FRONT PAGE:

Droitwich Waterways (Pamela May) Trust Ltd

Registered Charity Number: 1149844 Company Number: 7662700 www.droitwichcanals.co.uk

Commentaries for the Pamela May Trips

Taken from the Pamela May Operation Procedures Manual Dec 2017

- Issue 1 - April 2018 -

This document can be downloaded from www.droitwichcanals.co.uk/pammay

Issued by the Trustees of Droitwich Waterways (Pamela May) Trust Limited:- Issue A : Dec 2017

Bernard Clements And The Pamela May (How the Boat Started)

The Pamela May narrow boat is a Charity Trip boat sailing on the recently opened Droitwich Canals. The boat was the inspiration of Bernard Clements who recognised the benefits to the elderly and infirm of visits to the great outdoors. Bernard initially organised visits from residents of residential homes to his garden at Hanbury. However, his dream was to take people on boat trips along the Worcester to Birmingham Canal. Then in 1994, May Ward, widow of Freddie Ward the Worcestershire fast Bowler, left him a legacy and this made his dream a reality. The boat was built and launched at Hanbury Wharf (company name Saraband) in 1995. It was named Pamela May after Bernard's wife, Pamela, and May Ward.

Bernard Clements was born in 1917 in Quinton, the fourth and youngest son of John Clements, a postman, and he went to school in Rubery.

He left school at 14 without academic qualifications and joined "Clements Brothers", the firm his three older brothers had started in 1930. The firm did sign writing and made advertising posters. At that time, the Cinema Industry was beginning to boom, and they made posters (eventually silk screen printed) advertising each new film as it was shown. They went on to do shop displays and stands for exhibitions. A number of the largest brewers commissioned them to make mobile bars for exhibitions and fairs. Industrial companies ordered exhibition stands to be built and some were in overseas locations like Russia. They became skilled carpenters and tradesmen, and eventually some 250 people were employed by the firm. Most customers were in marketing and advertising. Companies like Bass, Hotpoint, Cadbury and Austin were on their client list. The craftsmen were recognised as among the finest in the business, and the Company built a fine reputation for quality work, and one of the best employers in Bromsgrove.

As the youngest brother, Bernard swept out the factory and made the tea to start with, but with his sharp mind, quickly learnt the business.

In the Second World War, Bernard joined the army and was commissioned as a Lieutenant in the Middlesex Regiment. He served in the Faroe Islands, as there was a German threat to invade them.

After the war, he joined his brothers in the Family firm, and became Works manager. The company was split into two – "Clements Brothers Displays" and "Clements Brothers Exhibitions".

All the employees were devoted to the Company and Bernard cared for them in return and took an interest in their personal lives. It was a fine example of Capitalism at its best. For example, Bernard advised one employee about buying his first house, and took the shy young carpenter to meet an Estate Agent friend, who found a very nice house he could afford. He heard that the young daughter of one employee had been to Spain and had a knack for languages, so he arranged for her to have private French and German lessons, which he paid for, and this led to a University degree and a career as a linguist. Another remembers Bernard noticed he was in agony with a wisdom tooth, and Bernard immediately took him to his own dentist in Rubery, who split it and extracted it. Bernard then drove the now pain free man via Longbridge to pick up the employee's wife and take them home. Another employee, Ted Johnston, said it was a wonderful firm to work for.

The elder brothers died early but they all remained close friends and partners. Bernard became Chairman of the Company, with Alf Beddow as Managing Director, till it was sold.

Bernard was extremely sociable and entertained customers and friends generously. There were many occasions when he arranged for the firm's craftsmen to help people sort out home building problems. His generosity and good deeds were a hallmark of the man. After he retired, he was a regular visitor at the old Bromsgrove General Hospital and specially Ward 18 which was for "long term elderly men". Staff nurse Amanda Ward, remembers, every week he took in baskets of exotic fruits, which most of them had never seen. He also brought in bottles of beer and whiskey "to cheer them up". For the wedding of Prince Andrew and Fergie, he threw a ward party which remained "memorable" for many years. He knew the name of all the nurses and staff as well as the patients.

Both during his active years and in retirement, Bernard "invented" things, and was always most creative.

When the Pamela May was being planned, he built wooden models of the boat and the internal layout and furnishing, so that the build went smoothly.

After the boat was launched, Bernard formed the Pamela May Trust in 1995. This was re-formed after his death in 1997, with Bernard's son Ian, and daughter Sue, and Ben Lee becoming trustees. Day to day running was undertaken by Ben Lee and a small group of volunteers who provided two hour trips totalling more than 150 trips a year for small parties of the elderly and disabled from local nursing homes.

Following Ben's death in 2005 the boat was transferred to the Droitwich Canals Trust. Sailings took place along the Worcester and Birmingham Canal from the Trust's mooring at Hanbury Wharf and then ultimately from the Netherwych Basin at Droitwich. She was transferred to the Droitwich Waterways (Pamela May) Trust in July 2011, when the restored canals were opened.

Today, the Pamela May team run four boat trips starting from Kidderminster Road opposite the Railway Inn or from Vines Park.

1. These are to Salwarpe and Ladywood Lock.
2. To Hanbury Wharf
3. To Dunhampstead
4. To the river Severn at Hawford

Passengers are from residential homes, local schools and the general public. Crews are composed entirely of volunteers, trained by professional trainers to a high standard of competency and have obtained recognised boat handling certificates.

Because of the Charitable nature of the Trust, the Pamela May is not financially viable on its own and needs the support of the other Trust activities and its Patrons.

Patrons are sought to support the Droitwich Waterways (Pamela May) Trust, subscription £10.00 per annum. For further information please contact Cllr. Margaret Rowley; 01905 345307, email AMargaretRowley@aol.com.

To book a trip contact www.pamelamay.org.uk and follow the e-mail links to check free dates and e-mail a booking request, or leave a message on 0793857 1809.

