explored a range of redevelopment proposals including residential, office, retail, leisure and more recently conversion of part of the mill into a secondary school. Prior to the fire serious consideration had been given to the use of a large part of the site, including many of the surviving buildings, for an Academy School. The scale of the site would have allowed some compatible supplementary uses to be included within the reuse scheme.

3.29 The loss of the mill complex to fire now presents the challenge of how to redevelop the site in a manner which captures the significance of the lost buildings. New development must seek to reinstate mass along the Lumb Lane frontage in order to repair the street scene. The orthogonal geometry of the site layout should be protected. In addition the inter-play of different scale and format buildings to create a complex overall composition would be desirable.

Low Mill

3.30 Low Mill is located on a relatively flat site adjacent to the River Worth in the centre of Keighley, opposite Aldi foodstore on Gresley Road. Now vacant, it was once part of a larger complex. The mill building is three storeys and ten window bays long. Low Mill is a Grade II* listed building. The condition of the building is recorded as "Very Bad" on the Historic England Heritage at Risk Register, 2015.

Left: Drummond Mill, Manningham, Bradford before the 2016 fire

Above: Low Mill, Keighley, Bradford

3.31 The construction of Low Mills commenced in 1779 by the Ramsdens of Halifax and was completed in 1780 by Thomas Walsham and William Clayton. The mill was water powered with a dam and goit taken off the River Worth. When the mill came into operation in 1780, it was Keighley's first industrial building and the first cotton mill in Yorkshire.

3.32 The machinery was made under the direction of Sir Richard Arkwright, one of the pioneers of the Industrial Revolution. Since the cotton-spinning process was new to this area, a number of employees were sent to Arkwright's works at Cromford, Derbyshire to master the techniques involved.

3.33 The mill has lost much of its original context, however the water course and sluices associated with the mill survive and these represent an important aspect of the significance of the site.

3.34 The freehold interest in the property is held by a private property company. Redevelopment proposals for the site have included refurbishment of the mill into offices (alongside food retail use) and more recently redevelopment for residential use. To date, none of the refurbishment proposals have come to fruition.

Dalton Mills

3.35 Dalton Mills is a Grade II* listed building built between 1866 and 1877 for the manufacture of worsted cloth, located in Keighley, Bradford. The mill was designed by W. Sugden for J & J Craven as a worsted mill. It replaced an earlier worsted mill, Strong Close Mill, owned by Rachel Leach.

Above: Dalton Mills, Keighley, Bradford

Right: Prospect Mill, Thornton, Bradford

3.36 Dalton Mills comprises three multi-storey mills: Tower Mill in the north-east corner of the site, begun in 1866 and in operation by 1870, Genappe Mill to the north begun in 1868 and New Mill to the south in 1869. A long shed was also part of the original group, as were two engine houses, boiler houses, a chimney and offices dated 1872. The two original beam engines, one for Tower and Long Shed, the other for Genappe and New, were accidentally destroyed and replaced by new horizontal engines to the design of John Haggas & Sons of Keighley in 1904, of which Genappe and New Mills was said to be the largest in the world at that time.

3.37 A footbridge over the River Worth opposite the chimney once connected the mill complex to the house of the owners, Strong Close (named after the original mill), which stood to the east of the mill. A stone gateway on the other side of the river survives. Mr Craven was said to cross the bridge directly to the chimney which has a stair running around the flue, leading to a balcony from which he could oversee the mill and surrounding countryside.

3.38 The significance of Dalton Mills is in part derived from its completeness and scale, along with the quality of its impressive architectural detailing for the main facades (including those concealed within the heart of the site). The interior detailing of the mill buildings matches the quality of the exterior with elaborate cast iron columns surviving throughout. Limited but important remnants of equipment and industrial fittings survive throughout the complex. The mill, which is curiously named after the former mill manager rather than its owner, has historic connections with Low Mill relating to a dispute over access to water.

3.39 The freehold interest in the property is held by private owners who would like to see the mill redeveloped for commercial uses.

Prospect Mill

3.40 The Prospect Mill complex is a Grade II listed steam-powered worsted mill originating in 1848 with various 19th Century additions (1849, 1855, 1850-60). It is located adjacent to the former Dole Mill site in Thornton, Bradford. The mill is vacant and has been subject to repeated fire damage. The most recent incident was in December 2015 which resulted in the loss of the roadside warehouse range.

3.41 The first buildings on site were dwellings of 1821, the base of a family putting out business. The mill and warehouse were built in 1849, representing a shift away from dispersed working. The mill of four storeys and attic and 11 window bays had a corner engine house. A second warehouse was constructed in 1855. This was the main roadside warehouse block - an imposing three storey block with basement, which ran parallel with Thornton Road and descended the hillside (four storeys to rear) and 14 window bays. A second mill was constructed in 1860 of three storeys and eleven window bays and a six bay extension to the first mill was undertaken in 1865. The occupiers were Joshua Craven and Son who were both spinners and manufacturers. It is likely that parts of the main buildings were used for powerloom weaving.

3.42 The significance of Prospect Mill was in part derived from the townscape composition it contributed to. This composition is defined by a combination of the close relationship between the industrial buildings on the site and the adjacent residential buildings together with the topography of the valley side. The relationship of the mill with Thornton Road and the residential properties

fronting it was also a defining townscape feature of the site which was lost as a result of a fire which took place during December 2015.

3.43 The freehold interest in the property is held by a private company who has explored the potential of redeveloping the mill and surrounding land for residential, retail and office development.

Old Lane Mill / Rawson's Mill

3.44 Old Lane Mill is a Grade II* listed worsted mill which is recorded on the Historic England Heritage at Risk Register 2015. Located in Halifax, Calderdale, it was constructed between 1825 and 1828 for James Ackroyd and acquired by the Rawson family in 1836.

3.45 The mill is of six storeys plus attic and is arranged in an L-Plan. It has 15 x 5 bays with a further 4 bay wing to the right. The mill is the oldest and largest surviving example of a multi-storey, steam powered, iron framed textile mill in the important textile centre of Halifax. Old Lane Mill's attached boiler house and chimney are listed separately from the main mill building. They are also listed Grade II*.

3.46 The significance of Old Lane Mill is in part derived from its age, historical associations and the quality of its architecture. It is probably the best preserved mill of its type (multi-storey, iron framed) in Yorkshire.

3.47 The freehold interest in the property is within private ownership. The mill is unoccupied and the freeholders have aspirations to redevelop the mill building for residential use. They purchased the site in the recession from Britannia Developments who became insolvent.

Old Town Mill / Mitchell's Mill

Above: Old Town Mill, Old Town, Hebden Bridge, Calderdale

Left: Old Lane Mill / Rawsons Mill, Halifax, Calderdale

3.48 Old Town Mill is located in Old Town, Hebden Bridge and is a Grade II listed textile mill of mid-19th Century origin with later additions in 1881 and 1888.

3.49 The mill buildings are largely grouped around a narrow courtyard. A large two storey mill range (1851) runs south-east to north-west parallel with Old Town Mill Lane. Alongside the mill building to the south-west is a stair tower which adjoins a multi-storey warehouse aligned south-west to north-east forming the end of the courtyard. A boiler house lies on the north-west side of the mill, with the chimney to the rear and a small series of north-light sheds is situated between the mill building and the warehouse.

3.50 The Mitchell brothers were woollen manufacturers and the mill produced textiles until the 1950s when the industry declined. The mills were made available at auction and were purchased by a local farmer (the current owner) to house chickens and cows. Whilst parts of the mill are vacant, the mills provide workspace for a number of local businesses including a juggling company, joiners, curtain manufacturer for the hospitality industry, a local artist and car workshop.

3.51 The significance of Old Town Mill is in part derived from is completeness as a small rural mill complex. The relationship between the mill and the surrounding open landscape and as well as its relationship with the hamlet within which it sits are significant. The adaptation of the mill internally and its association with farming are important as is the survival of some machinery.

3.52 The freehold interest in the property is held by a private individual.

Above: Carlinghow Mill, Batley, Kirklees

Top right: Mill 6 & 7, Parkwood Mill, Longwood, Kirklees

Bottom right: Mill 5, Parkwood Mill, Longwood, Kirklees

Carlinghow Mill

3.53 Carlinghow Mill, also known as Park Works is a Grade II listed corn mill originating in the late 18th Century, located in Batley, Kirklees. The mill was originally water powered with historic maps showing three large mill ponds on Carlinghow Beck to the north of the site. The presence of a substantial chimney demonstrates the transition to steam power, during the 19th Century. The form of the main mill building resembles that of a textile mill rather than a corn mill.

3.54 Seven buildings comprise the mill complex. The main mill building has four storeys with attic, three by four bays and a three storey outhouse to the north. The other buildings comprise a cart shed (single storey), workshop/ storage (single high storey), cart shed/stables (single storey and seven bays), mill of three storeys with a four bay structure to the rear. A very large square stone chimney projects from the west gable end, cart shed (single story with wagon door to south gable end), and Shay Farm (18th Century farm house). The significance of Carlinghow Mill is in part derived from the rare survival of a former late 18th Century corn mill within an urban context. The adaptation of the mill to accommodate new uses and the association of the mill with the same family for four generations are also significant.

3.55 The freehold interest in the property has been held by the Exley family since 1914 (five generations). Historically, the family operated the mill as mill furnishers, buying, refurbishing and selling on textile mill machinery. Today, the family operate their haulage business from the site and use the mill buildings for offices and storage. The family reside adjacent to the curtilage of the mill site.

Parkwood Mills

3.56 As stated in Section 3.12 Parkwood Mills is a Grade II listed mill complex. It is included within this report as both a case study and a target mill due to the fact that the mill complex is an example of a successful mill redevelopment, whilst also having two mill buildings which await redevelopment and reuse thereby meriting further investigation through this study.

3.57 The significance of Parkwood Mills is in part derived from the scale of the complex and the relationship the surviving buildings have with each other and the public highway.

3.58 The Freehold interest in the property is held by PJ Livesey who have redeveloped Mills, 1-4 into 183 one, two and three bedroom apartments including penthouses. PJ Livesey aspire to find alternative uses for Mill 5 and Mill 6 & 7 which are currently vacant.

Top left: Farsley Festival, Sunny Bank Mills, Farsley

Top right: 'Trouble at the Mill" Pop-up Theatre, Sunny Bank Mills, Farsley

Middle right: 'Walk-in Movie Night', Marshall's Mill, Leeds

Bottom right: Ricci's Tapas, Dean Clough, Halifax

Bottom left: World Heritage Day, Salts Mill, Saltaire

4.0 Analysis of lessons of best practice

There is evidence that the long term returns from investment assets can be highly favourable particularly where redevelopments are locked into an improving area such as has been witnessed with Marshall's Mill and Tower Works in Holbeck Urban Village in Leeds. This case study has underlined the opportunities for developers and investors to collaborate to establish specialist long term funds with attractive returns.

Right: Redbrick Mills, Batley, Kirklees

Overview

4.1 In this section we have distilled the lessons from the case study and target mill assessments into a series of themes. We have grouped the themes under the following headings which are considered to aptly represent the principal drivers/determinants of successful and viable mill regeneration:

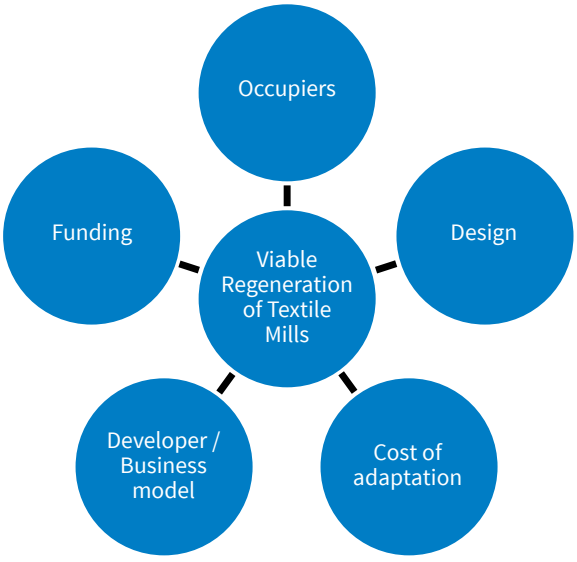


Figure 4.1: Key drivers and determinants of successful regeneration

Occupiers

How do occupiers affect viability of mill regeneration projects?

4.2 Finding a viable and sustainable end use is critical to the successful regeneration of vacant or underused mill sites. There have been a variety of occupier types that repurposed mills have been used for; from residential apartment conversions and office spaces to leisure and destination retail. One of the key challenges for mill refurbishment projects is to enable the mill buildings to be adapted to suit modern occupiers and to appeal to a sufficient quantity of occupiers to enable viability.

What are the key issues and constraints that affect occupier demand?

4.3 Our research of case study and target mills highlighted a number of interrelated challenges facing the West Riding of Yorkshire's textile mills summarised below:

Weak market demand

4.4 Textile mills are generally capable of being adapted to suit a range of occupier types with residential and creative sector office uses being those most commonly seen in successful renovation projects.

4.5 However, redundant textile mills can be found in locations that experience unfavourable market conditions for both residential and commercial end use. This is particularly the case for the majority of target mills that have been examined in this study: Drummond Mill (Lumb Lane, Manningham, Bradford), Dalton Mills and Low Mill (Keighley), Prospect Mill (Thornton, Bradford) and Old Lane Mill / Rawson's Mill (Halifax) in particular are in weak market areas. This is typical of many textile mills where the decline of the mills has often been accompanied by wider decline within the surrounding areas over a period of time. Such mills are not exclusively found in such locations and experience shows those in stronger markets have a better prospect of regeneration.

4.6 The residential market in West Yorkshire is diverse and as illustrated by Figure 4.2, average house prices range from significantly below £50,000 in the inner urban areas to over £600,000 in certain more affluent locations. These average house prices are a reflection of the varied demand in the local market and translate directly into sales revenues achievable on new build schemes. Feedback from one developer indicated that the sales values from new residential development needed to be a minimum of £2,152.78 per sq m (£200 per sq ft) to enable a mill conversion project to be viable.

4.7 Based on our understanding of viability we have undertaken a RAG (A traffic light – Red/Amber/Green rating system) and rated the West Yorkshire area according to the average house price ranges where 'green' locations are those where we consider there to be a strong prospect

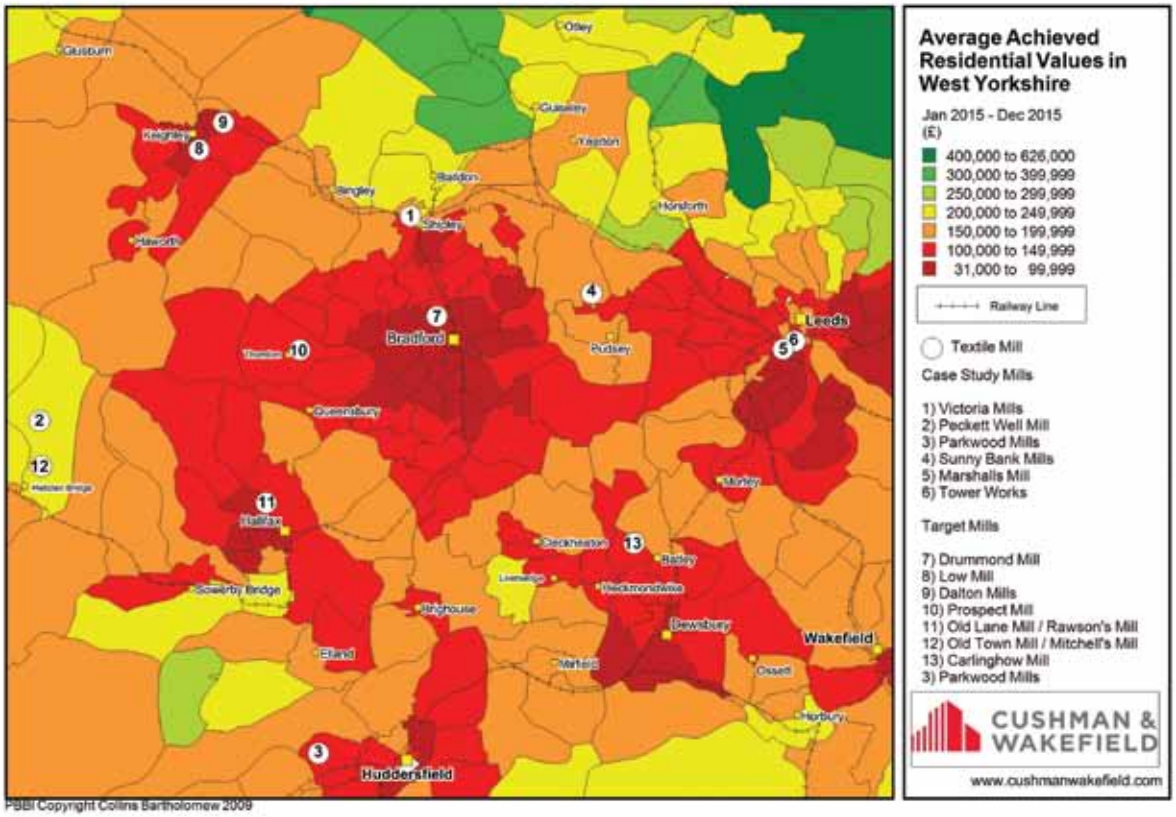


Figure 4.2: Average House Prices in West Yorkshire

of viability, 'amber' where viability will be sensitive to individual circumstances and 'red' where prospects for viability will be more restricted. As the graphic shows, the majority of the target mills are within the red or amber areas thus indicating the likelihood of challenges with viability – an indicator borne out by indicative viability assessments carried out as part of this study.

4.8 The apartment market remains generally weak within Yorkshire. This is partly the consequence of house purchasers' preference for houses which can be found at prices comparable with flats in many locations. It is also a reflection of house builder attitude towards flats and the risks associated with large scale capital outlay of a block of flats being less favourable on cashflow than that of a 'build-a-unit-sell-a-unit' on many housing sites. Whilst this position is starting to change in certain locations, the limited appetite for flats impacts on the viability of many mill projects which, because of their scale and mass often convert more readily to flats.

4.9 In respect of the commercial markets, office occupancy is the end use most commonly associated with mill refurbishment, as exemplified by Dean Clough and also at Marshall's Mill and Tower Works - the case studies that have been examined. However, the office market within West Yorkshire is dominated by Leeds City Centre, outside of which the prospects for bringing forward speculative office development schemes on commercial terms is more limited. However, this does not preclude fit out on demand models such as those exemplified by Salts Mill, Dean Clough and Sunny Bank Mills.

Dean Clough, Halifax, Calderdale

Costs and feasibility of conversion

4.10 The high costs and challenging feasibility of converting derelict mill buildings for modern requirements is a perception and in many cases a reality which acts as a disincentive to occupiers. With many of the target mills that have been examined, discussions with owners/promoters revealed that various options had been explored but that the cost of conversion had proved prohibitive. Examples include Prospect Mill, where various residential conversion schemes had been explored and then aborted due to cost; Low Mill, where similarly a residential apartment scheme was drawn

Right: Marshall's Mill, Holbeck, Leeds

up and submitted for planning permission but never implemented, and Drummond Mill, which was actually considered as a site for a secondary school in 2014 under the Government's free school programme, but dismissed on cost and feasibility grounds in favour of an alternative location. Old Lane Mill / Rawson's Mill has the benefit of a planning consent which was secured by the previous owners of the site, who went into administration. At Parkwood Mills, the developer is struggling to implement the delivery of the remaining mill refurbishment due to the costs of conversion and the fall in market values since the completion of the initial phases of development.

Running costs

4.11 There is also a perception held by occupiers and investors alike that listed buildings typically face higher life cycle costs as a result of lower energy efficiency and higher ongoing maintenance costs. Whilst some such costs would be picked up by a landlord the majority would be passed onto the occupier in the form of service charges, higher rents or sinking fund obligations.

Risk and timescales

4.12 Occupiers perceive the risk associated with conversion to be high, affecting their appetite to commit and invest. Such risks relate to timing and certainty over statutory processes, adaptation and cost, all of which can impact on the feasibility of occupation and make other projects more favourable. In relation to Drummond Mill, the free school requirement had a need for opening within the next school year and the risk associated with the planning and other statutory process contributed to the decision to look at alternative options.

What best practice lessons can be applied in the future?

4.13 Whilst the above factors underline the challenges associated with mill regeneration projects, experience demonstrates the potential for overcoming such challenges. There are a number of best practice lessons identified through the review of the case study mills in respect of targeting and maximising occupier appeal:

Alignment of assets with requirements of target occupiers

4.14 Discussions with some of the developers responsible for the case study projects revealed that key to harnessing the appeal of the underused mill was to reposition the building in the market. For example in the case of Marshall's Mill, when developer igloo acquired the property it was underused and had been subject to a 'standard' internal fit out. However, igloo decided to 'strip back' the internal design of the building to expose its historic character, alongside which it was re-branded to reach the creative sector who would be much more likely to be attracted to the distinctive and characterful workspace. The occupancy level and rental performance was reported to have dramatically improved as result of this.

4.15 Similarly at Victoria Mills in Shipley, New Mason Properties created a mix of refurbished mill buildings and new residential apartments to provide a range in residential offer. As a result of this successful mix of converted old and new living space, there is a level of churn within the development and residents relocate within the mill complex to experience the different type of accommodation within the complex which appeals to professionals and young families alike.

Link to area based strategy for occupier growth

4.16 Stimulating occupier demand is a very difficult aim to achieve and experience shows that this generally only works on a sustainable basis if part of an area wide strategy. The experience of Tower Works and Marshall's Mill shows the success that has been achieved as a result of the uplift of the Holbeck Urban Village area. Designated as a regeneration area with a focus on fringe creative and media sector businesses in the early 2000s set it on a course in which a combination of investments have created a sustainable micro economy that has enabled commercial development to prosper. Tower Works and Marshall's Mill both benefited from the public sector investment in the Round Foundry innovation/ incubator centre and substantial investment in the local environment.

Incentivise occupiers

4.17 There are a wide range of public and private sector incentives that can be offered to attract occupiers. Conventional developer incentives include rent free periods and reverse premiums are often used to tie-down anchor tenants. Securing such occupiers can often then

act as a catalyst for other occupiers in the same way that a shopping centre is delivered with at least one key department store stimulating interest from other retail operators.

4.18 Public sector incentives can be offered to occupiers provided they accord with EU state aid restrictions. Bradford Council has recently implemented a City Centre Growth Zone, partly funded by the Regional Growth Fund, which offers new occupiers to the city centre a discount from their business rates bill up to certain thresholds. Subject to funding availability there is no reason why this could not be applied to mill projects in weak market areas. Similarly, this concept could also be applied to residential occupiers as a discount from the Council Tax bill for a limited amount of time.

Mixed use on large sites

4.19 Another of the challenges with many mills is their scale which generates a mismatch in terms of the demand within the local area. Clearly one solution is partial demolition to effectively resize the mill to meet the local market. An alternative approach is that which has been exemplified at Sunny Bank Mill in Farsley, Leeds where there are a wide range of uses in occupancy with different zones being allotted different functions under an overarching masterplan. Warehousing and storage, offices, child care and exhibition spaces are all integrated across the site to maximise the potential occupancy and tenancy income and the segregation of the site in this way has ensured compatibility of use.

Phased transition from textile production to multi-tenanted and mixed use

4.20 Another best practice characteristic demonstrated by Sunny Bank Mills is the phased transition from operational mill to new use. The owners of the mill gradually transformed the mill over a period of time. Whilst fabric production gradually reduced, new tenancies and occupiers were phased into buildings and areas of the site that became vacant. This enabled the building to remain occupied and to have some continuity of operation and income through the transitionary period, thus ensuring the building's upkeep, limiting the landlord's exposure to holding cost liabilities and enabling capital expenditure on conversion to be gradually phased.

Market making – build it, will they come?

4.21 The adage that if you 'build it, they will come' has been proven to be a particularly risky philosophy for the public sector seeking to reverse market trends and bring occupiers to a location where there is no endogenous market. Whilst this can work in established markets or locations close to established markets, the most likely scenario where this is not the case is that buildings can eventually be let and/or sold. However, it can involve a prolonged period of vacancy necessitating substantial incentives to attract occupiers (i.e. in reduced prices/rents, rent free periods etc), both of which erodes capital values and can result in a 'loss' for a developer at their point of exit.

