

Moddershall Valley Conservation Area Appraisal January 2016

Stafford Borough Council

Contents

		page
1	Introduction	1
2	Summary of Special Interest	3
3	Location and Topography	4
4	Land Use	4
5	History of the Flint and Bone Mills	5
6	Historic Development and Relation to Current Layout	7
Char	acter Analysis: Flint Mills Character Area	
7	Plan form and Settlement Morphology	12
8	Indsutrial Processes and Buildings	12
9	The Industrial Landscape of the Water Power System	16
10	Building Materials and Architectural Detail	19
11	Listed Buildings and other Positive Buildings	22
12	Boundaries	32
13	Public Realm	33
14	Trees and Landscapes	34
15	Views	36
Char	acter Analysis: Village Character Area	
16	Plan form and Settlement Morphology	41
17	Building Form and Scale	41
18	Building Materials	42
19	Archtiectural Styles and Features	42
20	Boundaries	44
21	Listed Buildings and other Positive Buildings	45
22	Public Realm	48
23	Trees and Landscapes	48
24	Views	49
Char	acter Evaluation and Protection	
25	Key Positive Characteristics	51
26	Negative Features within the Conservation Area	52
27	Protecting the Character and Appearance of the Conservation Area	56
28	Proposed Boundary Revisions	57
	Appendix 1: Summary of Flint and Bone Mills of the Moddershall Valley	61
	Appendix 2: Statutory List Descriptions	63
	References	69

1 Introduction

Definition

1..1 A Conservation Area is defined as an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. Conservation Areas are designated by the local planning authority through Section 69(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, which imposes a duty on the local planning authority to identify areas of special architectural or historic interest, and to designate those places as conservation areas. Designation helps to ensure that an area identified for its architectural and historical significance is managed and protected appropriately.

Purpose of Appraisal

- 1..2 Conservation area appraisals identify and assess the special architectural or historic character of a place. The Moddershall Valley Conservation Area was designated in 1979 by Staffordshire County Council after an appraisal of the special architectural and historic interest of the area. Under section 69 (2) of the Planning (Listed Buildings and Conservation Areas) Act 1990, it is a requirement of the local planning authority to update conservation area appraisals regularly, and designate further areas as necessary.
- 1...3 The purpose of this appraisal is to assess and define the special character and appearance of the Moddershall Valley Conservation Area as it stands today, and identify any current or future threats to the area's character and integrity.
- 1..4 The appraisal ensures that the local authority, developers, property owners and the local community are aware of the area's special character when drawing up and assessing proposals for change.

Effects of Conservation Area Designation

- 1..5 The conservation area appraisal will be adopted as a "material consideration" in the planning process and will be used by the local planning authority when considering the effects of any proposed development affecting the conservation area, including its setting.
- 1..6 Works to trees: Anyone proposing to cut down, top or lop a tree in a conservation area, even if the tree is not protected by a Tree Preservation Order (TPO), must notify the local planning authority and allow six weeks before commencing work. This gives the local planning authority the opportunity to make a Tree Preservation Order (TPO) if the tree is considered to be important. Carrying out work to a tree in a conservation area without consent is an offence. Further details can be found on the Borough Council's web-site at www.staffordbc.gov.uk/trees-in-conservation-areas.

- 1..7 Permitted Development Rights, i.e. those works of alteration or extension that can be carried out without planning permission, are slightly different in conservation areas. Further details can be found at:

 www.planningportal.gov.uk/permission/.
- 1..8 Some conservation areas are covered by Article 4 Directions, which restrict certain Permitted Development Rights, for example the installation of uPVC windows or satellite dishes. These are specific to each conservation area, and are in place to ensure the special historic and architectural character is protected. The Moddershall Valley Conservation Area is not currently covered by an Article 4 Direction.

Community Involvement

1..9 It is a requirement of the Local Authority under Section 71 of the Planning (Listed Buildings and Conservation Areas) Act 1990, to consult the local community, and have regard to any views expressed by consultees, concerning the conservation area in question.

Planning Policies

1.10 The Plan for Stafford Borough 2011-2031 (SBC, 2014)

The main Policies for the protection of conservation areas are in Policy N9 'Historic Environment' and Policy N8 'Landscape Character'. Other Policies also make specific reference to the protection of heritage assets, including: Policy E2 Sustainable Rural Development; Policy E6 Tourism; Policy E7 Canal Facilities and New Marinas; Policy N1 Design; Policy N2 Climate Change; Policy N3 Low Carbon Sources & Renewable Energy; and Policy N4 The Natural Environment & Green Infrastructure.

1.11 The National Planning Policy Framework (Department for Communities and Local Government, March 2012)

The National Planning Policy Framework (NPPF) identifies protecting and enhancing the historic environment as an integral aspect of sustainable development. Paragraphs 127 through to 141 contain specific policies for 'Conserving and enhancing the historic environment'.

More detailed guidance on the application of the NPPF to the historic environment is contained within the Planning Practice Guidance (www.planningguidance.planningportal.gov.uk/blog/guidance/conserving-and-enhancing-the-historic-environment/), and Historic England's suite of Good Practice in Planning Advice Notes: 1 The Historic Environment in Local Plans; 2 Decision taking in the Historic Environment; 3 The Setting of Heritage Assets (http://historicengland.org.uk/images-books/publications).

2 Summary of Special Interest:Moddershall Valley Conservation Area

- 2.1 The Moddershall Valley Conservation Area was designated by Staffordshire County Council on 16 April 1979, as a means of preserving and enhancing its special architectural and historic interest.
- 2.2 The key elements of the special character and appearance of the Moddershall Valley are summarised as follows:
 - An area of unique industrial archaeological interest of more than local importance, set in the most attractive scenery.
 - A rare collection of 18th and 19th century water powered flint mills associated with the Staffordshire Potteries, together with their associated watercourses.
 - A significant proportion of buildings and structures surviving from 9 out of 11 once operating mills in the area over a 200 year period from around 1750 to 1977, most being grade II listed.
 - 4 km length of intensively exploited watercourse with good survival of associated earthworks and engineering structures, including mill ponds, mill races, weirs, sluice gates and culverts.
 - Associations with early development of the pottery industry in Stoke-on-Trent.
 - Distinct character areas relating to land use: The flint mills along the valley bottom, and the historic village above.
 - Consistent vernacular character and use of local building materials including dark orange and blue local brick and plain clay tiles.
 - Clearly definable historic building forms illustrating the form/function relationships of both the flint milling industry and agricultural practices.
 - Survival of historic coppices together with mature hedgerows augments the visual character of the area.
 - Strong sense of connection between the rural landscape and its industry.
 - Well-preserved pattern of development, settlement form and road layout.
 - A surviving mix of industrial, agricultural, community and residential uses.

3 Location and Topography

- 3.1 Moddershall is located about 10 km southeast of Stoke-on-Trent and 3.5 km northeast of Stone. The Moddershall Valley Conservation Area is an extensive area concentrated around the 'Scotch Brook' and its valley. The Brook flows about 4.5km from Moddershall village south to the River Trent at Stone, and the conservation area encompasses both the valley and the associated historic village, a linear settlement running close to the valley ridge to the northeast.
- 3.2 The whole of the upper valley and its tributary streams lie on Triassic pebble beds or Carboniferous sandstones which are both porous and permeable and so capable of providing a regular and copious supply of water, reliable for water power throughout the year.
- 3.3 It was a combination of the efficient water power provided by the Scotch Brook and its proximity to the developing Potteries around Stoke-on-Trent that led to its intensive development for water-powered flint and bone grinding mills from the mid-18th century to the early 20th century.
- 3.4 The same geology and topography that suited the valley to intensive water-powered industry also created some of the most attractive scenery of mid-Staffordshire, varying from the steep rolling grassy hills around Moddershall village to the picturesque wooded gorge with its sandstone cliffs below Oulton village.

4 Land Use

- 4.1 Historically there was a clear distinction in land use between the industrial mills strung out along the Scotch Brook to the west, and the combination of agricultural buildings, farmhouses and traditional village buildings including school, post office, church and inn to the east. There remains a corresponding distinction in character, and so for the purposes of this appraisal, two 'character areas' have been identified: the Mills Character Area and the Village Character Area.
- 4.2 The two character areas connect geographically at the Mill pond adjacent to the Boar Inn. Although there is a clear distinction in land use, the two were interdependent: the village providing essential services for mill owners and mill hands, whilst many of the flint millers remained engaged in the agricultural practices already established around the village and along the valley.
- 4.3 Today, like many rural villages, Moddershall no longer has its post office, or school, but a strong sense of community survives at the Village Hall, Church and Boar Inn. And whilst a number of former farm buildings have been converted to residential uses, many remain in agricultural use.

4.4 Of the Mills, none now survive in industrial use, although Mosty Lea Mill has been restored to working order by volunteers, and the industrial buildings and watercourses at Splashy Mill and Coppice Mill are maintained unaltered and being gradually restored by enthusiastic private owners.

5 History of the Flint and Bone Mills

- 5.1 There is believed to have been a corn mill in the Moddershall Valley as early as the 12th century, possibly near Wetmore Mill, but this cannot be proven. Documentary evidence indicates the existence of many mills in or near Stone in the Middle Ages and later, but the sites of these have not been established with certainty.
- 5.2 These earlier mills were mainly corn and fulling mills, such as Mosty Lee Mill, first recorded as a corn mill in 1716; but the main period of industrial activity in the valley came after 1720 with the introduction of flint grinding for the pottery industry.
- 5.3 It was thought that it was John Astbury, a potter of Shelton, who in 1720 first discovered the advantages of adding powdered flint to the local reddish clay; however it is now known that a John Dwight of Fulham was already aware of the process by 1700. Adding flint produced a finer white or cream ware, which proved more popular than the characteristic red wares of the North Staffordshire Potteries.
- 5.4 Flint was brought by boat from the south coast to either Liverpool or Shardlow on the Trent (near Derby) and then by packhorse to the Potteries to be ground dry into powder. At first grinding was a domestic industry, using a hand operated quern, but large quantities were required for the burgeoning pottery industry, and mechanisation was sought. Attempts to use conventional millstones to grind the flint proved too expensive as they wore down too quickly. Stamping mills were tried, as used in mining industries, with iron shod timbers raised and dropped by means of a water-powered cam. But this was quickly recognised to be hazardous to health, as fine particles of siliceous dust adhered to the workmen's lungs and produced silicosis. Unsurprisingly, this deterred men from entering the new industry.
- 5.5 It wasn't long before a solution was found, and in 1726, Thomas Benson of Newcastle-Under-Lyme, John Gallemore of Longton, Joseph Bourne and James Brindley, a native of Leek and better known as a pioneer of the canal system, perfected and patented a process of 'wet' grinding flint to eliminate the dust.
- 5.6 The first mill to use the wet-grinding process opened in 1726, financed by John Astbury, and built by Benson and Gallemore. This mill was 'Ivy House Mill', once reputed to be the Ivy Mill in the Moddershall Valley, but now proven to have been in Hanley. The first mill in the Moddershall Valley to be used for flint grinding is now thought to be Mosty Lee Mill, converted to flint milling in 1756.

- 5.7 Initially the process featured iron wheels for initial crushing and then 60lb iron balls driven around the bottom of a large iron vessel to crush the flint in water. However, iron particles became embedded in the ware and in 1732 Benson took out a new patent adapting the system to run stone balls and stone edged runners around the grinding pan. James Brindley is popularly attributed with enlarging the diameter of the pan and using silica stone instead of local stone. Further developments included substituting a wooden vat for the iron, and flattened stones pushed around the pan instead of balls.
- 5.8 The full process that became established in the mid-18th century remained largely unchanged until the mills fell out of business in the mid-20th century, and is described in detail in Section 8.
- 5.9 The conversion of Mosty Lea Mill from corn to flint milling marked the beginnings of the valley's long association with the pottery industry, and over the next 150 years nearly all the mills along the Scotch Brook came at some stage to be used for the grinding of flint.
- 5.10 Alternative means of powering the flint mills were tried. Wind power was tried in the 1750s with little success, and steam from the 1780s. Steam power meant the mills could be located closer to the pot works, or even on site, thus reducing transport costs. But the water mills were cheaper and more reliable, so the two power sources continued side by side until the early 20th century. It was the electric motor driving cylinder mills that ultimately lead to the closure of the water-powered mills.
- 5.11 In the early years of the 20th century, four of the mills, Boar Mill, Splashy Mill, lvy Mill and Hayes Mill changed from flint to bone grinding. Bone was an alternative and well-established additive that produced a fine white china with a translucent character; its first use is not recorded, but bone china had been manufactured by Josiah Spode from before 1800.
- 5.12 The water mills of the Moddershall Valley were mostly all working to supply the pottery industry as late as the 1930s. But from the beginning of the Second World War, shortages of spare parts and labour for the mills, and a changing technology of production, left the majority of the mills obsolescent or redundant. Between 1947 and 1961 the majority closed down. Only Hayes Mill and Ivy Mill continued in operation into the 1970s, although by then their waterwheels were inoperative and they were used for processing powdered bone produced elsewhere. Hayes Mill was finally closed late in 1977, marking the end of over 200 years of pottery related industry in the valley.
- 5.13 Of eleven known mills that formerly flourished in the Moddershall Valley, four have been completely demolished: Ochre and Top Mills, Lower Moddershall, and the Boar Mill in Moddershall village itself. Nevertheless, the cottage survives at the former Ochre Mill; and surviving mill ponds and mill races remain as testament to all of these earlier mills.