Written by Roy Murphy and Sandy Laird

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Pamela May talk

Vines Park to Ladywood

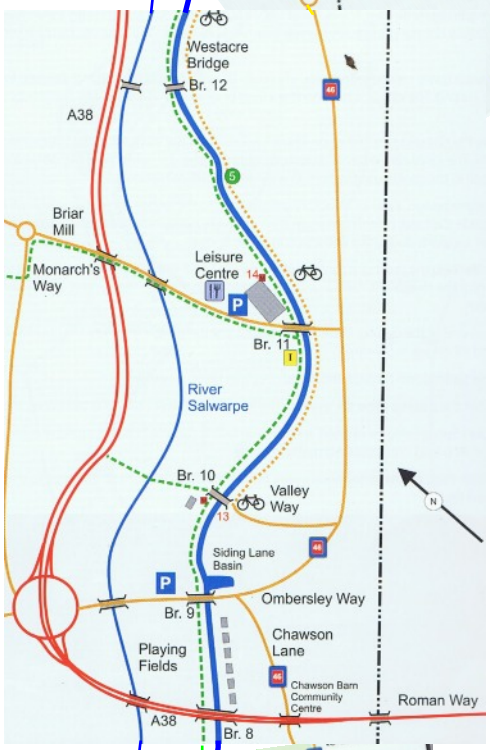
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- Trip Commentary: Vines Park to Ladywood:

PAMELA MAY TALK - FROM VINES PARK TO LADYWOOD

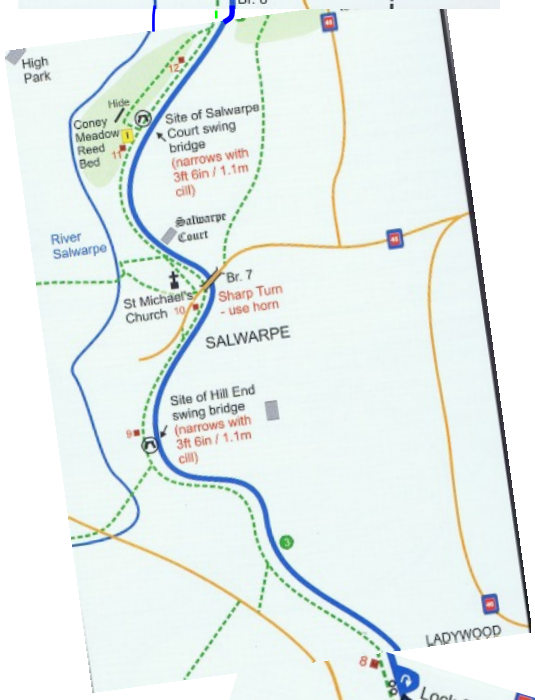


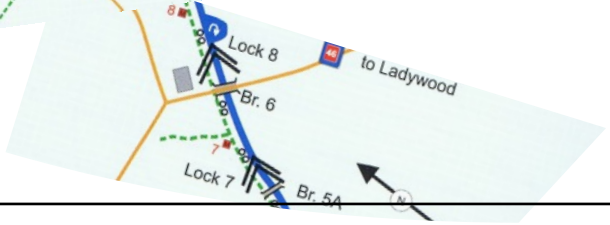
THE DROITWICH BARGE CANAL



KEY TO MAPS

- lock
- bollards
- water level warning board
- mileage from Hawford
- cycle track
- parking
- national cycle route
- picnic site
- 17 audio trail mosaic post
- interpretation board