4.22 Parkwood Mills in Huddersfield is one such example of 'market making' whereby the developer committed to the scheme in the last property cycle where the market for new build apartments in Huddersfield was largely untested. The strategy was to try to recreate the market that was at the time highly active in the Leeds area. At the point of completion we understand that flats were being sold at an equivalent value of £1,938 per sq m (£180 per sq ft), indicating a degree of success in that these values were broadly equivalent to those achieved elsewhere at the time. However, with the timing of the economic down-turn shortly following completion it is understood that revenues dropped to £1,507 per sq m (£140 per sq ft) reflecting the retrenchment of the market. Parkwood Mills is undoubtedly an example of best practice in 'market making', however the question is 'at what cost?' and the lesson is that 'market making' must be approached in a very cautious way.

Above: "Build it and they will Come" Titanic Mills, Linthwaite, Huddersfield, Kirklees

Left: 1912 Mill, Sunny Bank Mills, Farsley Leeds

Public sector accommodation requirements

4.23 There is significant rationalisation to the public sector estate taking place across central and local government and related agencies as part of the 'efficiency' agenda. As a result buildings are being vacated, new buildings are being acquired that offer more efficient delivery of services and sharing of buildings across departments is being actively pursued. The potential for vacant mills to be accommodated for such use must be considered given the connected benefits to public sector place-making objectives that reuse of such buildings has. A good example of a recent public sector body taking space in a repurposed mill is by the NHS at Acre Mill in Huddersfield as well as Calderdale Council occupying office space at Dean Clough.

Create certainty through planning and historic building guidance

4.24 A key issue for occupiers considering mill buildings is the uncertainty regarding the acceptability of the required changes, their costs and their timescales. By providing clearer guidelines as regards what will be acceptable this could help to de-risk projects from an occupier perspective. Local Development Orders are one such tool that effectively grant planning permission, an example of which is that recently produced for the Little Germany area of Bradford city centre. Providing a greater level of clarity through planning advice can assist in this regard.

Huddersfield Royal Infirmary and Outpatients at Acre Mills, Huddersfield, Kirklees

4.25 The following table summarises the key constraints and solutions in respect of occupier demand:

Constraints	Best practice / solutions
Weak market conditions	• Align assets to needs of target occupiers • Link to area based strategy • Occupier incentives • Mixed use on large sites • Phased transition • Market making • Public sector accommodation led
Cost and feasibility relating to adapability of building	Greater flexibility regarding acceptability of renovation to meet occupier requirements
Higher running costs	Smart design mitigation
Delivery timescales	Create fund to support speculative development
Risk	• Created planning / listed building advice to establish certainty over what is acceptable • Use Enterprise & Regulatory Reform Act and other 'Streamlining Consents' tools to deliver (prior consents) • Explore new 'deemed consents' in Planning & Housing Act

Design

How does design affect viability of mill regeneration projects?

4.26 The contemporary interventions within listed mills and mill sites can be delivered successfully and there are many examples throughout the West Riding of Yorkshire where the sometimes apparently conflicted pressures of; preventing harm to heritage assets, producing good quality design and achieving project viability have been reconciled.

4.27 There is evidentially a strong link between design quality and viability however, both are affected by locational factors. Low value areas are unlikely to see schemes which are based on expensive high specification designs come forward, unless development margins can be helped by public sector intervention. Where a mill conversion scheme is in a geographically weak market the benefits derived from critical mass can help to establish a distinctive and differentiated location and in effect make the market which can allow an entrepreneurial developer to risk investing in both a higher quality specification (for both space standards and material) and innovation in architectural design.

4.28 The condition of fabric also impacts on both design approach and viability. The replacement of ruinous buildings is clearly going to be more commercially appealing than restoration especially when grant support is not available. It would be simplistic however, to assume that all developers view historic buildings in a poor condition as a liability. Specialist developers who are

able to place a value on the distinctiveness that heritage can bring to a scheme may not be deterred by poor fabric condition.

4.29 When design teams are considering development strategies for listed mill sites one of the critical first steps is to establish the heritage significance of the surviving buildings. Heritage assessments will provide guidance on what is significant about a site and will identify elements within the site which must be protected. Conversely a heritage assessment can identify negative and less significant features of a site. Early understanding of the heritage significance of a site can allow a commercial developer to use this as part of the feasibility process along with other considerations such as market assessment, condition, flood risk, access and planning policy. An informed, justified and agreed approach to retention and loss is essential to establish both where new development might be accommodated and how viability might be achieved.

4.30 In order to generate value many mill conversion schemes have sought to create developable area within their site boundaries and this often results in the loss of weaving sheds. Weaving sheds tend to occupy a large footprint, single storey, deep plan buildings. These are difficult to convert to uses which have recognised commercial value and hence many mills have lost their weaving sheds to uses that contribute to supporting overall viability (often parking, access and circulation or open space). 'Northern Lights; the Pennine Lancashire North Light Weaving Shed Study' (Purcell Miller Tritton, 2010) demonstrates that weaving shed reuse is possible but principally for commercial rather than residential schemes. In the case of Peckett Well Mill contemporary terraced housing and in the case of Victoria Mill high quality shared gardens and sports facilities replaced weaving sheds.

4.31 When new buildings are constructed within the curtilage of a listed building care must be taken to ensure that designs understand and respect established character. This may mean that buildings of similar scale can be introduced. New buildings placed within the setting of mill buildings should seek to understand and respond to existing significance and character but should avoid attempting to either replicate or compete with this. Examples of new development which complement the form and scale of adjacent mill buildings by creatively responding to context can be found at sites throughout West Yorkshire including Victoria Mill in Shipley and Ledgard Bridge Mill in Mirfield.

4.32 The ease of conversion of mills (and warehouses) is dependent on a number of factors but buildings designed for industrial use generally adapt well to contemporary employment uses of all types. Many higher value and creative occupiers value the distressed utility finish of minimal fit-outs. In the case of Marshall's Mill an attempt by a previous owner to disguise the mill as a contemporary office building was reversed by the current owner in order to reveal the muscular nature of the mill fabric and attract higher value occupiers who appreciated this.

4.33 Residential conversions can be more problematic, especially when floorplates are either too narrow (inefficient circulation and sub-division) or too deep (lack of daylight). Residential schemes, particularly in large plan mills, can require the introduction of additional vertical circulation which can lead to loss of fabric. Sub-division of floorplates into residential units will in many cases be the only realistic reuse option but will lead to the loss of the scale associated with mill interiors.

What are the key issues and constraints that affect design?

4.34 There are a number of features common to many mill buildings which impact upon their ease of conversion and reuse. These can be categorised as follows:

Spatial

- Mills with deep floorplates will require innovative design solutions, in order to ensure the availability of natural light and ventilation to all rooms, as far as possible.
- Mills with narrow floorplates can be adapted through horizontal sub-division to create town houses, or the introduction of external open or enclosed decks or stairs, instead of internal corridors.
- Floor to ceiling heights can be very generous which can provide the opportunity for mezzanine insertion which creates high volume units.
- Fenestration patterns tend to be repetitive, may include high cills and large windows. Innovative solutions will be needed to take advantage of the opportunities these characteristics offer.

Technical

- Acoustic separation can be problematic. Structure which runs between residential units can transfer sound between units. The introduction of additional sound deadening mass, appropriate breaks in sound transferring elements and new layers of acoustic material are all techniques which may be used to improve acoustic separation between units within mill conversions.
- Fire separation may need to be improved within residential conversions. The introduction of vertical risers and vertical circulation requires consideration in terms of any impacts on existing fire separation. Where timber floors are to be retained it may be possible to introduce intumescent material to either ceilings or below floor boards. Over boarding with fire proof material may be appropriate in buildings where floor boards are in poor condition.
- In order to provide safe means of escape it may be necessary to introduce additional vertical circulation within some schemes. This will impact on the gross to net ratios. Various mill conversion schemes have overcome this challenge by introducing external circulation towers (Dean Clough and Peckett Well Mill).
- Waste is often forgotten about however, good residential conversion scheme have well resolved strategies for removing and concealing waste. Built-in design solutions such as the provision of waste chutes within apartments and management strategies which involve collection regimes are frequently used in order to minimise the visual and operations challenges that waste can cause.

External Spaces

4.35 Within high density residential schemes it is desirable to provide some communal open space. Areas suitable for communal space are often limited and have to compete with the demand for car parking provision. This can be resolved by bringing car parking within the building, which may also help address flood risk problems.

Car Parking

4.36 Space for car parking can be limited within mill sites. This can be addressed by bringing car parking within the building, as at Carleton Mill, in Carleton Craven or Dewhurst's Mill, Craven; providing car parking off site, building under-croft parking or simply rationing parking. At Victoria Mills, a small amount of car parking is provided on site, however, the complex benefits from a multi-storey car park offsite – albeit on adjacent land which was acquired separately by New Mason Properties. The availability of car parking at Victoria Mills is managed through a policy of one car parking space for each residence, however residents are able to purchase additional car parking spaces for an extra cost.

What best practice lessons can be applied in the future?

4.37 Mill conversion projects always benefit from a vision which is based on more than a desire to maximise return on investment capital.

4.38 When vision is backed up with expertise as well as passion conversion projects stand a good chance of success.

4.39 Mills are often big and sometimes complex and mill conversion projects reflect this. The most successful conversion schemes recognise that scale and complexity require a strategic approach to design and delivery challenges. The master planning of sites in order to prioritise where and when resources are best spent is undoubtedly beneficial. The spatial masterplan explaining the design and development strategy for the site always benefits from being developed in conjunction with a delivery plan or business plan.

4.40 The scale of some sites means that consideration of phasing, which may include mothballing or meanwhile uses, is essential.

4.41 The best mill buildings should always be protected and their integrity and setting respected. Stasis however, is not a common characteristic of most mill sites and many have witnessed continual development and rebuilding during their existence in order to incorporate new technologies and working methods. Most mill sites are capable of accepting future careful intervention and adaptation to allow the best mill to remain in productive use (whatever this may be).

Left: Carleton Mill, Carleton, Craven

Right: Lister Mills, Manningham, Bradford

Cost of adaptation

How does cost affect viability of mill regeneration projects?

4.42 The cost of adaptation is a key determinant of the feasibility of mill regeneration. Often the costs of renovation are high which undermines viability sometimes creating a financial deficit whereby the costs of conversion exceed the end use value necessitating subsidisation.

What are the key issues and constraints that affect cost?

4.43 The assessment of the target mills revealed a number of common themes regarding adaptation costs. Although the buildings generally lend themselves readily to conversion due to the large unconstrained internal spaces, it is the structural condition in most cases which present the key challenges.

4.44 Many buildings have been disused for a significant period of time and there is a noticeable correlation between the length of time a building has been vacant and the extent of deterioration in building condition. Prospect Mill, Low Mill and Old Lane Mill have all been vacant for 20 years or more, all of which exhibit acute structural building condition issues. Conversely, those mills that had been more recently vacated such as Dalton Mills and Drummond Mill (2007) – up until the fire in January 2016 – had relatively less damage. This underlines the importance of economic use and function to the buildings' sustainability.

4.45 Internal inspections were not possible on all of the mills, but the key issues identified from external inspections were:

- Overall building structures – some buildings have become structurally unsound with Low Mill in particular having recently been secured with temporary brackets at the gable end. The remaining parts of Prospect Mill also appeared vulnerable with the gable end becoming detached from the main structure at one end. If these buildings were to be retained and converted they would require radical structural remediation and strengthening
- Roof penetrations – many of the mill buildings would need replacement roofs due to large sections exposed to penetrations
- Internal floors – on some of the mills floors were missing.

4.46 Key issues associated with mill refurbishment and alterations:

- The condition of the mill and any alterations, remodelling and extension to the building
- The extent of demolitions, any contamination and asbestos removal required
- The purpose of the buildings' future use
- The level of existing structural integrity to the building fabric
- Preserving the character of the existing features and stonework
- Utilising traditional building techniques with skilled trades
- The level of external works and car parking.

4.47 Many of the buildings were incurring substantial costs in ongoing maintenance. Consultation with the agents acting for the owners of Drummond Mill indicated that maintenance costs of approximately £80,000 per annum were being paid out for maintenance works.

4.48 In addition to the buildings, there were in some cases significant site constraints which would need to be addressed in any redevelopment project. Key common issues affecting the target mill sites were:

- Asbestos
- Japanese Knotweed
- Evidence of fly tipping
- Flooding issues (in relation to Low Mill only)
- Site topography and levelling requirements
- Need for new access and other infrastructure upgrades require radical structural remediation and strengthening.

For the avoidance of doubt, these issues are common to many brownfield sites, not just mills and listed structures.

4.49 Key issues associated with new build housing on a former mill site include:

- The extent of existing mills' water-way infrastructure and proximity to water-way or sluice
- The level of contamination and any invasive species present on the site
- Any abnormal ground conditions affecting the substructure design
- The level of surface water attenuation for the site.
- Any BREEAM and sustainability requirements
- The specification of the housing fabric and whether natural stone is required
- Any new statutory services infrastructure and existing service diversions
- Any adoptable roads or drainage works
- Any site cut and fill
- Any ecological matters.

4.50 It should be noted that not all the sites viewed experienced the same level of constraints.

What best practice lessons can be applied in the future?

4.51 There are a number of lessons that can be applied to mitigate exposure to costs in the redevelopment process. These include:

- Using the existing layout of the mill
- Seek to reduce the circulation space within the mill
- Provide only sympathetic alterations in keeping with the history of the building
- Engage a focused design team to provide design for best value
- Early involvement with cost consultants to maximise value engineering opportunities
- Involvement with a remediation contractor that strives for best value solutions for the site
- Carry out a competitive tendering process to acquire best value construction costs
- Seek to reduce the scheme construction duration to benefit from reduced preliminaries costs.

Early identification and determination of strategy

4.52 As highlighted above a key lesson is that there is a direct correlation between the length of time a building remains vacant and the amount of remedial works required to bring it back into use. It appears that the process of physical deterioration accelerates with time. Therefore early identification of disused mills and other heritage assets is required to determine a suitable strategy prior to prevent them falling into an inextricable process of decline.

Phasing of redevelopment and reuse

4.53 The phased transition of Sunny Bank Mills has already been highlighted above as an example of how to enable the gradual transformation from operation textile mill to multi-tenanted and mixed use facility. As part of this process, a phased approach to renovating buildings to enable costs to be managed effectively was key to the viability of the scheme. Finding a way to mothball / secure parts of the site pending their phased redevelopment is also important.

Utilisation of tax concessions – Enhanced Capital Allowances

4.54 Enhanced Capital Allowances are available for the redevelopment of listed mill buildings which can help to off-set the costs of remedial works.

4.55 The Business Premise Renovation Allowance (BPRA) gives incentives to bring back into business use derelict or business properties that have been unused for at least one year. It gives an allowance of 100% for certain expenditure incurred when converting or renovating unused business premises in a disadvantaged area. Expenditure that qualifies is:

- Building works, e.g. the cost of labour and materials
- Architectural and design services, e.g. the detailed design of the building and its future layout
- Surveying or engineering services, e.g. services to check the structure of the building or specialist checks for asbestos
- Planning applications, e.g. the costs of getting essential planning permissions to alter a listed building
- Statutory fees and statutory permissions, e.g. the costs of building regulation fees, or getting listed building consent.

4.56 The allowance is available within Assisted Areas up until March 2017. Large parts of West Yorkshire are located within Assisted Areas particularly around the main urban centres where the mills are positioned.

Off-setting costs via enabling development

4.57 Enabling development is the process by which development that is contrary to planning policy is allowed on the basis that it will facilitate the regeneration of a heritage asset. Typically, the enabling development will create a level of income/profit that is transferred via cross subsidy into meeting the cost deficit on the regeneration of a heritage asset. The Historic England policy on enabling development sets out the following requirements:

- It will not materially harm the heritage values of the place or its setting
- It avoids detrimental fragmentation of the management of the place
- It will secure the long term future of the place and, where applicable, its continued use for a sympathetic purpose
- It is necessary to resolve the problems arising from the inherent needs of the place, rather than the circumstances of the present owner, or the purchase price paid
- Sufficient subsidy is not available from any other source
- It is demonstrated that the amount of enabling development is the minimum necessary to secure the future of the place, and that its form minimises harm to other public interests
- The public benefit of securing the future of the significant place through such enabling development decisively outweighs the disbenefits of breaching other public policies[2].

4.58 Enabling development is controversial however, it can provide a viable route to enable the 'conservation deficit' on mill regeneration projects to be funded. In relation to the target mill cases we consider that it could be potentially deployed in a number of cases with additional residential development either on site or off site in an alternative location. Parkwood Mills and Mitchell's Mill are two examples of sites where enabling development could assist delivery.

4.59 In summary:

Constraints	Solutions
Building structural condition	• Cost management
Site constraints and abnormal development costs	• Early identification / determination of strategy
High ongoing maintenance cost liabilities	• Phasing of site renewal costs • Utilisation of tax concessions • Off-setting abnormal costs through enabling development

Business model

4.60 The business model that is applied to the regeneration process is a key determinant of the success. There are several business models in operation in the delivery and ongoing management of listed mill buildings:

Developer

4.61 The conventional model of redevelopment is via a commercial developer such as PJ Livesey who have amassed a considerable track record in the redevelopment of heritage assets and were responsible for the Parkwood Mills project which is the subject of a case study and target mill in this report. The conventional developer model is generally: acquire (either conditionally or unconditionally on planning); implement construction process; market; set up management company; let and/or sell (either unit sales or block investment sale); exit.

[2] English Heritage Enabling Development and the Conservation of Significant Places, 30 September 2008

4.62 Viability is dictated by the level of return and speed of exit which in turn is driven by the value/cost equation. Sales values and rate of sale are critical as is the cost of redevelopment. The risk profile for a developer regenerating a heritage asset is different to that of a conventional new build project because of greater uncertainties relating to statutory approvals and costs. However, these can be managed effectively through the development process.

4.63 The key issue is that for many of the target mill studies there is too much risk for the standard development business model to work. In our consultations PJ Livesey indicated that target revenues need to be at a level of £2,152.78 per sq m (£200 per sq ft) and sales rates four per month. As highlighted in the section 'Occupiers' (page 16), the challenge is that many mills are in locations where this level of revenue is not attainable. While there are other developers with less stringent acquisition criteria we consider the feedback to be representative of the mainstream developer sector which could in part explain the relative inactivity in progressing the stalled target mills.

4.64 In order to make this business model viable, it would be necessary to incentivise a developer. Options might include deficit funding, innovative lease structures or public sector sharing some of the developer's risk. There are a number of precedents that have recently been applied to incentivise the delivery of new build property that are capable of adaption to the heritage sector. These include:

- Gap / deficit funding
- 'Put option' commitment by public sector to purchase asset to give developer 'exit of last resort'
- Public sector to underwrite developer risk through taking head lease.

These are all subject to risks and careful consideration by the public sector would need to be taken on a case by case basis before committing such investment.

Investor

4.65 The investor development model is driven by a different set of considerations. Investment yield, effectively the annual level of rent as a proportion of capital value or 'total return' on capital are key performance indicators influencing investment decisions. There are a wide range of investors and as a result there is a difference in perspectives in relation to the timescales over which the return on capital is sought; most investors are looking for a regular, steady and long term growth in return.

4.66 A report in 2011 for English Heritage by Colliers International, produced research on the Investment Property Database (IPD) and concluded that between 1981 and 2007 the investment performance of listed buildings as a whole outperformed that of the average for all property. This is perhaps owed to the relatively low capital costs and the potential for significant investment growth over time. The experience of igloo who has operated as a developer/investor in the implementation of Marshall's Mill is that significant uplift in returns is achievable in locations where there is a corresponding improvement in the surrounding area.

4.67 However, whilst such forward funding of developments by investors has increased over the last 12 months, it is generally limited to pre-let or projects in the best occupier locations. The limitations in local occupier markets in relation to each of the target mills is likely to place restrictions on such investment.

Landlord

4.68 The landlord's motivation is similar to an investor in that he/she wishes to maximise the value of the asset and minimise exposure to cost and risk. Smart property management is usually key to ensuring that life cycle costs and other liabilities are minimised and that rental incomes are maximised.

4.69 Landlords of vacant listed properties can take a variety of forms and often their knowledge of redevelopment opportunities and constraints is limited. Similarly access to capital to facilitate regeneration can be more difficult with often smaller landlords relying on bank debt. Such landlords can however, also facilitate a gradual process of improvement given their requirements are generally long term sustainability / income stream rather than short term profiteering.

4.70 Sunny Bank Mills is one example of a landlord based business model that has facilitated the transition of the mill gradually over a period of time. The landlords were in fact the previous textile mill industrialists and therefore had a historical connection to the mill and thus also partially fit under the 'visionary' category below.

Owner occupier

4.71 Owner occupiers are driven by the operational needs of their business and need to ensure their accommodation is supportive of their business model. They are not driven by exploiting any return as such from the property other than the derived benefits of their business activity. Owner occupiers seeking new accommodation will be driven by the risk/certainty of being able to customise the premises together with timescales as to when the property is available. Their general lack of property knowledge may put them in a position in which they are 'put off' the complications associated with converting a difficult mill building.

4.72 Key challenges for making listed mill buildings attractive to owner occupiers were aptly illustrated by Drummond Mill's attempts to attract a secondary school free school operation. The risk associated with converting the premises was judged too great for the free school trust / Education Funding Agency which required certainty over timescales for delivery and as such sought alternative premises.

Salts Mill, Saltaire, Bradford

Public sector

4.73 The public sector business model is different to that of most other categories outlined here. Traditionally they have taken a custodian / stewardship role whereby social wellbeing and 'the greater good' are considered as part of area based property strategies. This remains a key part of public sector bodies' remit and local authorities and LEPs in particular are motivated by the growth and regeneration agenda. Certain investment decisions can be made based on the economic benefits that property projects will make and broader impacts in the surrounding area. A net present value (NPV) which aggregates financial and monetised economic benefits is often used to determine whether a project represents a good investment opportunity.

4.74 Under the devolution agenda local authorities and LEPs are increasingly exploring mechanisms that facilitate not only economic development but also growth in local fiscal benefits and tax revenues through business rate retention and council tax. These are factors that the regeneration of mills can have a key role in contributing towards.

4.75 Many of the successful mill regeneration projects have involved investment from the public sector acting in this capacity. Tower Works is one such example which was directly developed and funded by the Homes and Communities Agency. Connected to Tower Works is an example of a local authority acting in a stewardship capacity in accepting the transfer of the listed towers and engine house of the building in return for a 'dowry' which is essentially a capitalised sum of money to reflect the maintenance costs of taking this asset on in perpetuity. The similar transfer of residual assets where there is little income generation potential, paid for by 'enabling development', could be one route to enable the transfer of 'managed loss' assets.

Third sector

4.76 The charitable and voluntary sector has a key role to play potentially in the ownership and management of assets particularly where they have local community value. The Community Asset Transfer which was later extended by the 2011 Localism Act, provided a basis for such assets be transferred. The challenges for such groups is that they are often not well resourced or have the skills to facilitate a regeneration project. However, this could be a key element of the strategy to enable such groups to drive the regeneration process.

Visionaries

4.77 The 'visionary' is an individual with a vision and the resources to drive a regeneration project in an unorthodox way against convention eg Sir Ernest Hall and Jonathan Silver. Such an individual is usually motivated by unique factors that do not follow typical financial models above.

4.78 In summary:

Constraints	Solutions
Standard developer model unviable for many assets	Need for mechanisms to incentivise developers • Deficit funding • Put option to purchase • Taking head-lease • Phased transition • Direct delivery by the public sector
Investor acting as forward funder restricted to the best opportunities and locations	Investor sector needs to estblish funds targeting long term returns for locations where uplift is anticipated
Landlord constraints	Bespoke help for landlords in terms of finance, guidance and advice
Owner occupier risk and uncertainty	Provision of clear planning / listed building guidance on what will be acceptable
Public sector	Opportunity to pool resourses to facilitate regeneration projects that generate economic and fiscal return
Third sector	Capacity building to enable management role for assets
Visionary	Marketing of opportunities to high net worth individuals

Funding

How does funding affect viability of mill regeneration projects?

4.79 The availability of funding is critical to the regeneration of mill projects and takes a number of forms from traditional equity and debt finance to public sector grant based initiatives. For the purposes of this report we have categorised below two forms of funding that have proven necessary in many cases to the delivery of mill based regeneration:

- Commercial funding, i.e. debt and equity
- Public sector funding through both loan and grant

Commercial funding

4.80 Key issues and challenges of securing commercial finance for mill projects:

- Many of the West Riding of Yorkshire's mills are located in areas where market conditions are unfavourable
- Such assets have historically been largely not seen as mainstream investment prospects by the main financial institutions
- Restrictions on debt to speculative development projects in general and particularly so for heritage assets.

