## AREA 5.E BICKERSHAW

### Description

The Bickershaw area consists of the former Bickershaw Colliery workings to the west of West Leigh and to the north of Plank Lane. It comprises heavily disturbed land including subsidence flashes, flooded streams, exposed nonvegetated colliery spoil heaps, partially restored and re-graded land, together with reclaimed land potentially for agricultural use to the north and associated plantation woodland. Together they form one of the largest reclamation areas in Wigan and have been designated as a park and golf course.

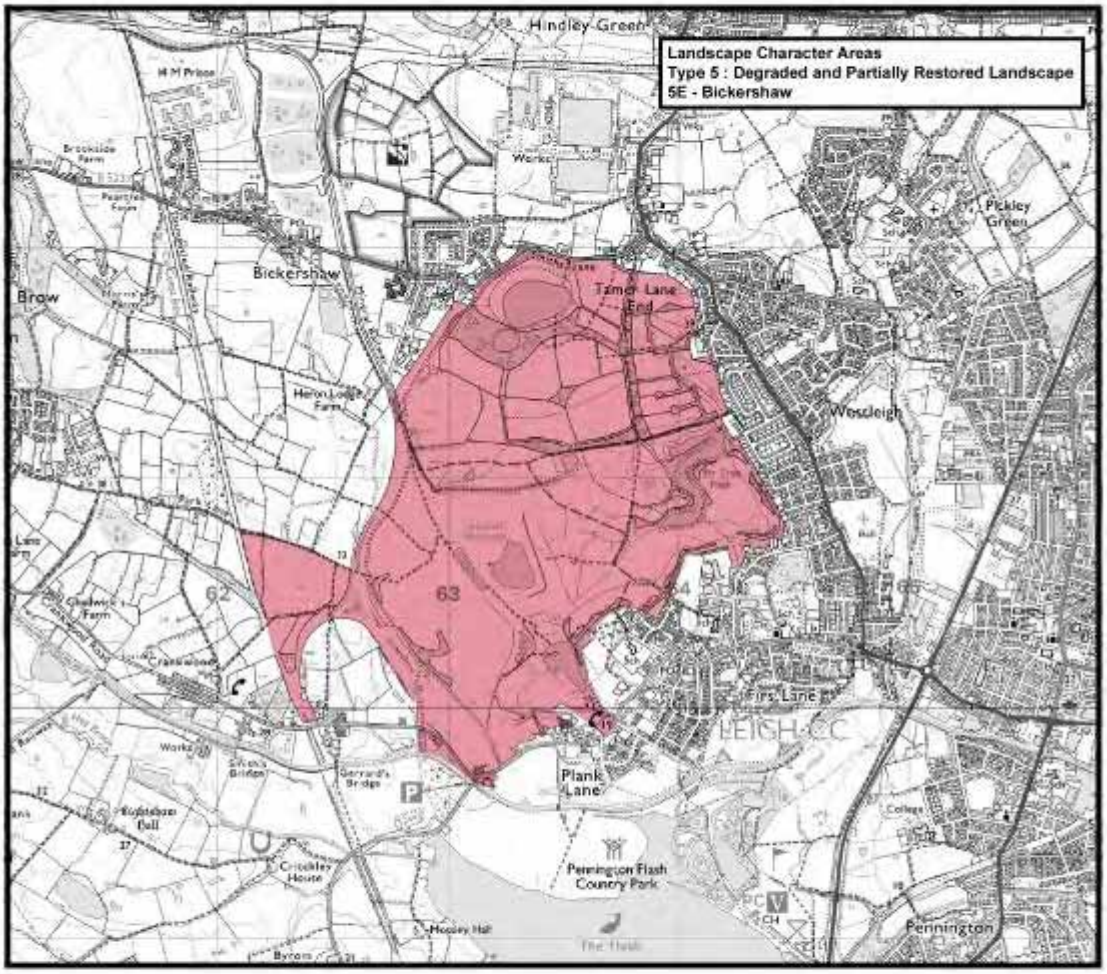
Photo. 103 New Park, Tamer Lane End.

The resulting landscape is on a very large-scale with currently unreclaimed land exhibiting such features as colliery wash-out basins and steeply battered tip slopes. Trees and hedgerows are generally absent. A rudimentary footpath system crosses the area from north to south, together with evidence of former railway and tramways.

The area also includes a serpentine like water feature, known as Fir Tree Flash, between re-graded spoil heaps. This forms a highly attractive feature within what is essentially a young and developing landscape

## Key Characteristics:

- Very large-scale landscape
- Landscape in various stages of reclamation:
    - Unreclaimed colliery spoil tips devoid of vegetation
    - Partially re-graded and reclaimed land
    - Fully reclaimed land to agriculture and woodland
    - Introduction of footpath system
- Flashes and areas of open water


Landscape Character Areas
Type 5 : Degraded and Partially Restored Landscape
5E - Bickershaw
Hindley Green
Bickershaw
Brow
Tamer Lane End
Pickley Green
Westleigh
Heron Lodge Farm
63
62
64
Plank Lane
Pennington Flash Country Park
Pennington
Crickley House
Hussey Hall
Byrom
Firs Lane

## Cultural History

Mineshafts at Bickershaw were sunk in the 1830s by Turner Ackers Co. and these were linked by a tramway to the Leeds and Liverpool Canal via Plank Lane, a route nearly 1.5 miles long. In 1972 road transport replaced canal transport of the coal. More shafts were sunk in the area throughout the later C19th although others were abandoned. In the later C20th the National Coal Board invested heavily in this site, connecting Bickershaw with underground tunnels to the mines at Golborne and at Parsonage. The result was that all the coal produced from these areas was brought to the surface at Bickershaw. A rapid loading system was constructed here, which could load a train of 45 wagons with 30 tons of coal per wagon (1350 tons) in less than one and a half hours.