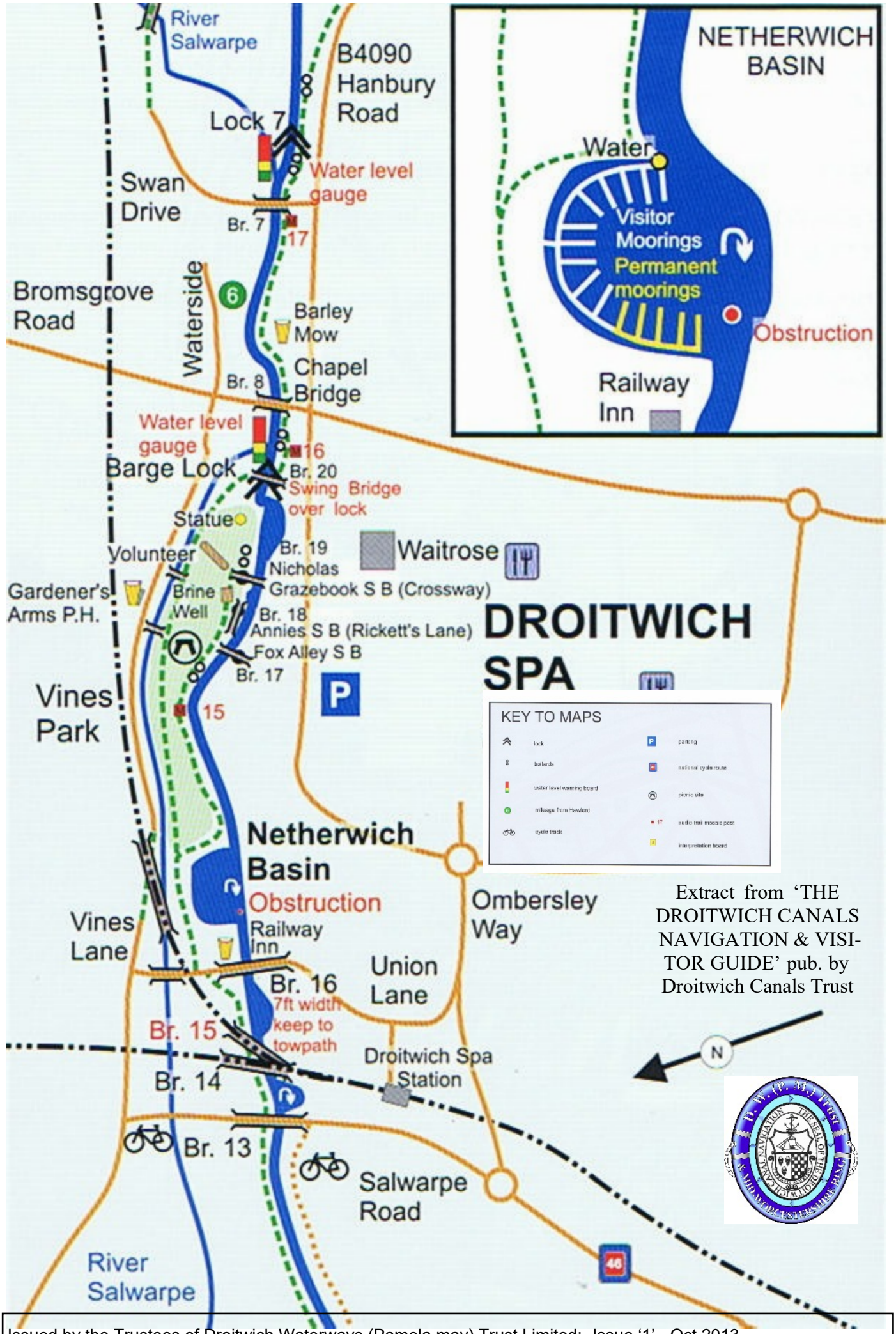




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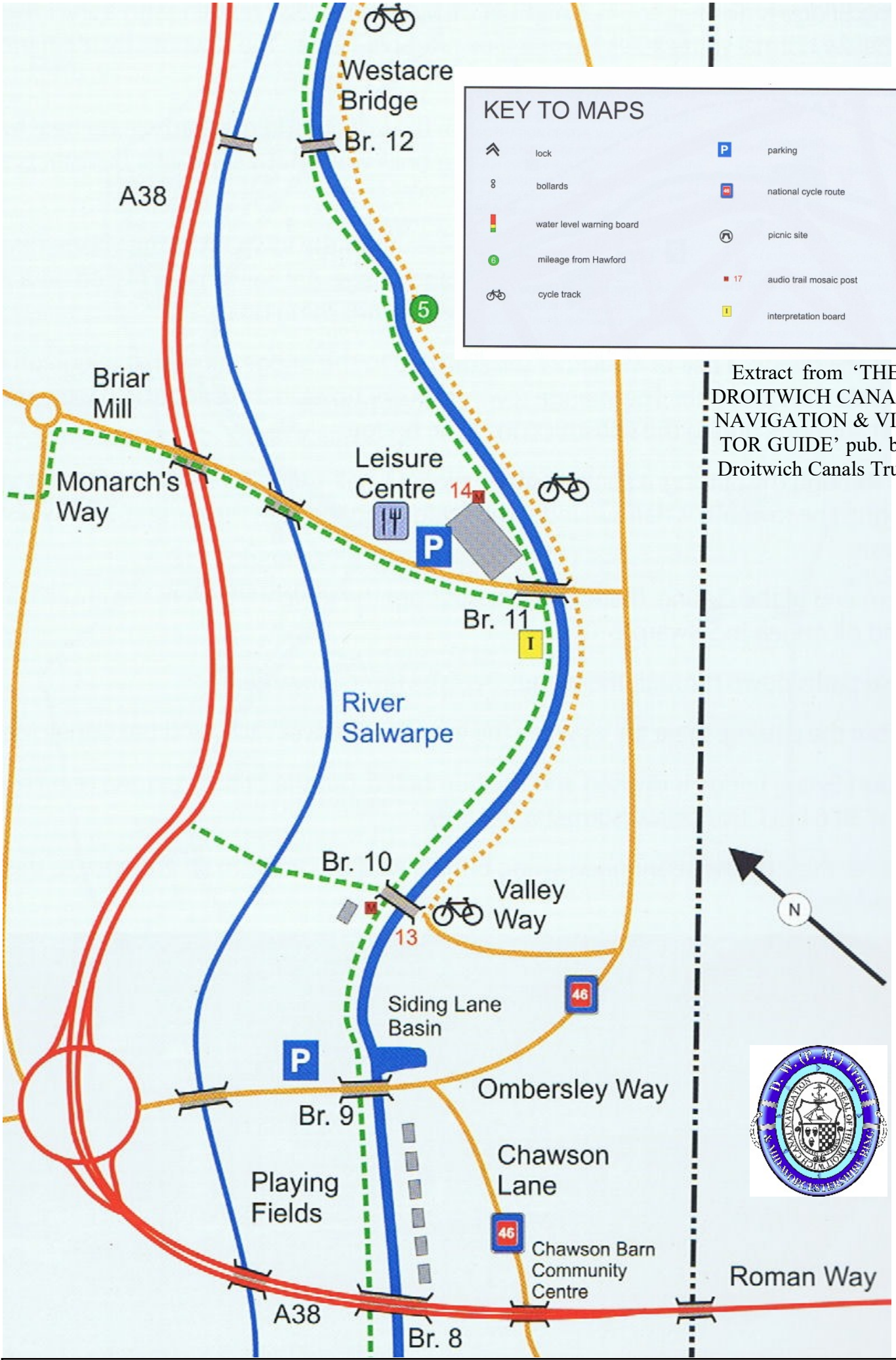
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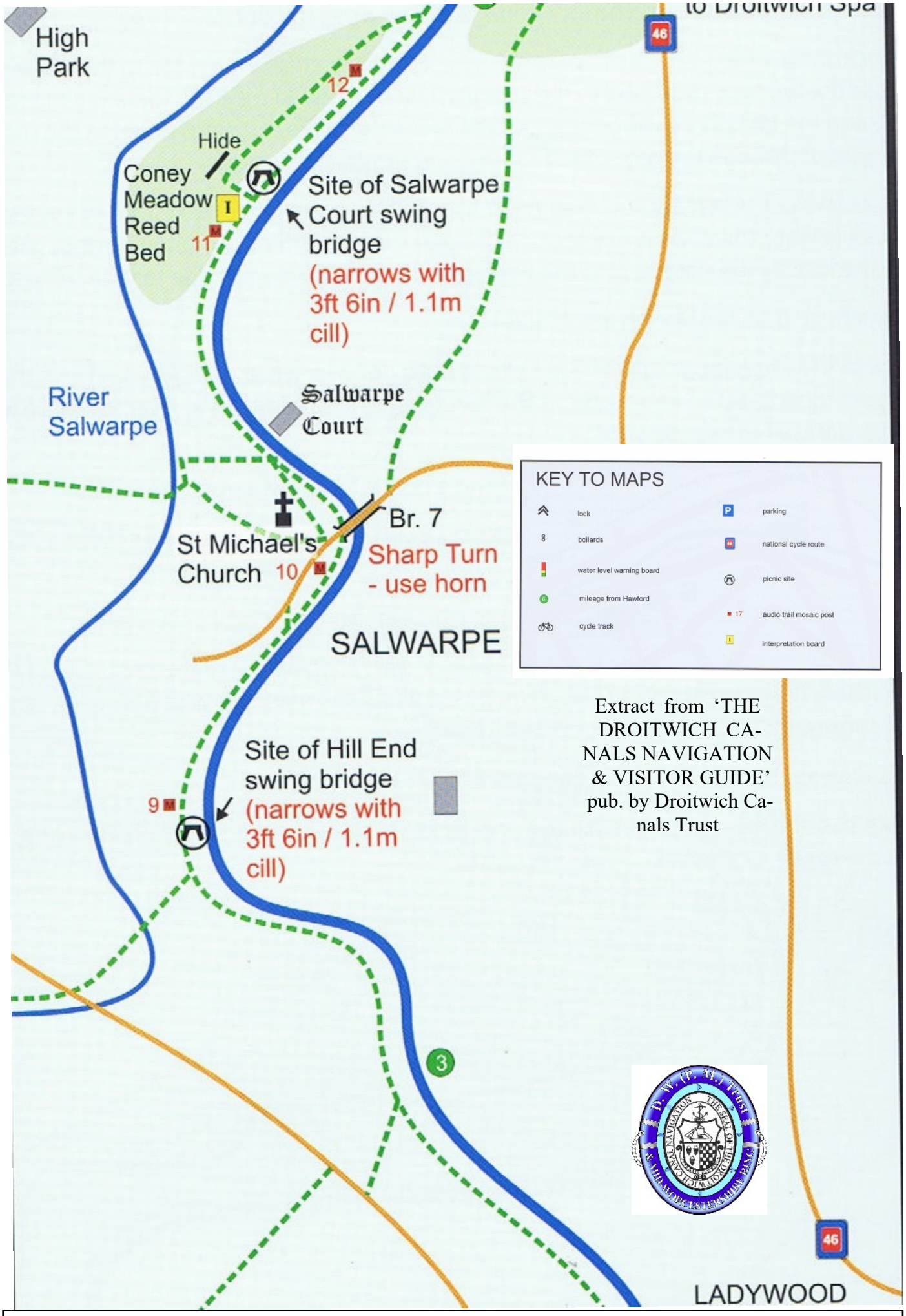
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THE DROITWICH WATERWAYS (PAMELA MAY) TRUSTPAMELA MAY'S CANAL JOURNEY