Banking sector

4.81 The availability of debt finance for development schemes in recent years has been constrained as a result of the much publicised restrictions in the banking sector. However, over the last 6 to 12 months there has been a noticeable increase in appetite for development projects driven by market improvement and the Bank of England's national edict to the banking sector to contribute towards accelerating house-building.

4.82 One such national high street bank is on a drive to increase lending to the property sector. Cushman & Wakefield has consulted this bank to ascertain their appetite on lending to the West Riding of Yorkshire textile mills regeneration projects. The key messages are:

- This bank is a willing lender to heritage property conversions and is seeing a growing trend in lending to this asset class
- It does not differentiate its lending criteria specifically for listed buildings and will consider the merits on a case by case basis
- Within West Yorkshire it does view the secondary locations such as Wakefield, Bradford and Dewsbury as weaker market areas however, it does not apply any general rules and considers each lending proposition on a case by case basis
- It will generally only lend to speculative development projects if they are either exclusively or largely residential and remain averse to lending to speculative commercial development projects unless in exceptional cases
- Its preference is to lend to projects that are build-to-keep rather than build-to-sell to enable longer repayment timescales and build up a long term sustainable flow of debt repayment rather than the peaks and troughs created by development finance
- It will only lend to developers with established track records and has no appetite for offering finance to new developers
- It will typically lend up to a maximum of 65% of the total development costs of the project with repayment costs currently in the order of 5.25% above the Bank of England base rate plus arrangement fees.

4.83 This feedback is considered generally representative of the banking sector as a whole and whilst it does provide some positive signals in terms of the availability of debt for heritage redevelopment projects and particularly those focused on the residential sector, the restrictions on commercial speculative projects and on lending to new property companies with no or limited track record represent a constraint. In addition, whilst the bank in question stated that they would apply no general differential lending criteria on secondary market locations that are the subject of this study, consultation with PJ Livesey in relation to the Parkwood target mill case study revealed that other national banks imposed the requirement for a higher level of developer's profit on development schemes in 'Yorkshire Towns' than in other locations.

Equity

4.84 Investment in property assets is assessed by the total return against the capital invested. Colliers International prepared a report for English Heritage in 2011 to better understand the investment performance of heritage assets and, through a detailed analysis of the Investment Property Database (IPD) between 1981 and 2011 concluded that listed commercial properties generated a higher overall total return than all commercial property over 3, 5, 10 and 30 year time periods. Therefore, this would indicate that there are no general constraints to the fundamentals underlying the investment prospects for listed properties per se.

4.85 However, our research of the investment market as it relates to the West Riding of Yorkshire's textile mills indicates:

- Because many mill projects are in unfavourable market locations there is often insufficient certainty from an occupier perspective to make an investment proposition viable
- Heritage asset are still viewed by some institutions as a non-mainstream investment class
- There is limited appetite for forward funding genuinely speculative projects in any property class, let alone one involving bringing back to use a derelict listed asset.

4.86 Despite this, there does remain a strong appetite from the institutions to invest where the conditions are right. This is likely to mean pre let based development. In addition, the experience of igloo with Marshall's Mill has demonstrated the value of developer's establishing funds that are seeking long term returns, where there is recognition of the necessity of a long term view given the investment performance being intrinsically linked to the gradual uplift of an area over time.

4.87 We are also aware of the growing role of foreign equity in development markets in West Yorkshire with several investors looking at assets in secondary locations. This is particularly the case in Bradford where at least two ventures set up with foreign equity are pursing conversion projects.

Public sector funding

4.88 The public sector funding landscape has radically changed in recent years as a result of changing Governments and austerity in the public finances. Connected with this there has also been a change of attitude in the way that the public sector views funding, now preferring to prioritise schemes which offer a financial return and contribute to the economic growth of an area. We consider the following to represent the key opportunities for public sector funding of the West Riding of Yorkshire's textile mills:

- LEP / Local Growth Fund (LGF)
- European Union funds
- Heritage Enterprise
- HCA recoverable investment
- Tax increment financing (TIF)
- Innovative leasing structures
- Local authority borrowing.

Local Growth Fund

4.89 Local Growth Fund represents the principal source of direct Government funding to LEPs for investing in the economic development of their areas. Leeds City Region Enterprise Partnership (which incorporates the West Yorkshire local authorities) originally secured £572.9million, subsequently increased by a further £54.6million, to be spent over the period 2016/17 to 2021. The funds are to be spent in accordance with the LEP's Strategic Economic Plan, the key objectives of which are:

- Improving transport connectivity, accelerating housing growth and town centre regeneration
- Developing a skilled and flexible workforce
- Supporting growing business and promoting resource efficiency.

4.90 The funds are being committed to projects on a rolling annual basis with flexibility for new projects to be brought forward according to changing priorities. Funding is generally offered on the basis of a loan however, there is understood to be some flexibility in the ability of the LEP to vary this approach. Key outputs expected are economic and relate to jobs and Gross Value Added.

4.91 LGF is considered to be an important potential source of funding for facilitating mill regeneration projects given the potential of such buildings to generate economic outputs and in particular to attract growth in the creative and digital sector which is a key target/growth sector of the LEP's Strategic Economic Plan.

European Union funds

4.92 European funds are grouped under the heading European Structural and Investment Funds (ESIF) and include three separate European funds; the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Rural Development (EAFRD). The current fund programme is 2014-2020 and is aligned closely with the LEP's key economic priorities. There is £340million committed to the Leeds City Region over the period and similarly to the Local Growth Fund. Key outputs are jobs and Gross Value Added. Therefore there is potential for this source of funding to be attractive for mill regeneration projects.

Heritage Enterprise

4.93 Heritage Enterprise was set up in 2013 as a distinct initiative within the umbrella Heritage Lottery Fund to target funding to bring vacant and derelict mill building back into use for business accommodation. The fund directly addresses the market failure experienced by many vacant mill buildings by bridging the 'gap' between cost and end values to make the project viable. Cushman and Wakefield understand that the take up of this grant regime has been low due to the paucity of good quality projects. We understand that at the time of preparing this report there have been no awards under Heritage Enterprise to projects within West Yorkshire. We consider this represents an opportunity given the lack of geographical take up to draw funds into the mill regeneration projects in West Yorkshire.

HCA Recoverable Investment programmes

4.94 The Homes and Communities Agency provides a range of funds on a loan/equity basis targeted at bringing forward new homes. There are several funds targeting a range of household types from custom build to starter homes to large scale sites to funding targeted at small house builders who are unable to access commercial finance on the same footing as large house builders. There is also a joint venture with a national bank – the Housing Growth Partnership – established to enable HCA to assist the smaller developers meet the equity requirements on commercially funded schemes. The funds can be offered on more flexible terms enabling projects judged to be too risky for commercial bank lending to receive funds. The potential to attract such funding into mill conversion projects where the end use is residential is significant albeit the funds are offered largely on a recoverable basis.

Tax Increment Financing

4.95 Tax Increment Financing (TIF) is the means by which the tax revenues generated by a project are recycled into the project, typically at the outset utilising borrowing against the projected tax revenue stream. TIF has become a popular means of investment in Accelerated Development Zones and Enterprise Zones where 100% of business rates income over a 25 year period has been ring-fenced for retention by the Local Enterprise Partnership. With councils being able to retain up to half of all net

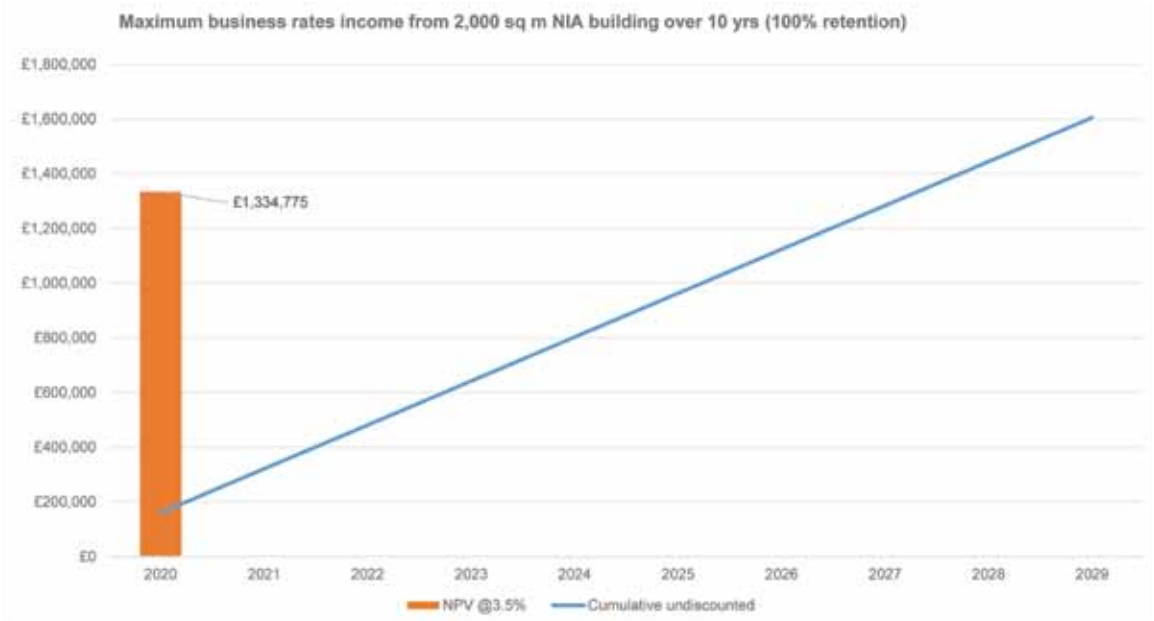


Figure 4.3 Maximum business rates income from 2,000 sq m building over 10 years

additional business rates generated within their areas and the recent Government commitment to extend this to 100% by the end of the current parliament, TIF becomes a potential scenario for locally determined projects outside Government designated EZ/ADZ areas.

4.96 We consider that there is an opportunity to utilise TIF to enable the upfront abnormal or gap funding costs of a mill regeneration project to be met. Whilst this is principally a tool associated with commercial uses that generate business rate income, we consider there to be potential to apply a similar model to residential schemes utilising New Homes Bonus and / or a portion of council tax receipts. This could apply to several of the target mills that have been assessed and demonstrated the need for some subsidy to address abnormal regeneration costs.

4.97 We have prepared a scenario to illustrate the potential benefit of TIF over a ten year period on a 100% retention scenario in Figure 4.3 above. The reason we have assessed this over a 10 year period is because there is a reset of the local authority's base business rate position against which the net additional rates that are available for retention can be retained.

4.98 The result shows that there is potential for a 2,000 sq m (NIA) office building to generate a business rate income of £1.6 million over ten years, netting back to £1.3 million at a discount rate of 3.5%. Although the actual business rate income would likely be less to allow for voids and certain types of businesses that are exempt from paying rates it nonetheless demonstrates the potential for mill regeneration projects to effectively contribute to deficit costs by clever use of the projected tax revenues generated.

4.99 Since the initial drafting of this report the Chancellor's March 2016 budget announced the Government's proposal to allow businesses occupying premises with a rateable value of £12,000 per annum or less exemption from business rates. This could affect the level of business rates income generated on premises targeting particularly small firms and therefore an element of 'risk' should be allowed for in any such TIF model.

4.100 The above model could be applied to a residential reuse given the potential new homes bonus payments received by the local authority in creating new dwellings out of vacant mills.

Innovative leasing structures

4.101 With a head lease[3], a local authority would enter into a sale and lease back[4] arrangement with a developer where a head-lease could be taken enabling the council to sub-let the property. Lease arrangements are a popular form of financing new development projects with the public sector's generally strong covenant strength enabling low yields to generate an attractive investment proposition.

4.102 There are a range of lease lengths that could potentially be entered into with the longer the length of term certain[5] the greater the capital value capable of being generated. Long term annuity style income strip leases have become popular with developers recently and this is the approach that a number of councils are considering to generate capital to underpin regeneration projects. Under such an arrangement, the local authority would enter into a term of between 25 and 40 years with a commitment to annual rental uplifts for inflation (often RPI linked) set on a cap and collar basis. With this long term commitment, the yield is compressed to a level which enables the rent to be priced at a low level – typically below market value – with the prospect that the council can then sub-let at market value and make a profit rent.

[3] A head lease is a lease to an entity that will subsequently grant leases to sub-lessees who will be tenants in possession.

[4] A sale-and-leaseback is a financial transaction where one sells an asset and leases it back for the long-term. Therefore the asset can continue to be able to be used, but the asset is no longer owned.

[5] A valid lease must be granted for a "term certain" i.e. a length of time

Prudential borrowing

4.103 Local authorities have the power to borrow money to fund capital projects. Introduced in 2003, Prudential Borrowing was the first major change to local authority capital finance in over ten years. The legislation provides the broad framework for the 'prudential system' but the new system places the emphasis on local authorities planning their needs for capital expenditure in a sensible and long term way based upon sound management of assets and finances. Borrowing costs are significantly below typical commercial costs of equity and debt, and therefore give local authorities an advantage in being able to make development projects viable.

Summary – constraints and opportunities

4.104 In summary, in the commercial funding sector there are a number of constraints affecting accessibility of finance for mill regeneration projects. Whilst there is an appetite to fund mill regeneration schemes, this is understood to be for the best schemes in the best locations, with a reluctance to commit to speculative development schemes and from the banking sector in particular a preference for residential based redevelopment schemes.

4.105 There is however, evidence that the long term returns from investment assets can be highly favourable particularly where redevelopments are locked into an improving area such as has been witnessed with Marshall's Mill and Tower Works in Holbeck Urban Village in Leeds. This case study has underlined the opportunities for developers and investors to collaborate to establish specialist long term funds with attractive returns.

4.106 The key issues for many mill regeneration projects concern viability and the deficit created by costs exceeding end use values. However, we believe there are a number of opportunities available that are not being properly utilised and that in particular there is an opportunity to create a joint investment programme at the West Yorkshire level focused on a combination of LGF, Tax Increment Financing (TIF) (from retained business rates income and New Homes Bonus), EU funds and Heritage Enterprise grants.

Top: Tower Works, Leeds

Bottom Left: Heritage Open Day, Sunny Bank Mills, Farsley

Middle right: Throw-up Graffiti Exhibition, Sunny Bank Mills, Farsley

Bottom right: Round Foundry & Marshall's Mill, Leeds

5.0 Conclusions and action plan for the regeneration of the West Riding of Yorkshire's textile mills

The regeneration potential of the West Riding of Yorkshire's textile mills is vast. Whilst many have already been regenerated, there are a great number that remain underused or vacant and their reuse offers the opportunity to make a major contribution to the growth of homes and jobs in the future.

Conclusions

5.1 The regeneration potential of the West Riding of Yorkshire's textile mills is vast. Whilst many have already been regenerated, there are a great number that remain underused or vacant and their reuse offers the opportunity to make a major contribution to the growth of homes and jobs in the future.

5.2 This study has revealed a number of common issues affecting the regeneration prospects for West Yorkshire's textile mills but has also provided some invaluable lessons of best practice from the many exemplar mill regeneration projects which demonstrate how such issues can be overcome.

5.3 The key issues that drive and determine the feasibility of heritage projects can be summarised as follows:

- Occupier demand
- Adaptability and design
- Cost of adaption
- Applicable business model for delivery and management
- Funding.

5.4 The key issues affecting most of the vacant mills that we appraised were the combination of weak occupier demand and abnormally high development costs. Together these factors combine to create a viability problem which dictates the need to find an appropriate balance between conservation and economic factors in the search for the appropriate level of 'constructive conservation'[6].

5.5 However, it must be emphasised that the sample of 'target' mills examined were disproportionately from areas of weak market demand and in many cases experienced significant structural weaknesses. The challenges facing these mills are acute and should not be taken as representative of all mill projects. As a benchmark, in the period that our work has been conducted we are aware of commercial led plans emerging for several other mills including Rutland (Wakefield) Temple Mill and Hunslet Mill (both Leeds).

5.6 Our review of case studies underlined the potential that can be achieved across different geographies bringing mills back into productive use for both residential and commercial activities. The lessons of best practice emerging from these mills provide clear pointers for how the challenges facing vacant and derelict mills can be overcome.

5.7 Fundamentally, we consider that occupier demand is 'king' and where such buildings can be put to an appropriate end use on a commercial basis it provides the best chance for sustainability. Where this can be achieved we believe there are workable solutions that can be found to address cost and other identified constraints. However, where there is no realistic commercial end use the sustainability of retention is at risk and there is a real risk that buildings can enter a terminal downward spiral.

5.8 Our review of target and case study mills underlined the importance of the above factors in determining the most appropriate future for any disused textile mill. We consider that depending on the interrelationships of these factors there is a range of potential outcomes ranging from full restoration and regeneration to in some cases, managed loss. An open minded and flexible approach is needed by local planning authorities to ensure the most appropriate solution is reached.

5.9 It is clear that there are a wide range of measures that can be undertaken to drive forward the regeneration process. The diagram on page 33 provides a summary tool kit for activating the regeneration of a textile mill:

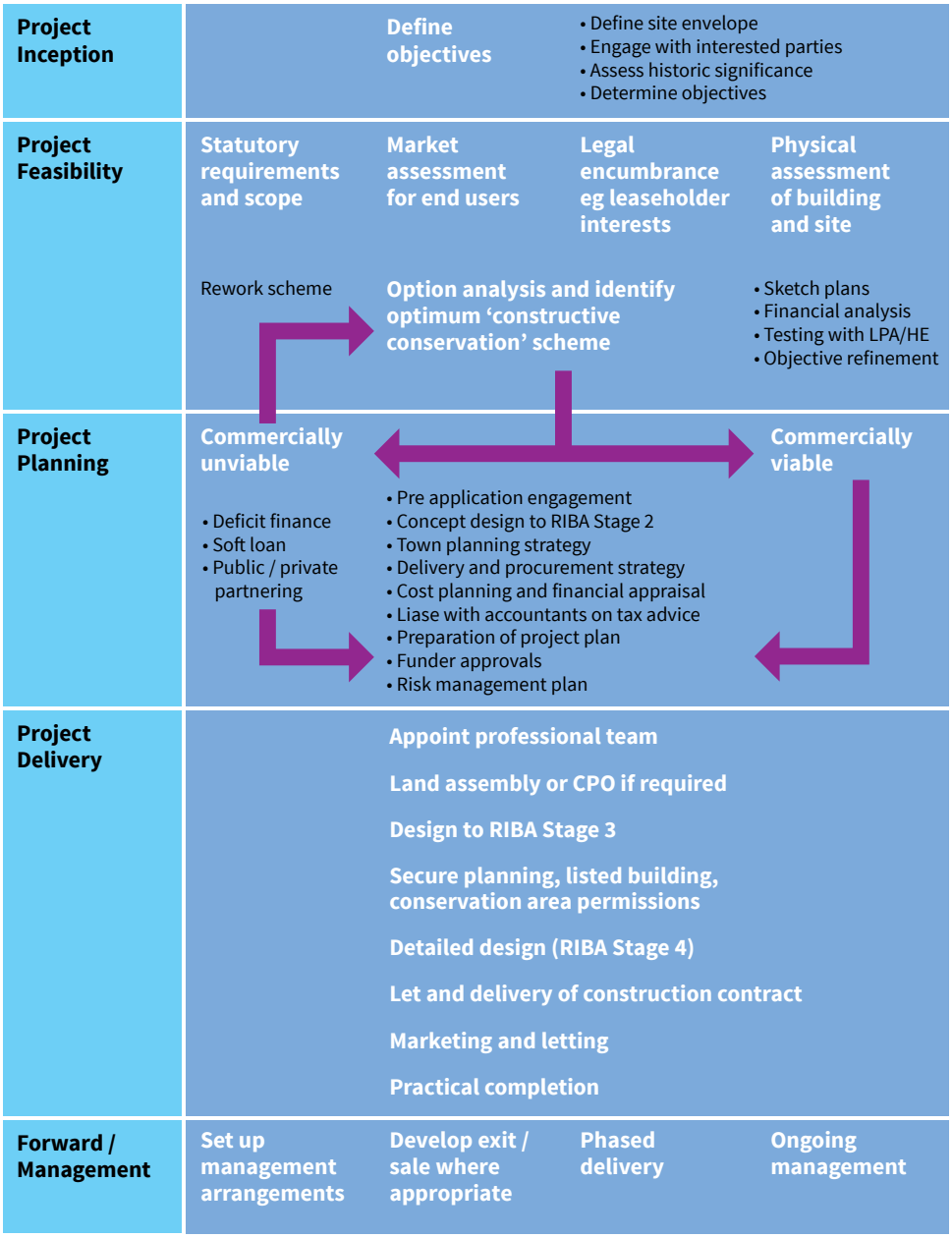
Recommendations

5.10 Taking account of our findings we consider there to be a number of action areas for key stakeholder groups to address in promoting a programme of change and facilitating the regeneration process:

Historic England

- Rigorously apply Constructive Conservation principles to adaptation solutions
- Proactive strategy for identification of assets at risk and development of schemes in collaboration with promoters and other key stakeholders
- Create certainty by working with senior officers within local authorities including conservation officers to provide clarification of what is needed
- The Enterprise and Regulatory Reform Act 2013 aims to make it easier to undertake works that do not affect the special architectural or historic character of listed buildings. Historic England can create certainty by working with local authority conservation officers to provide clarification of what is needed utilising planning frameworks / briefs, Local Listed Building Consent and Local Development Orders and Certificates of Immunity / Certificates of Lawfulness where appropriate.

[6] Constructive Conservation is defined by Historic England as a positive, well-informed and collaborative approach to conservation. It is a flexible process of helping people understand their historic environment and using that understanding to manage change.



Toolkit for regenerating the West Riding of Yorkshire's Textile Mills

Public sector

• Create West Yorkshire textile mill investment funds through Local Enterprise Partnership co-financed from Local Growth Fund, Historic England, European Structural and Investment Fund
• Local authorities to consider tax increment financing (as stated in section 4.95) to address conservation deficit on priority assets, with seed funding provided by the above West Yorkshire fund to limit borrowing risk exposure (potential to merge together with the proposed fund)
• Local authorities to take a more hands-on role in promoting and facilitating regeneration process using resources at its disposal – planning, Compulsory Purchase Orders, borrowing, skills, local tax revenues
• Consider aligning public sector accommodation requirements with heritage assets.

Investors, developers and occupiers

• Work collaboratively with public sector partners to enable constraints to be overcome through funding, planning and other matters
• Recognise the long term investment potential of textile mills and devise bespoke funds to target high rental/capital growth locations
• Look at long term opportunities in areas that will be up and coming – align with regeneration strategies.

Top: Tower Works, Leeds

Middle left: Walk-in Movie Night, Marshall's Mill, Leeds

Middle right: Gallery Exhibition, Sunny Bank Mills, Farsley

Bottom: The Arches at Dean Clough, Halifax

Appendix 1: Case Study Mills

Victoria Mills
Shipley, Bradford

A successful example of:

- The integration of old and new buildings with high quality public space to create a strong composition
- The redevelopment of a mill complex without the need to secure public sector intervention
- Effective partnership working between the public and private sector to enable delivery
- Management of car parking for end users
- Achieving an optimum balance between conservation and commercial objectives in the site's redevelopment
- Successful and effective long term property management arrangements

Background to Regeneration

The Grade II listed Victoria Mills is a worsted mill located in Shipley, 21km west of Leeds, 5.6km north of Bradford and is set within five acres of land on the buffer of a World Heritage Site. Victoria Mills comprises Old Mill which was built in 1873 by Henry Mason to manufacture worsted coatings and dress goods; and New Mill which was constructed some 15 years later. Victoria Mills was one of four significant mills in Bradford (Salt's, Lister's, Drummond and Victoria). Victoria Mills was fully integrated – wool arrived on the top floor and the processes took place on site from wool to finished cloth. In 1958, the mills were acquired by Solomon Jerome a cloth merchant. Cloth production continued until 1992 when the mills closed.

New Mason Properties purchased the derelict site in 2003 and commenced a £70m redevelopment programme which included the conversion of Old and New Mills into 57 and 53 apartments respectively and the creation of new build residential units.

The 449 unit residential development comprises one, two and three bed luxury apartments which include roof gardens, balconies, landscaped gardens, tennis courts, a gym, beauty studio, café and convenience store in a riverside setting. The scheme was completed in 2008.