This colliery had a very large workforce, many of whom lived in the immediate vicinity resulting in a particularly strong community identity. The Bickershaw colliery celebrated its centenary in June 1977. Famously, Bickershaw was known for the quality of its Brass Band. The Bickershaw and Parsonage collieries closed in 1992, since when the land has lain largely derelict apart from reclamation schemes to the north and east.

In 2004, English Partnerships provided substantial funding for a redevelopment of the southern part of the area under the National Coalfields Programme and this has since been increased as the northern areas were considered. The resulting area is envisaged as a large park.

### Key cultural elements in the landscape:

- Mineshafts sunk in the 1830s and on until the C20th.
- Underground linkage with Golborne and Parsonage collieries in 1976
- Establishment of the Rapid Loading System
- Bickershaw Colliery Band and strong community sense of identity

## Landscape Sensitivity and Change

The Bickershaw landscape has been subject to large-scale degradation through colliery workings although partially restored recently through grading, followed by agricultural, woodland and hedgerow restoration. Much of the area however remains relatively unchanged from its state following the abandonment of colliery workings and retains a somewhat bleak and industrial character. The area in general has been so radically affected by mining that all the original agricultural areas have been totally lost.

The land is continuing to change through further phases of reclamation works for open space and informal recreation. Urban pressure is being experienced to the southern and eastern boundaries with domestic fly-tipping and motorbike misuse creating problems for the open space areas.

### Key elements of landscape sensitivity:

- Urban fringe pressures of fly-tipping, motorbike and 4x4 vehicle misuse

## Key elements of landscape change:

- Changes from agricultural land to colliery workings, followed by restoration for open space, woodland and informal recreation.

- On-going restoration

## Recommended Management and Landscape Objectives

The Bickershaw site represents the largest area left for reclamation in Wigan. Parts of the area to the north have already been reinstated to pasture, woodland and public open space whilst other areas to the south are currently undergoing or awaiting commencement of restoration. Once again remnants of spoil heaps with gentle slopes leading to steep scarp faces can still be found to the south of the area. It is hoped that some integration of these features can still be achieved within the open space design providing some link with the areas past heritage. The site affords an excellent opportunity to provide for both passive recreation and for habitat diversity and wildlife. A system of surfaced footpaths is currently being implemented and early phases of advanced planting have been undertaken. A car park has been provided to the northern half of the site off Smiths Lane and it is recommended that a similar car park serves the southern half of the site from Plank Lane. Signage and an appropriate level of interpretation will also be important. New footpaths into the area could be considered along the disused mineral railway from the north and through the open access land to Pennington Flash to the south. Fly tipping is locally a problem particularly from rear garden fences and this should be addressed as quickly as possible. The use of the site by motor bikes has taken place for many years but will be incompatible with passive recreational uses. Motor bike control at entrance points will therefore be essential.

## Management of the Landscape:

- Continue a balanced management regime for the site based on passive recreation and wildlife/habitat conservation

- Retain elements of spoil heaps relating to the areas heritage

- Address minor fly tipping from rear garden boundaries

- Control motor bike access at points of entry

- Consider signage to the open space inside and outside the site

- Consider the provision of a purpose built car park to the southern half of the area together with interpretation facilities

- Explore the possibility of additional footpath links from the area to the Hindley open space areas and to the south to Pennington Flash Country Park

## AREA 5.F DANGEROUS CORNER

### Description

Area F is enclosed by suburban housing on all sides. It consists of heavily disturbed, partly elevated ground, including a former sandstone quarry, a brick clay quarry, colliery workings and associated spoil heaps. It is understood that the former sandstone quarry was infilled with domestic refuse and capped with colliery spoil to form the main mounded feature to the east of the site. This affords an elevated position providing sweeping views. A disused railway line runs across the northern part of the site.