6 Historic Development and Relation to Current Layout

- 6.1 Moddershall village is mentioned in Domesday Book, listed as *Modredes Hale*, which is thought to refer to "Modred's Hall', 'Modred' being the first Anglo Saxon to settle there. At that time it was a very small settlement of only 5 households: 3 villagers and 2 smallholders, with 5 ploughlands, and small areas of meadowland and woodland.
- 6.2 Little is known of the early history and development of the village, but it remained a largely agriculturally based community and grew slowly. The Tithe Map of 1841 shows the layout of a typical linear Midlands village, with individual farmsteads and dwellings strung out along the route through the village. Immediately behind the houses were gardens or orchards, and beyond, enclosed agricultural fields.



Figure 1: Tithe Map of Moddershall, 1840, copied 1850 (reproduced by permission of Staffordshire Record Office)

- 6.3 The layout of the roads and pattern of development through the village has changed little since that date, but to the west the mills were isolated and accessed only by steep tracks down the valley side from Moddershall to the east or the Kibblestone to Oulton road to the west. The Longton Road was planned from the 1830s, but not completed until about 1847. Until then the route from Stone to Leek had been what is now known as 'Old Road'.
- 6.4 The new road was to follow the route of the valley bottom and so surviving plans from the 1830s show all the mills from Stone Mill to Mosty Lea, their associated mill ponds and watercourses, and the existing roads that were to be negotiated by the new. The plans show that despite the intensive use of the Scotch Brook's potential for water power, the need to dam water into mill ponds and construct extensive mill races to power the water wheels led to a widely dispersed layout, with the mills appearing as small and isolated clusters of buildings strung out at some distance along the brook.
- 6.5 Little additional development took place along the valley, although 'Hayes House', a large country house, was constructed in the early 19th century opposite Hayes Mill. It was not linked to the flint mills, but took advantage of the dramatic landscape of the valley, looking out to the southeast away from the industrial activity.
- 6.6 The eventual construction of the Longton Road attracted little new development, and the dispersed string of buildings along the valley remains a characteristic of the conservation area today. The later 20th century growth of Stone has led to some significant development adjacent to the south end of the conservation area, but the conservation area itself has seen only minor additions of the occasional new dwelling or farm building since the mid-19th century.
- 6.7 Within the village itself, the first edition Ordnance Survey Map of 1879 shows that some agricultural holdings had developed and there were a couple of additional houses to the east side of the road, but the principal changes were the building of the school, the post office and the Boar Inn opposite the Boar Mill.
- 6.8 More substantial changes took place during the 20th century in the village, with additional housing to either end continuing the linear pattern of roadside development, but also some backland development set back from the road within former gardens or fields.

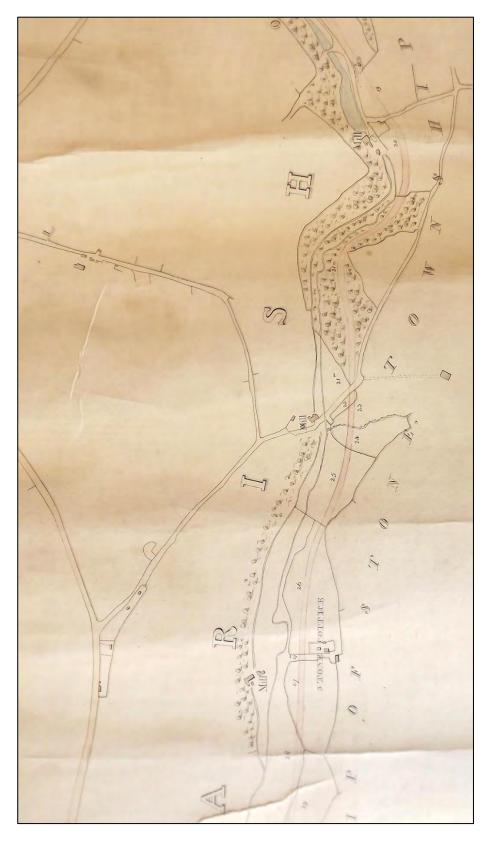


Figure 2: Plan of proposed diversion or new line of road in the Stone Lane End Trentham Turnpike Trust in the County of Stafford 1833. Section from Ivy Mill in the north to Coppice Mill in the south. The proposed road is shown in pink. (reproduced with permission of Staffordshire Record Office)

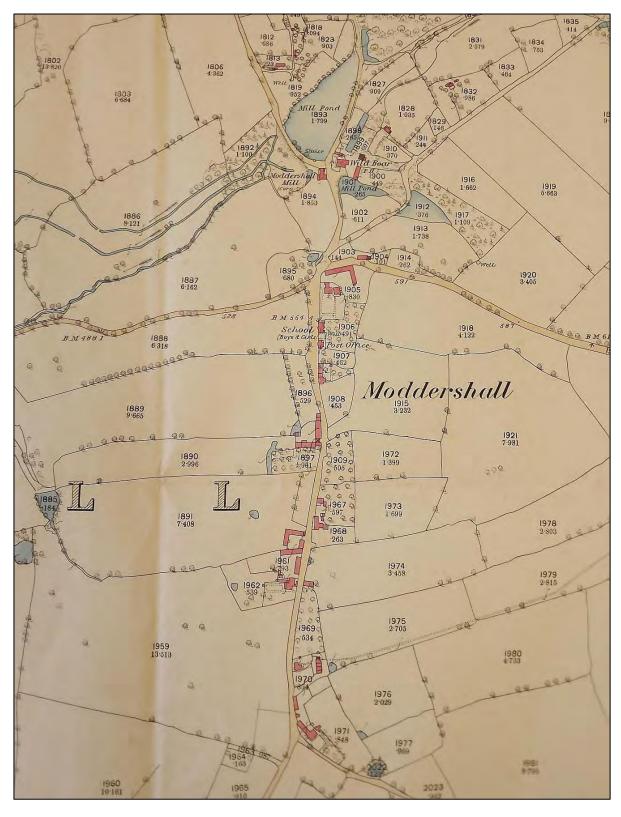


Figure 3: First edition OS of 1879 (reproduced with permission of Staffordshire Record Office)

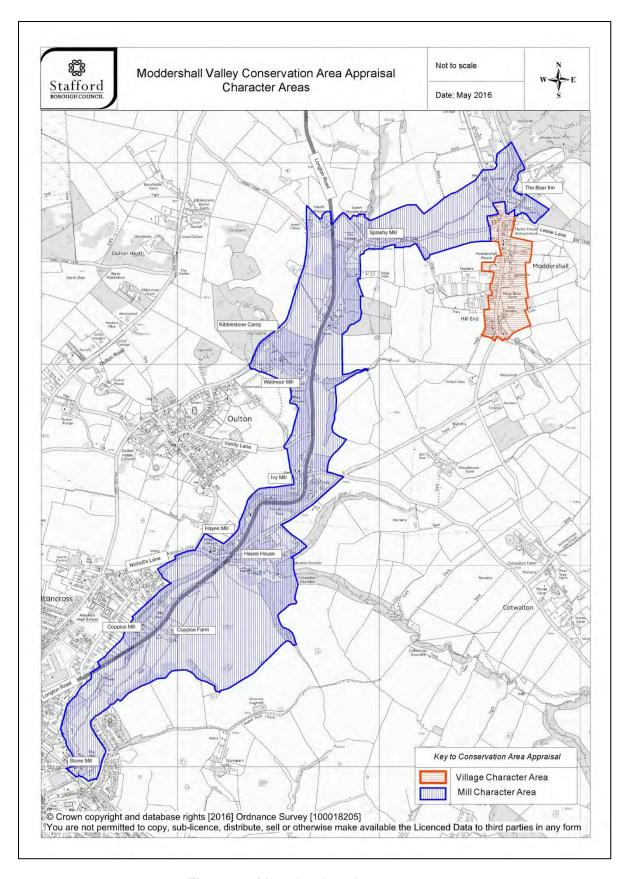


Figure 4: Map showing character areas

Character Analysis: Flint Mills Character Area

7. Plan Form and Settlement Morphology

- 7.1 Along the valley, the settlement form is directly related to the nature of the industry and its power supply, the Scotch Brook.
- 7.2 Mills were located where they could take advantage of the efficient supply of water for powering the wheels and processing the flint. This meant not just being adjacent to the water course but being sure of a reliable and regular flow of water. Water was diverted from the stream and dammed into millponds and directed along mill races by sluices and weirs to regulate the flow of water. This meant that the mills were usually sited at some distance from each other to gather a sufficient head of water, typically between 300m and 800m. Splashy Mill and Ochre Mill were located only about 100m apart, but this resulted in a complex water supply system at Ochre Mill to either use the tailrace from Splashy Mill or take water direct from the stream.
- 7.3 This resulted in small clusters of buildings serving a single mill, strung out along the stream at some distance from their neighbours and experiencing an isolated rural setting. The sense of intimacy and clustering is enhanced by the tendency for buildings to nestle into the steep banks to facilitate gravity fed processes, and the lack of space for buildings against the valley sides, resulting in tightly packed sites.
- 7.4 Additional buildings in the character area include modest farmsteads that typically comprise of a farmhouse and two or three agricultural buildings around a yard. They are similarly sited in well-dispersed locations and have a spacious rural setting. The occasional larger country house was sited to enjoy the spectacular scenery of the valley, and so is again located at a refined distance from its neighbours.

8 Industrial Processes and Buildings

8.1 The form and appearance of the flint mills is directly related to the industrial processes they were built to house. The processes of grinding flint and bone are very similar, and whilst most initially ground flint, they could readily convert to grinding bone.

Calcining Kiln

- 8.2 The first stage of the process was to heat the flint or bone at temperature of over 1000 degrees centigrade to drive off the moisture and alter the structure to be more readily reduced to powder, and in the case of bone, to remove any organic content.
- 8.3 The calcining kilns were similar to lime kilns, with two chambers with a 'hovel' over to control the draft and improve combustion. The kiln was usually set into

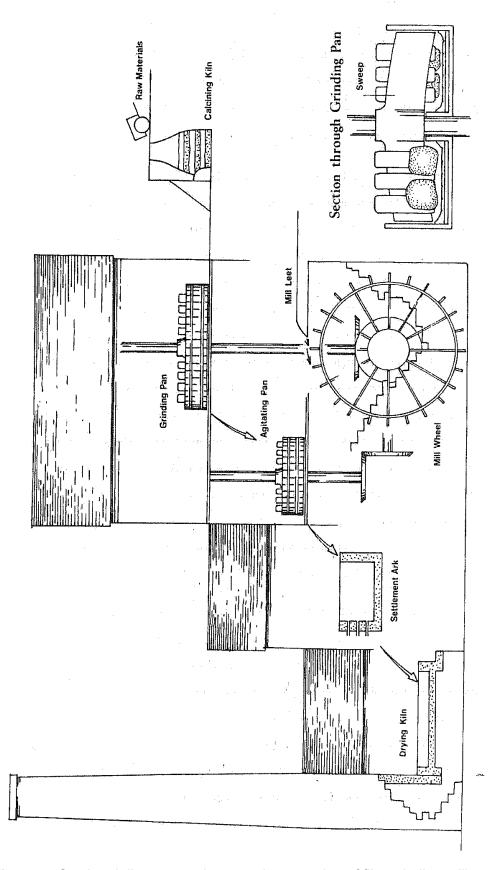


Figure 5: Sectional diagram to show gravity operation of flint grinding mill

- a bank to allow access to both top and bottom levels for loading with raw material and extracting the calcined material. Typically coal was used for flint and wood for bone, with layers of fuel and raw materials carefully stacked prior to burning.
- 8.4 After the calcined material had cooled, the kiln was hand drawn from the bottom and any large pieces broken by hand or through a jaw crusher.