Look out for these birds on route

Swan

Coot

Mallard

Moorhen

Heron

Kingfisher

Lapwing

Reed Bunting

Sedge Warbler

Snipe

Willow Warbler

Willow Tit

Read Warbler

Salt Water Plants: -

Dittander

Lesser Sea-spurrey

Sea Milkwort

Sea Club-rush

Wild Celery

Invasive Plants: -

Japanese Knotweed

Reeds: Canary Grass

Look out for these fresh water plants: -

Brookweed

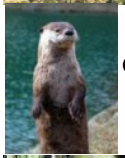

Burnet Saxifrage


Cowslip


Ladies Bedstraw

Spot these animals

Shrew


Otter


Water Vole


Weasel


Knapweed

- - - Tow Path
SW Pill Weir
SB Swing Bridge (Disused)
SLB Siding Lane Bridge
WB Westacre Bridge
WH Winding Hole
SB Signal Box
E Embankment


Hartstongue

AED 2011


Male Fern

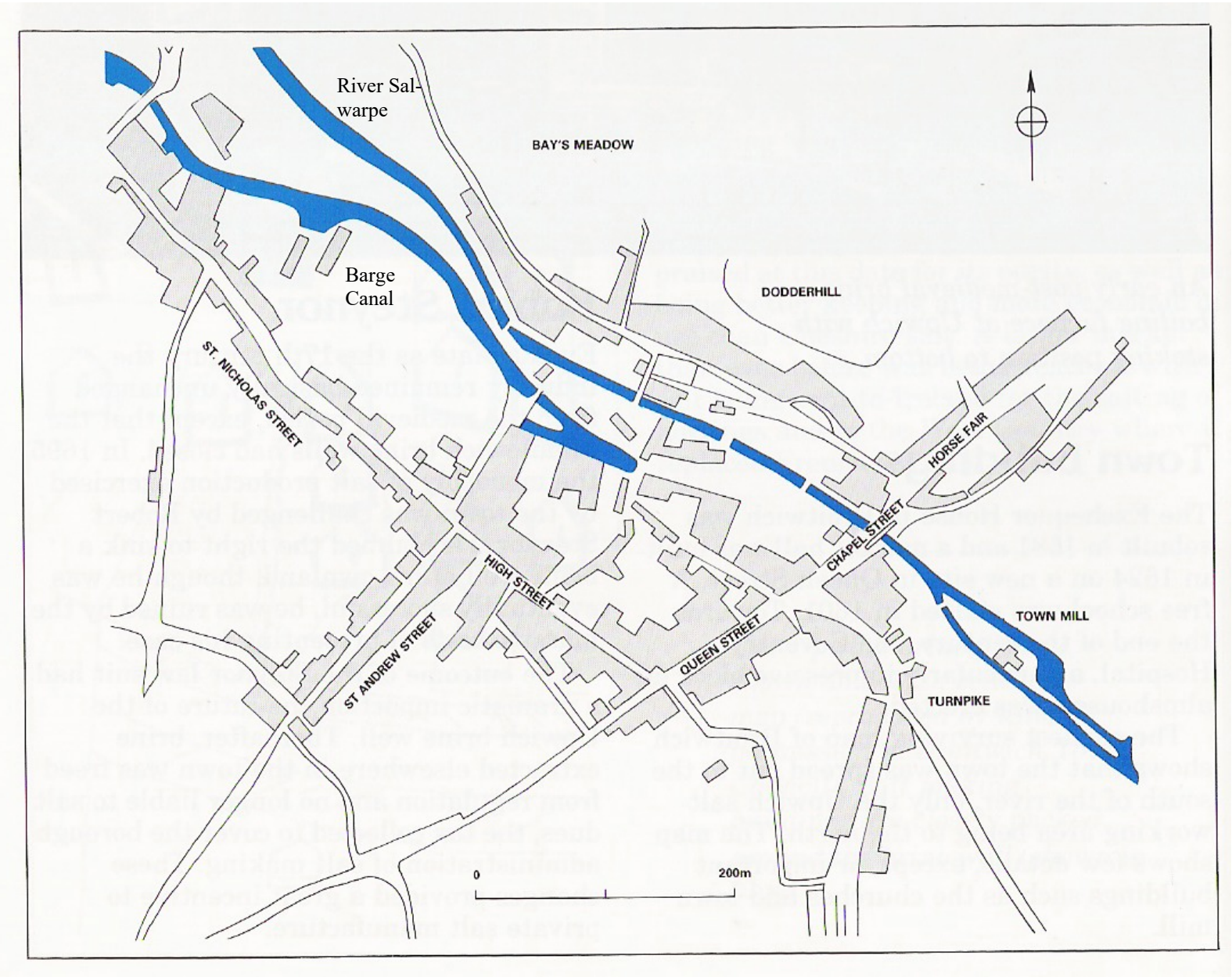
HELP SUPPORT THE DROITWICH WATERWAYS (PAMELA MAY) TRUST
RING: 01905 796632

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- Trip Commentary: Vines Park to Ladywood:

DROITWICH

BARGE CANAL MAP: 1786



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Information for a talk to passengers cruising from Vines Park in the centre of Droitwich Spa to Ladywood Lock

PAMELA MAY: TALK - AT LOCATIONS:

Start – NETHERWICH BRIDGE – (Bridge Number 16)

Welcome to the tour on the famous Barge Canal taking us from the centre of Droitwich Spa to Ladywood Lock Cottage. This is Droitwich Waterways (PM) Trust narrow boat, the Pamela May. This boat was specially built by Bernard Clements to take the elderly, infirm and disadvantaged out on the Worcester / Birmingham canal. It was named Pamela after his wife and May after Mary Ward who left him a legacy to fund his dream. We are supported by many volunteers to crew this boat so I hope you will have an enjoyable experience.

This canal is one of the first built in England. Built by James Brindley in 1771. That was over 240 years ago. It flows six miles to the river Severn with eight locks locks. Lock eight starts the drop at down to the river Severn at Ladywood so we will miss the excitement of using a lock unless this is part of the schedule.