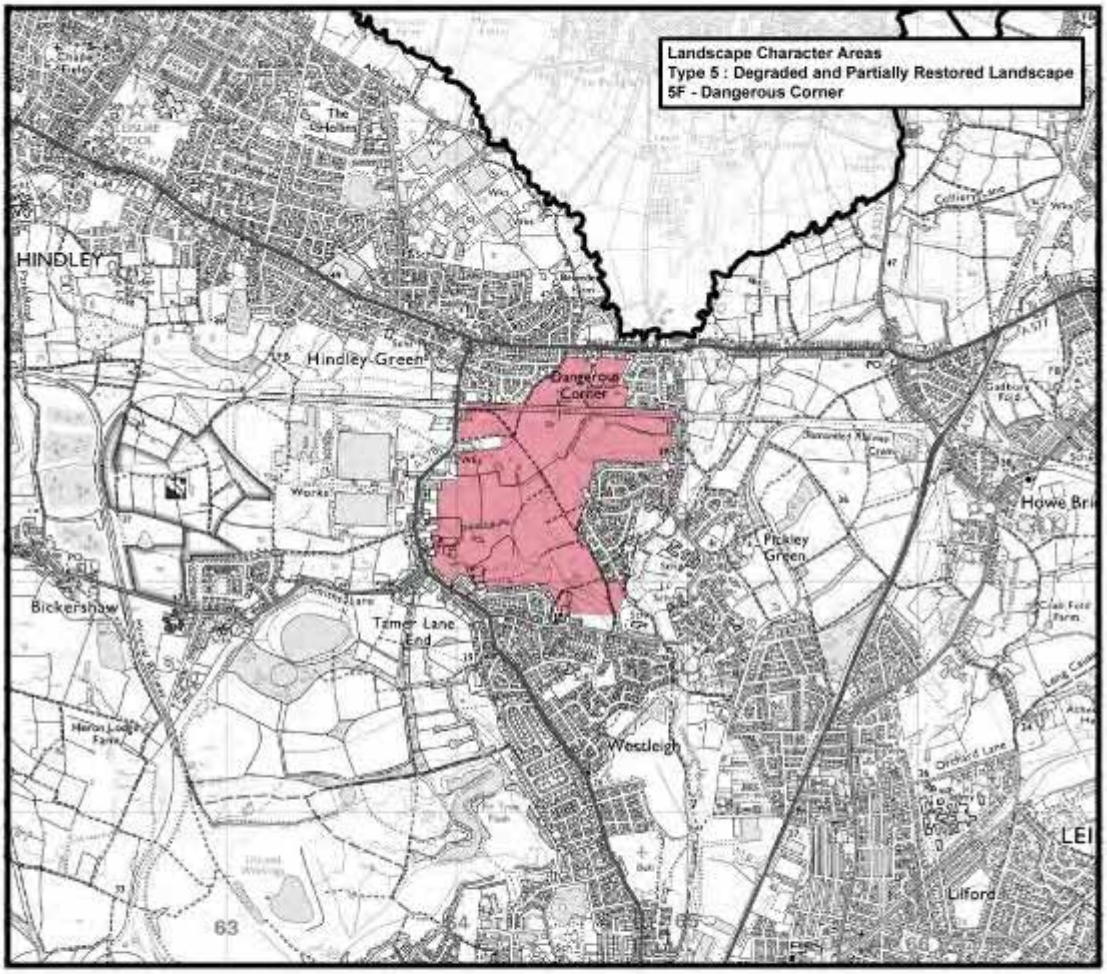
Photo. 145 Abbey Lane Tip, Dangerous Corner.

The spoil areas are sparsely vegetated with woodland planting to the south. Small areas of remnant hedgerows are apparent to lower, original ground levels to the west. The area appears to be unmanaged, disrespected and poorly reclaimed. It is currently used unofficially for tethered horse grazing and the site fringes have been subject to fly-tipping

A series of informal footpaths cross the area.

**Key Characteristics:**

- Disturbed area including refuse and spoil mound
- Some elevated sparsely grassed areas with low-lying poorly drained rough ground
- Tethered horse grazing
- Locally good views
- General absence of hedgerows and field patterns
- Large-scale generally open landscape
- Enclosed by suburban residential development
- Subject to fly tipping


Landscape Character Areas
Type 5 : Degraded and Partially Restored Landscape
5F - Dangerous Corner
HINDLEY
Hindley Green
Dangerous Corner
Bickershaw
Tamer Lane End
Pickley Green
Westleigh
Howe Bri
Lilford
LEI
63

## Cultural History

This area was crossed, to the north, by the L&NWR Eccles, Tyldesley and Wigan Railway Line, which ran almost east – west across the site. Opened in 1864, this railway closed in 1959. Part of the area to the north-east was a quarry in the C19th but this was infilled in recent times with domestic refuse and was capped off with colliery shale.

Colliery workings on the site are presumed to be C19th as are former clay pits.

## Key cultural elements in the landscape:

- The former L&NWR Eccles, Tyldesley and Wigan Railway Line.
- Former sandstone quarry.
- Former clay pits.
- Former colliery workings

## Landscape Sensitivity and Change

The area has undergone a variety of previous changes, mainly related to quarrying activity followed by the tipping of domestic and colliery spoil. Parts of the site have been reclaimed previously. Small vestigial areas of hedgerow fields can be discerned to the east, suggesting a small part of the original agricultural landscape character. The area is overlooked by housing estates, mainly to the south and east. The site is also prone to fly-tipping and provides open access for motorbikes.

## Key elements of landscape sensitivity:

- Overlooked by surrounding housing areas
- Subject to fly-tipping and mis-use by motorbikes
- Sparse vegetation unsuitable for grazing

## Key elements of landscape change:

- Changes from agricultural land to quarrying, followed by tipping and basic restoration/re-grading
- Currently open space for general public use
- Area likely to be subject to future change

## Recommended Management and Landscape Objectives

The site is almost totally enclosed by surrounding development and is currently unmanaged and subject to fly tipping. The area could be considered for a useful recreational open space use together with lesser infill areas of development to the periphery. Links from the area could be considered to the south east connecting to footpaths along Westleigh Brook. The site is sloping and any footpaths crossing the steeper parts of the site should be surfaced to resist erosion. Small scale field boundaries occur on what appears to be a minor area of

original farmland to the west. If demand was sufficient and subject to soil testing this area could usefully be used as allotments related to the open space and housing boundary. Open space design should include native woodland planting as an envelope to the open space with footpath connections broadly following the existing desire line footpaths. Consideration should be given to maximising the views from the higher parts of the site. Site access points should prevent the abuse of the land by motorbikes and fly tipping problems should be addressed as they occur. The open space provision would be on a small scale and the open space would be considered as a local amenity for the immediate area.

## Management of the Landscape:

- Consider mainly open space use with potential for minor infill development to the periphery and the possibility of allotments to an original farmland area in the west
- Design considerations should include a native woodland framework with surfaced footpaths. Views from the site should also be considered from the higher ground
- Management should be formulated on a balanced regime based on passive recreation and wildlife/habitat conservation
- Address fly tipping from access roads and rear garden boundaries
- Encourage the removal of eyesores such as derelict structures and fences, small areas of tipped materials, particularly when these are easily viewed from major routes.
- Control motor bike access at points of entry
- Explore the possibility of an additional footpath link from the area along the Westleigh valley to the south

## AREA 5.G PICKLEY GREEN

### Description

The Pickley Green site is an area of heavily disturbed and poorly drained ground to the north-east of the residential area of Pickley Green.