The Mill Buildings

8.5 **Grinding Pan:** The calcined bone or flint was taken into the pan room where it was spread out in a circular vessel or 'pan' and covered with water. The pan was typically about 12 ft (4m) in diameter with iron hooped timber sides of about 3 ft (1m) high. Later iron was used for the pan, once a method for removing iron particles from the product by magnetism was developed. The floor was of Flintshire or Yorkshire chert on a clay seal, and a vertical shaft driven from below drove arms or 'sweeps' to push chert runners around the pan to grind the product.





Figure 6: The grinding pan at Mosty Lea Mill, before and after restoration

- 8.6 **Agitator or Wash Tub:** The resultant slurry of fine powder and water was then run off through wooden launders into a 'washtub' or 'agitator'. Here coagulated particles were dispersed in water, and for bone, fatty matter was skimmed from the surface. A wooden gate circulated the mix and when stopped it 'blunged' through vertical bars. Coarser particles sank and could be returned to a pan for further grinding, whilst the finer material was run off through a sieve to the next process.
- 8.7 **Settling Ark**: After running past magnets to remove iron particles the product was then let into large brick tanks with wooden bungs set in the side. After a day or so, the bungs were knocked out and excess water ran off until it reached a density suitable for transportation. It might then be pumped into

- barrels for sale, or, for longer distance travel, might be further reduced through a drying kiln.
- 8.8 **Drying Kiln:** Initially drying could take place outdoors in a pan by evaporation alone. But this wasn't suitable for larger scale production. The drying kiln had a brick pavement surrounded by low sided walls, with flues underneath running from a coal fire to a chimney stack. Dried blocks of about a foot square were then transported to the Potteries.



Figure 7: Drying bed at Mosty Lea Mill

Mill Building Form

- 8.9 The flint mills have a recognisable form reflecting the processes they housed. Even where mills had previously been used for other water-powered processes such as corn or paper milling, the new process would lead to alterations to accommodate the particular needs of the flint mill.
- 8.10 The steep valleys of the Moddershall Valley were fully exploited to enable a gravity fed production process, with the mills often set into banks and accessed at different levels for the different stages of the process. The diagram at Figure 5 shows how the production process resulted in a series of stepped rooflines. Where gravity was exploited to its fullest, the mill could be of four storeys in height, such as at Hayes Mill. Other mills had a lower profile, such as at Mosty Lea, but always the result was a complex collection of rising and falling rooflines. Splashy Mill, in fact, was also known as 'Mill of Many Roofs'.
- 8.11 A cluster of small interconnected buildings identifies the mills as distinct from the dwellings or agricultural buildings within the area. Other key features are the water wheel, which would be sited unhoused adjacent to the mill, and where there were drying kilns, a tall industrial chimney stack and roof top vents to the drying shed. Wheels survive at Splashy Mill, Mosty Lea, Wetmore Mill, Ivy Mill, Hayes Mill and Coppice Mill, and stacks at Mosty Lea, Wetmore, Ivy Mill and Hayes Mill (albeit a mid-20th century rebuilt stack).



Figure 8: Roof top vents and chimney stack identify the drying kiln at Mosty Lea Mill

- 8.12 A notable divergence from the typical rectilinear form and footprints of traditional buildings in the locality is also found at the flint mills, where low buildings with wide-span roofs have an almost square plan, to house the circular pans within.
- 8.13 The buildings on the mill site were not confined to the mill alone. In addition to the mill, kiln and various sheds, there may also be the miller's house, cottages for mill hands, warehousing, stables and cartsheds. Often the mill was run alongside farming activities and cowhouses or barns might also be located nearby, whilst the domestic curtilage of the millhouse might include gardens and pigsties.

9 The Industrial Landscape of the Water Power System

- 9.1 The special interest of the Moddershall Valley is not confined to its buildings, and nor is its landscape purely incidental to its importance. What now appears a spectacularly romantic landscape conceals the driving force of a once industrial landscape. Behind copses of trees and mature hedge boundaries are the clearly legible remains of an often complex network of mill ponds and mill races, together with culverts, weirs and the occasional sluice gate. Where these survive they are as important to the character of the area as the mills themselves.
- 9.2 Mill ponds collected the power source into a controllable reservoir to ensure a constant and supply of water to the mill. Mill races or 'leats' were often extensive hand-built linear structures, diverting the water of the stream or pond to the mill. The 'headrace' supplied the water to the wheel via a launder,

whilst the 'tailrace' returned the water to the stream. The mill race to Coppice Mill runs some 600m from Hayes Mill, and is in the process of restoration. The Stone Mill leat can be identified as a linear engineered structure beyond the trees when looking across from Redhill Road.

9.3 The mill ponds are most clearly evident to the west and south of the Boar public house, the Boar mill pond forming a focal point in the conservation area, and a further mill pond is now home to a host of duck species, complete with duck house. The mill pond to Mosty Lea Mill has been restored to power its wheel, and ponds survive at Splashy Mill and Hayes Mill, though no longer driving the wheels. At Coppice Mill, the site of an earlier mill pond, actually damming water for Stone Mill 700m to the southeast, is evident as a wide flat area of grassland terminating at a weir.



Figure 9: The former mill pond to the Boar Mill now creates an attraction as a duck pond to the Boar Inn



Figure 10: Well maintained private pools adjacent to Moddershall Oaks now contribute to a romantic sylvan scene.



Figures 11 & 12: Sluice gate and weir between Wetmore and Mosty Lea Mills, and brick-lined culvert taking the stream under Mill Lane from Splashy Mill to the former Ochre Mill site



Figure 13: Wooden launder and sluice gate at the overshot wheel of Splashy Mill

- 9.4 Although the watercourses have become obscured through the obsolescence of the flint mills and their gradual decay into nature, the flow of water from one site to another can still be traced from the first mill pond behind the Boar Inn in Moddershall village, south to the River Trent in Stone.
- 9.5 The water courses and mill ponds were not just exploited for their industrial uses. 'Water cress beds' are identified behind Moddershall Mill on OS plans from 1901, and frequent references are made historically to the stream 'abounding with trout'. At Mosty Lee Mill there was a boathouse for fishing boats by the late-19th century, and just north of Hayes Mill there is now a modern trout farm, continuing this associated historical activity into the 21st century.

10 Building Materials and Architectural Detail

- 10.1 Throughout the Mills Character Area, for domestic and agricultural buildings, as well as the mills, the building materials are of local bricks for walls with plain clay tiled roofs. Usually the bricks are dark orange, but at Splashy Mill, for example, over-fired bricks create a darker blue or brown appearance. Roofs are simple gable ended, but an appearance of complexity often results from the clusters of mill sheds and outbuildings. Only on the higher status Hayes House is a hipped and slated roof found.
- 10.2 Many of the historic buildings have been painted or rendered in white or cream, but this is rarely a historic finish. Most were of exposed brickwork until the late 19th or early-20th century. At Hayes House alone, the stuccoed finish is original to the building.



Figure 14: Exposed brick elevations at Hayes Mill, Hayes House, and Millbank Cottages, c.1900, now all painted or rendered.

10.3 Bricks are commonly laid in a variety of bonds, most commonly 'Flemish bond', where headers and stretchers alternate in rows, or 'Flemish Stretcher bond', where three stretcher rows are divided by one of alternating headers and stretchers. At Splashy Mill, the dark bricks are laid in an English garden wall bond, where three rows of stretchers alternate with a single row of headers.





- **Figures 15 & 16:** Typical orange bricks in a Flemish bond contrast with the dark bricks and English garden wall bond at Splashy Mill.
- 10.4 The mills and farmsteads were strictly functional buildings, and architectural detail is sparse. Simple straight heads or segmental arches to window and door openings, and dentillation to the eaves are common. Roof verges are typically plain closed without corbelling or bargeboarding, although a single example of decorative bargeboarding is found at Grove House.
- 10.5 Original window or door joinery has often been lost to the mills, and a patchwork of replacements is typical. At Stone Mill some multipane iron windows can be seen to the upper storeys, but simple side opening timber casement windows were typical, divided into 3 or 6 panes. These have been reinstated at Mosty Lea Mill alongside plank and ledge doors or shutters.





Figures 17 & 18: Multipane window at Stone Mill with dentillation to eaves above, and replacement window with simple segmental arched header.

10.6 Survival of historic windows on the domestic buildings is better, including simple timber side opening casements to the cottages of Ivy Mill, sliding sash windows at Grove House, Hayes House and Wetmore Mill house. At the mill house at Stone Mill, curved sash windows negotiate a corner adding an interest to an otherwise routine dwelling.





Figures 19 & 20: Sash windows at the mill houses of Stone Mill and Wetmore Mill

10.7 Door joinery is also sadly lost to most historic houses, although survives at the listed Grove House, under a classical moulded door surround, and at Hayes House. On cottages there is the occasional survival of a simple tiled and bracketed canopy over the door.





Figures 21 & 22: Simple bracketed tiled porch at Ivy Mill Cottages and bargeboarding to gable of Grove House.

11 Listed Buildings and other Positive Buildings

- 11.1 Full details of the history and industrial archaeology of the flint mills are set out in a number of comprehensive studies (see References), and their known history and survival is summarised in Appendix 1. The buildings that contribute to the character and appearance of the Mills Character Area of the Moddersall Valley Conservation Area are described below:
- 11.2 **Boar Inn (unlisted):** At the head of the valley at the juncture of valley with village, is the Boar Inn. Not constructed until the later 19th century, it is a pleasant double-pile building in red brick with prominent gable and brick chimney stacks, overhanging eaves and bay window of domestic character. Its main asset is its rural waterside setting between two mill pools. Alongside are extensive barns and stables.



Figure 23: The Boar Inn, with the former Boar Mill to the left, circa 1900

11.3 **All Saints Church (unlisted):** Dating from 1904 and gifted to the village by members of the Wedgewood family. It is a modest village hurch of rock-faced stonework with simple coped gables, domestic scale windows and quaint bell turret rather than spire to the east end. It is rightly described by Pevsner as having 'quite some charm', and was entirely rebuilt in 1993/4 following damage from mining subsidence.



Figure 24: All Saints Church

- 11.4 **Splashy Mill (grade II listed)** originated as a corn mill around 1752, but by 1841 was grinding flint and was one of a group of buildings known as 'Lower Moddershall Mills'. A second mill had been constructed on the site and in 1854 these were described as 'water corn mill' and 'flint mill'. The southern mill was demolished in 1973, and only the stone bearing for the second waterwheel now survives. From the structural evidence of the mill, it is thought that it was constructed pre-1830.
- 11.5 The mill makes use of the steep gradient of the valley, with its northside set into a bank to allow direct access to both upper and lower levels. A modest mill pond survives to the east and the 16 ft diameter overshot water wheel is fed by a wooden launder from the millstream. A 12 ft grinding pan survives on the upper floor, with iron sweep arms attached to a vertical shaft, and a settling room with 6ft 10" iron settlement pan fed by a chute from the grinding room above.



Figure 25: Splashy Mill



Figure 26: OS first edition map of 1879 showing former cluster of mill buildings, of which only the north mill and outbuilding now survive.

- 11.6 The house on the site is a late-20th century building, contrasting with the vernacular qualities of the historic building.
- 11.7 **The Cottage (unlisted):** Formerly the mill owner's cottage to Ochre Mill, an early 19th century flint mill, which may have been constructed on the site of an early water mill. It closed in the 1940s and was subsequently demolished. The cottage, however, continues to reflect the industrial character of compact clustered buildings and varying roof lines, and nestles in the valley adjacent to the stream. Although the mill buildings do not survive, the culvert taking water from the mill pond under Mill Lane to Ochre Mill bears testament to the former water power system.