This particular part of the canal we are on now, known as the three mile summit pound, was restored in the late 1970's and early 1980's by thousands of volunteer man hours. This was a wise priority one action which created a land locked canal stretch with water and tow path activities raising a great deal of money and interest for the next 25 years.

NETHERWICH RAILWAY TUNNEL (Bridge Number 15)
In 1967: - the railway bridge needed repairing and British Rail intended to remove the canal and replace it with 3 ft conduit. The Droitwich Borough Council stepped in and bore the cost of a 16 ft Armco tube containing a tow path – linking walkers from new housing estates to the Town Centre. **Even in those days, people like Max Sinclair were lobbying to restore the canal.**

The tunnel and bridge we are about to enter did not exist until 100 years after this canal was built. The first one is known as the Netherwich tunnel. As part of the requirement to involve the community in producing works of art to obtain restoration funds, a group of young people were involved in designing the plaques that can be seen on the towpath railings. There are other plaques on the floor and a poem describing the work on a board around the corner.
Originally the tunnel was lit up with blue and green lighting. The lights have now been abandoned due to vandalism. You can see their remains on the tow path and side. The designers were restricted by not being able to mount anything on the wall of the bridge unless a large yearly maintenance payment was paid to Railtrack. The lights were not allowed at dusk to avoid disturbing the swarms of bats which feeding on flying insects in the gap between the tunnel and the bridge.
Have a good look on the return journey.

Unfortunately this tunnel is only ten feet wide, restricting boats 14 feet wide from coming any further into Droitwich. This is a modern restoration bottleneck as this Barge canal was designed to allow sea going barges 14 ft wide, with sails, to take salt direct to the continent.

BAT GAP AND SIGNAL BOX.
Look for the bats and an old Railway Signal Box.

NETHERWICH RAILWAY BRIDGE. (Bridge Number 14)
Look at the tow path lighting panels - destroyed by vandals.

Note the brickwork pattern showing how the bridge was widened and built on a skew.

Just through the bridge is a small winding hole (a widening of the canal to allow boats to reverse. This is essential for boats wider than 10 ft which cannot go through the railway tunnel. Let's hope these boats are not too long!

SALWARPE ROAD BRIDGE (Bridge Number 13)

SEWAGE WORKS

After the abandonment of the canal in 1916 it is thought that a sewage works used part of the canal alongside St Georges playing field. Aeration paddles were found during early restoration.

WESTACRE BRIDGE – FOOT BRIDGE (Bridge Number 12)

This foot bridge allows direct access to town shops for people on the Westland's estate

On the left is Ledwich housing estate forming a 'new' western edge of the old town of Droitwich.
On our right is open space playing fields - King George's Playing fields. These fields are mainly football pitches and is bordered by the canal and the River Salwarpe, both too shallow to cause a serious hazard. Next to football pitches is a large Leisure Centre incorporating the Town's Swimming pool. There you will see a landing stage specially built for canoes.

SIDING LANE BRIDGE – BRIAR MILL (Number 11)

This bridge allows us to go under the road (Briar Mill) which leads to three schools; Droitwich High, Westacre Middle and St Joseph's Catholic Primary. This is the centre for sport and education. The school laying fields can be seen over on the right.

Briar Mill leads North to the famous Monarch's Way route. This was the route that Charles' II, took when he escaped to France from the last Civil War battle at Worcester in 1651. He eventually turned back from his escape route to Wales and after hiding in an Oak tree, eventually reached Shoreham-by-Sea on the south coast. We will be meeting this route again when it travel along the tow path on the other side of Salwarpe Village.

LITTLE HILL FOOT BRIDGE OR VALLEY WAY(Number 10)

Used mainly for leisure walking and cycling

OMBERSLEY WAY BRIDGE (Number 9)

On the left, just before the bridge, is Siding Lane Basin. This area is full of reeds and so for now it is a nature area; no moorings and not deep enough to use for boat turning.

A38 BYPASS ROAD BRIDGE (ROMAN WAY) (Bridge Number 8)

This bridge allows the A38 Droitwich Spa by-pass road to cross the canal. This road forms the western boundary of the town.

After passing under the A38, the canal runs over the partially hidden Copcut Brook which flows through a culvert under the canal. We now pass through the new nature reserve of Droitwich woods and are now in the green belt.

SALWARPE SPILL MILL
Check out?

During the early restoration days in the 1970's, reeds sold to the West Midland Safari Park for African Huts; also to Avoncroft Building Museum for thatching.

NEW REED BED: CONEY MEADOWS

The Environment Agency and Wild Life Trust demanded that restoration should preserve and enhance the amount of wild life. To this end a large area of land was purchased and thousands of reeds planted into artificially created ponds- as you can see in the Coney Meadow Reed Beds on our right.
This benefits water birds such as the reed warbler and reed bunting. And also the red crested newt. There is a special restricted pathway for visitors to view wildlife.

SWING BRIDGES

We are now at the site of the ruins of the Salwarpe Court swing bridge. This has the original Brindley castings. In particular the turn table contains the first recorded application of caged ball bearings.

During the restoration the remains of a special drawbridge door was found at the base of the swing bridge. This was thought to be originally installed by Brindley to seal off the canal if the embankment was breached. However there is no record of them being used. In fact it is highly unlikely that the door could be pulled up into place due the amount of force required to get it unstuck it from the silt in the bed of the canal.

SALWARPE EMBANKMENT AND CUTTING

If you look at the map, you will see that the canal kinks at his point. It takes a sharp turn to the left and runs through a deep cutting which would have been very difficult and time consuming to achieve with the equipment they had in the 18th century. It also involved the construction of a high and graceful road bridge. The effect has been to create one of the most beautiful locations in Worcestershire.
This was not the original route planned by Brindley when he first surveyed the area. He had planned to follow the natural contour line around the hill, close to the river Salwarpe. Unfortunately, the local mill owner objected to the canal ruining his business by disturbing the waterways. A mill was essential in those days for survival of the local population. As with many attempts to make the Salwarpe fully navigate-able, the mill owners won their case.

The embankment had to be made from special bricks imported from Belgium to East Anglia. First class- frost free - bricks were required at this critical location. If the embankment collapsed, draining of the canal and flood damage would be devastating. Although the Industrial Revolution had broken out in England, it was early days and long lasting high quality items could only be obtained from Europe.

SALWARPE COURT MANOR HOUSE
Can be seen through the trees high on our left

The most noticeable resident was: Richard Beauchamp, 13th Earl of Warwick – born there in 1381 – became guardian of Henry V1.
In 1510? The manor was bestowed to Catherine of Aragon as part of her short lived marriage to Prince Arthur, brother of Henry V111. Catherine became the wife of Henry VIII after Arthur's death.
It then became the home of the Talbot family.