Steep spoil slopes have been formed to the east side of Westleigh Brook and these now retain a number of fully reclaimed terraced playing fields at a much higher level. The remaining areas comprise unmanaged rough grassland with natural regeneration of hawthorn, particularly associated with former railway lines. Hedgerows are absent.

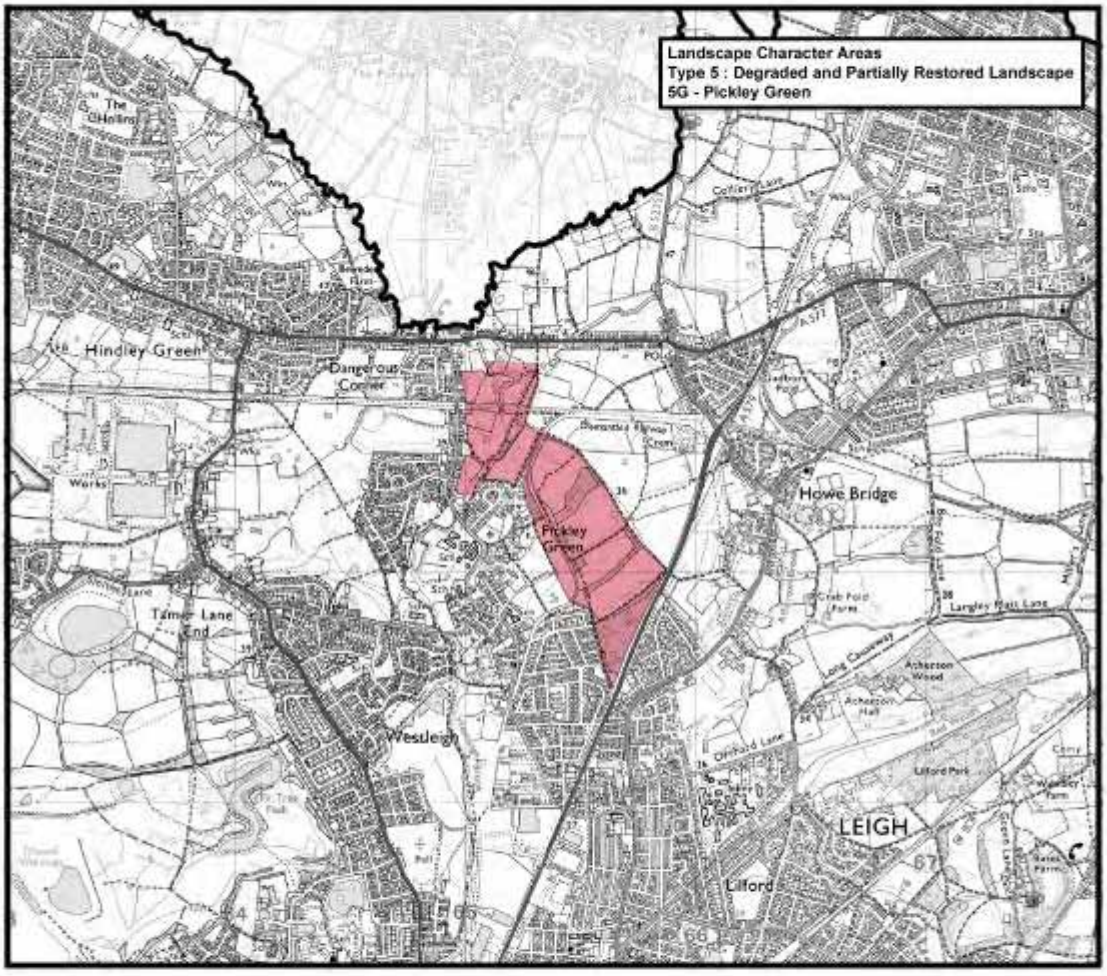
Photo. 148 Pickley Green; disused mineral railway to the right.

An area to the east has been divided by a series of woodland plantations creating a number of rectangular 'fields', comprising of rough grassland. Views are generally poor and limited throughout.

A number of unsurfaced footpaths cross the area, mainly following former railway line routes.

**Key Characteristics:**

- Poorly drained, unmanaged rough grassland
- Re-graded landform, including playing field area
- Former railway lines
- Informal footpath routes
- Linear plantations
- Naturally regenerating hawthorn
- Absence of hedgerows


Landscape Character Areas
Type 5 : Degraded and Partially Restored Landscape
5G - Pickley Green
Hindley Green
Dangerous Corner
Howe Bridge
Pickley Green
Tyldesley Lane End
Westleigh
Lilford
LEIGH

## Cultural History

The south-eastern boundary of this area is Atherleigh Way, the A579, a relatively new road which follows the line of the Bolton – Leigh Railway. Most of the mining activities in this area relate to Sovereign Pit Colliery, to the south-west of the area, and to Pickley Hey Colliery. Sovereign Pit was sunk in 1864, Pickley Hey, an older pit, closed in 1858. This relatively late development of C19th mining relates to the development of the railways, as the Bridgewater Canal is approximately one mile south, too far for effective connection to a mine.

The Bolton – Leigh Railway was a branch of the Liverpool – Manchester line and was opened for goods traffic in 1828. A second railway line, the Eccles, Tyldesley and Wigan Railway ran east – west across the area and was opened in 1864. Once these lines were open, colliery development was rapid and a large number of branch and loop lines were constructed to serve various mines. Several lines accessed Sovereign Colliery and many curved through this area. The Eccles, Tyldesley and Wigan Railway closed in 1959.