Figure 27: The Cottage

- 11.8 Mosty Lea Mill (listed grade II) was built prior to 1716 as a fulling mill or corn mill. By 1756 it had been converted to a flint mill, and was possibly the first of the Moddershall Valley flint mills. Originally known as 'Mostylee' mill, it was owned by John Baddeley, who eventually operated at least three flint mills in the valley, and it is reputed to have been engineered by James Brindley. It closed in 1962, but was restored to working order. It is now on the Kibblestone Scout Camp site and can be visited on certain days of the year.
- 11.9 A 20ft pitchback waterwheel drives a single iron grinding pan and three brickbuilt settling arks. The cluster of buildings include a calcining kiln and drying kiln.
- 11.10 Unusually, the tallest building is of only two-storeys, possibly reflecting the relatively slight bank of this site and its earlier construction before the processes were fully standardised. But the clustering of buildings and roof lines is familiar, and again the slope of the land is utilised to provide easy access to the first floor.



Figure 28: Mosty Lea Mill

11.11 On the opposite side of the A520, now divorced from Mosty Lea due to the intervening road and subsequent changes in ownership, is 'Mosty Lea Farm'. Often mills were run alongside farming, and it is likely that the mill owner lived in the farmhouse. There is now a large new dwelling on the site, but former agricultural buildings and farmhouse of vernacular character also survive to the east.

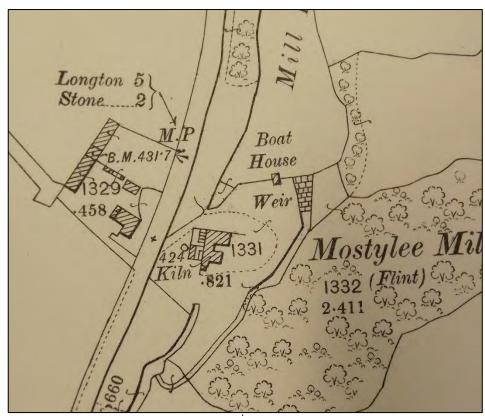


Figure 29: OS 2nd edition 1901

11.12 **Wetmore Mill (unlisted)** lies just downstream of Mosty Lea Mill and was built circa 1757 or 1763. Although rebuilt as a corn mill between 1821 and 1827 it was unsuccessful and restyled again as a flint mill by 1867. It closed about 1960. Although largely unaltered, it is now in domestic and ancillary uses. The waterwheel, located to the rear of the site, is still in situ and operable, and a collection of low sheds survive to the rear, including a heated drying kiln.



Figure 30: Wetmore Mill

11.13 **Grove House (grade II listed)** is a mid-19th century house, in a modest Georgian double fronted style and forms a group with Ivy Mill. It is of painted brick with stone plinth, sliding sash windows plain splayed lintels. The moulded stone pilaster doorcase has a small cornice hood, over a 4-panelled door. The projecting wood scalloped eaves, ornamental bargeboards and slated roof are indicative of the rising status of the Moddershall valley as a picturesque location in the mid-19th century.



Figure 31: Grove House

- 11.14 **Ivy Mill (grade II listed)** is thought to have been built about 1740 for linseed oil production. Originally known as 'Oulton Mill', it continued in use as an oil mill, but was also grinding flint by 1782 and later grinding bone. It ceased grinding in 1966 and closed in 1977. Its high breast water wheel, calcining kiln, octagonal chimney stack, mill pool and associated buildings and mill cottages survive in situ. Internally two grinding pans remain in situ.
- 11.15 Ivy Mill is one of the few buildings within the Conservation Area to betray the historic industrial nature of the Moddershall Valley in views along the main A520 Longton Road. The 60 foot chimney stack draws attention to the cluster of buildings, confined by the gorge of the valley at this point into a linear string of buildings up against a dramatic cliff face backdrop.



Figure 32: Ivy Mill, with cottages to the left and industrial mill to the right.

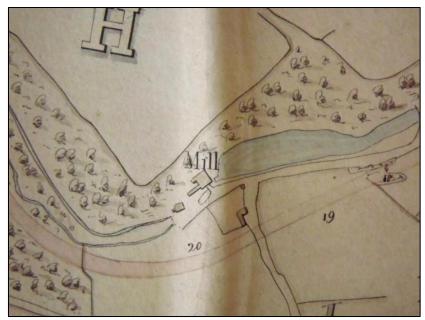


Figure 33: Ivy Mill in 1846, prior to the construction of Grove House and 'The Pines' opposite (Plan for a new road to avoid the Oulton Hill, Stone, Lane End, Trentham and Stableford Turnpike Trust, 1846, reproduced by permission of Staffordshire Record Office)

11.16 **The Pump House (unlisted)** is a distinctive building adjacent to the Longton Road, formerly the house to Stone Council's pumping station. It is in the typical late-Victorian gothic style adopted for public utilities buildings, with oversailing eaves, prominent stacks, compact verticality and semi-circular arched window heads emphasised by yellow brick headers and keyblock. The pumping station has been demolished and the building is now in private residential use.



Figure 34: Pump house

11.17 **Hayes Mill (grade II listed)** was constructed between 1750 and 1803, and may be the first purpose built flint mill. In 1966 it ceased grinding and it closed in 1977. Although converted to a dwelling around 1985, it retains many of its industrial features, including settlement pan, gearing and line shafting, as well as the external features of its mill pond, water wheel and a chimney stack rebuilt in the early 20th century.



Figure 35: Hayes Mill

11.18 **Hayes Mill Cottage and Millbank Cottages (unlisted):** The house just to the rear of Hayes Mill is thought to have been the miller's house, whilst the linear row of cottages behind are thought to have housed labourers for the mill, and also incorporate its stables.



Figure 36: Millbank Cottages to the left, and Hayes Mill Cottage to the right

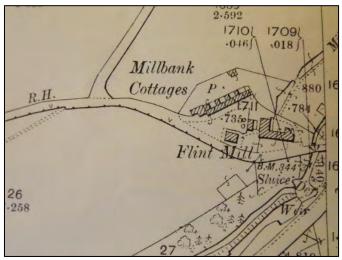


Figure 37: Second edition OS plan 1901

11.19 Hayes House (grade II listed): A house existing in this location pre-1775. The existing, in an early 19th century classical style, may been a rebuilding or adaptation of an earlier building. Although historically occupied by owners of major pottery companies, it is thought to be an incidental addition to the flint milling landscape, merely taking advantage of the dramatic scenery of the Moddershall Valley for the location of an aspirational home for the rising professional classes. Certainly it looks away from the flint mill 200m to its west, with 2-storey canted bay windows to the rear giving onto only the slightest terrace before the steep descent to the valley below. A prominent port cochere with doric columns, 9-bay elevation with central three bays under a broken pediment, stuccoed facades, and a prominent campanile stair lantern distinguish the building as belonging to the class of 'polite' architecture. The stable block (independently listed grade II) with further Italianate influences adds decorative charm, and a compact lodge (also listed grade II) adjacent to the Longton Road completes the impression of grandeur.



Figure 38: Hayes House viewed from the west, with Italianate stable block to left

11.20 **Coppice Mill (grade II listed)** originated pre-1720 as a paper mill, and was later owned by Henry Fourdrinier, famous for perfecting a machine for producing continuous paper in 1807. By 1851 the mill had turned to flint grinding. In 1953 the mill closed. Currently it is in a largely derelict condition, but being slowly restored. Waterwheel, flint kiln (separately listed), crushing pans, wash tub and gearing survive and the process is readily legible in the buildings. The millers' house is in domestic use. The 600 yard leat running from the Nicholls Lane junction by Hayes Mill is also in the process of restoration, and the brick and stone weir to the former Stone Mill millpond survives in the private garden.



Figure 39: Collection of buildings at Coppice Mill

11.21 **Stone Mill (grade II listed)** is a former corn mill, dating from 1795, and was the birthplace of "Stoney Richard Smith", originator of Hovis bread. It is a more substantial four-storey five bay building than the typical flint mills, but it is a smaller building to its west that is now recognised as a former flint mill. During recent conversion to a dwelling, the former wheelhouse and evidence of the leat and power systems have been uncovered.



Figure 40: Stone Mill, now in use as a restaurant



Figure 41: Converted Flint Mill

- 11.22 **Mill House and Mill Farm (unlisted):** The mill owner's house faces the mill and is a modest two storey house of Georgian origins, and on the opposite side of the stream is Mill Farm, a range of cowsheds and barns arranged around a typical farmyard.
- 11.23 **Farmsteads and Detached Houses:** Aside from the key flint mills and other focal buildings of the Mills Character Area, a number of additional 18th and 19th century buildings fall within the conservation area. These are largely

agricultural buildings and farmhouses, dating from the later 19th century and of traditional vernacular construction. They reflect the historic mix of flint milling with the established rural land uses of the area, and retain historic character in terms of their basic form and materials.



Figure 42: 19th century farmhouse at Lower Closes

11.24 All buildings that contribute positively to the character and appearance of the conservation area are identified on the plans at Figures 50 to 53.

12 Boundaries

- 12.1 Within the Mills Character Area there are few formal walls or fences, most property boundaries being undefined, or edged by hedges or groups of trees.
- 12.2 Some of the larger domestic properties have low stone or brick walls to the front, with gate piers, but few are historic and no historic gates survive.
- 12.3 Due to the topography, natural banks or the steep cliff faces of the valley often serve to create natural boundaries adjacent to the road. Occasional lengths of estate style, or simple vertical iron railings survive in some areas, usually in a poor state of repair, and fields are often bounded by timber post and rail fences.





Figures 43 & 44: Gate piers at Grove House and iron 'estate' railings at the corner of Vanity Lane

13 Public Realm

- 13.1 The public realm of the 'Mills Character Area' is dominated by the A520 Longton Road, a heavily used vehicular link between Leek to the north and Stone to the south. The roar of traffic along the road is a relatively recent introduction, the route itself not having existed until the 1840s, and the intensity of use having accelerated from the late-20th century.
- 13.2 This modern addition obscures the earlier lack of connectivity between the mill sites, by following the route of the Scotch Brook, but also enables a more ready appreciation of their group character and common characteristics.
- 13.3 Although a main road, the A520 maintains the rural character of the conservation area. The narrowest of pavements is maintained along the west side of the road, of the ubiquitous tarmac with concrete kerbing. But on the east side there is no pavement and informal boundaries of grass, hedging, trees extend to the kerb. Essential highways signage and crash barriers are unavoidable intrusions, but are relatively minimal and do not detract from the surrounding scenery.
- 13.4 Away from the A520 the character of the roads quickly reverts to modest single track country lanes. Often climbing steeply to negotiate the valley sides. There are no formal kerbs, maintaining a softer rural character, and this is further enhanced along Mill Lane, where the brook is clearly seen running directly adjacent to the road.



Figure 45 Extensive road signage, bollards and road markings along the A520



Figure 46: Mill Lane, with informal grassy verges, stream, and intimate wooded character

14 Trees and Landscapes

14.1 The Mills Character Area presents some of the most dramatic scenery of central Staffordshire, with variously rolling hills and steeply incised valleys. Around the old Waterworks site and between Wetmore and Most Lea mills, the valley assumes the character of a gorge, with vertically rising faces of weathered sandstone. The same vertical descent is experienced along Nanny Goat Lane above the mill race to Stone Mill, softened by woodland. Elsewhere, the gentle fall of the valley is either wooded or presents smoothly rolling grassy slopes.



Figure 47: Steep sandstone cliff by Wetmore Mill

- 14.2 The interest of the landscape is not confined to its natural topography or the watercourses. Waste from the flint mills was often dumped in spoil heaps close to the mills, and a number of small irregular hummocks in the landscape could proved to have such origins.
- 14.3 The Moddershall valley has been home to woodland throughout its history, with many of the existing copses and plantations having been already defined during the 19th century, as can be seen from the plans at Figures 2 and 3. Mill Wood extending north from Hayes Mill, and Cotwalton Drumbles, partially within the conservation are to the east, are both designated by Natural England as Ancient Woodland.
- 14.4 Some woodland may have been exploited as 'coppices', i.e. managed to produce poles or shoots for use as firewood, baskets to carry the products of the potteries, or for laths for fencing and building purposes.
- 14.5 Intervening land was put to use as agricultural pasture lands, sometimes from independent farmsteads, but also as an ancillary operation to the flint mill.
- 14.6 The landscape of the Character Area is largely unchanged from its 19th century character. However, some areas of trees are relatively recent additions to the landscape, particularly where mill ponds and mill races no longer serve an industrial purpose and have become absorbed into the natural landscape. A photograph of Hayes Mill in 1905, for example, shows clear views of the mill from the Longton Road, where now the banks of the Brook and mill race have been taken over by vegetation, screening the mill from the main road. The mature hedgelines and copses serve to enhance the sense of intimacy and seclusion of the mill sites, but can also obscure significant views of heritage assets.