On our right is St Michael's and all Angles in the centre of Salwarp village; well worth a visit.
The village was one of the last place to have stocks and a pillory.

SALWARPE BRIDGE (Number 7)

Holes are for scaffolding supports to repair the high arch brickwork.
The canals were the first places in England to install telegraph poles and the new electric telegraph system. That is until about 1920 when many were removed due to canal owners charging exorbitant rents.
The early telephone system was very useful for lock keepers to inform other lock keepers of oncoming boats.
The remains of the electric telegraph -a pair of insulators- can be seen on the side of this bridge.

Round the corner the tow path on our right, picks up Monarch's Way which follows the canal all the way to Porter's Mill where it turns south to where Charles' II started out his escape from Cromwell's army at Worcester.

THE HILL END DISUSED SWING BRIDGE: like the swing bridge on the other side of Salwarpe village both disused swing bridges are now no longer required.

LOCK COTTAGE – LADYWOOD

1770: Men building the lock complained of harsh conditions and supply of poor materials, went on strike.
The strike did not last long and the men were fined five shillings each.
Bear in mind that when the Tolpuddle Martyrs were convicted of striking in 1834, the leaders were hanged.
Poor materials were found during the restoration demonstrating that the men had a valid grievance finding work difficult.

This is the end of the journey, we will now let you off to explore the lock etc, etc

GOING BACK – RETURN JOURNEY

SALWARPE CHURCH

St Michael and All Angels – holds a copy of royal command during the last battle of the Civil War from Charles 11 in 1651 – 'bring tools for work on the defence of Worcester City'

In 1850 the village still had a whipping post and stocks on the green next to the bridge.

SALWARPE MILL was demolished in 1942. The Mill caused a major problem during the building of the barge canal. The canal had to be diverted from it's originally surveyed route away from the river where the mill was located which involved digging out the large valley between the church and the manor house and building a long embankment on the sharp bend to support the edge of the canal. However this created one of the most beautiful spots in Worcestershire.

RIVER SALWARPE

From Roman occupation until the 16th Century the River Salwarpe was navigable from the river Severn to Bromsgrove when the water level allowed. Flash locks were used to raise or lower the boats and rafts to different levels. Along its length there were seven mills.
The river was more salty in the past, as the name suggests: SAL means Salt and WARP means boat haulage.
The river became salty at Stoke Prior and called Salwarpe from there.

Evidence of stored contraband found in Bomsgrove showing evidence of smuggling up the river Salwarpe.
In 1378 Richard 11 granted the bailiffs of Droitwich the right to levy tolls on River Salwarpe traffic.

1600: movement stopped.
1655: Captain Yarranton and Wall, spent £750 trying to make the river navigable and failed.
1670: Lord Windsor spent £779 and failed.
1673: Sir Timothy and sir Charles Baldwin failed.
1693: The Earls of Shrewsbury and Coventry tried and failed.

DROITWICH -origins of.

Romans called it **salinae**

Saxons called it **saltwic** wic = an important trading centre.

Normans called it **wich** ref: 1086 in the domesday book

In the 4th century known as **dryghtwych** (later spelt droitwich)
Dryght either means 'dirty' or 'royal'.

RETURN TO THE RAILWAY INN

The departing point was an old coal Wharf.

Opposite where the Amateur Boxing Club is, stood a Boat House in 1900, which hired out rowing boats and berthed a steam pleasure cruiser named the 'Coronation'.

NETHERWICH BRIDGE Bridge rebuilt in 1936

.– FINISH

ODD NOTES FOR THE JOURNEY BACK -or going out.

BARGE CANAL CONSTRUCTION:

The Barge canal was first built with locks take 64 craft' long and 14'6'' wide, 5' 9'' draft with a canal width of 43'. The first craft was 20 tons square rigged trows. This was altered in 1823 to allow longer 71'6'', for 60 ton Wych barges to pass as there was an economic need for more tonnage per boat. This was to avoid the practise of transferring salt from 'make weight boats' to larger sea going trows at the Severn end of the canal at Hawford.

The clay surface was puddle in without lime and without rubber 'Wellington' boots, (clogs were used) so the navvies suffered from trench foot. Vulcanised rubber was not discovered until 1840.

Although Brinley designed the Barge Canal he was very busy building canals all over England. In fact his assistant, Robert Whitworth, supervised the construction; with a local Droitwich man – John Priddey acting as site engineer. John Priddey was paid £90 per year to do this job; equivalent to about £80,000 p.a. in today's money.

Special freeze resistant bricks were brought from East Anglia to build the spill weirs.

Before competition with road and railways, canals were built as far as possible following contour lines; avoiding locks and tunnels. The latter was used to create shorter, faster journey's

1806: a towpath was made to allow horses to pull the barges. Before the boats were man handled.

In 1830? : the barge canal was widened, including the locks, to take larger barges. This avoided reloading salt down at the Severn into boats capable of trading with Ireland, France and Spain.

In 1864 proposals were made to convert the canal in a railway line – this failed due to pressure from other canal interests.

1874: The Sharpness New Docks and the Gloucester and Birmingham Navigation Company took over the Worcester – Birmingham Canal and the Droitwich canals to ward off competition from the railways.

1876: barge lock in vines park – rebuilt.
1903: rebuilt again due to subsidence.

1881: The barge canal was dredged: 73,000 tons of silt was removed. In 1968 – 1984 the canal restoration teams removed 300,000 tons.

1872: Peak production of salt in Droitwich reached 120,000 tons per year.

BRINDLEY'S INNOVATIONS ON THE BARGE CANAL:

Silt trap – a trench running down the centre of the canal into which the silt was collected from movement of passing barge traffic. The silt was then easier to dredge.

Lifting gates to trap water if the embankment of the canal at Salwarpe village collapsed.
These were found during the early part of the restoration having been buried under the silt for more than 200 years. It is thought that they have never been lifted and possibly would not have worked in an emergency due to the vast leverage required

Self closing Lock Gates: Tilted Quoins on the bottom gates.

Special features were used on number 7 lock at Hawford. This had to take into account a 5 foot variation water level due to tidal conditions of the River Severn.

Swing bridges were used to allow farmers to cross the canal just like some of the 'cow – path' bridges are used on today's motorways.

JUNCTION CANAL

The Junction Canal was built at a time of intense competition between canal and railway interests and was intended to support the Birmingham and Worcester Canal. Railways reached Stoke Prior in 1841 and Droitwich in 1851 to help with the salt trade. The proprietors of the canal believed that there would be no future in railways!