To the north of this area, in the valley of Small Brook has had some fill material tipped into it and the east side of the valley of Westleigh Brook has been subjected to sand quarrying. This has since been filled in.

The former colliery workings have been reworked and regraded, with large scale planting to west of the area, forming a boundary to local housing.

## Key cultural elements in the landscape:

- Former railway lines of the Eccles, Tyldesley and Wigan Railway and numerous branch lines loops etc.
- Former colliery workings
- New woodland planting

## Landscape Sensitivity and Change

The area appears to have been substantially altered in terms of landform, particularly in association with the eastern side of Westleigh Brook, where large and steep engineered embankments now form an artificial and somewhat overbearing side to the valley.

The land also appears to be heavily disturbed further to the east, resulting in poor quality rough grassland with poor drainage.

The old disused railway lines form an historic structure to the area, but these are often badly drained or show signs of erosion to their embankments. The informal footpath routes which follow the line of the old railway tracks are well-used recreationally, although often mis-used used for fly-tipping and motorbike riding.

An attempt at reinstating the land has been made by the introduction of linear plantations which follow what may originally have been old hedgelines.

Most of the land is screened from residential areas to the south by trees and woodland and from the east by raised land levels.

## Key elements of landscape sensitivity:

- The valley of Westleigh Brook has been subject to very artificially graded valley sides
- Subject to urban fringe pressures of fly-tipping and motorbike use
- Grassland areas subject to poor drainage

## Key elements of landscape change:

- Areas subject to tipping and grading creating artificial landform and poor drainage
- Loss of original hedgerows
- Creation of now disused railway lines often on embankments
- Use of the area for both formal and informal recreation
- Creation of narrow linear woodland plantations
- Area likely to be subject to future change

## Recommended Management and Landscape Objectives

The Pickley Green area is located in close proximity to Dangerous Corner but physically separated from it by the Pickley Green housing areas. The site is of a similar size and is also enclosed by housing. Parts of the Pickley Green site have been reclaimed for playing fields by unsympathetically dozing spoil into the Westleigh Valley. Whilst the playing fields are well maintained the valley sides remain unmanaged. The vast majority of the Pickley Green site remains as badly disturbed but fairly even ground, poorly drained and planted with narrow plantations reinforcing the shapes of previous field boundaries. The majority of the area remains unmanaged. Footpaths through the area are limited by wet badly drained conditions and tend to concentrate along the disused railway lines. These footpaths are all unsurfaced and many are in poor condition with evidence of use by motor bikes.

The area could be considered for open space use or for a combination of open space with development off the A579. Poorly drained areas could be exploited to develop wetlands within the open space and native woodland planting should be structured to form an envelope to the site and any future development. Footpaths should be surfaced and any access points to the open space provided with control to restrict motor bikes. The main dismantled railway to the north runs due west and could form a direct footpath link with open space areas at Area 5D Hindley.

## Management of the Landscape:

- Consider either open space use or a combination of open space and development from the A579
- Design considerations should include a native woodland framework with surfaced footpaths and the exploitation of badly drained areas to form wetlands
- Management should be formulated on a balanced regime based on passive recreation and wildlife/habitat conservation

- Undertake woodland management to previously planted linear woodlands and consider mitigation works to steep regraded land into the Westleigh valley from the playing fields

- Control motor bike access at points of entry

- Explore the possibility of an additional footpath link from the area along the dismantled railway towards Hindley

## AREA 5.H GIN PIT

### Description

The Gin Pit area is bordered to the north, south, east and west by the residential areas of Hindsford, Marsland Green, Blackmoor and Bedford/Higher Folds.

The area largely comprises of a former colliery spoil heap which has been re-graded to form a simple but large-scale, generally dome shaped mound with gently sloping sides. Woodland plantations are present around the boundary, particularly to the residential areas of Higher Folds, together with interlinked strip planting which divides the area into a series of grassed open spaces. The open space areas are of a very large-scale nature, contrasting with the surrounding heavily built-up urban areas. The woodland plantations are now reasonably mature, creating a landscape framework which is also valuable for wildlife.