Figure 48: Hayes Mill in 1905

15 Views

- 15.1 Due to their nature and the character of the landscape, many of the mills are discreetly sited, nestling low in the valley against banks and surrounded by trees. Views of them are therefore limited to close views, where they become the focal point on rounding a corner or emerging out of a dense tunnel of woodland.
- 15.2 The majority of significant views are of the associated landscape. In sequential or kinetic views along the Longton Road, the sense of the dramatic scenery is heightened through the contrast between intimate leafy tree lined spaces and wide open views across rolling fields.
- 15.3 Narrow winding lanes leading uphill from the Longton Road invite exploration and a sense of escape from the heavy traffic of the main road, whilst peaceful scenes looking down across the valley are experienced from the Kibblestone Road. From Redhill Road, there are clear views across a grassy bank down to the collection of historic buildings at Stone Mill and Mill Farm Barns with St. Michael and All Saints Church a focal point in the urban backdrop.
- 15.4 Key views are identified on the plans at Figures 50 to 53.



Figure 49: View south from Coppice Road

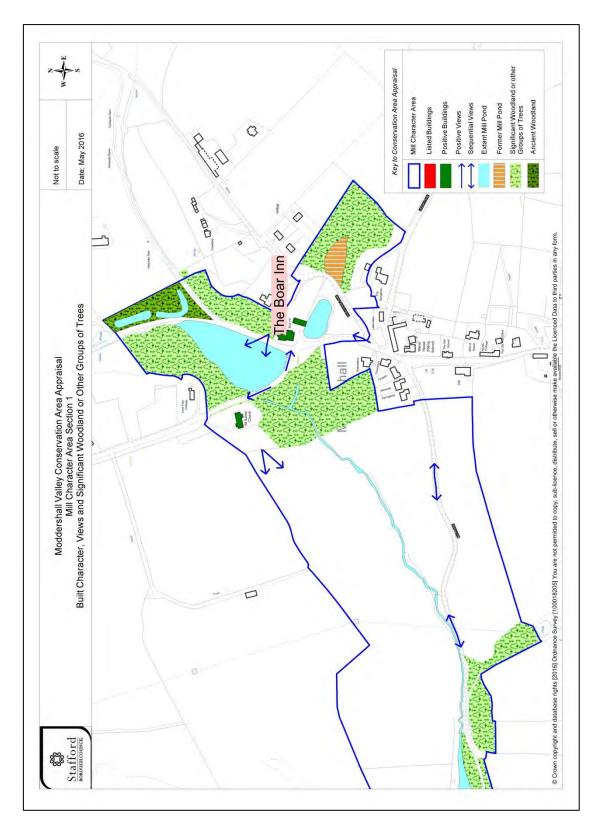


Figure 50

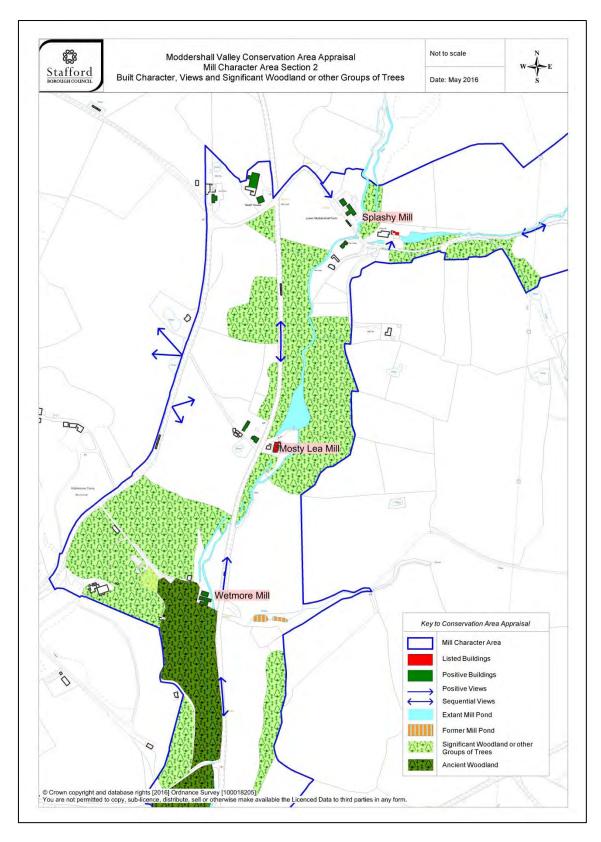


Figure 51

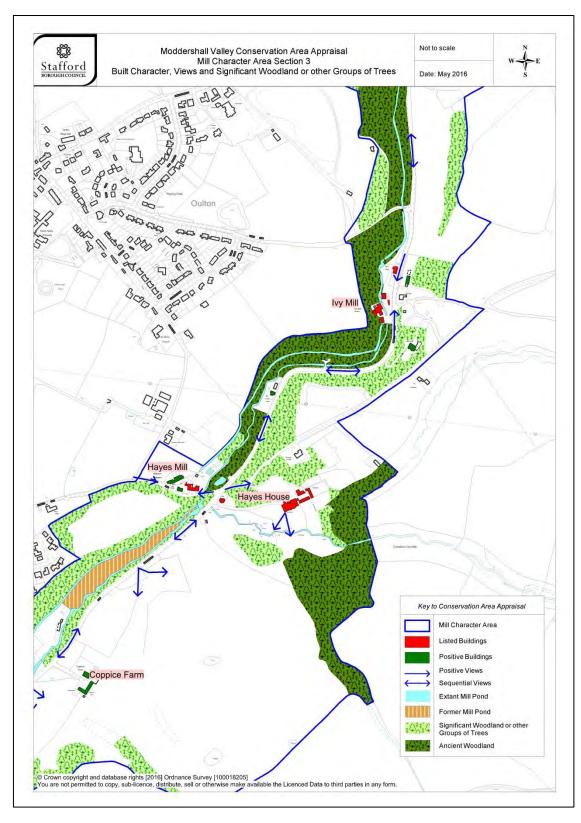


Figure 52

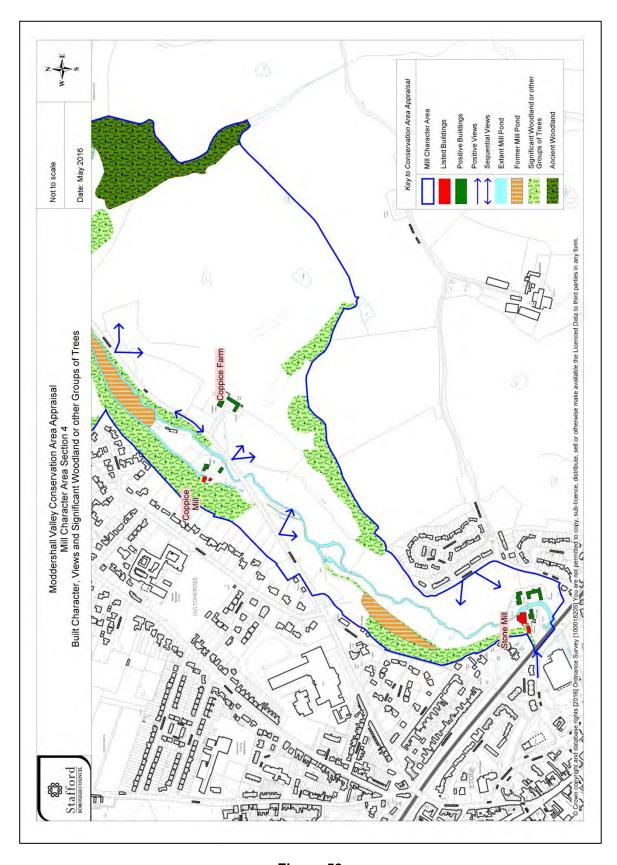


Figure 53

Character Analysis: Village Character Area

16 Plan Form and Settlement Morphology

- 16.1 The greatest visual contrast between the Mills Character Area and the Village Character Area is in the plan form of the settlement. The village has a typical midlands linear village layout, with buildings strung out along the main road. Originating as a series of farmsteads, properties are typically detached, but in relatively close proximity and are set close to the road. Houses usually face out onto the road, with agricultural buildings facing in towards the farmyards and fields, presenting blind elevations, and effectively creating boundary walls alongside the road.
- 16.2 19th century infill development of workers' cottages creates the occasional brief terrace, but the spacing remains relatively loose and the orientation to the road is continued and repeated for the late 19th century school and Institute.
- 16.3 At the south end of the village the pattern is broadly reproduced for early and mid-20th century housing, but is somewhat more dense and uniform, and the buildings are set back behind modest front gardens added.

17 Building Form and Scale

17.1 Throughout the village, the scale of the buildings is modest. Other than the 3-storey Moss Rose Farm, no building is over 2-storeys in height. Typically buildings are comprised of simple rectilinear forms with gable ended roofs of up to three bays. Changing orientations and roof levels nevertheless create interest along the street scene, and at Manor House Farmhouse, a more imposing impression is created by two end wings with projecting gables either side of a simple three bay frontage.



Figure 54: Manor House Farmhouse

17.2 Agricultural buildings tend to be low single-storey buildings, and mainly comprise cow-houses, stables and barns. At Prospect House the agricultural buildings form a continuous roadside frontage with the farmhouse, a relatively unusual form within central Staffordshire, where the detached farmyard is the norm.

18 Building Materials and Architectural Detail

- 18.1 The local vernacular of dark orange handmade bricks with blue plain clay tiles is used almost exclusively throughout Moddershall. Some later brickwork uses over-fired blue bricks and ones with 'kiss marks' showing how bricks were stacked on top of each other in the kiln.
- 18.2 Sandstone is used sparingly for coping stones to boundary wall, gate piers and window sills.
- 18.3 Few historic buildings have been rendered or painted, preserving the natural subdued palette of the historic environment.

19 Architectural Styles and Features

19.1 The architecture of Moddershall is largely vernacular and architectural embellishment is used sparingly. Eaves lines occasionally display dentillation or corbelling, and window and door openings are usually expressed with simple brick segmental arches or straight heads, and straight stone sills. Barns display a variety of patterns of 'honeycomb' brickwork, to achieve ventilation for storage of hay.



Figure 55 & 56: Dentilled eaves and burnt brick in flemish bond with traditional cast iron tie bar bracket

19.2 The sliding sash window is entirely absent from Moddershall village, and the side opening casement is instead found throughout. Windows to higher status farmhouses may have originally had sash windows, however, the side opening casement was a long established means of fenestration, and persisted in central Staffordshire from the 17th century on.





Figure 57 & 58: Myrtle Cottage and the Old Post Office circa 1900, with small paned casement windows in situ and historic casement window at Prospect House under simple brick header with central keyblock.

- 19.3 Few historic front doors survive, but there is a good example of a four-panel early 19th century door at Prospect House, with well-defined moulding to panels and central door knob. Often porches are later additions to houses, but some simple canopies on brackets can be found at Prospect House and Boulton's Office.
- 19.4 At Manor House Farm, the projecting gables bear moulded plaques in shields, one proclaiming the building date of 1857, the other an image of a wild boar, suggesting a connection with the Boar Inn or Board Mill further north down the road.



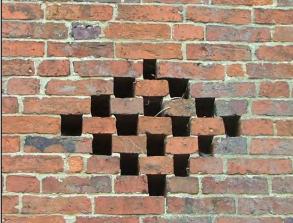


Figure 59 & 60: Boar plaque at Manor House Farm and 'honeycomb' brickwork to create ventillation holes in brick barn





Figure 61: Door and porch at Prospect House

20 Boundaries

20.1 Historic properties tend to be bounded by brick walls with a variety of copings in brick or stone, and agricultural buildings backing onto the road create a sense of enclosure adjacent to farm yards. But the majority of the roadside boundaries are of hedging, varying from informal field boundaries, to more manicured domestic boundaries.