Design Process

Prior to commencing the redevelopment of Victoria Mills, New Mason Properties visited examples of the best and the worst mill conversions. They visited Edinburgh, Glasgow, Liverpool, Nottingham, Manchester and Salford and were not overly inspired by what they saw.

New Mason's vision for Victoria Mills was to create a unique development for owner occupiers which would stand the test of time by using the highest quality palate of materials. This included Yorkshire stone paving, oak doors, aged tumble sets, Code 8 lead for roofing (York Minster has Code 7) and resin gravel (as inspired by Harlow Carr). The materials were all sourced from local suppliers with the exception of the chimney protection. To minimise cost, a significant amount of material was reused / recycled.

The creation of the communal internal gardens was a key feature of the design and required the demolition of the weaving sheds. These gardens are well maintained and well used.

New residential blocks located to the east and north do not seek to imitate the aesthetic of the surviving mill buildings. Although they are of a similar scale, the architectural treatment reflects the period when they were constructed.

The old and new building work together to enclose the communal landscaped gardens and create a strong overall composition.

Key elements of note:

• The chimney at Victoria Mills is slightly larger than that at the adjacent Salts Mill
• One can still see the roof line of the former weaving sheds within the external brickwork of Old and New mills
• The development is free of clutter – no dustbins are visible (all residents are no more than 11m from a bin shoot which leads to a bin storage area within the under-croft car park). There is also a concealed recycling area on site
• A water harvesting system serves the landscaped areas and the water feature
• New Mason Properties wanted to retain sight lines through the mills and onto the open space area
• All lighting is hidden. There are only four different light fittings on the entire site. Photovoltaic lighting is used.

New Mason properties were aware that the net:gross ratios of the new build elements of the scheme were not very efficient – but they wanted to maximise the design impact of the development rather than increase the number of units on site, thereby creating quality of place. The new builds are 60% net:gross and the converted mills are 85% net:gross. The smallest unit on site is 52 sq m (560 sq ft).

Statutory Process

New Mason Properties worked very closely with the local authority at officer and member level. The Conservation Officer was included in the design team from the outset. Historic England were also engaged throughout the design process. Planning permission was secured in 2004.

Financial

Victoria Mills did not receive any grant funding. The development was entirely funded by debt (40%) and equity (60%) funding.

The site was still in development at the peak of the recession. The value of other developments in the area dropped substantially and this was not helpful as the bank valuers took a conventional (comparison approach) to the valuation of Victoria Mills, despite the extra offer that Victoria Mills had compared to other properties. New Mason Properties were forced to refinance to enable the development to continue. Their debt lenders also enforced private rented units to assist the final units to be occupied. The site has had 99% occupancy since completion. Residents include young families and professionals. The average unit price was £3,229 per sq m (£300 per sq ft) for many years. The Penthouse in the new build apartment achieved £3,670 per sq m (£341 per sq ft). Average unit prices were £2,142 per sq m (£199 per sq ft) in the recession.

Partnership Working

As well as engaging the local authority throughout the redevelopment process, New Mason Properties engaged the support of Historic England.

The site of the multi-storey car park was not within the curtilage of the original Victoria Mill site. This was a separate acquisition by New Mason Properties. The industrial site was owned by Bradford Council but leased to an industrial occupier. The occupier vacated the site having contaminated it. New Mason Properties negotiated the purchase of the land from the council at £1 on the assumption that they would remediate the site. The site was transferred to New Mason Properties once the site had been remediated. The provision of the multi-storey car park enables each apartment at Victoria Mills to have one car parking space included within the cost of each residential unit. Additional car parking is available but is charged separately at £50 per month. 50 additional spaces have been let. The cost of the multi-storey car park was £3.2m.

New Mason Properties recognised early on in their design development process that strong political and officer support from Bradford Council would be critical to ensure the success of the project. Council Officers were treated as part of the design team and invited to design team meetings helping to build shared ownership of the project.

Exit / Forward Strategy

New Mason Properties retain the freehold interest in the communal spaces throughout the development.

They have established their own on-site facilities management company which provides service management 24 hours a day, seven days of the week. This has a maximum four hour response time.

There are a number of serviced apartments on site – Vivo is the specialist provider for Victoria Mills. Belvoir is an on-site sales and lettings agency. Belvoir and Vivo are located in the former mending rooms.

There is a residents' meeting every three months.

Lessons Learned

"I designed that... Everyone has taken ownership of Victoria Mills from cleaning staff, designers, local authority staff, the construction team to the developer's themselves.'

"Give people the right materials and an example of the desired quality so they have a sense of what can be achieved. The refurbished Old Mill was used as the quality benchmark throughout the remaining development."

"Workmanship was not accepted unless it met the standard set by Old Mill."

"Be prepared to take risks"

"Think the unthinkable"

"Approach key stakeholders with a blank piece of paper – ask them what they want to see – then incorporate their views into the design. Key personnel at the local authority worked alongside New Mason Properties and architects Beckwith Design Associates".

"Negotiate – engage key stakeholders at the right level".

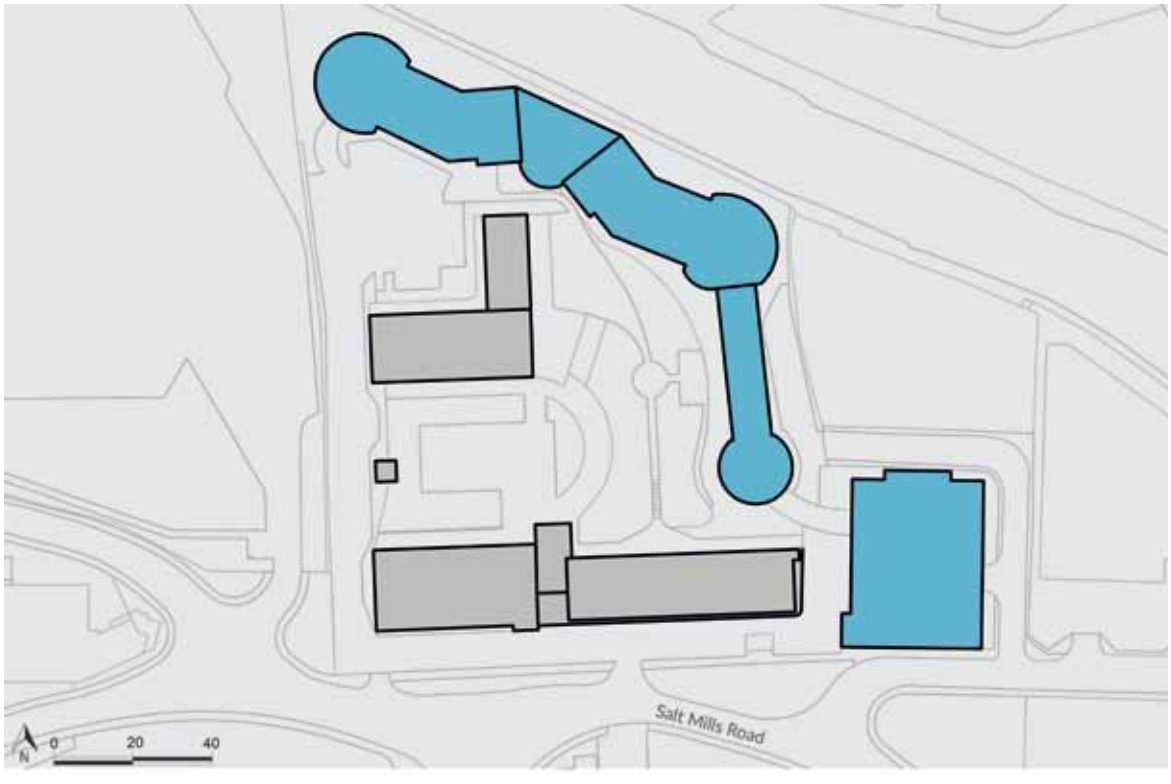
"Do something different"

"Stewardship not ownership"

"There has been a level of churn within the development. Residents tend to relocate within the site. This is testament to the quality of the development and the fact that professionals find it very desirable to be located at Victoria Mills."

"Don't take advice from those who can only say 'no'. The success of the scheme is in part due to the total and ongoing personal commitment of the developer and his capacity to take risks in order to protect his vision. There is a bond between developer and site which goes beyond a simple commercial relationship."

"Location is critical. The mill site is a few minutes' walk to Shipley Railway Station which provides rapid and regular access to Leeds city centre."



Peckett Well Mill
Keighley Road, Wadsworth

A successful example of:

• The redevelopment of a mill complex without the need to secure public sector intervention
• A residential mill conversion located in a spectacular landscape setting
• The benefits of securing advice from Historic England on the significance of listed buildings and how best these can be redeveloped.

Background to Regeneration

Peckett Well Mill (otherwise known as Pecket Well Shed) is a Grade II listed, cotton weaving mill which specialised in fustian – a heavy cloth used for corduroy and moleskin. The mill is situated on a south-west facing hillside in the village of Peckett Well, less than 3.2 km from Hebden Bridge, 46.5km west of Leeds and 48km north-east of Manchester. The mill, engine house, chimney and weaving shed date from 1840 to 1858 and are listed.

The mill was rebuilt after a fire in 1873 and later traded as Cords Ltd. The business became a subsidiary of M Chapman and Sons (Textiles) Ltd, Stockport and provided the main source of employment in the village. Weaving continued at Peckett Well Mill until 1998 when it was then used for textile storage. The mill was the last fustian-weaving mill in Hebden Bridge.

Mango Homes purchased Peckett Well Mill in 2003. The company, who specialise in the restoration of historic buildings, found the mill complex interesting as most parts of it were complete. They appointed local architects and initiated discussions with Historic England regarding the potential redevelopment of the mill.

Mango Homes delivered Phase 1 of the redevelopment of Peckett Well Mill. This included the oldest elements of the mill complex - converting the multi-storey mill into seven apartments, the engine house into a three bedroom home; and redeveloping the dilapidated weaver's cottage (Bobbin Cottage) into a two bedroom home. On completion of Phase 1, Mango Homes sold Peckett Well Mill to York Homes.

Phase 2 of the development (17 residential units) was completed by York Homes and comprised six three bed town houses (Type T Weaving Sheds) and 11 three and four bed homes (Type M weaving sheds).

Design

The development was completed in November 2006 and in total, comprises 26 unique two, three and four bedroom residential units with combinations of terraces, patio areas, or gardens which provide generous outdoor spaces making the most of the landscape setting. The development won the Yorkshire Renaissance Award in 2006.

The residential units are finished to a high standard with oak, tiled and carpet floors, high quality fitted kitchens with integrated appliances and solid granite worktops.

Each unit has the benefit of two car parking spaces or garaging on site. The development includes a solar-panel hot-water system and rainwater harvesting.

Although the mill itself has been successfully converted to residential use, most of the other buildings which were associated with the complex have been lost. The site of the weaving shed to the east of the mill is now occupied by a court of two storey dwellings. These are accessed through an arched gateway in what would once have been the western wall of the weaving shed. However, elements of the large weaving shed were retained - a number of the new houses retain the saw-tooth roof and some of the iron columns.

Statutory Process

Mango Homes worked closely with Historic England and engaged the local authority in its aspirations for developing the site. Historic England offered guidance on the historic significance of the mill complex and the redevelopment proposals. The engine house was very important in terms of historic significance as it was intact – which is very rare for a surviving textile mill.

Financial

The redevelopment works were privately funded with debt funding from Royal Bank of Scotland.

Exit / Forward Strategy

Mango Homes purchased the site as they have an interest in the restoration of historic buildings. They completed the redevelopment of the oldest elements of the mill complex including the multi-storey mill and the weavers' cottages.

On completion of the first phase of the development, Mango Homes sold Peckett Well Mill to York Homes who completed the second phase of development. Peckett Well Mill has since been sold to a private individual.

Lessons Learned

Early engagement with Historic England was very important in informing the development strategy.

"I found Historic England very helpful, supportive and practical. Many developers are nervous of dealing with statutory bodies because they are sometimes rather obstructive and in the end this produces inferior outcomes".

Different developers have different approaches – the historic mill pond (to the north) was infilled to enable additional units to be created in a future development phase. ***"Mango Homes would not have filled in the second mill pond as we have a strong conservationist approach and feel it was a nice feature which added to the appeal of the houses".***

Although the remoteness of the site might seem unpromising for residential development its appeal lies in its spectacular landscape setting.

Reuse New build Vacant

Parkwood Mills
Longwood, Huddersfield

A successful example of:

• The redevelopment of a mill complex without the need to secure public sector intervention
• A Grade II listed mill complex that has been converted to high quality residential units that maximise the historical features of the site
• A development that illustrates creative adaptation of existing buildings to deliver high quality residential units.

Background to Regeneration

Parkwood Mills is located in the village of Longwood, 4km from Huddersfield, 32km from Leeds and 40km from Manchester.

Parkwood Mills is a grade II listed woollen mill. The integrated Room and Power woollen mill was constructed in the mid to late 19th Century for the firm of John Broadbent and Sons, and tenants. The main buildings of the group are numbered 1 to 8. Mill 1 is the earliest surviving mill, built in the early 1850's on the site of John Broadbent's first mill.

By 1887 the tenants included spinners, manufacturers and one dry finisher. In November 1887 the Broadbents acquired the finisher's company and it became the Longwood Finishing Company Ltd, remaining in the hands of the Broadbent family until 1910. Parkwood Mills closed in 2001. The mills are a complete and unique example of the development of a large Room and Power business which returned to single company ownership in World War I.

PJ Livesey purchased the site in 2005 just before the economic downturn. They acquired the property to redevelop and then sell on the residential units. They selected Parkwood Mills as it was a mill complex, rather than a standalone mill building, offering critical mass.

PJ Livesey converted all but two of the mill buildings into 183 high quality one, two and three bedroom apartments including penthouses.

Design

PJ Livesey have developed significant expertise in the adaptation and reuse of historic buildings. **At Parkwood Mill a comprehensive site-wide masterplan was produced which allowed a phased approach to development to be taken forward. The masterplan was informed by an appreciation of heritage significance as well as viability and market considerations.**

Selective demolition was undertaken within the mill site in order to improve access and to create an improved context for residential use. Where new development has been added within the site boundary this has sought to ensure that context is respected (in terms of materials, massing and geometry).

A phased approach to delivery has allowed development activity to pause around the periphery of the scheme without undermining the market appeal of the core. The in-house expertise which PJ Livesey have in reuse development economics and design, has allowed them to efficiently establish the potential of each of the retained buildings and the spaces within the site boundary. This has resulted in a varied but confident approach to building adaptation.

Where possible, external fabric has been retained but this has been treated creatively in some instances, for example with balcony spaces located behind original window openings. Features which might detract from the visual appeal of external areas such as service risers and parking are usually concealed.

Internally entrance lobbies and vertical circulation is generally well finished and generously proportioned. Apartment sizes and distribution reflect the block width, internal structure distribution and the aspect (i.e. larger units tend to benefit from better views/aspect).

In terms of unit size, space efficiency is maximised throughout the buildings and as such gross to net ratios vary across the complex. The smallest two bed property is 72 sq m (775 sq ft). On average they are 77 sq m (825 sq ft). The largest unit is a three bed penthouse which is 120 sq m (1,300 sq ft).

Original floors in the mill were timber, but they were contaminated with oils and chemical residues. They were raised and refitted. PJ Livesey also encountered asbestos on site often within concrete structures which was removed prior to construction.

Statutory Process

The site had the benefit of a planning permission and Listed Building Consent when PJ Livesey acquired the property. They subsequently applied for additional consents in order to progress their development aspirations for the site.

PJ Livesey received support from Historic England when developing their proposals for the site.

Financial

PJ Livesey secured conventional bank funding to finance the purchase and redevelopment of Parkwood Mills. Their model is to act as a conventional developer and therefore sales values and sales rates need to be at a certain level to enable a viable delivery and exit route.

They were aware that the local residential market was not very strong, however, they targeted purchasers from Leeds and Manchester looking to buy terraced properties.

The converted residential units sold throughout the economic downturn and units were achieving £1,884, £1,938 and £2,045 per sq m (£175, £180 and £190 per sq ft). PJ Livesey invested £1,507- £1,615 per sq m (£140 - £150 per sq ft) (inclusive of abnormal costs (e.g. asbestos removal) and external works) build cost.

PJ Livesey target locations which are capable of achieving approximately four sales per month and a minimum of £2,153 per sq m (£200 per sq ft) in terms of sales revenues. They use their own labour, choosing not to subcontract conversion work as this enables them to retain control in delivering a quality product.

Exit / Forward Strategy

The PJ Livesey model involves retaining the freehold interest in the communal areas of the mill development until the last residential unit is sold. A property management company (comprising representatives from local residents) is established to manage the common parts thereon.

The next phase of the redevelopment of the mill complex will include Mill 5 and Mill 6 & 7. PJ Livesey are assessing a number of options for the redevelopment of these buildings.

Lessons Learned

PJ Livesey maximised revenues from the mill conversions, utilising the aspect of the buildings to optimise value; smaller units faced north, larger units faced south.

PJ Livesey have experienced that mill conversions in towns are less attractive propositions for institutional lenders compared to cities. This has implications for the delivery of mill redevelopment projects outside large urban centres.

The ethos of the company is to deliver well designed buildings and spaces and considered reuse which understands and exploits the commercial values of distinctive and historic sites.

PJ Livesey have developed considerable in-house expertise. As well as the skills associated with successful developers they have internal heritage and design skills and have an architect as part of their core team.

Reuse New build Vacant

Sunny Bank Mills
Farsley, Leeds

A successful example of:

- How partnership working and thorough research into successful mill redevelopment can assist with developing a delivery strategy
- How development has been phased to ensure it is self-financed and can be delivered without public sector support
- How being passionate about the importance of a mill to a local community and the desire to maintain a site for employment use can drive the vision for redevelopment.

Background to Regeneration

Sunny Bank Mills are located in Farsley, 10km west of Leeds, 7km east of Bradford within the Farsley Conservation Area; the Mills are not listed. The complex dates back to 1829 when it was developed by a group of clothiers including Mr John Gaunt, an ancestor of the current owners.

The mill expanded in 1850 through the acquisition of land known as Sunny Bank. The site continued to develop throughout the 19th Century, employing over 800 people.

By the 20th Century, the mill was one of Leeds' premier worsted spinners and weavers and consolidated its reputation as one of the finest cloth producers in the world. Sunny Bank Mills continued producing high quality wool cloths until 2008 when production ceased after almost 180 years.

In 2010, the 6th generation of the Gaunt family embarked upon the regeneration programme of Sunny Bank Mills driven by a desire to re-establish an employment centre in Farsley and to create high quality commercial space.

Sunny Bank Mills offers employment space ranging from 46 - 1,393 sq m (500 - 15,000 sq ft). There are currently 60 businesses occupying the site ranging from creative businesses, engineers, textile artists, architects and a children's play gym.

Design

The Gaunt family looked at what made other mill conversions successful before they embarked on the regeneration of Sunny Bank Mills. They built a team of professional support around them to help them develop their vision.

They attended and later took part in the National Mills Regeneration Conference and developed links with local history groups such as the Leeds Civic Society and the Victorian Society.

The vision for Sunny Bank Mills is to restore the historic buildings; enhance their presence by demolishing some less important and commercially unviable buildings; introduce some new buildings which provide high quality,

high value business space; and primarily for Sunny Bank Mills to reclaim its status as the largest employment generator in Farsley.

Phase 1 of the redevelopment focussed on the iconic four storey 1912 Spinning Mill which led to the letting of the ground floor to a photography company. This was promptly followed by Phase 2, the upgrading of the external envelope and other external works which resulted in a letting to a graphic design company. Securing these tenants enabled the redevelopment of the mill office building (Sandsgate) and the Festoon Rooms resulting in an additional ten tenants. The most recent redevelopment is that of the Mending Rooms.

The demolition strategy for the site is supported by a Heritage Assessment and this identifies buildings which can be removed in order to improve access and in particular to provide adequate car parking for a sustainable employment site. The proposed removal of concealed weaving sheds to the west of the site is intended by the Gaunts to free up land for new sympathetic development. The Gaunts considered how to improve site access and whether demolition of Building 39 could be justified. This building is visible from Town Street so the benefits of removal were weighed against the potential

harm to the conservation area. This justification was approved as part of the planning permission granted for the development in May 2015.

Statutory Process

The planning application process commenced in 2012. Part of the scheme that entailed new build housing on land to the rear of the site had to be withdrawn, however the Local Planning Authority are very supportive of the overall ambition for the redevelopment of the scheme.

Financial

The Gaunt family wanted to self-finance the project so they phased the development to ensure it was deliverable. Over £4m has been invested since the redevelopment commenced in 2010.

The initial revenue for the redevelopment works came from ten existing tenants (including Yorkshire Television). Engagement with the community and a sustained PR campaign made people aware of the business space available at Sunny Bank Mills.

Occupier leases range between 5-7 year terms, however the artists' studios are on monthly leases. Commercial rents range from £134.55 - £156.08 per sq m (£12.50 - £14.50). This excludes the estate service charge which is typically around £10.76 per sq m (£1.00 per sq ft).

The only grant received was from the Arts Council for an Arts Exhibition. The Colour and Community Event saw 40 artists exhibit work within the weaving sheds at Sunny Bank Mills.

Exit / Forward Strategy

It is hoped that future phases will include residential development and additional employment space. The Gaunt family self-manage the site and have no immediate plans to dispose of it.

Lessons Learned

Given their historical connections with the site, the Gaunt family are passionate about the redevelopment of Sunny Bank Mills, this is evident in the use of high quality materials and design which create quality of place.

"Look at the vision and break it down into viable chunks".

Financial institutions did not want to invest in the mill refurbishment. The redevelopment has therefore been approached on a phased basis which has enabled the Gaunt family to self-finance the capital works.

Partnership working and background research into mill conversions has informed the redevelopment strategy and vision for Sunny Bank Mills.

"You can get mission creep if you don't have a masterplan".

The family employed a team of professional consultants to offer professional advice in bringing forward the development.

"Expect the unexpected - allow sufficient contingency in your capital works budget".

The Sunny Bank Mill Archive is run by volunteers and occupies space free of charge. This helps to strengthen the relationship between the mill and the community.

The take up of larger floorplates has been slower.

There is a strong brand and destination being developed which is well promoted and helps to maintain interest in taking up space within the site.

Reuse

Vacant

Marshall's Mill
Marshall Street, Holbeck, Leeds

A successful example of:

- How public sector investment can unlock a number of challenging mill sites to create a critical mass of commercial space which provides incubator, move-on and larger office workspaces
- How creating clusters of like-minded creative sector businesses provided an environment for businesses to evolve into successful high growth companies
- How investing in areas in need of regeneration have the potential to yield strong financial results in the long term
- How location is an important factor in unlocking commercial reuse potential.

Background to Regeneration

Marshall's Mill is a Grade II* former flax mill which was part of a mill complex constructed 1791-92 by English industrial pioneer John Marshall. John Marshall was the most important industrialist in Leeds in the first half the 19th Century after Benjamin Gott. It was originally a four storey mill, drawing water from the nearby Hol Beck. Following the installation of a steam engine to assist water power, the mill became the world's first mechanised flax factory and rapid expansion of the mill followed with the addition of Mill 'B' in 1794 adjacent to a warehouse built to service the original mill. As the business continued to prosper further mills, warehouses, engine houses, and reservoirs were added on the south side of Hol Beck. The six storey Mill 'C' was added in 1815-16, Mill 'D' followed in 1826-27, and Mill 'E' (which is aligned to the roadside and joined Mill 'C' to Mill 'D') in 1829-31. The adjacent Temple Mill, in the form of an Egyptian tremple, was built between 1838 and 1841.

Marshall's Mill was used for spinning and bleaching flax. The complex employed over 2,000 workers and when completed, was one of the largest mill complexes in the world with over 7,000 spindles. Marshall & Sons ceased production in 1886 and the company was taken over by other textile manufacturers.

The fire proofing measures incorporated into the design of the mill include cruciform cast iron columns, iron floor beams and brick arches.

Marshall's Mill includes circa 2.1 hectares of land in the Holbeck area of Leeds. The triangular site is bounded by Bath Road, Water Lane, Marshall Street and Union Place and lies within the Holbeck Conservation Area. Marshall's Mill underwent some initial refurbishment work in the mid-1990s before the site was purchased by igloo Regeneration who undertook a comprehensive redevelopment of the mill complex.