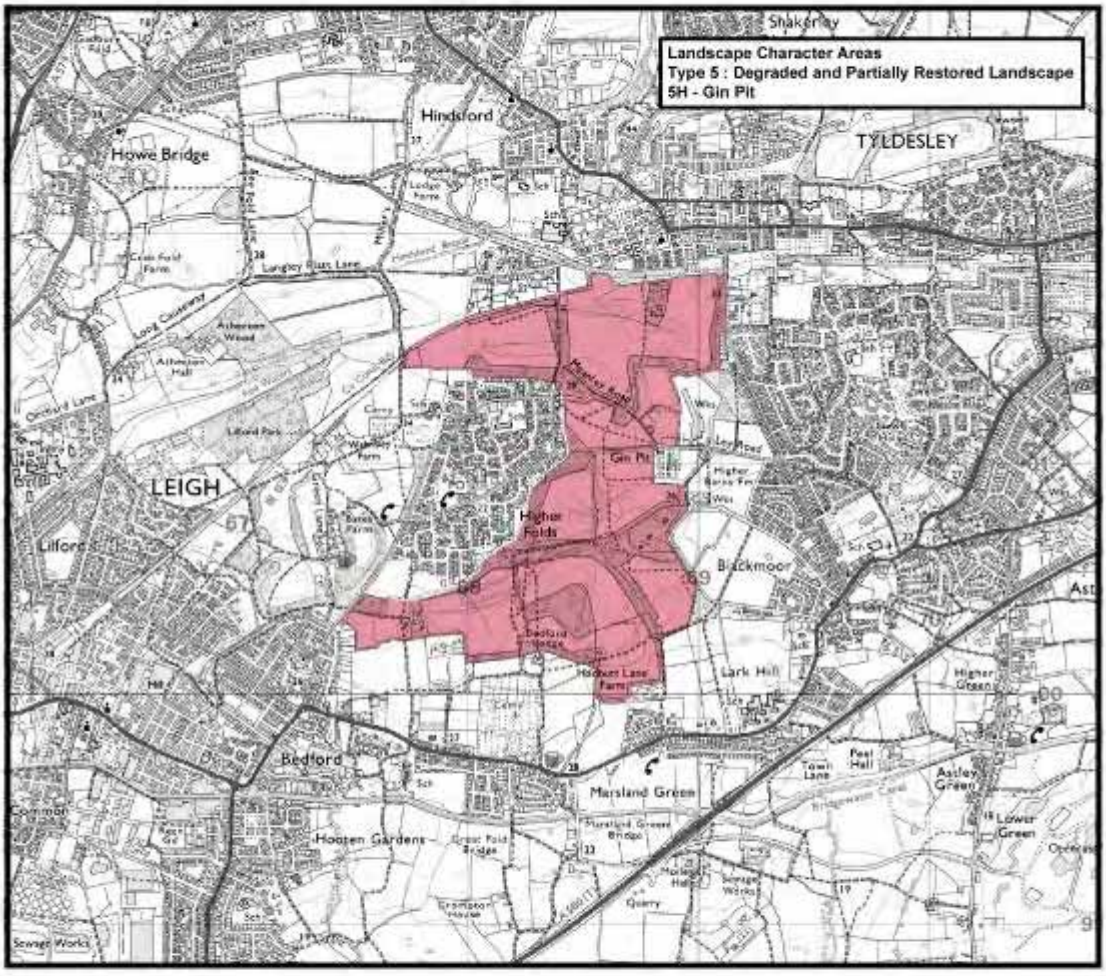
Photo. 86 Gin Pit.

The site has largely been classified as 'access land' and provided with an extensive system of gravel surfaced, informal footpaths used recreationally for walking and horse-riding. Extensive views are afforded from the higher ground in all directions, particularly towards Leigh and Winter Hill. Reclamation has taken place with minimal topsoil application, resulting in a nutrient deficient ground supporting a wide diversity of flora. Purple spotted orchids are common throughout the site.

The residential development of Gin Pit village is currently under construction within the area to the east and linked to the open space by a major east / west footpath route.

## Key Characteristics:

- Reclaimed former colliery spoil tip
- Generally dome-shaped landform, elevated above surrounding areas
- Excellent views from higher ground
- Large-scale open space areas surrounded by maturing woodland
- Extensive informal footpath system
- Site surrounded by housing areas
- Recreation uses, including horse riding
- Valuable site for flora and fauna


Landscape Character Areas
Type 5 : Degraded and Partially Restored Landscape
5H - Gin Pit
Shakerley
Hindsford
Howe Bridge
TYLDESLEY
Gin Pit
LEIGH
Higher Folds
Lilford
Blackmoor
Lark Hill
Bedford
Marsland Green
Hooten Gardens
Sewage Works
Quarry

## Cultural History

Gin Pit was sunk in 1850 and employed some 500 men at its peak. The adjacent Gin Pit Village was built as miner's housing for the workers. The colliery closed in 1955. Just south of Gin Pit was Nook Pit, sunk in 1860 and employing over 1,000 men at its peak. This colliery was closed in 1964.

The large area of spoil left from Gin and Nook Pits was subjected to a reclamation project by the Joint Lancashire and Greater Manchester Derelict Land Reclamation Unit. This involved regrading the spoil and seeding and planting works. Many paths were provided for public access.

Photo. 86 Early purple orchid at Gin Pit.

## Key cultural elements in the landscape:

- Site of Gin and Nook Pits
- Extensive areas of reclaimed spoil supporting a wide range of wildflower species
- Extensive areas of tree planting

## Landscape Change and Sensitivity

The Gin Pit area has created very large exposed areas of mounded land from part of the original colliery works, leaving only small areas of original field patterns in association with southern and eastern fringes of the site. The spoil areas have now been reinstated to grassland and woodland forming a very different landscape to the agricultural land previously consumed by the colliery.

Also associated with the reclamation has been the construction of an integral surfaced footpath system with access for horse-riding and other recreational activities. The area now appears to be well used by residents from the surrounding residential areas.

More recent changes have included the on-going construction of the housing area known as Gin Pit village, situated centrally within the reclaimed area.

### Key elements of landscape sensitivity:

- Very large-scale landscape, sensitive to views
- Open areas can be exposed to weather
- Sensitive to urban pressures, such as fly tipping and mis-use by motorbikes

### Key elements of landscape change:

- Loss of original landscape and agriculture
- Creation of new mounded landform, mainly for recreational use
- Diverse range of flora encouraged
- Certain areas subject to housing development
- New views created
- Creation of woodland plantation frameworks

## Recommended Management and Landscape Objectives

The Gin Pit area is already well established and managed as a reclaimed landscape mainly for passive recreation and nature conservation. Large expanses of grassland are mown, footpaths maintained and litter removed. Differential mowing has favoured the prolific growth of orchids throughout the site. Horse riding and walking are popular along surfaced gravel tracks and access is controlled for motor bikes. Woodland areas are now well established and require a considered programme of thinning and coppice management. Consideration should also be given to providing additional planting to reduce the sites exposure and large scale open spaces.