Figures 62 & 63: Sense of enclosure created to road side by rear wall of Manor House Farm and variety of historic walls and gate piers at the corner with Marlpit Lane



Figure 64: Typical mix of hedging, brick wall and roadside buildings at Moss Rose Farm

21 Listed Buildings and other Positive Buildings

- 21.1 Only two buildings in Moddershall village are listed: Prospect House and the former Boulton Offices. However, many make a positive contribution to the character and appearance of the conservation area, and are identified on the plan at Figure 72.
- 21.2 **Prospect House (grade II listed)** originated as a late 18th century farmhouse of a tall but compact two-storey, two-bay front elevation with stone coped gables and simple brick details. It was extended to side and rear in the 19th century, in a linear fashion. Turning its back on the village, and wrapping around the corner of Marlpit Lane, it presents its historic elevation as an introduction to the conservation area in the approach from the south.



Figure 65: Prospect House

21.3 **Boulton's Offices (grade II listed):** An early 19th century four-bay brick-built farmhouse of two storeys with attic. Historic casement windows feature under segmental arches with projecting keyblocks, and a moulded wood eaves cornice distinguishes the building. Set slightly back from the road behind a low brick wall it commanded views over its farmland to the west.



Figure 66: Boulton's Offices

21.4 **Farmhouses (unlisted):** Moss Rose Farmhouse is probably a late 18th century farmhouse, of three brick storeys, it is located end on to the road and nestles at a lower level, thus reducing its impact from the streetscene and blending with its more modest and functional neighbours. Moddershall House and Ivy Cottage are later, 19th century farmhouses. Ivy House, with its rendered elevations, projecting gables and prominent chimney stacks tucked behind a hedge adds some variety to the otherwise vernacular street scene.



Figure 67: Ivy Cottage with Rose Cottages behind

21.5 **Agricultural buildings**: Detached agricultural buildings at Prospect House, Moss Rose Farm, Moddershall House and Manor House Farm are variously converted to dwellings, or remain in ancillary or agricultural use. They typically turn their backs to the roadside and retain blind elevations, without the addition of windows or rooflights, thus maintaining an anonymous character in the streetscene. Occasional shuttered openings and a variety of patterns of ventilation holes in the brickwork, however, add interest to their plain functional character, and where buildings are orientated gable onto the road this creates variety in the roof-lines.



Figure 68: Barn at Moss Rose Farm with blocked up pitching door and openings for pigeon loft above.

- 21.6 **Cottages (unlisted):** The cottage terrace at Myrtle Cottage and The Old Post Office appears to date from the late 18th century as a row of agricultural labourer's housing, and is of a simple redbrick vernacular form up tight against the side of the road.
- 21.7 **School House (unlisted):** Now converted to domestic use, the school was built in 1844, but falling rolls caused it to close in 1966. A typical village school in miniature, it had separate boys and girls entrances under a porch (now blocked for windows), and was carried out in a 'Jacobethan' style' with heavy stone copings to the roof, stone quoins and mullioned and transomed window surrounds.



Figure 69: The School House

22 Public Realm

- 22.1 Within the village, the road is a simple unmarked tarmac surface. There are no formal boundaries, kerbs or road markings, so it maintains a simple, unobtrusive character within the village.
- 22.2 In front of the village hall, an informally surfaced area is available for parking, but appears as a widening in the road rather than a formal car park. Strung out between the hall and road junction with Mill Lane are found the essential village services of bus stop, bench, phone kiosk, and letter box.

23 Trees and Landscapes

- 23.1 The village follows a relatively level contour, parallel to the route of the Scotch Brook to the west and overlooking the fall and then rise of the Moddershall valley. Grassy slopes gently rise to the west, with a more agricultural character falling to the east. To the immediate west of the village, the landscape is dominated by the extensive range of modern horticultural buildings at Boulton's nurseries. Although due to the fall of the land and prominence of the roadside historic buildings, their impact is slight in views from the main thoroughfare.
- 23.2 Trees still have a significant contribution to the character and appearance of the Village Character Area, but the landscape is generally more open, without dense coppices or mature tree boundaries. Hedges, gardens and individual specimen trees create an altogether tamer feeling from the character of the Mills Character Area.

24 Views

- 24.1 Along the main road, kinetic views are generally experienced as a series of linear views. Starting from Prospect House facing out to approaches from the south, the eye follows the hedgelines from one building or farmstead to the next. It is only at the junctions of Mill Lane and Leese Lane that there is a sense of comparative seclusion and discovery, either to descend toward the Boar Inn seen in the near distance, or into the narrow and intimate tangle of trees and hedges descending down Mill Lane or up beyond Manor House Farm to the East.
- 24.2 Despite the dominance of the linear route through the village, and a denser building pattern, the character is strikingly more open than the Mills character area. The building pattern is still one of loosely strung out buildings. This, together, with the lower hedge and wall boundaries, and lack of dense tree growth, allows a sense of openness to either side of the village, with glimpse views frequently opening up of the grassy slopes to the west, and expansive long views to the east across the valley to the opposite ridgeline.



Figure 70: Clear views of the backdrop of gently sloping grassland viewed at Prospect Farm



Figure 71: Looking west across the valley from adjacent to the Village Hall with the trees of Mill Lane to the right.

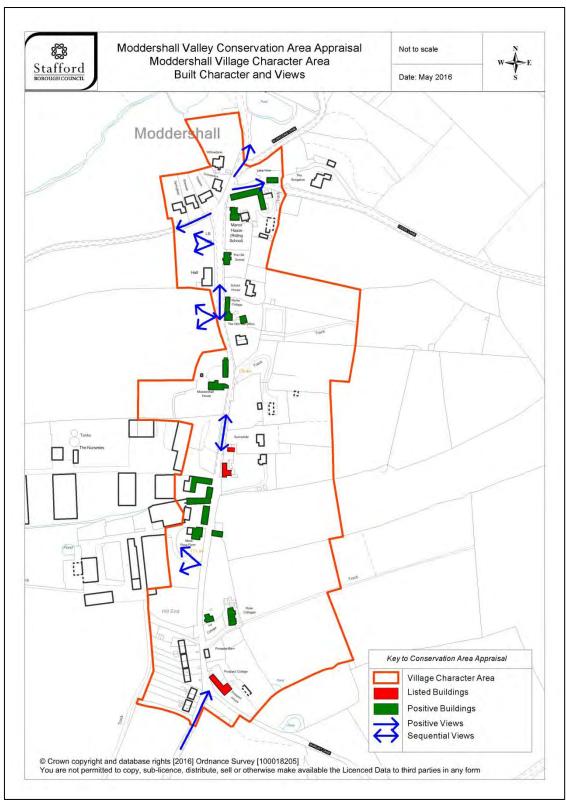


Figure 72

Character Evalutation and Protection

25 Key Positive Characteristics

The Conservation Area has been subdivided into two distinct character areas, which reflect the different land uses, building types and pattern of development. Within these areas, the following factors are key to the special historic character of the conservation area:

25.1 Mills Character Area

- A unique collection of former flint grinding mills along the Scotch Brook, representing the intensive use of the brook for over 200 years and having industrial archaeological value at a more than local level.
- Surviving water power structures and a systems of mill races and ponds readily legible for the entire 4km length of the brook.
- Surviving rural setting around mill sites and watercourses.
- Dispersed buildings as individual mills, farmsteads or houses, or in minor clusters of buildings.
- A resultant lack of intervisibility between buildings and a sense of rural isolation
- Distinctive building types reflecting the flint milling processes
- Simple traditional agricultural buildings and farmsteads
- Use of local brick and plain clay tiles
- Simple vernacular architectural styles including simple dual pitch roofs, compact forms, dentilled eaves, segmental or flat arched openings, sliding sash windows and side opening casements, and bracketed door canopies.
- A lack of formal boundaries and predominance of hedges alongside loose fences or railings.
- Dramatic scenery including wooded gorges, rolling hills and mill ponds.

25.2 Village Character Area

- A typical linear midlands village originating in Saxon times and retaining its 19th century layout and character largely unaltered.
- Based on development of farmsteads with later school building, cottages and detached houses.
- Loose linear development tight against the road
- Predominance of low one or two-storey buildings of rectilinear form.
- Use of local vernacular materials of brick and plain clay tiles
- Simple vernacular architectural styles including dual pitch gable ended roofs, segmental or straight arched openings, side opening casement windows and bracketed door canopies.
- Glimpse and open views of rural setting including wide views across Moddershall Valley

26 Negative Features within the Conservation Area

- 26.1 Although the over-all character and appearance of the Moddershall Valley Conservation Area has been retained intact over the last 35 years, certain developments threaten to compromise its special character and appearance.
- 26.2 **Location and density of new buildings:** The sense of space and relative rural isolation of mill buildings within the Mill Character Area is a key characteristic, which it is important to respect. Even at the south end in Stone, Stone Mill had an isolated setting on the outskirts of the town. It was only in the 20th century that development began to creep closer to the mill, but thanks to a railway bridge to the west, views of the urban environment beyond remain screened, and development to the east has mainly remained at a distance. But urban housing is creeping along Redhill Road and starting to threaten the setting of the mill group.
- 26.3 Along the ridge of the Moddershall Valley, particular care needs to be taken. Development along Airedale Road has pushed development potential to its limits adjacent to the conservation area. Here it is at a high level and screened by trees for much of the year, so any visual intrusion is negligible. But this should not be taken as creating a precedent where further along the valley where gradients, vegetation and landscape setting vary considerably.



Figure 73: Development within the valley of prominent scale dominates the background of sensitively converted agricultural buildings at Mill Farm and harms their sense of spacious rural setting.

26.4 Within the village, although there is a denser settlement character, this is still on a dispersed linear basis. To the east some backland development, though relatively well-screened and low lying, is eroding the settlement pattern of the historic village. The established pattern is of development strung out along

- the main road, with clear views to open fields behind, and this should be protected.
- 26.5 Extensive modern horticultural buildings at Boulton's do not have a major impact on the conservation area, as the modern buildings are only visible in secondary views from within the Conservation Area and are of a relatively low key agricultural nature, but should not be regarded as a precedent for further development within the rural setting of the conservation area.



Figure 74: View of horticultural sheds at Boulton's

26.6 **Form and Style of New Buildings:** Few new dwellings have been constructed in the conservation area in the last 35 years, but the failure of late-20th century development to respect the character of the area has notably diluted its built character. Particular mistakes have been in the use of inappropriately coloured or textured bricks, concrete tiled roofs, wide picture windows and the use of prominent white coloured fascia boards or bargeboards.



Figure 75: Development on the corner of Mill Lane and Moddershall Oaks with wide picture windows, concrete tiles and heavily accentuated barge boards.

26.7 Building Condition: The majority of buildings within the conservation area are well-maintained. However, a lack of maintenance and care for heritage assets is evident in certain areas. At Boulton's Offices, the front wall of the listed house has been partially demolished by a vehicle strike, whilst 'repairs' have been carried out to the masonry in inappropriate cement based mortars, which could lead to long term erosion of the masonry.



Figure 76: Damaged wall at Boulton's Offices, Moddershall

- 26.8 **Subdivision of properties:** Although frequently necessary to retain historic buildings in viable use, the subdivision of properties and their ownership can lead to a lack of unity of historical buildings or groups. Care is needed to ensure that details such as the layout of farmyards and treatment of window and door joinery are consistent to retain group character.
- 26.9 **Replacement windows and doors:** The Moddershall Valley has largely escaped the blight of upvc windows, but little remains of historic window or door joinery. Stained timber, inappropriate glazing patterns and storm-cased window frames are not historically based forms and detract from the historic character of traditional buildings.
- 26.10 **Rendering and Painting Elevations:** In addition to obscuring historic brickwork and the visual character of the historic buildings, the application of hard cementitious renders to soft local brickwork can trap moisture and prevent the more porous traditional materials from 'breathing'.
- 26.11 **Rooflights:** Rooflights are a popular, but rarely historic approach when converting historic buildings. They tend to create a cluttering effect on simple interrupted roofscapes, and should be kept to a minimum and sited only on well-hidden elevations.

- 26.12 **Closeboarded Fencing:** The majority of the boundary treatments are visually loose structures or natural hedging. Close boarded fencing can introduce a harsh solid appearance of a suburban rather than rural character.
- 26.13 **Solar Panels:** Although 'permitted development' that does not need planning permission (when affixed to a roof), solar panels obscure traditional roof materials and have a modern reflective surface that detracts from the more subdued materials of the historic environment. Care should again be taken to site them in less obtrusive locations.
- 26.14 **Highways Works:** Along the busy Longton Road highways interventions of signage, barriers and road markings are inevitable. But some works within the relatively peaceful village appear heavy handed. The double row of bollards of different styles at Prospect Barn, for example, add an unnecessary complexity within the street scene, whilst recent works on Nicholls Lane have inserted a harsh concrete kerbside in contrast to the usual soft unbound verges along the rural lanes.