Design

Marshall's Mill was refurbished by its previous owner in a manner which sought to disguise the building as conventional commercial office space. This involved concealing much of the character of the building. igloo stripped back the property to uncover the original form and character.

They established core occupiers from the creative sector who were looking for distinctive and characterful workspace. igloo's refurbishment work successfully appealed to the creative sector who were seeking unconventional and flexible workspaces in which to grow their businesses.

Creative Space Management were appointed by igloo in 2012. They developed high speed broadband for the site which was an area wide network (HUVnet) serving a number of the developments in the area, and was part of the strategy to re-orientate the building towards creative industries, building on their work at the Round Foundry Media Centre which commenced in 2003. HUVnet enables faster ICT connection times when businesses move from smaller workspace at the Round Foundry to larger units at Marshall's Mill.

Workspace ranges from 93 - 930 sq m (1,000 - 10,000 sq ft). Tenants include Flashtalking, a UK-based global online advertising technology provider; Interface – a specialist IT recruitment agency; and brand & design agency Robot Food who moved from Tower Works due to expansion to take up a larger office space in Marshall's Mill.

Statutory Process

igloo worked closely with Historic England, Leeds City Council and the Regional Development Agency, Yorkshire Forward.

Financial

igloo Regeneration set up an equity fund and looked for property to purchase in regeneration areas where base values were low but the potential for growth was high. Their model is based on long term returns which could be applied in this particular case.

Initially they looked at the top ten largest cities in the UK. They then looked at where the public sector was investing in regeneration areas. They identified Marshall's Mill which was completing its initial refurbishment.

igloo identified the opportunity to reposition the building and closely align it to the Round Foundry. igloo purchased the site in the early 2000's. They gradually replaced the existing tenants with those from creative sectors.

Rental levels were circa £118.40 per sq m (£11 per sq ft) when igloo purchased Marshall's Mill. Rental levels were achieving £161 per sq m (£15.00 per sq ft) at the beginning of the recession. Rents are now £215.28 per sq m (£20.00 per sq ft) inclusive of service charges.

Exit / Forward Strategy

igloo sold the freehold interest in Marshall's Mill to Hermes Property Unit Trust.

The sale which comprised the Round Foundry Media Centre, Marshall's Mill and Marshall's Court comprised 155,811 sq ft of office, restaurant and residential space. The price paid was £31.5m and reflected a yield of 7.98%. The net rent is approximately £2.65m a year, with 24% against Leeds City Council and the rest from a variety of tenants including Elmwood Design, Simplicity Marketing, Bloom Media (UK), Welcome to Yorkshire and Mediacom North, along with seven independent food and drink retailers.

Lessons Learned

igloo challenged conventional approaches to design by stripping back the refurbishment works to re-establish some of the original features to appeal to the occupiers.

"The vision at Marshall's Mill was to create clusters of like-minded creative sector businesses. These businesses evolved into high growth successful companies".

Round Foundry businesses were growing and wanted to stay in the local area. Marshall's Mill provided grow-on space and enabled them to further expand their business.

"Placemaking is critical to successful developments".

Taking a long term view on investment can yield financially attractive results – the financial model developed by igloo enabled a strategic, long term approach to the success of the development.

Location is an important factor in unlocking commercial reuse potential. The Holbeck area has been transformed over the past 25 years to an accessible southern part of the city centre. This transformation has benefited for prolonged and co-ordinated public sector investment in the wider area.

Critical Mass – Marshall's Mill benefits from the proximity of other complimentary sites including Tower Works and the Round Foundry. These sites combine to provide incubator space, move-on space and larger offices.

Management – Proactive and innovative space management has allowed Marshall's Mill to develop a reputation as a home for creative businesses and this has contributed to the development of a specialist cluster.

Reuse

Tower Works
Globe Road, Holbeck, Leeds

A successful example of:

- Public sector pump priming in a weak market via pioneering 'direct development' of the first phase
- De-risking the subsequent phases for the private sector by carrying-out site remediation works and transferring the listed towers to the local authority via a 'dowry'
- Plugging a gap in the supply of flexible creative work space in Leeds City Centre
- Achieving an optimum balance between conservation and commercial objectives in the site's redevelopment.

Background to Regeneration

Tower Works is a former factory, distinguished by its three listed Italianate towers, and includes two Grade II* and three Grade II listed structures. It was founded by T. R. Harding to make steel pins for wool, flax, cotton and silk combing and for carding cloth in the textile industry. The original buildings were erected by Thomas Shaw in 1864 -1866. The works were extended in 1899 by William Bakewell.

The largest and most ornate tower (constructed in 1899 by Bakewell restored in 1989) is based on Giotto's Campanile in Florence and is known as Giotto Tower. It was used as a dust extraction shaft.

The boiler house chimney (constructed in 1864 by Shaw and restored in 1989) is styled after the Torre dei Lamberti in Verona and is known as Verona Tower. The third plain tower was built in the final phase of the factory expansion in 1919 and is thought to represent a Tuscan tower house. The two ornate towers are Grade II* and the plain tower is Grade II.

The Tower Works entrance range is Grade II listed. The entrance passage still contains the original fine gates with metal decorative openwork representing the steel pins. The Tower Works Engine House is also Grade II listed and is a very fine example of the standard of elaboration and workmanship frequently expended on the housing for steam engines in factories and mills throughout the 19th Century.

The factory sustained damage in World War II when neighbouring buildings were bombed during air raids on Leeds City Centre. The factory was never fully repaired. It ceased to trade in 1981 after 117 years operation on the site.

Tower Works was acquired in 2005 by Yorkshire Forward, the former Regional Development Agency. Following the closure of the Regional Development Agencies, the site was transferred to the Homes and Communities Agency.

Design

In 2006 a masterplan was created for the area surrounding the site known as Holbeck Urban Village which was adopted as supplementary planning guidance. Planning permission was granted for the redevelopment of the site in 2009 comprising a mix of circa 20,000 sq m of office space, 130 apartments and ancillary retail and leisure uses. The permission allowed a mix of demolition and refurbishment with the buildings of highest historic significance being retained alongside proposals for new build.

The first phase of the site was carried out directly by the Homes and Communities Agency, completed in 2011, which involved the creation of 1,115 sq m (12,000 sq ft) of managed office space alongside site preparation works for subsequent phases. The Homes and Communities Agency subsequently undertook significant enabling works on the remainder of the site and then led the development plans for the remaining phases of the extant planning consent, which included approximately 200,000 sq ft of office floor space and 130 apartments.

As part of this first phase, the entrance range has been redeveloped alongside a new build high quality office and studio space, specifically for creative, digital and media businesses. The new offices and studio spaces are set around a public square, adjacent to the canal which incorporates both the Giotto and Verona chimney Towers.

The office building includes 24 office suites ranging from 14 – 139 sq m (150 to 1,500 sq ft) split between the refurbished and sympathetically designed new build extension.

The redevelopment was designed to meet very high environmental standards. From the sourcing of local materials through to the natural ventilation and efficient energy use of the new and refurbished buildings. There are eight substantial photovoltaic panels on the new build aspect of Tower Works on the south-facing roof profile.

Tower Works provides a modern office environment whilst offering great character within the setting of listed buildings. The telecommunications and distributed power points are specified to meet the needs of the creative and digital sectors. There are access controlled entrance doors and secure British Standard office locks as well as CCTV. A range of private and communal kitchens are distributed around the building and communal showers and WC's are provided.

Statutory Process

Yorkshire Forward and Leeds City Council worked in partnership through Yorkshire Forward's Renaissance programme to create a Supplementary Planning Document for Holbeck Urban Village that established the principles for constructive conservation. The planning process for the scheme itself involved a conservation area application, a hybrid planning permission (part outline and part detailed), and listed building consent. There were also subsequent modifications to the original consents.

Financial viability and business model

Tower Works is a successful example of public sector pump priming. The timing of delivery coincided with the depths of the economic downturn and necessitated the public sector taking a lead. The first phase was direct development by Yorkshire Forward/HCA utilising grant funding from a combination of sources including Yorkshire Forward, HCA and European Regional Development Fund (ERDF). This first phase resulted in a well let managed work space facility together with serviced remediated development platforms. The aims of the public sector's investment were to establish a framework for the site's redevelopment, establish occupiers on the site and de-risk it for the private sector to deliver subsequent phases.

In addition to creating serviced 'oven ready' development platforms, the listed towers and engine house were transferred to the council via a 'dowry' to reflect the ongoing maintenance costs, prior to transferring the remaining development parcels to the market.

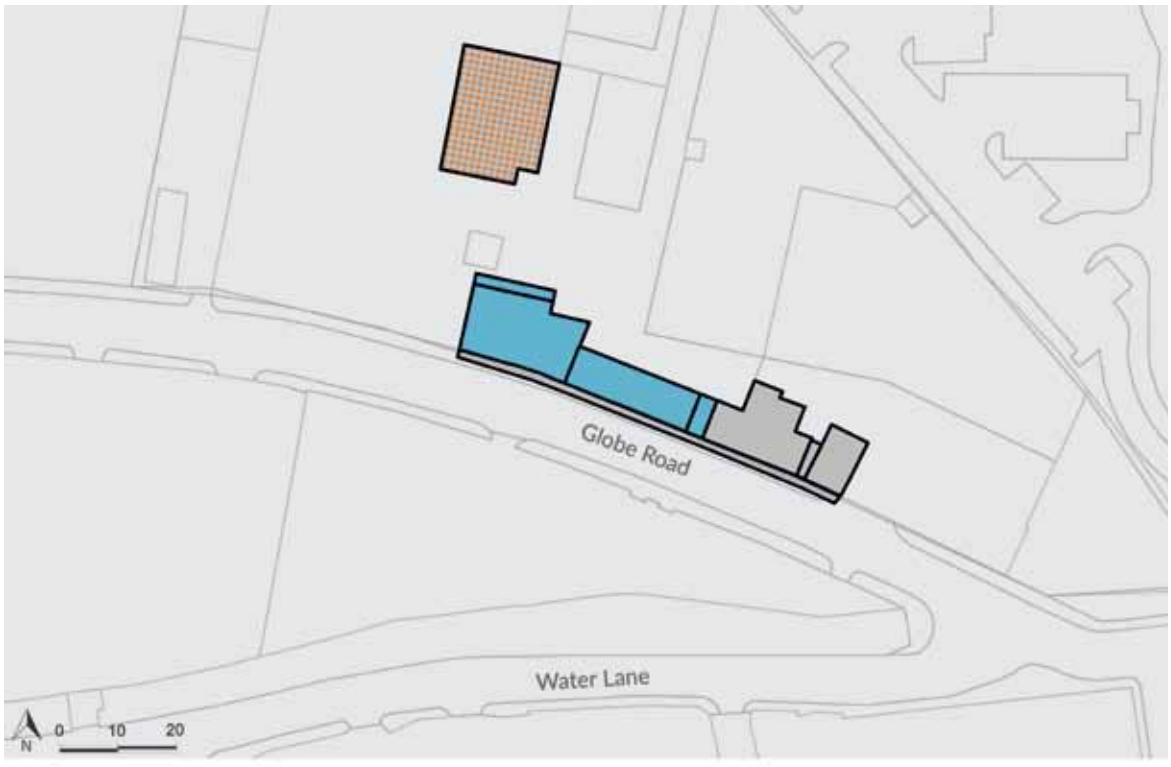
Exit / Forward Strategy

The aspiration of the Homes and Communities Agency was to achieve a sale of the part investment / part development site. This was with a view to achieving a disposal with an obligation on the purchaser to deliver a required level of development.

Through a competitive dialogue process, developers had the flexibility to work up a variety of scheme proposals which conformed to planning policy and at the same time delivered development on an agreed percentage of the site area. Restrictions were imposed in the head leases of the investment and remainder of the site to incentivise delivery. The disposal of the site from the Homes and Communities Agency to Carillion was completed in December 2015.

Lessons Learned

This project involved a partnership approach to delivery between the Regional Development Agency and then subsequently the Homes and Communities Agency, Leeds City Council and developer partners. The three listed towers are within the ownership of Leeds City Council. The Homes and Communities Agency and Leeds City Council worked together to secure a developer partner to deliver the final phases of the Tower Works development which are currently underway.



Reuse New build Vacant

Drummond Mill
Manningham, Bradford

Site address

Drummond Mill, Lumb Lane, Manningham, BD8 7RS

Site and floor areas

Gross land area: 2.6 hectares (6.5 acres)
Gross floor area of mill building(s): 2,277.96 sq m

Description

Drummond Mill was a Grade II listed mill built in 1861 to the designs of Lockwood and Mawson. The large five storey rectangular spinning mill had 26 close set windows to side ranges to each floor. Fronting Lumb Lane was a three storey brick warehouse range. A spinning shed block linked the three storey range with the five storey block which in turn had a link south to the engine house. At its east is a chimney stack with a tall, slender octagonal shaft and a console bracketed crown. Following a fire in January 2016, much of the mill was destroyed.

However, in accordance with our instructions from Historic England we have completed this assessment under the hypothetical scenario that the mill remains, in order to explore the potential of what could have been achieved to provide a benchmark for comparable mills.

The freehold interest in the property is held by a private company who has explored a range of redevelopment proposals including residential, office, retail, leisure and more recently, conversion of part of the mill into a secondary school.

Historic significance

The significance of Drummond Mill was in part derived from its completeness. This has now been compromised as a result of the disastrous fire which destroyed most of the surviving mill buildings during January 2016.

The mill complex was described by Pevsner (Buildings of England, Yorkshire West Riding – Peter Leach and Nikolaus Pevsner, 2009) as the 'sophisticated epitome of the large scale integrated worsted mill'.

Condition

Access to the mill was limited to the untenanted areas. A visual inspection from a building surveyor's perspective (rather than structural engineer) was undertaken prior to the fire in January 2016.

Roof coverings were generally intact with only isolated missing or damaged coverings and blocked rainwater goods. Where water was penetrating the building, this was being managed with plastic sheeting and buckets. There was staining to the stonework both internally and externally adjacent to these areas.

Evidence of failure of roof timbers to the front facing section of the mill was identified, possibly due to historic prolonged water ingress and the perishing of the timber trusses. These were supported internally with localised cracking within the internal walls.

Weaving sheds were generally complete between the front and rear sections of the mill. The roofs were covered with a York stone flag and iron ridge that appeared to be intact generally.

Externally, the site was generally well maintained.

Planning

Drummond Mill is located in an area which is designated as Policy UR7 – Urban Renaissance Mixed Use Area in the Replacement Unitary Development Plan 2005.

There are no existing planning consents for the site. Previous planning permissions include: 04/01650/FUL and 11/04585/LBC for conversion of the mill to create residential, business and retail space; 09/03157/FUL and 09/03158/LBC for internal fit out to form new football academy and gym.

Opportunities and constraints analysis

Opportunities
Drummond Mill is located within the heart of Manningham and is surrounded by residential development, retail and educational uses. As such there is a significant footfall in the local area.

The mill dominated Lumb Lane, and its loss following the fire damage has left a hole in the heart of the community. There is a real opportunity to address this loss, and this should be done as soon as practicably possible.

The land owner and his agent are very supportive of reuse of the site for educational purposes.

The head teacher of a local primary school is in the process of setting up a Free School Trust with the intention of making an application to the Education Funding Agency via the Free School Programme.

Constraints
Commercial market values are low in the local area. Office occupiers show a preference to nearby Bradford City Centre and industrial occupiers prefer locations close to main arterial routes. Residential development is low value and insufficient to attract regional and national house builders.

The site is of considerable scale and as such a mix of uses may be required to bring it fully back into use.

Redevelopment options

Various options have been considered for the future use of the Drummond Mill complex including; educational, residential and retail in various combinations. The scale and format of the buildings and in particular the constrained access to the site have limited reuse. Nevertheless prior to the fire, serious consideration had been given to the use of a large part of the site (including the rear five storey mill building for a school). The scale of the site would have allowed some compatible supplementary uses to be included within the reuse scheme.

The loss of the mill complex to fire now presents the challenge of how to redevelop the site in a manner which captures the significance of the lost buildings. New development must seek to reinstate mass along the Lumb Lane frontage in order to repair the street scene. The orthogonal geometry of the site layout should be protected. In addition the inter-play of different scale and format buildings to create a complex overall composition would be desirable.

Redevelopment options:

Secondary school led mixed use development

Option 1: The full refurbishment of the five storey mill building (7,490 sq m) to the rear of the mill complex into a secondary school. Assuming a requirement for a 600 pupil secondary school and a 200 pupil post 16 facility (800 pupils); which would necessitate accommodation of 6,580 sq m.

Option 2: A new build secondary school facility on the site of the former mill. We have assumed a requirement for a 600 pupil secondary school and a 200 pupil post 16 facility (800 pupils); which would necessitate accommodation of 6,580 sq m Gross Internal Area (GIA).

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for postcode area BD8 7 and BD8 8 illustrates average achieved house prices ranging from £63,000 to £93,667. There has been no recent new build residential development in the Manningham area for some time.	£1,615 per sq m (£ 150 per sq ft)
Office	Manningham's office market is limited, with office occupiers showing a preference to Bradford City Centre. Office accommodation in the local area includes Manningham Road and Manor Road to the south of Drummond Mill. It is unlikely that office development will be viable in Manningham due to the relatively low level of rental values which can be achieved.	£84 per sq m (second hand) £121 per sq m new build
Retail	Manningham Lane Retail Park is situated to the south of Lumb Lane and includes occupiers such as Toys R Us and Brantanno footwear. Manningham Lane has a range of local shops including local convenience stores, takeaways, and small independent retail units. Lumb Lane is noted for its Asian retail units including clothing shops, food retail and restaurants.	£169 per sq m (second hand) £231 per sq m new build
Leisure	Not applicable in this location.	n/a
Industrial	Manningham's industrial market is limited and is located around the outskirts of the town centre close to main arterial routes such as the M62.	£54 per sq m (second hand) £65 per sq m new build
Other	We are aware that there is a requirement for secondary school places in the local area.	Based on cost per pupil ratios

Recommendations for delivery

It is challenging to outline a potential delivery solution in a hypothetical scenario. However, given the scale of Drummond Mill, selective demolition may have been necessary for Option 1, to reduce the scale of the building; and options included removal of the weaving sheds to create a play space area within a central courtyard, or retaining the weaving sheds (given their completeness) and converting them into undercoft car parking to avoid congestion at times when parents will be picking up / dropping off pupils. Access to the site needed to be addressed in order to create effective circulation on the site and creating a second access point would have been beneficial.

The sketch proposal for Option 2 illustrates how a new build school could be accommodated on the site. We also recommend the inclusion of some phased new build development which could comprise retail and / or a community facility.

Next steps

Assess the remaining mill buildings and their suitability for redevelopment or managed loss.

Historic England to initiate discussions between mill owner and local authority to understand current position and aspirations for the site, determine a planning brief and consider inclusion in Local Plan as site allocation for residential development. This should lead to the preparation of a development brief that will establish the form of development that will be acceptable, achieving the balance between historic significance and viability.

As it has been suggested that the mill owner is still keen to progress making the site available for a secondary school, it is recommended that a meeting is held with the mill owner and education department within the local authority to discuss how best to progress this initiative.

There is also an opportunity to make links with Bradford College, so there is a natural progression for young people in the local area to move from the existing primary schools, to a new secondary school/ sixth form and then on to Bradford College.

Red line site boundary of Drummond Mill

Drummond Mill, redevelopment potential

Existing / Potential re-use

Potential loss

Potential development area

Redevelopment Option 2: New build secondary school

Existing buildings

Low Mill
Keighley, Bradford

Site adress

Low Mill, Gresley Road, Keighley, BD21 5JG

Site and floor areas

Gross land area: 0.3 hectares (0.8 acres)
Gross floor area of mill building(s): 579 sq m

Description

Low Mill is located on a relatively flat site adjacent to the River Worth in the centre of Keighley, opposite Aldi on Gresley Road. Now vacant, it was once part of a larger complex. The mill building is three storeys and ten window bays long. Low Mill is a Grade II* listed Building. The condition of the building is recorded as "Very Bad" on the Historic England Heritage at Risk Register, 2015.

The construction of Low Mill commenced in 1779 by the Ramsdens of Halifax and was completed in 1780 by Thomas Walsham and William Clayton. The mill was water powered with a dam and goit taken off the River Worth. When the mill came into operation in 1780, it was Keighley's first industrial building and the first cotton mill in Yorkshire.

The machinery was made under the direction of Sir Richard Arkwright. Since the cotton-spinning process was new to this area, a number of employees were sent to Arkwright's works at Cromford, Derbyshire to master the techniques involved.

The freehold interest in the property is held by a private property company. Redevelopment proposals for the site have included refurbishment of the mill into offices (alongside food retail use) and more recently redevelopment for residential use. To date, none of the refurbishment proposals have come to fruition.

Historic significance

Low Mill was the first cotton spinning mill in West Yorkshire and has a direct link to Sir Richard Arkwright, one of the pioneers of the Industrial Revolution. The mill has lost much of its original context, however the water course and sluices associated with the mill survive and these represent an important aspect of the significance of the site.

Elements critical to significance which need to be retained and enhanced include:

- The history of the site
- The water course and associated sluice and the relationship with the river to the east
- The building footprint.

Condition

Access to the mill was not achieved due to the structure being unsafe. The condition is purely a visual inspection from a building surveyor's perspective and not a structural engineer.

Roof coverings are missing in entirety with only a minor part covering provided by torn and ripped plastic sheeting offering little or no protection. Prolonged water ingress has caused structural failure to the upper floors, particularly at joist ends within the gable walls. Historic strapping has been introduced to limit the pull of the gable walls, however it would appear that these are beginning to fail. Stonework is cracked and missing in isolated areas and has been repaired historically to a poor standard. Vegetation is growing from the building in a number of areas which is also causing stonework to fail. Glazing and windows are generally missing allowing unauthorised access, with a number of discarded needles within the vicinity.

Externally, the site is generally overgrown and evidence of Japanese Knotweed was identified adjacent to the river. In addition, sections of broken corrugated cement sheet were found on the site which may contain asbestos. The adjacent river breached the walls during the December 2015 floods.

Planning

Low Mill is located in an area which is designated as a City & Town Centre Defined Expansion Area (Policies CT1, CR1A and CL2) in the Replacement Unitary Development Plan 2005.

There are no existing planning consents for the site.

Previous planning consents for the historic Low Mill site include:
00/02287/LBC and 00/02286/FUL extension to Low Mill for additional retail space; 91/03056/REM (Planning permission for supermarket and refurbishment of the mill into offices); 98/02520/LBC demolition of wall and 04/04756/FUL conversion of existing mill into 6 apartments and construction of a further 50 apartments. A subsequent consent was approved in December 2007 relating to amendments to the layout and design 07/10261/VOC.

Opportunities and constraints analysis

Opportunities
The site is located opposite a budget supermarket so there is good footfall in the area.

The area would benefit from an area of accessible open space. Opening up access to the historic sluice and water feature and providing interpretative information would be advantageous.

Constraints
The site is located within an area which is at risk of flooding, and last flooded in December 2015.

The site is used by trespassers and it is evident that antisocial behaviour including substance abuse takes place on the site despite attempts by the mill owner to secure the property.

The building condition is in a very poor state of repair, with short term quick fixes in evidence helping to retain the building.

The site is small in scale and separated by the river on the southern side and the mill and water sluice to the north.

There is no access to the site.

Redevelopment options

Despite the heritage significance of Low Mill an innovative approach is required to overcome the constraints of the site and to create a viable scheme. Approximately a third of land associated with the mill is undevelopable due to the survival of channels and sluices. A further challenge is the poor condition of the structure and fabric of the building.

Despite these constraints the mill owner has previously prepared a scheme for residential conversion of the mill with some associated new build on the adjacent developable land. In the meantime the strength of the residential property market in Keighley has become more challenging and the condition of the mill has deteriorated.

As achieving a viable development on this site is challenging in current market conditions, other options for the future of the site include stabilising the mill fabric leaving the mill in situ as a managed ruin. The water course surrounding the mill could be restored and the surrounding land treated as public realm.

There is potential for interpretation and lighting to be installed to attract attention to a site which could be overlooked. This approach would require the establishment of a secure revenue stream to allow the maintenance and management of the site; and would also require the establishment of a management trust.