Any new planting should continue to facilitate the excellent views which currently exist from the higher parts of the site. The small scale field pattern which survives to the south and south eastern side of the site should resist infill development and ideally continue as grazing paddocks integrated with a programme for hedgerow restoration and management. Provision for allotments could also be considered in these areas together with native planting

connecting to the reclaimed areas, relating to footpaths or used for framing or screening views. In common with a number of reclamation sites Gin Pit open space is somewhat hidden from view and does not advertise its existence to the surrounding area. The attraction and scale of the site warrants stronger signage and interpretive information on site linked to a series of designated periphery car parks. A greater emphasis towards planting and footpath links with the Atherton Hall open space areas should also be considered.

This area includes a section of woodland planted using Forestry Commission grants and a large area has been designated as an area of Open Access. While welcome in principle, open access land should be subject to careful monitoring to ensure that public access does not result in disturbance of wildlife habitats. The local community, although small, has shown great interest and has been involved with a planting scheme carried out with the assistance of Red Rose Forest. It is considered that there is scope to increase this interest in the surrounding area.

### Management of the Landscape:

- Maintain existing balanced management regime for the site
- Undertake a comprehensive woodland management programme
- Consider new planting to reduce elements of scale and exposure and create a more intimate landscape
- Consider signage improvements inside and outside the site
- Consider the provision of a purpose built car parks and stronger site interpretation
- Explore the possibility of a stronger link with the Atherton Hall open space areas
- Resist infill development to the south and south east of the site, restoring hedgerows and exploring the potential for allotment use and planted links to the reclaimed land. Retain this area largely for grazing if possible

## AREA 5.I ASTLEY GREEN

### Description

The Astley Green area consists of three distinct elements of derelict land. To the south and north of the Bridgewater Canal surrounding the Astley Green Colliery Museum lies a disturbed area of even, low-lying ground forming rough grassland with marshy wetland areas. It is currently being managed as a naturalistic open space and has been provided with an informal footpath system linking to the Astley Mining Museum adjacent. This area contrasts with the reclaimed agricultural land to the north-east and with the substantial unreclaimed areas of tipping to the south.

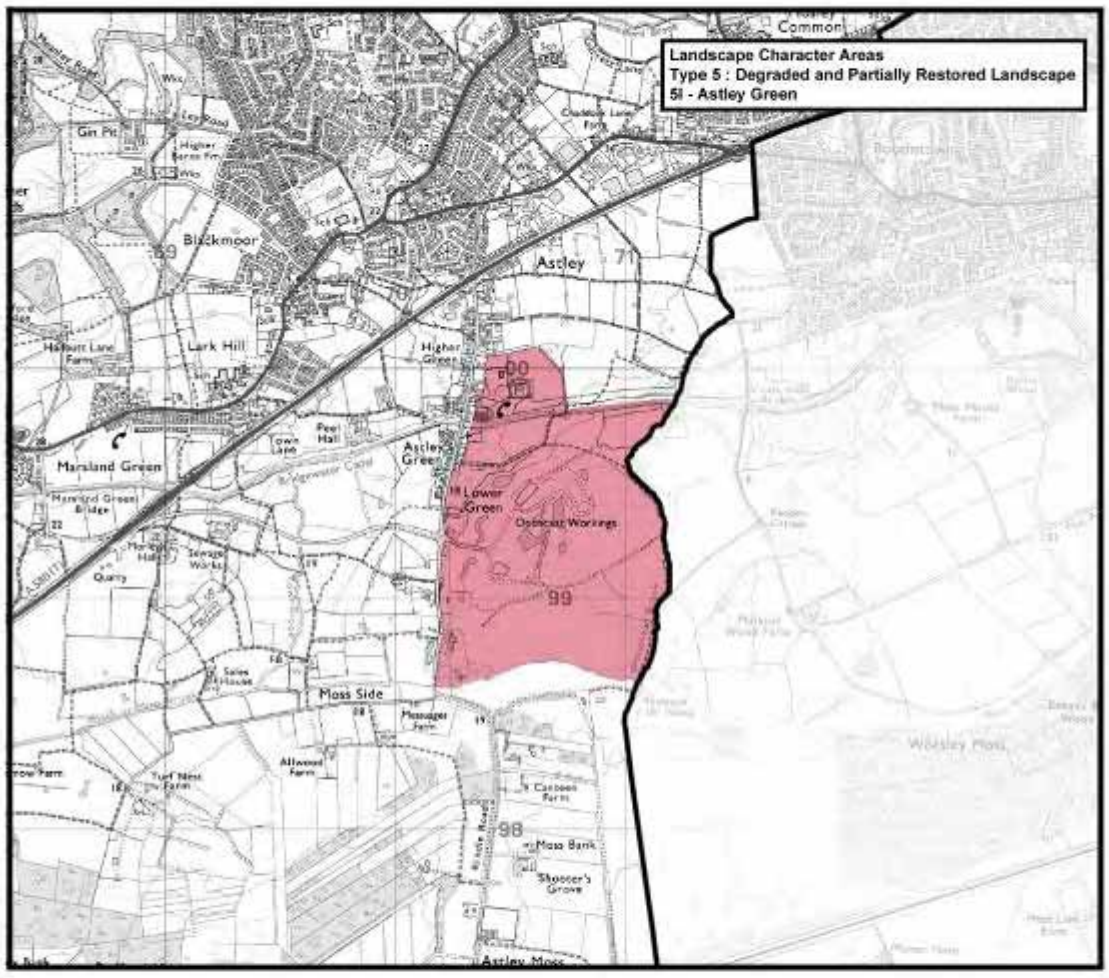
Photo. 3 Millenium Green, Astley Green.