Figure 77: Roadside bollards at Prospect Barn create a cluttered and inconsistent appearance



Figure 78: Insertion of standard concrete kerbing in place of soft verge

- 26.15 **Trees and Hedges**: Although trees and hedges contribute to the sylvan character of the Moddershall Valley and enhance the rural setting of the village, many hedges and woods have become overgrown and other areas have become populated by self-set trees. Historically there was a greater contrast between open fields and pockets of woodland, and more open views from the roadside of the mills. More considered tree and hedgerow management could redress the balance between landscape, woodland and historic buildings.
- 26.16 **Industrial Archaeology:** Many of the significant features of the Mills Character Area are associated with the supply and control of water to power the wheels of the flint mills: former mill races, sluice gates, weirs and culverts, in addition to redundant mill ponds. These important historic engineering features are often concealed within the landscape and encroaching vegetation. Many may yet to be identified and others are falling into disrepair. Although they may often fall outside of planning control, they are key to the understanding of the area as an interconnected whole and are deserving of sensitive management and repair.

27 Protecting the Character and Appearance of the Conservation Area

- 27.1 Policies for the protection and management of the historic environment through the development management process are set out within NPPF Paragraphs 127 through to 141.
- 27.2 The Plan for Stafford Borough sets out policies for the protection and management of the historic environment through policies N9 and paragraphs 12.27 to 12.58.
- 27.3 These policies should be used in conjunction with this appraisal to guide or assess any future development within the Moddershall Valley Conservation Area.
- 27.4 Other organisations, such as the County Council Highways Authority, and statutory undertakers also have their own commitments to protect the character and appearance of the conservation area in the exercise of their duties. The Borough Conservation Officer should be consulted on all work within the area to ensure protection of its character and appearance.
- 27.5 To manage and protect the special historic character and appearance of the Moddershall Valley Conservation Area in the exercise of these policies and duties:

- The existing special historic character and appearance of the conservation area and all features identified as positive within this document should be retained and reinforced. This does not just apply to the 'Positive Buildings' identified on the plans at figures 50, 51, 52, 53 and 70, but to all features identified as contributing the character and appearance of the area throughout the Appraisal. The key characteristics are summarised in Section 25.
- Further works that harm the significance of the area, as set out in the appraisal in Section 26, should be avoided.
- Conserving and Enhancing the Historic Environment' in the Planning Practice Guidance (2014) and Good Practice Advice (GPA) notes 1, 2, 3 (Historic England, 2015) should be used for guidance.
- Existing and emerging design or conservation guidance published by Stafford Borough Council, and Historic England (formerly English Heritage) guidance should be consulted where relevant, such as *The Conversion of Traditional Farm Buildings: A guide to good practice* (English Heritage, 2006), *Living Buildings in a Living Landscape* (English Heritage, 2006), *Conservation Principles, Policies and Guidance* (English Heritage, 2008), *Streets for All* (English Heritage, 2004), *Understanding Place: Conservation Area Designation, Appraisal and Management* (English Heritage, 2011).
- 27.6 Some works that could harm the character or appearance of the conservation area can be carried out under "permitted development rights", which means that home owners and landowners do not need to apply for planning permission. Owners are nevertheless encouraged to take heed of the special historic character and appearance of the area identified in this document when carrying out these works.

28 Proposed Boundary Revisions

- 28.1 The boundary to the original 'Moddershall Valley Conservation Area' designated in 1979, has been reviewed as part of the appraisal process. The following philosophy has been adopted:
 - To concentrate the designation on the buildings and industrial landscapes of the flint milling industry and its supporting historic village where they are of special interest.
 - However, it is recognised that the landscape is causally integral to the special historic and architectural interest of the conservation area, as well as host to the water courses and mill ponds that served its mills. The boundary has therefore been revised to continue to follow the visual bounds of the 'valley' area, following established woodland edges, roads or upper contours, in a

- common sense interpretation of what is perceived as the Industrial Moddershall Valley.
- Buildings of incidental historic interest, or areas of purely landscape interest that do not contribute to the character of the core of either the Flint Mills or Village areas, have been omitted.
- The boundary has been corrected to follow identifiable physical features, i.e.
 road boundaries, or woodland edges. In some exceptional instances though,
 brief 'short cuts' across open fields or properties have been taken to follow an
 intuitive link from one clear boundary to another and avoid designating large
 open areas of no special interest that clearly extend beyond the visual limits of
 the valley.
- 28.2 The majority of alterations are therefore 'corrections' to the existing boundaries. More significant alterations are:

28.3 Additions

- The railway bridge west of Stone Mill: This is a pleasant Victorian construction on the Stone to Colwich railway line, of dark red and blue bricks, dentil cornice with stone parapet above, and stone quoins and arch of a skewed elliptical form. Although it post-dates the mills it creates a clear historic boundary and gateway from the urban environment of Stone to its semi-rural industrial predecessors.
- Land south of Nanny Goat Lane, Stone: The previous boundary followed an indistinguishable physical route at this point. The footpath along Nanny Goat Lane follows the ridge of the gorge of the Moddershall Valley to the southeast and is an identifiable boundary for the conservation area.



Figure 78: Railway Bridge on Mill Lane, Stone

- Fields south and east of Nicholls Lane: The boundary was previously drawn tight around the domestic curtilage of Mill Bank Cottages and included just part of the field to the south. This was inconsistent with other parts of the conservation area, where the designation follows contours or significant visual buffers of landscape around mill sites. The fields are also known to have had a historic connection with the Hayes Mill group of buildings, as associated agricultural land.
- Mill pond to north of Boar Inn, Moddershall Oaks: The boundary is slightly extended to include a further mill pond that appears to date from the early 19th century.

28.4 **Deletions**

- **Elmwood:** Elmwood is a late 20th century detached house that does not contribute to the historic character and appearance of the conservation area.
- **The Drumbles:** This is a 20th century building and is divorced from the valley by Hayes Bank road. The boundary has been redrawn to follow the historic property boundary of Hayes House.
- West and East of Kibblestone Road: The area to the west is of high landscape value but contains no built heritage features. Although views of this area are identified as significant, it does not contribute to the special historic interest of the Moddershall Valley and is omitted. South of the Kibblestone Scout Camp building is an area now substantially used for vehicle parking. The boundary is drawn back here to the tree line of the Ancient Woodland that bounds the Scotch Brook.
- 20th century development east of Moddershall Village: The semidetached buildings at Hill Top, along with Hilltop Bungalow and The Bungalow are all non-historic buildings on the edge of the conservation area that do not contribute to the group character either of the mills area or the village core. It is proposed to omit these from the conservation area, but to retain the wooded banks and steep sides of the former mill pond east of Rushton's Lane.

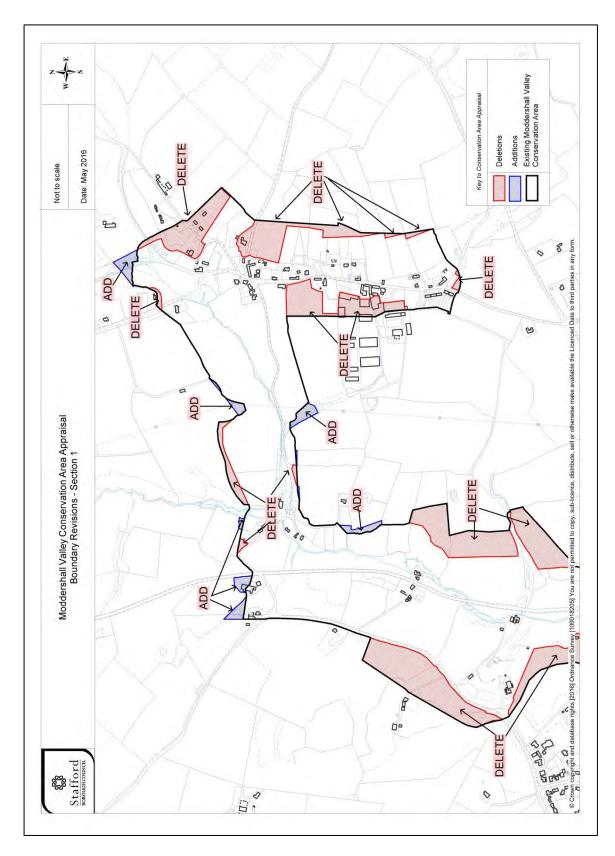


Figure 79: Proposed boundary changes, north section

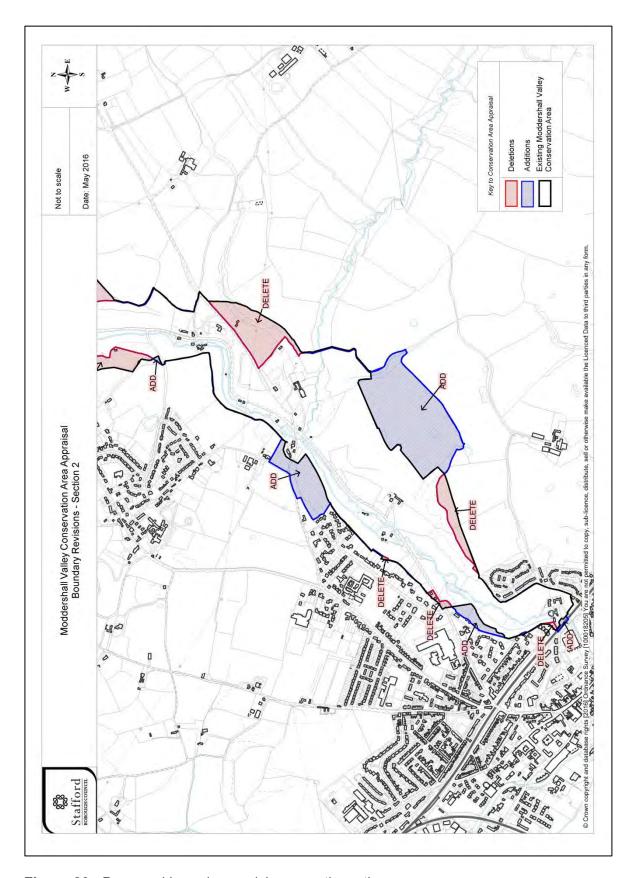


Figure 80: Proposed boundary revisions, south section

Appendix 1: Summary of Flint and Bone Mills of the Moddershall Valley

Mill	Dates and Processes	Condition
Boar Mill or Moddershall Mill (demolished)	Built pre-1775 as corn mill, converted to flint grinding in 1905, closed 1954, demolished by 1965.	Mill site is flat surfaced area on road junction opposite large pond. Waterwheel and other structures reputedly left in situ but buried. Series of pools and watercourses can still be made out.
Lower Moddershall Mill (demolished)	Constructed pre-1775. One corn mill and one flint mill. Sited close to top end of the pool for Splashy Mill. Scrapped c.1896.	Stone wheel bearing survives directly opposite Splashy Mill pool.
Splashy Mill	Originated as corn mill c. 1752. Flint mill thought to have been built alongside corn mill, by 1841. Later, grinding bone alongside flint. Closed 1958, southern mill demolished 1973.	North mill extant, with 16ft overshot waterwheel, grinding pan to upper floor with iron sweep arms attached to vertical shaft. Settling room with chute from grinding room.
Ochre Mill (demolished)	Mill extant pre-1775. Possibly rebuilt as a flint mill in 1829. Closed 1940s. Water supply in conjunction with Splashy Mill. Demolished mid-20 th century.	Mill cottage ("The Cottage") survives opposite Splashy Mill.
Mosty Lea Mill or Mostylee Mill	Built pre 1716 as a fulling mill or corn mill, maybe on the site of a 12 th century corn mill. Converted to a flint mill by 1756. Closed in 1962, but restored to working order. Could have been site of 12 th century corn mill.	Complete operable mill with working machinery restored and dam to mill pool rebuilt. Calcining kiln, 3 settling arks, drying kiln.
Wetmore Mill	Built as either an oil or flint mill 1757 or 1763. Rebuilt as corn mill between 1821 and 1827, but unsuccessful and restyled again as flint mill by 1867. Closed about 1960.	Unaltered but converted to other uses. Waterwheel restored but out of view.
Vanity Mill (demolished)	Shows on Yate's map of 1775 but taken down by 1819.	No remains

Ivy Mill	Thought to have been built about 1740 for linseed oil production. Continued as oil mill, but alongside flint, and by 1821 bone. Ceased grinding 1966, 1977 closed.	High breast water wheel, calcining kiln, 60ft chimney stack, pool, mill, access bridge to first floor, associated buildings and mill cottage. Largely complete but not restored.
Hayes Mill	Circa 1750. Ceased grinding 1966, closed 1977.	Converted to dwelling circa 1985. Overshot wheel, stabling, workers' cottages. Retains pan, gears, line-shafting etc internally.
Coppice Mill	Pre1720 paper mill. Later owned by Henry Fourdrinier famous for perfecting their machine for making continuous paper in 1807. By 1851 flint grinding. 1953 closed.	Millers house occupied. Calcining kiln, mill with two pans and wash tub, high breast wheel, stables. Substantial part of mill lost. 600m leat. Drained mill pond to Stone Mill in grounds with weir and sluice gate.
Stone Mill	Corn Mill of 1797. Flint mill in separate building powered by second waterwheel.	Corn mill converted to restaurant c.1970s. Flint mill converted to dwelling 2013. Wheel house, leat, circular room for grinding pan survive.