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for postcode area BD21 1, BD21 2, BD21 3, BD21 4 and BD21 5 (1 mile radius of Low Mill) illustrates average achieved house prices ranging from £31,000 to £138,710. New build residential values in the area range from £131,850 (Woodland Heights) to £147,595 (Vision) and £55,000 (1 bed) and £85,000 (2 bed) apartments at Inghow Mill.	£1,668 per sq m (£155 per sq ft)
Office	Keighley's office market is limited, with office occupiers showing a preference to Bradford, Leeds and Huddersfield which offer better quality office units. Keighley's office market is concentrated on Skipton Lane and Devonshire Street in the town centre. The majority of stock is below 1,000 sq ft and are generally located above high street retail units.	£65 per sq m (second hand) £156 per sq m new build
Retail	Keighley contains 76,690 sq m of retail floor space. Convenience floor space for the area is above the national average whilst the retail, leisure, financial and business service floor space are all below the national average. The convenience sector is anchored by Asda, Sainsbury and Morrisons, Aldi and Iceland. The main retail centres are the Airedale Centre and Cavendish Retail Park both located to the south-east of the town centre. The town centre contains a mixture of national and independent retailers including an indoor market. The town centre predominantly offers small retail units whereby c.60% of total floor space are under 93 sq m.	£255 per sq m (second hand)
Leisure	n/a	
Industrial	Keighley's industrial market is limited and is located around the outskirts of the town centre close to main roads.	£32 per sq m (second hand)

Given the location of the site an option could be to convert the mill into managed work space or possibly an enterprise centre with grow on space being located as and when required on the developable section of the site.

Redevelopment options:

1 Residential redevelopment – conversion of the existing mill building into six apartments (average unit size of 68 sq m) and construction of 12 new residential dwellings of the following mix:
- x6 2 bed semi-detached units (69 sq m)
- x2 3 bed semi-detached units (27 sq m)
- x4 1 bed quadrant (46 sq m).

2 Commercial redevelopment
- Mill refurbished for managed office space – 579 sq m / GIA 463 sq m NIA
- Light industrial 1200 sq m GIA.

3 Managed loss
Demolition of the remaining mill, retention of water course and sluice. Creation of landscaping and enhanced connectivity with River Worth.

Recommendations for delivery

Despite that fact that the redevelopment options for Low Mill are challenging, we consider there are options for funding support which should be properly examined. This could include:

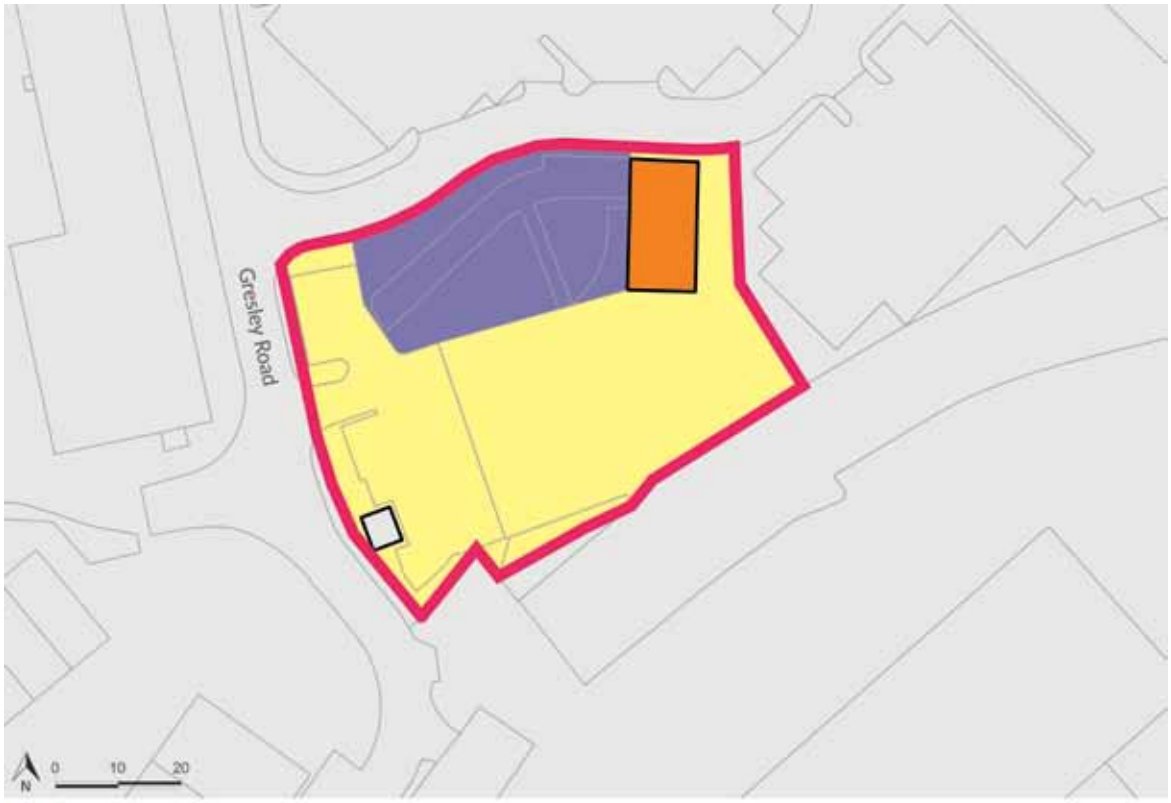
- Off-site enabling development
- Heritage Enterprise Grant (for the commercial scenario)
- Use of tax increment finance with either the retained business rates in the commercial scenario or ring fenced New Homes Bonus or ring fenced council tax revenues in the residential scenario.

In the absence of a viable strategy for the site, we consider that a 'managed loss' scenario is the most likely outcome for the site whereupon certain aspects of the site which symbolise the mill are retained. The creation of a fund via dowry to transfer the residual public space upkeep obligation to a third sector organisation or the Parish or District Council could also form part of such a loss strategy.

Next steps

Historic England to initiate meeting with mill owner and Bradford Council (to include Regeneration, Planning, Conservation and Highways Officers) to establish partnership approach and agreeing on a solution for the site. This could include the delivery of offsite enabling development to assist with the financial deliverability of Low Mill.

Red line site boundary of Low Mill



Low Mill, redevelopment potential

Existing / Potential re-use

Potential development area

Non-development area

Low Mill redevelopment Option2: Mill refurbishment for managed office space and new light industrial units

Existing buildings

Dalton Mills
Keighley, Bradford

Site adress

Dalton Mills, Dalton Lane, Keighley, West Yorkshire, BD21 4JH

Site and floor areas

Gross land area: 2.1 hectares (5.1 acres)
Gross floor area of mill building(s): 19,155 sq m

Description

Dalton Mills is a Grade II* listed building built between 1866 and 1877 for the manufacture of worsted cloth, designed by W. Sugden for J & J Craven as a worsted mill, it replaced an earlier worsted mill, Strong Close Mill, owned by Rachel Leach.

Dalton Mills comprises three multi-storey mills: Tower Mill in the north-east corner of the site, begun in 1866 and in operation by 1870, Genappe Mill to the north begun in 1868 and New Mill to the south in 1869. A long shed was also part of the original group, as were two engine houses, boiler houses, a chimney and offices dated 1872. The two original beam engines, one for Tower and Long Shed, the other for Genappe and New, were accidentally destroyed and replaced by new horizontal engines to the design of John Haggas & Sons of Keighley in 1904, of which that powering Genappe and New Mills was said to be the largest in the world at that time.

A footbridge over the River Worth opposite the chimney once connected the mill complex to the house of the owners, Strong Close (named after the original mill), which stood to the east of the mill. A stone gateway on the other side of the river survives. Mr Craven was said to cross the bridge directly to the chimney which has a stair running around the flue, leading to a balcony from which he could oversee the mill and surrounding country.

The freehold interest in the property is in private ownership. The mill owner would like to see the mill redeveloped for commercial uses.

Historic significance

The significance of Dalton Mills is in part derived from its completeness and scale, along with the quality of its impressive architectural detailing for the main facades (including those concealed within the heart of the site).

The interior detailing of the mill buildings matches the quality of the exterior with elaborate cast iron columns surviving throughout. Limited but important remnants of equipment and industrial fittings survive throughout the complex.

The mill, which is curiously named after the former mill manager rather than its owner, has historic connections with Low Mill relating to a dispute over access to water.

Condition

Access to the mill was limited to the untenanted areas. The condition is a visual inspection from a building surveyor's perspective and not a structural engineer.

The owner is in the process of undertaking a number of ongoing repairs / restoration of the mill. Roof coverings are generally intact with only isolated missing or damaged coverings and blocked rainwater goods. Where water is penetrating the building, this is being managed. There is staining to the stonework both internally and externally adjacent to these areas. The lantern turret details to the roof are in the process of being replaced.

There is evidence of failure of the front facing central tower which is supported internally and externally. We understand that there is a programme of works pending instruction to stabilise and repair this area. In addition, there is extensive cracking within stonework to the rear chute opening.

A rear section of the mill has been destroyed by fire historically, prior to the current owner's occupation. There are a number of missing glazing and windows to isolated areas which is allowing pigeons to enter the building with a build-up of guano.

Externally, the site is generally well maintained.

Planning

Dalton Mills is located in an area which is designated as Policy K/E6.3 Worth Village Keighley (Employment Zone), in the Replacement Unitary Development Plan 2005.

Previous planning applications for the site include: 10/04806/FUL Unit 18 - Change of use from light industrial unit to assembly and leisure for use as a martial arts centre; 97/03359/FUL - Restoration and rebuilding of fire damaged property plus extra access and new toilets; 93/02474/COU - Change of use to employment agency class A2 at part of office block; 91/06395/COU - Change of use of vacant building to training facility for martial arts; 91/03095/COU - Change of use of fourth floor to health club.

Opportunities and constraints analysis

Opportunities

Dalton Mills has the benefit of a number of existing occupiers and these should be retained where possible – especially as there is sufficient space within the mill complex for the businesses to grow.

There is an opportunity to create flexible workspace for local small to medium sized enterprises as per the successful Round Foundry and Marshall's Mill, Leeds and Huddersfield Media Centre. Part of the site could therefore be promoted for the clustering of small businesses as per Sunny Bank Mills, Farsley.

Dalton Mills is a very accessible site within close proximity to the railway station and town centre. The location provides potential as a retail destination.

The letting strategy of the owner could be diversified to include complementary uses to support employment, such as retail and food/beverage. This could help to develop the site into a destination which would in turn help increase demand from business occupiers. For example, the site should be promoted as a facility for music, and film given the history of filming at the property.

Constraints

The scale of the mill is arguably too large for the level of demand in the local area, and as such a destination needs to be created. However, this is an untested market for destination retail in this location.

The mill buildings are being restored / maintained incrementally. This needs to be balanced against the rate of deterioration.

Access to the site is constrained and needs to be improved. The site would benefit from opening a second access point which will be necessary in the redevelopment of the site.

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for post-code area BD21 1, BD21 2, BD21 3, BD21 4 and BD21 5 illustrates average achieved house prices ranging from £31,000 to £138,710. There is no new build residential development taking place within in the local area.	£1,668 per sq m (£155 per sq ft)
Office	Keighley's office market is limited, with office occupiers showing a preference to Bradford City Centre. Dalton Mills provides office accommodation for occupiers looking to secure space between 2,691- 32,292 sq m (250 -3000 sq ft) It is unlikely that office development will be viable in Keighley due to the relatively low level of rental values which can be achieved.	£84 per sq m (second hand) £121 per sq m new build
Retail	Dalton Mills is within a ten minute walk from Keighley Town Centre and as such is close to the town centre amenities.	£169 per sq m (second hand) £231 per sq m new build
Leisure	The leisure market tends to be focussed within the main town centre of Keighley.	£150.00 per sq m new build
Industrial	Keighley's industrial market is limited and is located around the outskirts of the town centre close to main transport routes such as the M62.	£54 per sq m (second hand) £65 per sq m new build

Redevelopment options

The scale and completeness of the mill complex contribute to its significance and therefore any intervention which might compromise these characteristics should generally be avoided. The small weaving sheds which occupy the central courtyard space located between the two main mill blocks are a later addition and could be removed to create a more attractive space and in order to improve circulation within the site.

The loss to fire of the building located on the western site boundary adds to the opportunity to create an improved central space within the complex and also offers the opportunity to establish a secondary access point.

The current mill owner is seeking to restore the mills and let space for employment uses incrementally reflecting take up. This means that the appropriate protection and mothballing of the unoccupied buildings will be important if harm and loss is to be avoided.

The use of the mills for employment space means that conversion can retain the quality of the existing internal spaces and should be able to avoid the introduction of additional vertical circulation.

The triangle of land to the south of the site could be used for car parking although access is constrained. Alternatively additional contemporary employment units could be provided as part of a later phase of development (subject to access and take up elsewhere within the site).

Redevelopment option:

- Refurbishment of mill building fronting Dalton Lane
- First floor, retail/leisure = Gross External Area (GEA) 2,333 sq m, GIA 2,000sq m
- Second floor, office accommodation = GEA 2,333 sq m, GIA 2,000 NIA 1,600 sq m
- Mothball the remainder of the site for the current time.

Recommendations for delivery

The redevelopment of Dalton Mills is challenging due to the scale of the mill complex, the level of enabling works required to bring the site forward for development, the condition of the existing buildings (including those that have been fire damaged); and the level of revenues capable of being secured by potential occupiers.

The mill owner's aspirations to retain the mill complex as an employment site should be supported, however we recommend a partnership approach to delivering the holistic reuse of the mill involving Historic England, the mill owner, Bradford Council and the Local Enterprise Partnership.

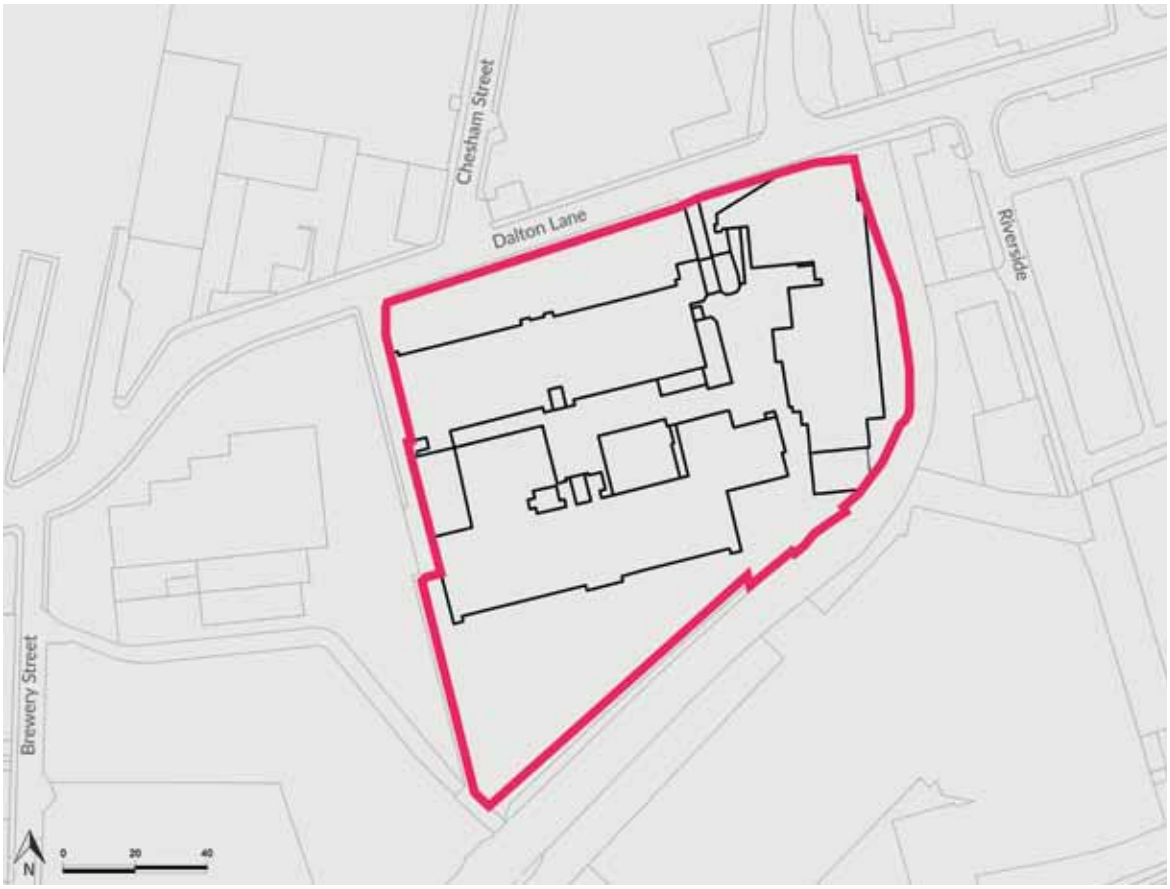
The delivery of the refurbishment should be phased over time, with a delivery strategy in place to ensure that the works are focussed.

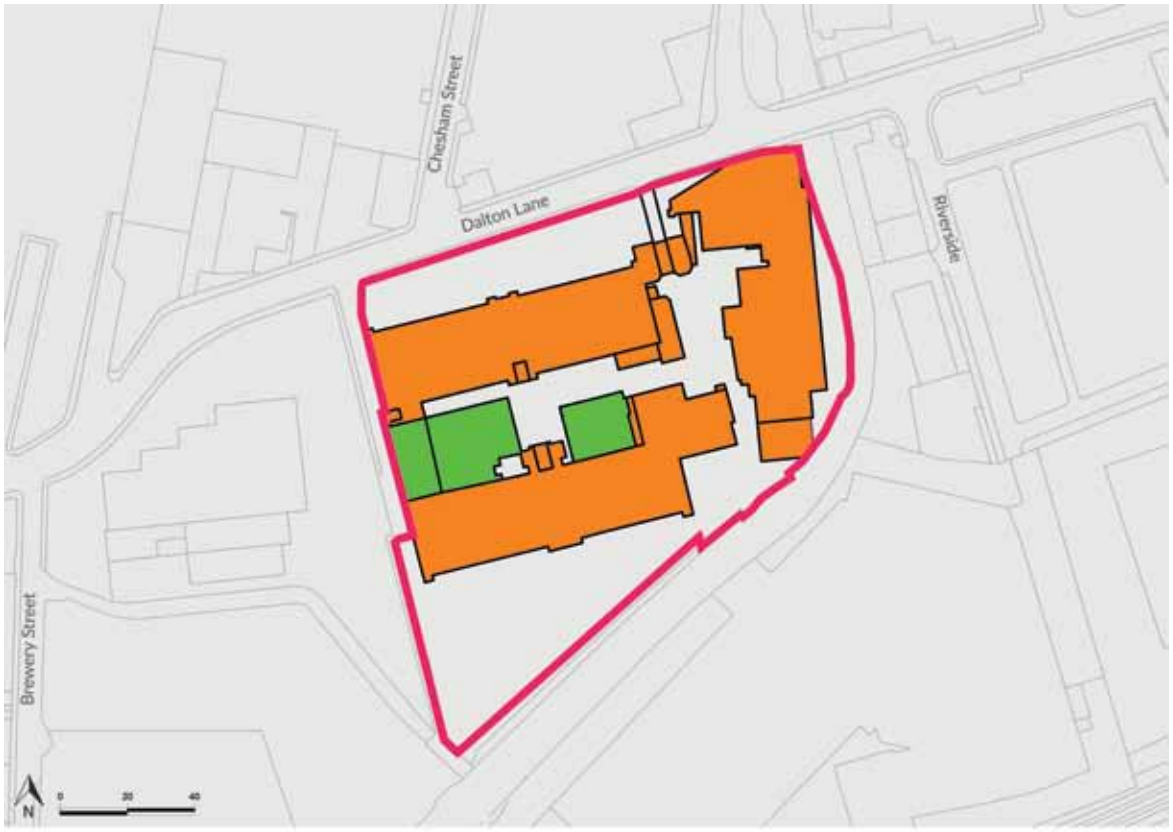
Next steps

Historic England to initiate meeting with mill owner to discuss forward strategy and agree approach to engaging LEP and local authority. Consideration to Heritage Enterprise grant application.

Advisory support to be secured for the mill owner, so a delivery strategy can be prepared.

Red line site boundary of Dalton Mills





Existing / Potential re-use Potential loss

Dalton Mills, redevelopment potential

Existing buildings

Redevelopment option: Dalton Mills

Prospect Mill
Thornton, Bradford

Site address

Prospect Mill, Thornton Road, Thornton, Bradford, BD13 3EL

Site and floor areas

Gross land area: 1.09 hectares (2.7 acres)
Gross floor area of mill building(s): 4,180 sq m

Description

The Prospect Mill complex is a Grade II listed steam-powered worsted mill originating in 1848 with various 19th Century additions (1849, 1855, 1850-60). It is adjacent to the former Dole Mill site.

The mill is vacant and has been subject to repeated fire damage. The most recent incident was in December 2015 which resulted in the loss of the roadside warehouse range.

The first buildings on site were dwellings of 1821, the base of a family putting out business. The mill and warehouse were built in 1849, representing a shift away from dispersed working. The mill of four storeys and attic and 11 window bays had a corner engine house. A second warehouse was constructed in 1855.

This was the main roadside warehouse block - an imposing three storey block with basement, which ran parallel with Thornton Road and descended the hillside (four storeys to the rear) and 14 window bays.

A second mill was constructed in 1860 of three storeys and eleven window bays and a six bay extension to the first mill was undertaken in 1865.

The occupiers were Joshua Craven and Son who were both spinners and manufacturers. It is likely that parts of the main buildings were used for powerloom weaving.

The freehold interest in the property is held by a private company which has explored the potential of redeveloping the mill and surrounding land for residential, retail and office development.

Historic significance

The significance of Prospect Mill was in part derived from the townscape composition it contributed to. This composition is defined by a combination of the close relationship between the industrial buildings on the site and the adjacent residential buildings together with the topography of the valley side.

The relationship of the mill with Thornton Road and the residential properties fronting it was also a defining townscape feature of the site which was lost as a result of a fire which took place during December 2015.

Condition

At the time of our inspection, the road facing the mill had been destroyed by the fire that took place in December 2015 and was in the process of being demolished by contractors.

The two cottages which remain on the road facing elevation are largely intact externally, with isolates missing or slipped slates and blocked rainwater goods. As a result, there may be rot within the roof timbers, and upper floors where water has entered the building over a period of time.

The main part of the remaining mill has a number of large penetrations within the roof. This has undoubtedly been prolonged over a period of time and may have caused extensive water damage internally and structural failure of the roof and floor timbers in areas. There are indications that the gable end has detached from the structure as a result of decaying floor timbers.

The roof structure to the lower level perpendicular block to the east of the main mill block has failed in a number of areas.

There is evidence of disposed corrugated sheet concrete that may contain asbestos around the site. In addition, evidence of Japanese Knotweed was observed on the site.

Planning

Prospect Mill is located in an area which is designated as Policy BW/H1.12 Dole Mill, Thornton Road, Thornton in the Replacement Unitary Development Plan 2005. This is a Phase 1 Housing site. The site is located in the Thornton Conservation Area.

There are no existing planning consents for the site. Previous planning permissions include: 04/03026/FUL and 04/03025/LBC - residential development (93 dwellings), however it should be noted that whilst the listed building consent was granted and planning permission was granted subject to the completion of a section 106 Legal Agreement, the S106 Agreement was not completed within a reasonable timescale.

Opportunities and restraints analysis

Opportunities
Prospect Mill is located adjacent to site of the former Dole Mill which is included as a phase 1 housing site on the principle that any early development of the site should be comprehensive and involve Prospect Mill.

The local authority is concerned about the deterioration of the mill cottages fronting Thornton Road and there is an opportunity to refurbish these as part of the comprehensive redevelopment of Prospect Mill.

Thornton village is growing in popularity and market values are starting to improve. We are advised that new residential development will shortly commence on the site of the former Fairweather Green Mills, Thornton Road, which will test the interest in the residential property market in Thornton.

The site lends itself to residential development above all other uses and has the benefit of being located close to the heart of Thornton village.

Constraints
The site is currently accessed by trespassers and used for antisocial behaviour which detracts from the local environment.

There is evidence of asbestos containing materials on the site, the removal of which will need to be managed carefully.

Japanese Knotweed and Buddleia (invasive weeds) are also growing on the site and will need to be treated prior to construction.

The topography of site will necessitate significant levelling works adding further construction / development costs.

Redevelopment options

The significance of Prospect Mill has been harmed by the loss of the 1855 warehouse building which fronted Thornton Road and the parallel 1849 warehouse. The surviving two mill buildings to the south of the site are in a poor condition and the boiler house is ruinous. The loss of the northern warehouse buildings opens up a large parcel of land for development.