The bulk of the area to the south of the Bridgwater Canal is a former mossland area, which has been subject to open cast mining. To the north, the area is currently active as a colliery waste washing site. The colliery area forms mounded, steeply sloping land consisting of colliery waste material with a perimeter security fence and no public access. To the south, the area rises steeply to form a domestic refuse tip which is also currently active.

The refuse tip is similarly fenced and partially screened by a perimeter strip of plantation woodland. The tips are dominant, unattractive features when viewed from the surrounding, typically flat mossland areas. The refuse site is also particularly well frequented by tipping wagons using the Area's very narrow and subsidence prone lanes.

**Key Characteristics:**

- Visually dominant, unattractive domestic refuse and colliery tips
- Both sites operationally active
- Wetland, naturalistic, open space associated with mining museum
- Perimeter security fencing
- Heavy use of roads by tipping wagons


Landscape Character Areas
Type 5 : Degraded and Partially Restored Landscape
5l - Astley Green
Blackmoor
Astley
Lark Hill
Marsland Green
Lower Green
Moss Side
Astley Moss
99
98

## Cultural History

The Bridgewater Canal runs through the south of the area from the east, meeting the Leeds and Liverpool Canal at Leigh Bridge. The two canals functioned from 1819. Subsidence around the canal has required reinforcement of the embankments.

Astley Green Colliery, commenced in 1908 by the Clifton and Kersley Coal Company was built to access coal under the mossland. The moss and clay 'overburden' was 30m thick and it was the technical inability to mine through this which had until this date protected the coal reserves. The shaft was sunk using a 'drop shaft' method, which used an iron cylinder with teeth at the base to be forced into the ground with hydraulic jacks, counterweighted by a large masonry thrust pillar. The pit closed in 1970 and demolition of the colliery commenced that year. Only the winding gear and the building housing the Astley Green Colliery Museum remain.

Photo. 1 Astley Green Pit winding gear.

Astley Green Colliery was the proud holder of the Lancashire record, when in 1967 on the 3-East face in the Worsley four feet seam, an advance of 84'2" was made in one week on a 250' face.

The Astley Green spoil heaps have been subjected to opencast mining and more recently to infilling with domestic refuse

## Key cultural elements in the landscape:

- Bridgewater Canal
- Astley Green Colliery Museum
- Astley Green Colliery Winding Gear
- Large areas of colliery spoil

## Landscape Sensitivity and Change

The area is largely situated on virtually flat, agriculturally rich, former mossland and is a particularly sensitive landscape on which to place raised artificial landforms. The tip sites to the south of the Bridgewater Canal therefore now form dominant artificial features in the landscape, together with disturbance to the area caused by noise and potential water pollution.

The open space land associated with the Astley Colliery and Mining Museum has been heavily disturbed and compacted forming poorly drained areas of ponds, reeds and marsh. This appears to be being managed as a naturalistic area in contrast with its former agricultural use, prior to the colliery workings. The site is adjacent to the remnant Manchester Mosses Special Area of Conservation.

## Key elements of landscape sensitivity:

- Mounded tip sites in a locally flat landscape
- Potential water pollution from domestic refuse tip
- Potential noise, gulls and rodents brought to the area
- Use of tipping wagons on peat based lanes

## Key elements of landscape change:

- Alteration from former flat mossland to mounded tip sites
- Degraded poorly drained land associated with Astley Colliery
- Provision of open space; naturalistic informal recreation areas

## Recommended Management and Landscape Objectives

The Astley Green area contains a variety of different landscapes requiring differing approaches to landscape objectives and management. The land relating to Astley Green Colliery museum has undergone a very basic form of restoration relying mainly on natural regeneration and the design/management of disturbed marshy ground. It also appears to be used in relation to the museum for passive recreation. A surfaced gravel footpath through the site has been provided. The resulting landscape is reasonably attractive and has created a degree of habitat diversity. Continued management will be required to establish a balance of naturally invading pioneer tree and shrub species and open space/wetland and grassland. Astley Green village is quietly situated off the A580 East Lancashire Road and the mining

museum enjoys neither through traffic or a prime visual position. A far greater degree of signage and interpretive advertising should therefore be considered if the site is to be well visited.

The majority of the site remains un-reclaimed and actively used as a colliery waste washing site with no public access. Long term objectives should aim towards the standards of reclamation and ultimate landuse achieved at the Ince Moss/Amberswood Common site with links to reclamation of the refuse site to the south.

The refuse site to the south situated in a flat low lying mossland is the worse possible location for an above ground refuse tip. The tip is visually intrusive to the surrounding landscape and has an adverse impact on the area through the heavy use of mossland roads by tipping wagons. The presence of large numbers of gulls and potentially rats and polluted water seepage may also have an adverse effect on the mossland habitats and wildlife. Following the completion of tipping landscape restoration should result in producing a flat horizon based on an inclined plane. Associated planting should be based on the tree species present in the mosslands adjacent and other key raised bog species, such as heather.

## Management of the Landscape:

*Mining Museum related area*:

- Continue and expand current management of the 'naturalistic' areas controlling the invasion of scrubland and trees

- Consider improved signage, advertising and interpretation to improve visitor awareness

*Active colliery waste site:*

- Consider long term restoration combining habitat diversity and passive recreation with future links to the adjoining refuse site to the south.

*Refuse site:*

- Assess the impacts of the current operation on the local area, mossland habitats and wildlife

- Consider final restoration in relation with the colliery washing site to the north and develop flat, inclined skylines relating to the mossland landscape. Woodland planting to similarly relate to existing mossland woodland species. Clay capping to the refuse site should be left underlying the final soil layer, which should be of a type similar to that in the mossland. (Ideally, a peat soil will contain seeds of heather and birch and naturally regenerate these species if left undisturbed.)