Appendix 2

Statutory List Descriptions

Note: Many of the statutory list descriptions have not been updated since the conservation area was designated in 1979. Since then, much further research into the history of the mills has been undertaken, and uses and condition have changed. As a part of this review of the conservation area, amendments are being forwarded to Historic England for inclusion in the statutory list. At the time of writing, however, the following descriptions are included on the list.

Name: **PROSPECT HOUSE** List entry Number: 1038977

Grade: II

Date first listed: 25-Sep-1979

II 2. Late C18 with later alterations. Red brick; 2 storeys; L-shaped plan; 2 C19 casement windows with segmental heads; C19 wood doorcase with plain rectangular fanlight, 4-panelled door and gabled rustic wood porch. Lower 2 storey wing on left-hand side has 2 windows (one modern) and later doorway with modern brick porch; toothed brick eaves; modern tile roof. Interior altered but retains exposed ceiling beams in the principal rooms; original turned baluster staircase, and panelled oak doors throughout. Attached early C19 outbuilding on north side. The house has modern alterations at rear.

Name: OFFICE BUILDING OF BOULTON BROTHERS (MODDERSHALL) LIMITED

List entry Number: 1038976

Grade: II

Date first listed: 25-Sep-1979

II 2. Early C19. Red brick; 2 storeys; 4 window front (one blocked); casement windows with projecting keyblocks; wood pilaster doorcase with 6-panelled door and small gabled porch; moulded wood eaves cornice; tiles.

Name: **SPLASHY MILL**List entry Number: 1038973

Grade: II

Date first listed: 25-Sep-1979

Late C18 or early Cl9. Former bone grinding mill, now disused. Originally a double mill with 2 waterwheels and grinding sheds, of which one shed, which is a plain 5-storeyed brick structure, one overshot waterwheel and the housing for the second wheel survive. The grinding shed contains two 12 ft grinding pans and ancillary machinery. Small one storey brick and tile building on west side.

Name: **MOSTY LEA MILL** List entry Number: 1293996

Grade: II

Date first listed: 25-Sep-1979

Early C19. Former bone grinding mill. Red brick with tiled roofs. The mill building is of 2 storeys with the ground storey built into the side of a slope and with 20 ft diameter iron and wood undershot waterwheel on west side. The mill retains some machinery including a grinding pan of iron and, in an adjoining bay, a large grinding pan of brick. The mill and ancillary buildings are now ruinous.

Name: GROVE HOUSE

List entry Number: 1039014

Grade: II

Date first listed: 25-Sep-1979

Early C19. Painted brick with stone plinth; 2 storeys; 3 sash windows with plain lintels; moulded stone pilaster doorcase with small cornice hood, rectangular fanlight and 4-panelled door; projecting wood scalloped eaves and ornamental bargeboards; slates. Small-paned cast iron window on north side.

Name: MILL CHIMNEY TO WEST OF IVY COTTAGE

List entry Number: 1189968

Grade: II

Date first listed: 25-Apr-1980

Probably mid C19. Polygonal chimney of dark red brick,60 ft high on a stone

base.

Name: IVY MILL

List entry Number: 1039013

Grade: II

Date first listed: 16-Sep-1977

Date of most recent amendment: Not applicable to this List entry.

II GV 2. Circa 1740 in origin. Later alterations and additions. The mill was first used for linseed oil, later as a bone grinding mill, and latterly for stone grinding. Formerly called Oil Mill and also Goodwin's Mill. Painted brick with tiled roof. Approached by a bridge over the stream and entered on an upper storey through a later plain doorway with a casement window at either side. At the rear is a pitch back waterwheel 19 ft in diameter and 6 ft wide. Interior has 2 pans driven from a common upright shaft, one on a floor above the other. Attached to south-west is the wash tub room with, to west, the drying kiln, and to south is Ivy Cottage proper, of painted brick with tiled roof and 3-storeyed. Irregular fenestration; generally C19 wood casement windows; plain doorway with tiled wood porch and a modern lean-to, partly tiled and partly glazed.

Name: **IVY MILL COTTAGE** List entry Number: 1374217

Grade: II

Date first listed: 16-Sep-1977

Date of most recent amendment: 25-Apr-1980

Probably of C18 origin but much altered. Originally a pair of cottages. Painted brick; 2 storeys; the right-hand bay largely a later addition; 3 C19 casement windows; plain doorway with modern glazed door; tiles.

Name: CALCINING KILNS TO NORTH EAST OF IVY MILL

List entry Number: 1294027

Grade: II

Date first listed: 16-Sep-1977

Probably early C19 in origin. Two kilns of brick construction set into the side of a bank, fronted by a brick retaining wall in which are set the 2 semi-circular headed kiln mouths, the whole covered by a modern open-fronted structure of brick and concrete.

Name: **THE HAYES HOUSE** List entry Number: 1374235

Grade: II

Date first listed: 27-Nov-1975

Early to mid C19. Large detached house of irregular plan. Cement rendered; 2 storeys; 3-window projecting bay at centre with open pediment; 9 windows overall, generally minus glazing bars; plain pilasters rising over 2 storeys; doorway to right, having plain Doric porte cochére of 8 columns; The garden elevation of similar style but having a 3-light canted bay tiered over 2 storeys, and a 5-light bow window to ground storey; hipped slate roof with ornate stair lantern, The interior contains good wrought iron anthemion motif stair balustrade, fielded panelled doors, elaborate cornices and contemporary fireplaces.

Name: FORMER STABLES TO HAYES HOUSE

List entry Number: 1038972

Grade: II

Date first listed: 27-Nov-1975

Early to mid C19. Red brick. One storey with central portion of one storey and attic having pediment with brick modillion cornice; 2 round headed relieving arches containing attic storey windows, generally with glazing bars.

Name: LODGE OF HAYES HOUSE

List entry Number: 1294050

Grade: II

Date first listed: 25-Sep-1979

Mid C19. Engraved cement rendering with stone plinth; one storey; L-shaped plan; projecting one window gabled wing on right-hand side; angled cornice hood porch with plain doorway and 4-panelled door; bold lined eaves; slates.

Modern additions at rear.

Name: HAYES MILL

List entry Number: 1190141

Grade: II

Date first listed: 25-Sep-1979

Early C19 bone grinding mill. Brick with tiled roofs; irregular. Mill building to west is 2-storeyed and contains working machinery including drive shafts and

2 grinding pans (one disused) and disused overshot waterwheel. One of the few bone mills still operating in North Staffordshire.

Name: **COPPICE MILL**List entry Number: 1196747

Grade: II

Date first listed: 27-Jul-1972

Paper mill, converted to flint mill, c1840, now derelict and being restored (1990). Probably mid C18 with mid C19 alterations. Brick with some dressed squared stone; tile roof. Single storey structure with wheel to right return. Modillioned brick cornice. Open-fronted part to left has brick pier, roof missing and stone end wall; part to right has segmental-headed entrance to right of and narrowed by section of battered wall supporting ends of 2 girders; smaller entrance to right end. Wheel in pit to right has timber spokes and paddles, iron hub, rims and penstock. INTERIOR: 2 heavy spine beams, truncated, and king post truss; machinery to 2 flint crushing pans is complete, including great spur wheel, 2 horizontal gears and paddles; left end is raised, with wash tub; deep pit to front of left end is site of settling tanks. A good survival of an important local industry.

Name: FLINT KILN APPROXIMATELY 5 METRES SOUTH WEST OF COPPICE MILL

List entry Number: 1219169

Grade: II

Date first listed: 27-Jul-1972

Date of most recent amendment: 24-Jan-1992

Flint calcining kiln. c1840. Brick with corrugated iron roof. Small square structure built into slope. INTERIOR: 2 round niches in rear wall. Used for calcining flint prior to its crushing in the mill (q.v.). Flint was an important material in the Staffordshire china industry and its preparation was a significant local industry.

Name: THE MILL RESTAURANT AND ATTACHED AQUEDUCT

List entry Number: 1196750

Grade: II

Date first listed: 24-Jan-1992

Corn mill, now restaurant. Datestone inscribed:1795. Brick with tile roof.

Rectangular 4-storey structure. Large segmental-headed opening to left end has C20 infill with paired doors. Varied fenestration: segmental-headed windows with C20 casements; 1st floor loading door with renewed gabled canopy, datestone, partially obscured by ivy, to right. Left return has segmental-arched aqueduct bringing mill leat to 1st floor level. Rear has C20 single-storey addition. INTERIOR has heavy timber beams, on round iron columns to ground floor, chamfered timber posts to 1st floor, which retains great spur wheel, probably in situ. Most of the machinery and the wheel have been removed. The site of the Priory Mill; the producer of Hovis flour, Stoney Richard Smith, was born in the Mill House (not included). (Leaflet on The Mill Hotel and Restaurant).

Name: OUTBUILDING APPROXIMATELY 10 METRES SOUTH WEST OF

THE MILL RESTAURANT List entry Number: 1291574

Grade: II

Date first listed: 24-Jan-1992

Outbuilding of unknown purpose, now used for storage. Probably C18 or early C19. Brick with tile roof. Square 2-storey structure with outshut under catslide roof to right return. Gable facing. Large entrance with timber lintel over paired plank doors, 2 blocked roundels to gable. Return has shallow projection ?fireplace. INTERIOR: 1st floor removed; king post truss with diagonal beams across corners to right, one truncated and signs of similar arrangement to left; slightly lower beam runs from front to back with hole for pivot to soffit. Walls to upper level are concave except to ends. Building's purpose unknown, perhaps for some process involving rotation. Included for group value.

References

Cosson, N. 1993 BP Book of Industrial Archaeology, David & Charles 3rd edn

Job, B, 1995 Watermills of the Moddershall Valley

Jones, A., 2004 Splashy Mill Lower Moddershall Staffs Historic Building Assessment – Birmingham University Archaeology (unpublished)

Historic England, 2015. Historic Environment Advice Note 1: Conservation Area Designation, Appraisal and Management

Pevsner, N., 1974. The Buildings of England: Staffordshire. Yale University Press: London.

Sherlock, R 1976 Industrial Archaeology of Staffordshire

Staffordshire County Council, 1979. Moddershall Valley Conservation Area.

Online Resources

Staffordshire Past Track: http://www.staffspasttrack.org.uk/

The Heritage List for England: http://list.historicengland.org.uk

Staffordshire Historic Environment Record: http://www.heritagegateway.org.uk/gateway

Free online copy of Domesday Book: http://opendomesday.org/place/SJ9236/moddershall/

Staffordshire Record Office:

D4605/7/12 Moddershall Tithe rent charge map and award 1840

D593/H/3/191 Tithe Map, Moddershall 1952

Q/Rut/5/73 Plan of a proposed diversion or new line of road in the Stone Lane End Trentham Turnpike Trust in the County of Stafford, 25 Nov 1833

6759/1 Plan for a new road to avoid the Oulton Hills Stone, Lane End, Trentham and Stableford Turnpike Trust 17 Dec 1846

OS plans 1st edition 1879 24/11; 1880 24/15, 1880 24/14

2nd edition 1901 24/11, 24/15, 24/14

Photography

All colour photographs taken between 2012 and 2015 by Penny McKnight unless otherwise stated

Black and white photographs reproduced with permission of Staffordshire Past Track.