The site slopes steeply from Thornton Road in the north, down to Pinch Beck in the south and there is a substantial parcel of undeveloped land located to the south of the southern mill building.

The northern and southern parcel of land are separated by the surviving mills and the boiler house.

The ruinous condition of the boiler house indicates that loss is inevitable however, this will allow the northern and southern sections of the site to be connected to each other within the site boundary.

The surviving two mill buildings should be retained and converted (almost certainly into residential or possibly a care home) however, it is recognised that both buildings are in a very poor condition and viable conversion is unlikely without some form of enabling development.

If further loss is to be considered then this should be the northern mill (1849) which although one of the oldest surviving buildings on site has now lost its context.

The landscape impact of the southern mill is more significant as this provides a strong edge to the developed part of the mill complex and the village.

New development within the site should follow the established development conventions of building along the contour lines and using an orthogonal layout with simple bold parallel forms.

Development to the south of the southern mill should be avoided.

New development should repair the Thornton Road frontage however, a set-back form may be required in order to develop unit types capable of meeting with market expectations.

Redevelopment option:

Residential development comprising:
- Refurbishment of mill cottages on Thornton Road (606 sq m GEA / 545 sq m GIA).
- Refurbishment of smaller southern remaining mill range into housing 1,158 sq m GEA / 1,042 sq m GIA – convert to houses.
- Optional refurbishment of remaining main mill range into housing 2,928 sq m GEA / 2,635 sq m GIA. (Not shown in sketch proposal).
- New build residential development comprising 2,717 sq m GIA.

Recommendations for delivery

We recommend that a planning framework is established collaboratively with Bradford Council and Historic England to determine the way in which new build could be delivered sympathetically to conserve the cottages fronting Thornton Road and the approach to the refurbishment of the mill building(s).

Any viability gap arising from the development will need to be addressed and could foreseeably be achieved through:

- Further off-site enabling development; or
- Subsidy via tax increment financing utilising New Homes Bonus receipts; alongside
- Nil S106 planning obligations.

If further loss of the mill is considered appropriate, other potential uses for the site could include the provision of a care home/retirement living accommodation, particularly given the proximity of the site to Thornton village and the good public transport links from the site.

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for postcode area BD13 3 (Thornton) illustrates average achieved house prices ranging from £103,573 to £144,805 with an average of £123,400.	£1,937.50 per sq m (£180 per sq ft)
Office	Thornton's office market is limited, with office occupiers showing a preference to Bradford City Centre. It is unlikely that office development will be viable in Thornton due to the relatively low level of rental values which could be achieved..	£53 per sq m (second hand)
Retail	Thornton Village has a Co-operative, a Post Office and a number of independent retailers including cafes and restaurants.	£142 per sq m (second hand)
Leisure	n/a	
Industrial	Thornton Village does not have an industrial property market. There are industrial units located on Thornton Road, but these are located nearer to Bradford and include the Thornton Road Industrial Estate which offers workshops from 48-465 per sq m on flexible terms.	£32 per sq m (second hand)

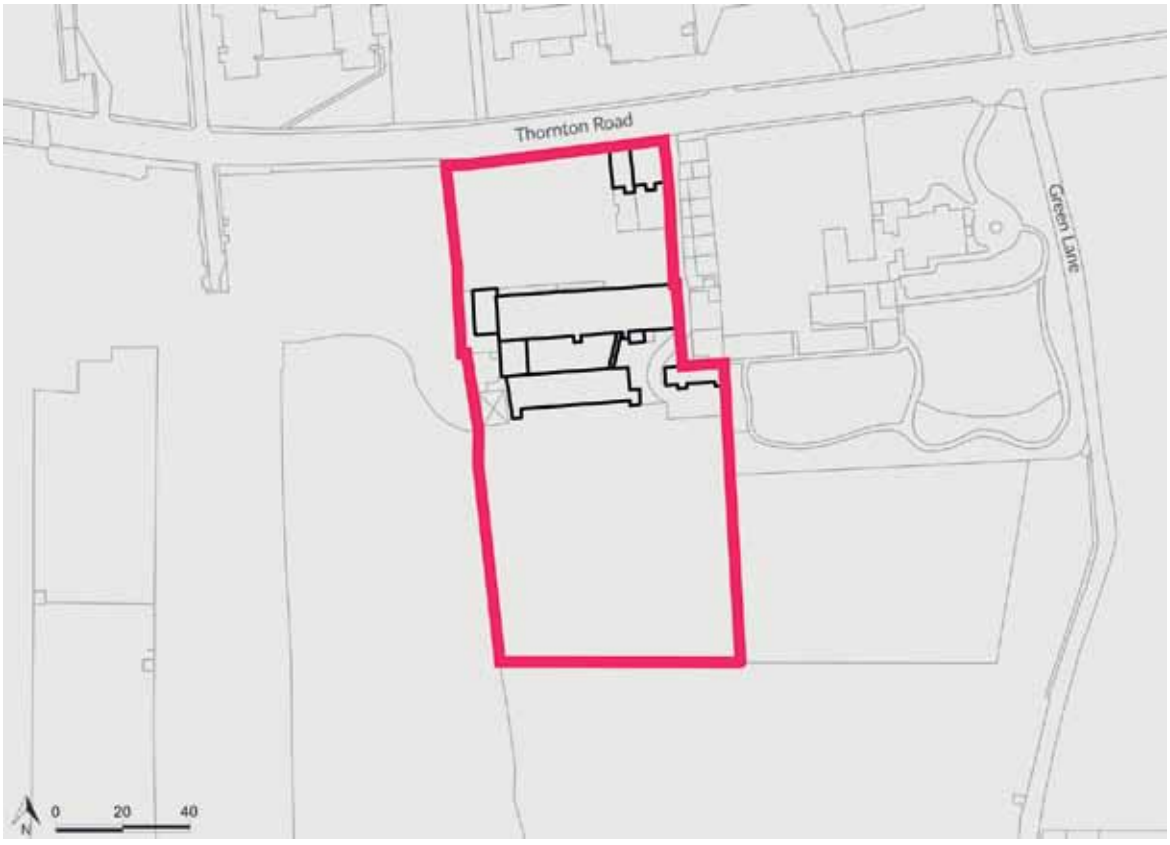
Next steps

We recommend Historic England initiates a meeting with the mill owner and the local authority to discuss the redevelopment of the site. We suggest that discussions also include the adjacent former Dole Mill site, the freehold interest of which we understand is held by the same landowner.

The mill owner has previously instructed property agents to dispose of the site. If this aspiration remains unchanged, there is potential to dispose of the property by advertising the site, or at auction. Alternatively the site could be promoted and a developer partner secured with an option for the developer to purchase the site subject to securing planning consent.

The scale of the site – particularly when combined with the adjacent Dole Mill site, is sufficient to attract local, regional and national housebuilders and as such there is potential to bring this site forward for development through a collaborative approach involving Historic England, Bradford Council (Planning, and Regeneration) and the private sector.

Red line site boundary of Prospect Mill



Prospect Mill, redevelopment potential

Existing / Potential re-use Potential loss Potential development area

Redevelopment option: Prospect Mill

Existing buildings A New residential B New residential C Mill converted to residential D New residential

Old Lane Mill / Rawson's Mill
Halifax, Calderdale

Site address

Old Lane Mill / Rawson's Mill, Old Lane, Halifax, HX3 5QN

Site and floor areas

Gross land area: 4.7 hectares (11.7 acres)
Gross floor area of mill building(s): 4,682 sq m

Description

Old Lane Mill is a Grade II* listed worsted mill which is recorded on the Historic England Heritage at Risk Register 2015. It was constructed between 1825 and 1828 for James Ackroyd and acquired by the Rawson family in 1836.

The mill is of six storeys plus attic and is arranged in an L-Plan. It has 15 x 5 bays with a further 4 bay wing to the right. The mill is the oldest and largest surviving example of a multi-storey, steam powered, iron framed textile mill in the important textile centre of Halifax. Old Lane Mill's attached boiler house and chimney are listed separately from the main mill building. They are also listed Grade II*.

The freehold interest in the property is within private ownership. The mill is unoccupied and the freeholders have aspirations to redevelop the building for residential use. They purchased the site in the recession from Britannia Developments who became insolvent.

Historic significance

The significance of Old Lane Mill is in part derived from its age, historical associations and the quality of its architecture. It is probably the best preserved mill of its type (multi-storey, iron framed) in Yorkshire.

Condition

Access to the mill and buildings was not achieved due to the structure being unsafe. The condition is a visual inspection undertaken by a building surveyor.

The mill has a number of penetrations within the roof which has undoubtedly been prolonged over a period of time which may have caused water damage internally, including structural damage to the roof. Windows to the mill are missing which has allowed pigeons and unauthorised access. It is therefore assumed that the build-up of pigeon guano could be a health hazard. It is unknown what activity has been undertaken by the unauthorised access.

There is evidence of failure of high level stonework, which has resulted in pieces deboning. Isolated areas of frost damaged sections of stonework, with varying degrees of severity. Sections of the site boundary retaining walls have failed in areas.

A water course runs through the site and beneath the mill building. There is evidence of disposed corrugated sheet concrete that may contain asbestos around the site. In addition, evidence of Japanese Knotweed was observed.

Planning

Old Lane Mill is a filtered site (LP1180) in the Local Plan Allocations and Designations document. It is currently unallocated, however it has the benefit of a planning permission for 64 dwellings (08/01355/FUL - 56 dwellings and 08/01356/LBC and 08/01329/FUL - 64 dwellings).

Opportunities and constraints analysis

Opportunities
The site benefits from a significant land area which could be brought forward for development potentially improving the viability of any development scheme as a whole.

The site is within close proximity to Dean Clough and has the potential to provide a complementary property offer.

The site benefits from a valley setting within close proximity to Halifax Town Centre and Dean Clough.

Constraints
Access to the site would benefit from improvement.

The mill is adjacent to a waste transfer site which could affect its appeal from an end user perspective, especially as occupiers would currently need to pass the waste transfer site in order to gain access to the mill. However, we understand that discussions are underway with Calderdale Council to agree alternative access points to the site.

The condition of the mill will necessitate substantial structural remedial works.

Redevelopment options

The Old Lane Mill complex consists of two adjacent listed buildings, the six storey mill building (1825-28) and the boiler house and chimney (1827-28). Both buildings are listed Grade II* and both are in a poor condition with the boiler house being ruinous. There is a culverted water course associated with the mill. Both buildings and the water courses should be retained and restored.

The mill complex is located in a narrow steep sided valley. The valley bottom was previously occupied by weaving sheds and other buildings associated with the mill which have now been lost. The valley sides are covered with mature woodland and the valley bottom is rough grassland.

Although there have been previous aspirations to develop the site for a residential scheme occupying the mill buildings and the adjacent valley there are a number of constraints which may challenge the viability of a conventional housing development in this location.

Vehicular and pedestrian access to the site is poor. The southern access runs past the local waste recycling depot; however we understand that discussions are underway with Calderdale Council with respect to agreeing alternative access arrangements.

The restoration of the mill will be greatly assisted by the development of adjacent associated land.

The mill has potential for conversion into to a range of uses including residential units, managed apartments and hotel. Should hotel use be considered then adjacent land and possibly the boiler house would be needed to provide ancillary facilities.

Although staircases survive it is likely that any future use will need to create addition vertical circulation either to satisfy means of escape or to allow future uses to function efficiently. This will entail some loss of fabric.

In order to optimise the potential of the site and to protect the setting of the mill buildings, it is recommended that the site should not be filled with development. The west side (that affected by overshadowing) should be left undeveloped and landscaped. The east side of the site could be developed for larger family housing and should capitalise on the unique hidden and tranquil nature of the valley.

Redevelopment option:

- New build 5,123 sq m GIA (assumes 1/3 gross to net of residual land area and 1/3 site cover)
- Conversion of mill to hotel - 4,682 sq m GIA or residential.

Alternatively a conversion for flats together with new build residential development in accordance with the previous planning permission.

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for post-code areas HX3 6 and HX3 5 illustrates average achieved house prices ranging from £88,028 to £137,083. With an average of £119,639. There is limited new build development in the area with the exception of Admiral Way, Halifax HX2 0SW which achieved an average of £1,700 per sq m (£158 per sq ft).	£1,722 per sq m (£160 per sq ft
Office	The office market in Halifax includes a number of converted mill buildings. The main office location is within the town centre, offering mainly second hand office stock. The converted Dean Clough mill offers grade A office accommodation ranging from 10 – 5,899 sq m (110 - 63,500 sq ft). There are over 140 businesses located at the site. Holmfield Mills located to the north-west of Halifax and the Elsie Whiteley Innovation Centre are other examples of mill conversions.	£101 per sq m (second hand) £145 per sq m new build £156 per sq m at Dean Clough
Retail	The town's retail parks are clustered around the north and north-west of the city centre. These include Charlestown Road, Greenmount, Crossley and Victoria Retail Parks. Given the site's location any retail would need to be specialized / destination and accompanied by significant improvements in access. We are not aware of any requirements currently.	£214 per sq m
Leisure	Halifax Town Centre has improved its leisure offer since the completion of Broad Street Plaza which includes Vue cinema, a gym, a number of restaurants and the Premier Inn. Dean Clough mills offers a range of leisure facilities including a Travelodge, restaurants and cafes and a small range of retail outlets. We are aware that Travelodge has a hotel requirement in Halifax despite their existing facility at Dean Clough. We anticipate a requirement for 60-100 rooms with a NIA of 21 sq m per room and a GIA of 30 sq m per room.	£174 per sq m
Industrial	The industrial hub for Halifax is located to the north of the town at Holmfield Industrial Estate, Sidhil Business Park and Calderdale Business Park.	£44 per sq m (second hand)

Recommendations for delivery

Residential / hospitality are considered the most appropriate end uses for this site – Titanic Mills, Linthwaite is an example of such a redevelopment approach. The converted mill includes a spa, hotel and residential accommodation.

There is potential to utilise the funding proceeds from housing delivery to pump prime the delivery of the site. This will require the engagement of the local authority and mill owner with support from Historic England.

Next steps

Explore potential for hotel operators and follow up requirements in Halifax.

Historic England to facilitate a meeting between local authority (Highways, Planning and Conservation Officer) with a view to preparing a development brief to guide the redevelopment of the site and the principles of 'constructive conservation' to enable a viable solution.

Engage Homes and Communities Agency with respect to potential for recoverable investment fund to assist with deliverability and or starter homes, custom build.

Red line site boundary of Old Lane Mill / Rawson's Mill

Old Lane Mill / Rawson's Mill, redevelopment potential

Existing / Potential re-use

Potential loss

Potential development area

Tree cover

Non-development area

Redevelopment option: Old Lane Mill / Rawson's Mill

Existing buildings

A Mill conversion to hotel / residential

B Mill conversion to hotel / residential

C Large extended family homes

Old Town Mill / Mitchell's Mill

Old Town, Hebden Bridge, Calderdale

Site address

Old Town Mill, Old Town Mill Lane, Old Town, Hebden Bridge, HX7 8SW

Site and floor areas

Gross land area: 0.43 hectares (1.1 acres)
Gross floor area of mill building(s): 3,644 sq m

Description

Old Town Mill is a Grade II listed textile mill of mid-19th Century origin with later additions in 1881 and 1888. The mill buildings are largely grouped around a narrow courtyard. A large two storey mill range (1851) runs south-east to north-west parallel with Old Town Mill Lane. Alongside the mill building to the south-west is a stair tower which adjoins a multi-storey warehouse aligned south-west to north-east forming the end of the courtyard. A boiler house lies on the north-west side of the mill, with the chimney to the rear and a small series of north-light sheds is situated between the mill building and the warehouse.

The Mitchell brothers were woollen manufacturers and the mill produced textiles until the 1950s when the industry declined. The mills were made available at auction and were purchased by a local farmer (the current owner) to house chickens and cows. Whilst parts of the mill are vacant, the mills provide workspace for a number of local businesses including a juggling company, joiners, curtain manufacturer for the hospitality industry, a local artist and car workshop.

The freehold interest in the property is held by a private individual.

Historic significance

The significance of Old Town Mill is in part derived from is completeness as a small rural mill complex. The relationship between the mill and the surrounding open landscape and as well as its relationship with the hamlet within which it sits are significant. The adaptation of the mill internally and its association with farming are important as is the survival of some machinery.

Condition

Access to the mill was limited to areas with the owner present. The condition is a visual inspection undertaken by a building surveyor. Part of the mill is occupied by tenants and inspections to these areas was not achieved.

Minor isolated missing sections of roof coverings and missing and blocked rainwater goods were observed during our inspection, with evidence of minor current and historic water staining. Generally minor in nature and being managed by the owner. A number of the window openings have been blocked in part, possibly due to the historic internal use of the mill through the years.

Internally, the mill has been sub divided to suit the owner's letting strategy.

Stonework is generally in fair condition, with only minor staining of stone beneath blocked and missing sections of rainwater goods.

Planning

Old Town Mill is located in an area which is designated as Green Belt in the Replacement Calderdale Unitary Development Plan 2006.

There have been no planning applications associated with this site since 2000 (electronic planning portal) there may be historic applications which are held in the council's archives.

Opportunities and constraints analysis

Opportunities
Old Town Mill benefits from spectacular views over the surrounding landscape due to its elevated location on the hilltop overlooking Hebden Bridge.

The mill is located adjacent to the cricket ground and is surrounded by open space.

Old Town is a desirable location for those looking for a remote rural setting and commands strong residential values which we feel are sufficient to attract developers and investors to the site.

The success of nearby Peckett Well Mill demonstrates that there is a demand for residential dwellings in this location.

Constraints
Old Town has a population of circa 1,000. Given its remote rural location, services in Old Town are limited. The settlement includes two chapels, a village green and cricket pitch, a post office and a village pub.

Access to the site is constrained due to the steep nature of the valley and narrow roads. This may cause difficulty in the redevelopment of the site and construction vehicle movements will need to be carefully managed with Calderdale Council's highways to ensure minimal impact on local residents.

Given the remote rural setting, sustainable reuse of the mill is limited to residential end uses. The success of nearby Peckett Well Mill demonstrates that there is a demand for residential dwellings.

The site is located in the green belt and as such development will need to be carefully managed.

Redevelopment options

The developed footprint of Old Town Mill has remained largely unchanged since the mid 19th Century, although some rebuilding may have taken place. The weaving sheds to the rear of the main mill buildings appear to have been substantially altered over time and are now ruinous. These lower and less visually impactful elements of the mill could be removed in order to secure viable conversion along with a sustainable future for the other more historically and visually significant buildings within the group.

The mill owner and his advisors have considered proposals for the removal of the rear single storey weaving sheds. The narrowness of the southern warehouse block means that it could be efficiently sub-divided vertically in order to create a residential terrace. Land to the south and west of this block would allow the creation of a safe vehicular access route as well as providing gardens.

The north-eastern mill block has a deeper plan which make conversion into conventional family housing challenging however, apartments or contemporary back to back property could work here subject to viability.

The area currently occupied by the weaving sheds could be made into gardens associated with the adjacent residential units. Alternatively it may be able to accommodate a limited quantity of new residential accommodation. New development would need to carefully consider impacts on the heritage assets (including the overall composition) as well as landscape impacts.

Redevelopment option:
Given the historical significance of Old Town Mill we have assumed that the mill buildings, (with the exception of the rear single storey weaving sheds) are retained and converted into residential dwellings. The redevelopment option comprises:

- Conversion to residential 2,869 sq m GIA
- New build units 500 sq m GIA (assumes 50% gross to net of residual land area and 1/3 site cover).

Recommendations for delivery

Residential is the most appropriate end use for the redevelopment and reuse of Old Town Mill given the site's remote rural location.

The redevelopment may be able to be viably accommodated through a selective approach to demolition and adaptation together with a flexible approach to how new build could be accommodated on site.

Any viability gap in the redevelopment of the mill buildings themselves could be potentially funded through off site enabling development. This could include property assets held by the freeholder and / or entering into a joint venture with neighbouring land owner(s).

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for postcode areas HX7 7 and HX7 8 illustrates average achieved house prices ranging from £155,576 to £297,373. With an average of £222,852. At Peckett Well Mill the average achieved sale price is £248,800.	£2,430 per sq m based on Peckett Well Mill as a direct comparator in the local area
Office	Not the most appropriate use in this location	n/a
Retail	Not the most appropriate use in this location	n/a
Leisure	Not the most appropriate use in this location	n/a
Industrial	Not the most appropriate use in this location	n/a

Next steps

The mill owner would benefit from guidance and support from Historic England, the council's Conservation Officer and property consultancy support in order to bring forward the redevelopment of the mill.

The mill owner will need to assess whether they undertake the direct delivery of the development, or whether they choose to sell the property with (or without) the benefit of planning permission.

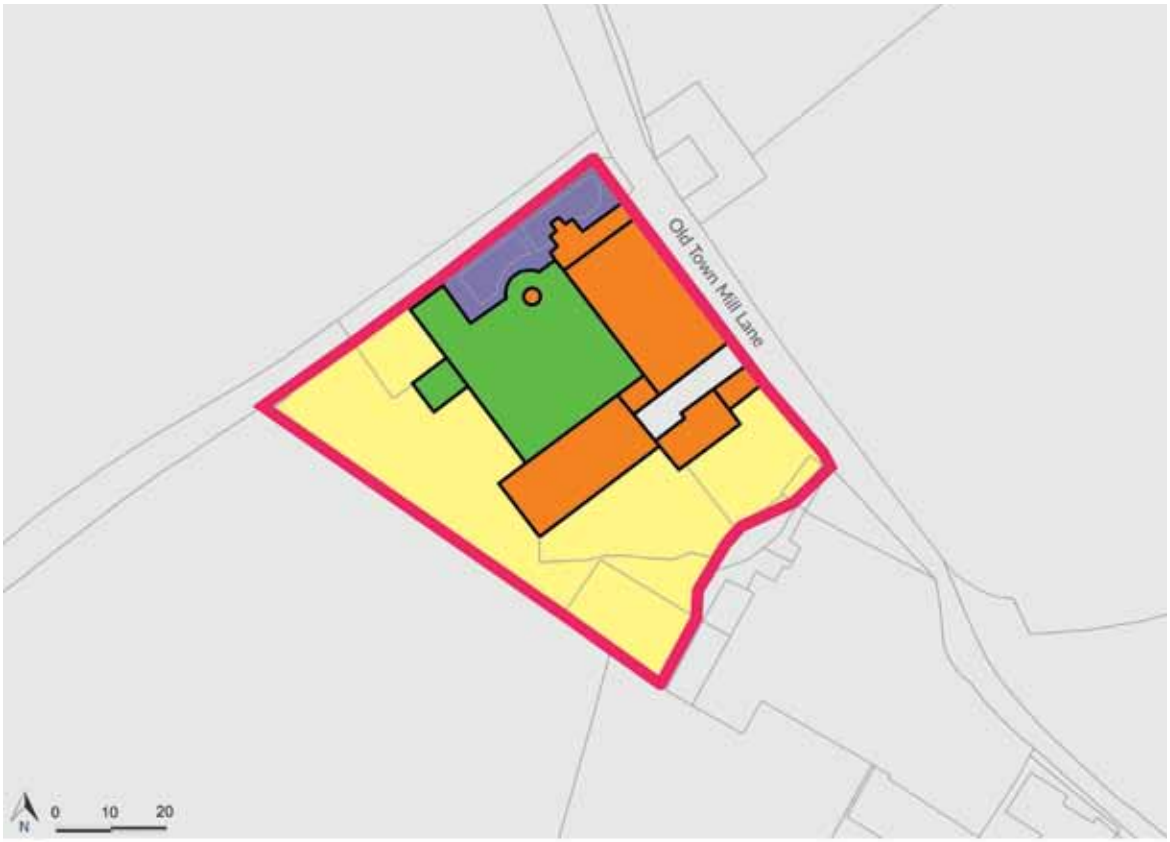
Should the site be brought forward for development a detailed feasibility study into the redevelopment options would be required, including detailed designs, cost plans and an analysis of funding options to enable delivery of the scheme. Early discussions with the local planning authority are recommended given the location of the site in the green belt.

The mill owner has a number of tenants on site which provide a rental income. Assessment of the terms of occupation will need to be undertaken, so that the businesses can be relocated. It would be ideal if these businesses were retained in the local area.

There would be benefits in the freeholder engaging with a property adviser to seek advice on the redevelopment options and to benefit from the lessons learned elsewhere.