The Junction Canal was one of the last canals to be built in England in the 19th century and was opened for traffic in 1854 having cost £28,000, £14m in today's money. Being one of the last canals to be built, there had been acquired considerable engineering expertise in canal construction and architecture over the years. Indicative of this is the complex system of deep locks and side ponds on the approach to Hanbury Wharf.
The engineer in charge was R Boddington: an ex Worcester/Birmingham canal engineer.
To economise on water consumption, the principle of the side pond was adopted. This consists of a brick lined chamber alongside the lock midway between the upper and lower pounds and communicating with the lock chamber by means of a culvert controlled by a 'side-pond paddle.' After a craft has entered the lock and the gates are closed, the water is first discharged into the side-pond. The side-pond paddle is then closed and the rest of the water is released from the lock. When a boat enters the empty lock the side-pond paddle releases water from the side-pond and half fills the lock. The lock is then filled with water from the upper pound. This saves half a lock of water at each lockage.

- The last 'commercial' use of the Junction canal:

The last commercial narrow boat on the junction canal before its closure was the 'Englishman' owned by George Harris of Stoke Works carrying a load of bricks in 1928. The boat was stopped at the bottom by

the police at night as the bricks had not been legitimately acquired, stolen from the brick works near Hanbury Wharf.

WORCESTER/BIRMINGHAM CANAL

Started after the barge canal and took a long time to complete, 1792 to 1825, 20 years, due to lack of funds and criticised for using inferior materials.
Navvies found salt when cutting the canal through Stoke Prior.
42 locks.
The barge canal gave support to fund the start of the B/W canal and received a 5% dividend.

1810: The B/W canal took over the day today management of the barge canal, even though their canal had yet to be completed.

1815 + the B/W subsidised the barge canal by £1,118 per year.

The Birmingham Ship Canal - *What could have been*!
The Manchester ship canal was authorised in 1887**.** The vision of a Birmingham Ship Canal bringing sea going vessels from the Bristol Channel to the centre of Birmingham was discussed in 1886. The idea was to dredge and deepen parts of the river Severn, ease the curves on the Gloucester and Berkeley ship canal and deepen and widen the W/B Canal, so that lighters carrying 200 to 250 tons could ply between Sharpness and Birmingham. The advantage was a saving of 50% on transport costs. The W/B locks would be 110 ft long, 20 ft wide, eight ft deep and a change in level of at least 14 ft. The cost for modification was estimated at £690,000, slightly more than the original cost of the canal.
This was abandoned in favour of improving the canal system to London.
In 1900 and again in 1923 this huge project was reviewed without success.
Would we be making this journey if the Birmingham Ship Canal had become a reality taking 20 ft wide sea going boats?

GENERAL CANAL HISTORY

Donkeys
Donkeys were used with advantage usually in pairs. They worked harder than horses, lived longer, hardier, less fussy about food and drink. They could be taken on board when going through a tunnel. Had hard hoofs, no need to shod and was sure footed. But they were stubborn.
In 1875 a reward of £5 was offered for anyone who gave evidence of ill treatment. This was soon reduced to 10/- due to the overwhelming number of applications!

Electric Telegraph
By 1862 most canals had a line of telegraph poles along the tow path. They disappeared between 1910 and 1939 due to rows over rent. They were very useful for lock to lock communication.

Lock Keepers
In the 1800's generally there was one lock keeper per six locks. There were two keepers on the Junction Canal, one at each end. Some lock keepers also acted as lengths men.
The locks were padlocked at night and up to 1840 were locked Sunday morning and afternoon.

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The was a toll house at Hanbury Wharf and another at Lock 17 at the bottom of the Astwood locks. The latter served the Droitwich Junction Canal.

Canal Highway Code
In 1809: one of the ten rules, stated that all boats must have a qualified helmsman.
In 1816 new rules were added: one stated that 'no boat is to be more than five minutes in a lock'.

Pleasure Boats
Until 1867 there was no charge to use pleasure boats on the canal. A charge of £1 per annum per boat was then introduced. Reason: rides in the new steam powered trip boats became popular.

Fishing
From 1791 canal boats were not allowed to carry fish nets or any 'engine' likely to harm fish.

Ice Breaking
In the 19th Century there were some hard winters. Special iron clad boats were used to beak up ice - critical for people earning their living on the canal. The ice was dispersed by a team of people rocking the boat from side to side. Crowds gather to watch this entertaining skilful activity.
From 1918 ice breaking was done by the motor tug 'Sharpness'.

REASON FOR CANAL BUILD (DROITWICH SALT)

Why was this canal built? It was all because of the production in salt in this area. There is evidence of salt being obtained by boiling of the brine found in springs in the Iron Age, 200 years before Christ. They did not have refrigerators in those days and salt was a valuable method of preserving food for the winter. Production was increased when the Romans decided to stay in Britain. Part of the solder's wages was paid in salt – salarium in Latin, from which comes the modern word salary.
Production was further increased in the Middle Ages – Droitwich was recorded in the Doomsday book as being more important to William The Conqueror than the City of Worcester, by producing more funds to the crown in taxes. Production increased after King John agreed for £100 per year to allow Droitwich to be free of salt trade taxes. It is believed that it was £100 per year for the next 500 years, when after the Civil war there was no king to pay it to; only the Protector, Oliver Cromwell, . During these years the people who owned the brine pits became very rich, and although dirty and grimy, the town prospered.

After the civil war there was an even greater demand for salt. Not only for preserving food (this was before refrigerators were developed) but also for making soap (some people had started to wash), curing hides to make leather, and as a chemical additive for new products.

The monopoly was broken and by 1727 everyone with land in the Droitwich area was boring into the ground searching for brine. Production increased which caused prices to fall. The government then started to tax salt. Salt was smuggled out of Droitwich in coffins. People went bankrupt. In 1822 the salt tax was lifted and wealth returned.
For every ton of salt produced at least three tons of wood was required to burn and evaporate the brine.. It was proving more and more difficult to obtain fire wood as the forests became depleted. It the 1700's roads were in an appalling condition and railway locomotives had yet be invented. Although toll roads were being constructed to connect towns most country roads could not be easily used in the winter. Fifteen salt roadways led from Droitwich to the river Severn- but only three open at any-one time during the winter, the others were flooded. Hence from the dawn of time salt production was only carried out in the summer. This also avoided wet fuel and rain or flood diluted brine. THE SALT INDUSTRY WOULD BE MORE PROFITABLE IF COAL COULD BE IMPORTED AND SALT EXPORTED ALL THE YEAR ROUND.

The industrial revolution had started and coal was being mined in the Forest of Dean and the Black country. Small quantities of coal were used instead of wood.
Canal mania had started with the building of the James Brindley's Bridgewater canal in 1761 which demonstrated that coal could be shipped from coal mines in Worsley near Runcorn to the industries in Manchester at a fraction of the cost and in vast quantities making a good profit for investors in the canal. The Droitwich Council asked James Brindley, to quote for a special wide canal capable of allowing the smaller sailing trows used on the River Severn to get from the river Severn to Droitwich.