Red line site boundary of Old Town Mill / Mitchell's Mill

Old Town Mill / Mitchell's Mill, redevelopment potential



Existing / Potential re-use

Potential loss

Potential development area

Non-development area

Redevelopment option: Old Town Mill / Mitchell's Mill

Existing buildings

Carlinghow Mill
Batley

Site address

Carlinghow Mill / Park Works, 644 Bradford Road, Batley, WF17 8HG

Site and floor areas

Gross land area: 0.65 hectares (1.6 acres)
Gross floor area of mill building(s): 1,642 sq m

Description

Carlinghow Mill, also known as Park Works is a Grade II listed corn mill originating in the late 18th Century. The mill was originally water powered with historic maps showing three large mill ponds on Carlinghow Beck to the north of the site. The presence of a substantial chimney suggests a change to steam at some point. The form of the main mill building resembles that of a textile mill rather than a corn mill.

Seven buildings comprise the mill complex. The main mill building has four storeys with attic, three by four bays and a three storey out building to the north. The other buildings comprise a cart shed (single storey), workshop/ storage (single high storey), cart shed/stables (single storey and seven bays), mill of three storeys with a four bay structure to the rear. A very large square stone chimney projects from the west gable end, cart shed (single story with wagon door to south gable end), and Shay Farm (18th Century farm house).

The freehold interest in the property has been held by the Exley family since 1914 (five generations). Historically, the family operated the mill as mill furnishers, buying, refurbishing and selling on textile mill machinery. Today, the family operate their haulage business from the site and use the mill buildings for office accommodation and as a storage area for the haulage business. The family also reside adjacent to the curtilage of the mill site.

Historic significance

The significance of Carlinghow Mill is in part derived from the rare survival of a former late 18th Century corn mill within an urban context. The adaptation of the mill to accommodate new uses and the association of the mill with the same family for four generations are also significant.

Condition

Access to the mill was limited to areas with the owner present. The condition is an external visual inspection from a building surveyor's perspective and not a structural engineer.

An extension to the mill has been undertaken and offers support to the original mill. The extension is a shell and has been constructed well. There is an open water course that runs through the site into a culvert beneath the mill and adjacent buildings. Diversion of this course should be considered.

Internally, the mill has been sub-divided to suit the owner's use. Evidence of materials that may contain asbestos were observed during our inspection.

Stonework is generally in fair condition, with only minor staining of stone beneath blocked and missing sections of rainwater goods.

Planning

Carlinghow Mill is undesignated in the Kirklees Unitary Development Plan 2007.

Previous planning permissions include:
89/01950 change of use of mill buildings to residential use (7 units); 90/03489 Erection of entrance porch to offices; 90/05688 Extension and conversion of outbuildings to form detached dwelling; 90/06784 conversion of barn to three dwellings and mill annex to 1 dwelling (each with garage) and formation of access road; 91/02117 and 91/02118 Erection of detached garage; 91/03882 erection of residential development plots 1, 2 & 3 only; 96/90236 Erection of 2.4m high palisade security fencing and gates (refused); 96/92488 Erection of warehouse/store/garage building and 2012/91700 Works to TPOS 01/91.

Opportunities and constraints analysis

Opportunities
Relocation of the haulage company would enable new build development to be constructed within the curtilage of the mill complex. The proceeds from such new development could be used to fund the maintenance and repair of the mill buildings.

Constraints
The costs of relocating the haulage business will need to be ascertained and the Exley family will need to determine whether this is in fact something that they would consider in order to progress the redevelopment of Carlinghow Mill.

Culverted water courses on site represent constraints that require mitigation.

Redevelopment options

The two buildings of heritage significance within the site are the main mill building and the barn. Other buildings within the site boundary are recent additions and could be removed. The recent eastern extension to the mill replaces an earlier building which occupied a similar footprint.

The site shares its private access from Bradford Road with a number of existing private residential properties (occupied by the Exley family) which line the southern site boundary. The rear extension to the mill has been converted into residential use.

The site owners have previously considered removing the remaining employment uses from the site (haulage) and bringing forward a residential scheme. Both the mill and the barn are domestic in scale and will convert efficiently.

Any residential development will need to take into account the level changes to the east of the site and must also respect the settings of the heritage assets.

Redevelopment option:

- 974 sq m mill refurbishment
- 767 sq m residential enabling development.

Recommendations for delivery

Carlinghow Mill is arguably not in any position of significant risk to warrant the level of redevelopment that other derelict and vacant mill sites require. The property is used and maintained as part of the owner occupier's haulage business. It is however, under-utilised and upkeep, repair and maintenance costs could present difficulties for the owners especially if the current business ceases to operate on the site.

Should a solution be required to safeguard the future of the mill it is considered that the most appropriate solution would be conversion for residential use paid for through enabling development on site.

Next steps

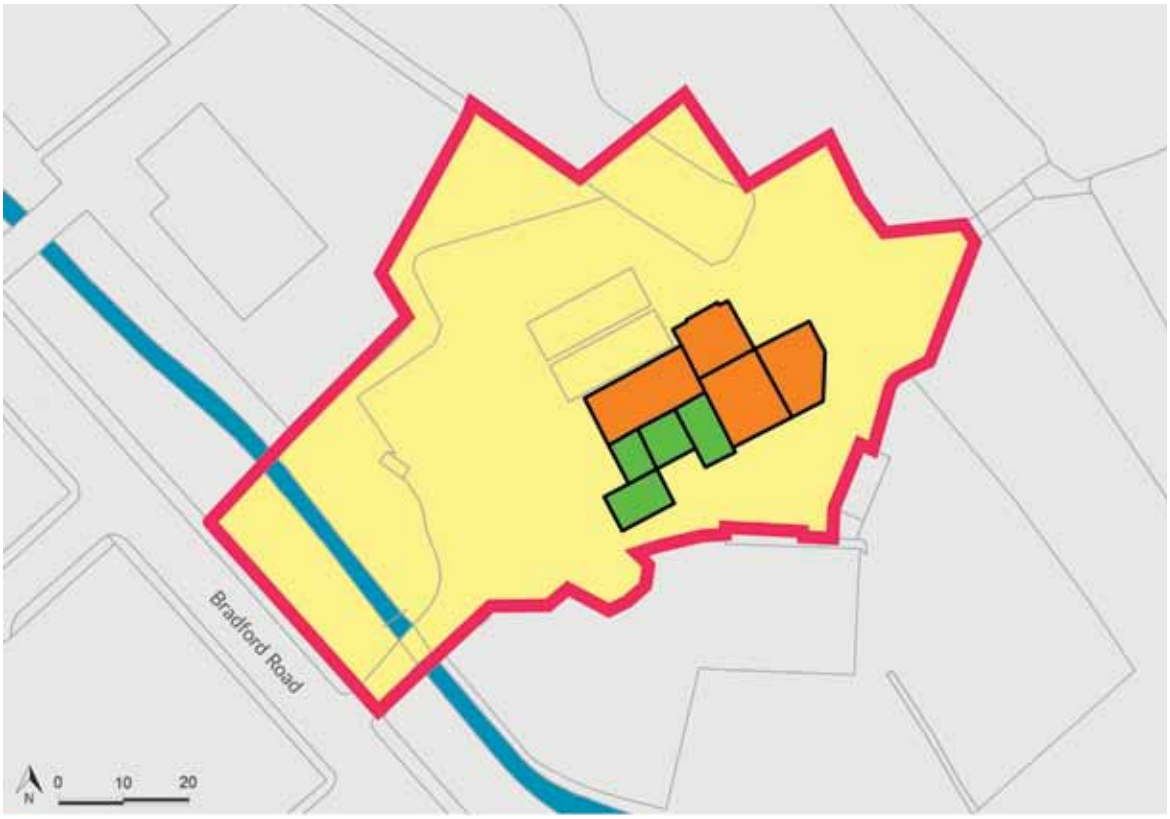
Given the position of this mill it is considered that no initial further action is required other than advisory service to the owners.

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Assessment of Land Registry Data for postcode area WF17 8 and WF18 0 illustrates average achieved house prices ranging from £102,472 to £192,756. New build residential development in the area is limited, however at Brooke Close, WF17 8NL, the housebuilder achieved an average of £1,647 per sq m for two semi-detached properties and at Prospect Court, Batley, WF17 5LD an average of £1,410 per sq m has been achieved.	£1,529 per sq m (£142 per sq ft) however uplift applied due to exclusivity of Carlinghow Mill site, so higher revenues are capable of being achieved. Assumed £1,830 per sq m (£170 per sq ft).
Office	Batley's office market is limited, with office occupiers having a preference to Leeds, Bradford and Dewsbury. Batley's office locations include Soothill Business Park and Batley Business Park; other office units are predominately second hand stock located above high street retail.	£75 per sq m (second hand) £140 per sq m new build
Retail	Batley's retail offer includes a range of local shops situated along Commercial Lane with occupiers such as JBM Bargains, Store Twenty One, and various independent retailers. The Mill Batley, is a converted Mill situated on Bradford Road, which offers over 40 stores across various factory outlet shops including; Edinburgh Woollen Mill, Klass and Mountain Warehouse and numerous restaurants. Birstall Retail park is within close proximity with occupiers including; Ikea, Argos, River Island and Next.	£148 per sq m (second hand)
Leisure	Batley's leisure market is fairly limited, with small betting shops populated along the high street. The closest leisure facilities are located at Birstall Retail Park which includes a Showcase Cinema.	£161.46 per sq m new build
Industrial	Batley's industrial offer includes Grange Range Industrial Estate, and a cluster of industrial units located on Bradford Road towards Dewsbury. There are numerous smaller industrial sites sparsely located along Bradford Road including Batley Enterprise Centre and Bulrush Business Park. Further industrial units are located on Bradford Road in the direction of Birstall and include Wilton Industrial Court and a number of car showrooms and one off industrial units.	£40.00 per sq m (second hand) £ 45.64 per sq m new build

Red line site boundary of Carlinghow Mill

Carlinghow Mill, redevelopment potential

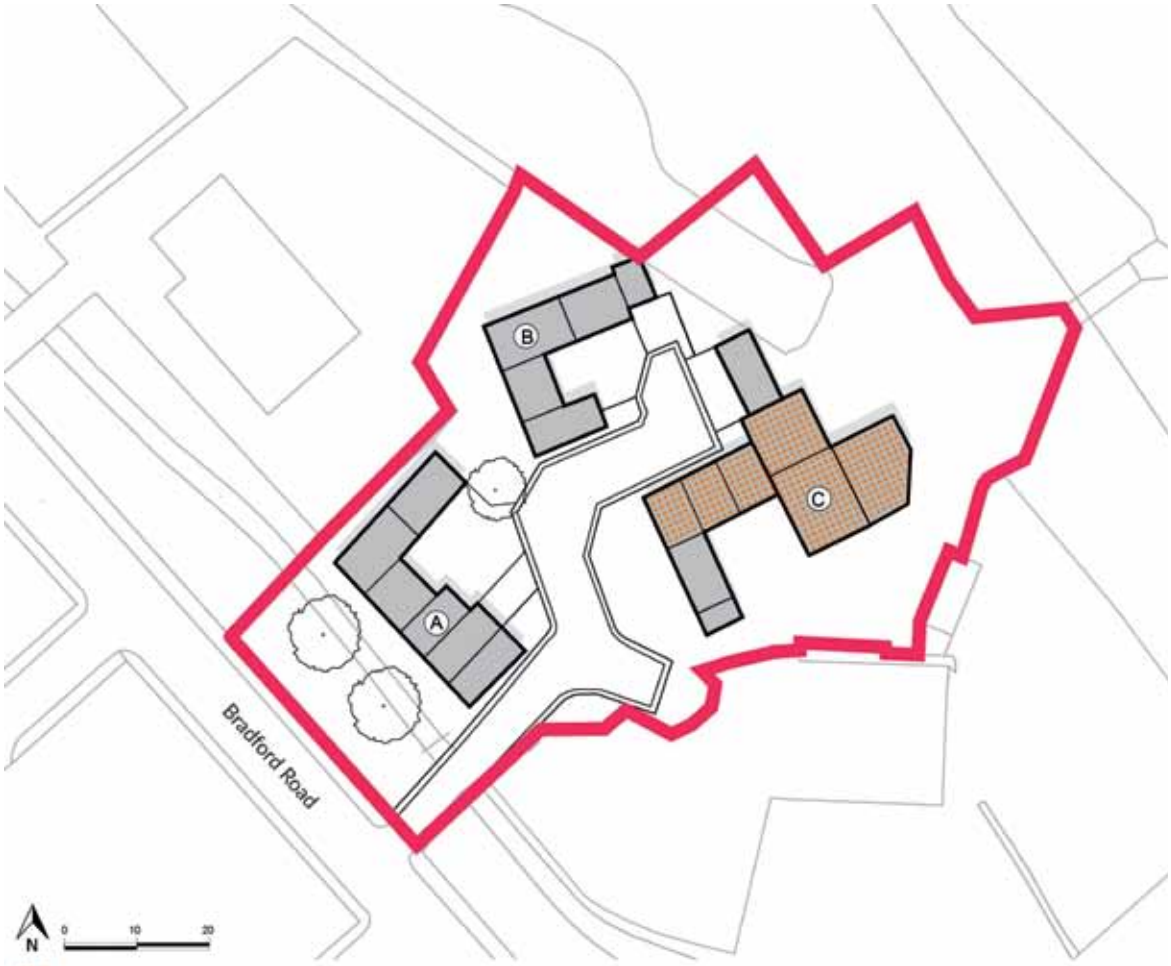


Existing / Potential re-use

Potential loss

Potential development area

Redevelopment option: Carlinghow Mill



Existing buildings A New residential B New residential C Mill conversion to residential with extensions

Parkwood Mills
Longwood, Huddersfield

Site address

Parkwood Mills, Grove Street, Longwood, Huddersfield, HD3 47Q

Site and floor areas

Gross land area: 2.1 hectares
Gross floor area of mill building(s): 4,650 sq m

Description

Parkwood Mill is a Grade II listed mill complex. The integrated Room and Power woollen mill was constructed in the mid to late 19th Century for the firm of John Broadbent and Sons, and tenants. The main buildings of the group are numbered 1 to 8. Mill 1 is the earliest surviving mill, built in the early 1850's on the site of John Broadbent's first mill.

By 1887 the tenants included spinners, manufacturers and one dry finisher. In November 1887 the Broadbent's acquired the finisher's company and it became the Longwood Finishing Company Ltd, remaining in the hands of the Broadbent family until 1910. Parkwood Mills closed in 2001. The mill is a complete and unique example of the development of a large Room and Power business which returned to single company ownership in World War I.

The freehold interest in the property is held by PJ Livesey who have redeveloped Mills, 1-4 into 183 one, two and three bedroom apartments including penthouses. PJ Livesey aspire to find alternative uses for Mill 5 and Mill 6 & 7 which are currently vacant; however they feel current sales revenues of £1,722.22 per sq m (£160 per sq ft) are not strong enough to enable the redevelopment of the remaining mill buildings, their target being £2,152.78 per sq m (£200 per sq ft).

Historic significance

The significance of Parkwood Mills is in part derived from the scale of the complex and the relationship the surviving buildings have with each other and the public highway.

Condition

Access to the mills was not achieved as the owners advised that they were unsafe; an external inspection was undertaken by a building surveyor. Visual inspection of part of Mill 5 was not achieved due to the installation of a site advertising screen.

The mills have minor penetrations within the roof and sections of missing rainwater goods which have undoubtedly been prolonged over a period of time which may have caused water damage internally. Some glazing was missing from Mill 6 & 7.

Stonework is generally in fair condition, with only minor frost damage to exposed high level sections beneath missing sections of rainwater goods.

Planning

Parkwood Mills is designated as unallocated land within the BE5-8 conservation area in the Kirklees Unitary Development Plan.

A number of planning permissions and listed building consents have been granted relating to the conversion of the mills, some demolition work, erection of housing and apartments and hanging signs dating back to 1984.

These include:
2009/90615 Listed Building Consent for Conversion of Mill 5 to 22 apartments with 8 car parking spaces at ground level. New entrance porch and alterations to Mill 6 & 7 (within a conservation area). 2005/9331 Demolition of mill buildings, conversion of existing mill buildings to 159 apartments and 7 houses. Erection of 4 houses and 24 apartments with car parking and associated works (listed buildings within a conservation area).

Opportunities and constraints analysis

Opportunities
Mill 6 & 7 could potentially be converted into houses in a sympathetic way that preserves the external character and features of the building.

Due to the lack of external space for gardens and car parking, there are opportunities to convert the ground floor of Mill 6 & 7 into under croft car parking.

Removal of the roof of Mill 6 & 7 will assist in reducing over shadowing. There is an opportunity to replace this with a rooftop terrace, behind the façade of the mill software, thereby creating external space for residents.

Constraints
The window to wall ratio of Mill 5 is poor. Mill 5 is a deep mill making residential conversion challenging.

The orientation of Mill 6 & 7 is not ideal (north facing and overlooks the road).

Although the other mill buildings have been successfully converted, the market for apartments is now weaker in this location which is impacting on the viability of the development.

There is a lack of external space for gardens and car parking around Mill 5 and Mill 6 & 7.

It is difficult to convert Mill 5 and Mill 6 & 7 as the maximum size in the area for a three bed unit is 1,000 sq ft to ensure a sale at an appropriate revenue can be achieved. The conversion would require sub-division of the building to create a small enough layout. The developer has considered most options for the future of this block including; back to backs, introducing a central light well and the removal of the upper floor.

Redevelopment options

The future development of Parkwood Mills should seek to retain the composition which includes the various mill buildings fronting the highway and visible from it. The deep footprints of Mill 5 and Mill 6 & 7 make efficient conversion into residential property challenging.

The two storey Mill 5 could be subject to significant intervention to facilitate viable conversion into residential use. This could entail the retention of the frontage of the mill facing Stoney Lane with the rear section removed reducing the block depth and allowing conversion into a residential terrace.

An alternative approach to the Mill 5 site would be to demolish it and build a new purpose built block with a similar relationship with Stoney Lane. This should seek to protect the townscape aspects of the overall composition. As the mass of the building contributes to the significance of the overall mill complex loss of height on this highly visible site should be resisted.

A solution to the Mill 6 & 7 block would be to vertically divide it into a terrace of residential properties. The ground floor could be converted into garages and the upper floor could be converted into private roof gardens (enclosed by existing masonry walls).

Redevelopment option:

Mill 6&7
- Converted into terraced houses - 1,528 sq m GEA
- Removal of top floor (retention of façade), replacement with roof garden 764 sq m
- Ground floor converted to under-croft car park 764 sq m.

Mill 5
- Demolition
- New build houses
- 407 sq m GEA residential floor space.

Market assessment

Sector	Assessment of potential	Tone of values in local market
Residential	Existing residential units at Parkwood Mills range from between £80,000 to £100,000 for one bed apartments to £125,000 to £140,000 for two bed apartments. New build developments in the area include Austin Close, Huddersfield, HD3 3ZQ located 1.5 miles from Parkwood Mills which has achieved an average price of £192 per sq ft; and Stringwood Close, Huddersfield, HD3 3HT located 2.7 miles from Parkwood Mills which has achieved an average of £213 per sq ft. The market for apartments in this area is now weaker than when the earlier phases of the development were completed, however recent achieved sale prices still illustrate that an average of £1,854 per sq m (£172 per sq ft) can be achieved.	£1,854 per sq m (£172 per sq ft)
Office	Not an appropriate use for this area	n/a
Retail	Not an appropriate use for this area	n/a
Leisure	Not an appropriate use for this area	n/a
Industrial	Not an appropriate use for this area	n/a

Recommendations for delivery

Residential development is considered the most appropriate reuse for the mill buildings.

Collaboration between the developer, Historic England and Kirklees Council could establish flexibility in interpretation of the potential for development to enable conversion for houses as distinct from apartments.

There is also potential to facilitate the delivery of this scheme through the provision of enabling development off site as part of a joint venture with the local authority or other landowner.

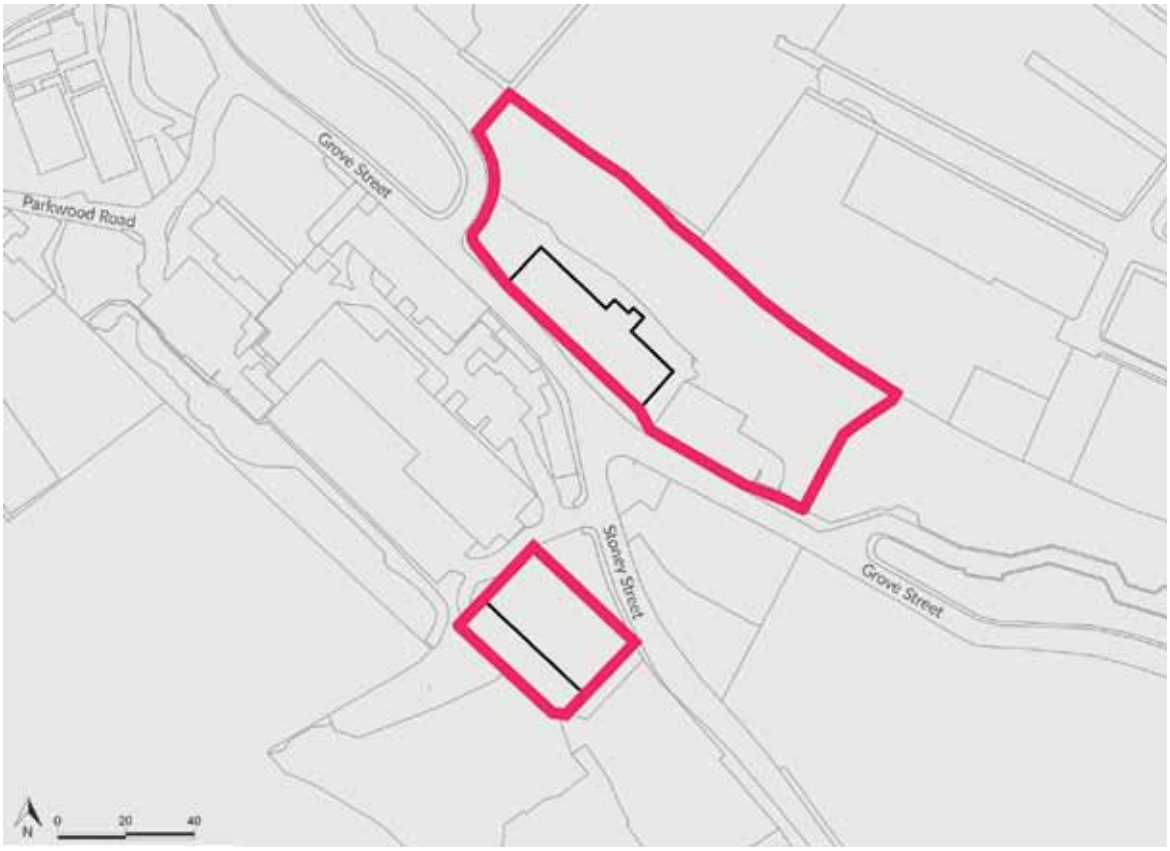
We recommend an approach is made to the Homes and Communities Agency for a recoverable investment fund as this can be secured at preferential rates which could facilitate delivery of the scheme alongside other measures.

Alternatively, the site could be mothballed until such time as local market conditions improve.

Next steps

Historic England to initiate meetings with developer, local authority and the Homes and Communities Agency in order to explore ways in which the viability gap could be addressed.

Parkwood Mill,
Red line site
boundary for Mill 5
and Mill 6 & 7



Parkwood Mill
5 and Mill 6 & 7,
redevelopment
potential

Existing / Potential re-use Potential development area Tree Cover

Parkwood Mill 5 and Mill 6 & 7: Redevelopment options

Existing buildings

Historic England,
37 Tanner Row,
York,
YO1 6WP

Contact: Deborah Wall

T: 01904 601948
E: deborah.wall@HistoricEngland.org.uk

Cushman & Wakefield
St Paul's House,
23 Park Square South,
Leeds,
LS1 2ND

Contact: Stephen Miles

T: +44 (0) 113 233 7471
E: stephen.miles@cushwake.com

Contact: Stephanie Hiscott

T: +44 (0) 113 233 7470
E: stephanie.hiscott@cushwake.com

Lathams
Knight & Whitehall House,
4 Carlton Street,
Nottingham
NG1 1NN

Contact: Jon Phipps

T: +44 (0) 115 8280422
E: j.phipps@lathamarchitects.co.uk

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