So at a cost of £22,500 (£19M in today's money) and only four years later the barge canal we are on now was open in 1771; over 240 years ago.

In 1771 when the barge canal was opened and salt was now produced all the year round, think of the effect on the salt workers who now found that they had lost a winter holiday!

1936: both canals legally closed.

The last commercial wychbarge, the ‘Volunteer’, went down the barge canal in 1916 commandeered by the army to transport two hay ricks for World War I. This is the same barge as that is reconstructed in Vines park as a picnic area.

HISTORY OF SALT MAKING & THE SALT INDUSTRY:

The salt was built up 400 million years ago, in vaporising lagoons stretching from Cheshire to south Gloucestershire.

Salt workings traced back to 200 BC – the IRON age. The Romans had a fort on Dodderhill and Crutch lane, and finally built a large villa in bays Meadow. The Romans made salts using 3’ x 5’ shallow trays over a wood fire.
The open pan method of making salt from brine was used throughout the nearly 2,000 years of salt production in Droitwich. Until 1922 when all the salt factories had closed.

In the 17th century lead pans where gradually replaced by cast iron; prolonging the peoples short lives by eliminating lead poisoning.

SALT STORAGE AND TRANSPORT

The Romans and Saxons used cheap porous ceramic pots to dry and store and transport salt. In the Middle Ages salt was dried and stored, in more robust, conical wicker baskets which easily fit on the backs of donkey and horse transport. In the 19th century, salt was packed into wooden boxes and dried in a large hot room. The moulded blocks of salt were then wrapped in paper and transported by canal or rail.
A pipe line to carry brine from Droitwich to the river was proposed using hollow elm tree trunks. This was not done, presumably due to the fact that fuel still had to be transported to Droitwich and a similar pipe system had been used locally in Droitwich, which probably leaked and required a high degree of maintenance.

Canals unlocked the growth of the industrial revolution by providing quick and low cost transport for heavy goods. The roads were poor; it was quicker to walk.

Salt: Sodium Chloride. Droitwich Brine springs yield 2.5 lbs of salt for every gallon evaporated.
As dense as the red sea – a human body floats with ease. Which, until recently, could have been demonstrated by a visit to the brine baths in St Andrew’s Street. Droitwich salt is very pure; with a sweet taste compared with the usual characteristic bitter taste of table and other salts. There is an absence of silicates.

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- Trip Commentary: Vines Park to Ladywood:

OUT OF DROITWICH SPA THROUGH VINES PARK GOING EAST

We are on the Droitwich Barge canal soon to join the Droitwich Junction canal. The Barge canal was one of the first canals built at the beginning of the Industrial Revolution. This area was also the first part of the canal to be restored in the late 1970,'s by hundreds volunteers, removing spoil put there during the construction of the M5 Motorway.

Swing bridges were installed to allow access to the town shops. They are a similar design to that installed by Brindley in 1772 further down the canal. If you take a journey down there you may see an engineering first - the application of the first use of caged ball bearings.

This park - Vines Park - was created by the District Council when thousands of volunteer hours created a three mile isolated land locked waterway in the late '70's. People Power. This was the first restoration action of the canal trust. The easiest and the most profitable, creating boating, walking and fishing activities which raised money maintained interest in the canal. Without it restoration may not have been completed.

BARGE LOCK

Most locks are numbered , but not this one. This lock is at the joining of the Barge canal to the Junction canal. The Barge canal is a wide canal built to take 14 ft wide Wychbarge sailing craft taking salt down to the river Severn and beyond. The Junction canal is narrow built to fit and join the Worcester Birmingham canal taking salt into Birmingham. This canal was opened in 1854, possibly the last canal built in the 19th Century

So why is this lock a wide lock? The answer may be to allow wide wychbarges into a salt factory situated on the side of the River Salwarpe which forms the first part of the Junction canal.

The Barge lock allows a step down from the river Salwarpe to the Barge canal. Usually the levels are the same allowing both gates to stay open. When first built the Barge lock had four sets of gates. Two sets facing opposite ways to be operated depending on the relative water levels of the canal and the river. The weirs now ensue that the levels are either equal or the river is higher. In the old days, dumping of excess brine from salt production sometimes made the canal water higher than the river. This stopped with end of salt production in 1922. The Barge canal has always depended on the River Salwarpe to provide its main source of water.

Note the weir on our left. This lets water from the canalised river carry on down the river proper after maintaining a correct water level for the canal.

CHAPEL BRIDGE (Bridge 8)

So called because from about 1500 to 1700 there was a Chapel built across the bridge with a toll for travellers who did not want to risk the ford. Horse drawn carts sometimes disrupted religious services in the chapel.
There is a ghost on the bridge but this story is best told at night during a Ghost walk through the town.

Under the bridge and on the right is the remains of the original canal with tunnels leading to loading bays.

From now on we will be on a new part of the restored canal the first part being the canalised River Salwarpe until reaching the next lock: number 7.

ALONG THE RIVER SALWARPE

There are no mooring points along this stretch until we get to the embarking moorings serving Lock 7. This is because the river could flood without warning and boats could be damaged if left overnight.

There was a mill was on the right in 1851 and the start of building the canal build was delayed by resistance by the mill owners over water supply rights. History was repeated. During the restoration, construction this part of the canal was again held up for over 18 months due to cancellation of the development of a first class hotel, caused by the 2008 financial recession.

SWAN DRIVE BRIDGE (Bridge 7)

This bridge was built in 1995 to allow a single road access to the Swan Drive Estate, built on the old Droitwich rugby club grounds. This land was prone to flooding so most of the houses were built on raised ground. A few houses were flooded in July 2007. The completion of the Droitwich canals now -hopefully - has taken them completely out of one in a 100 years flood area

When the bridge was first built, some of the technical members of the Canal Trust thought that it was too low for future boats to pass under. However as you can see there is plenty of head room.

LOCK 7

This is the first (or last) lock on the Junction Canal and takes us off the canalised river up onto part of the original line of the Junction canal. What is new is that the locks are made of concrete; not bricks and mortar. However, the gates and water control mechanisms use the same design and materials as that originally used in the 18th century

At the bend here we leave the original canal line and move onto the bed of the Body Brook.
On our left is a weir which takes flood water from the Body Brook. Just behind on our right is an offshoot for normal Body Brook flow of water. This maintains the water level in the canal and passes excess to an outflow the other side of the Barge Lock through two large underground pipes This separates canal water from the River Salwarpe and keeps the farmers and Environment Agency, happy.

The original line of the canal went straight through the garden of the house on the right.
On the left is a public open space which acts as a flood plane if the Body brook floods.

IMPNEY BRIDGE (Number 6)

The Impney Way housing estate on our left, is another state built with only one entrance. It was constructed in the year 2000 at the same time that the restoration partnership started with £1M each from Wychavon District Council and Worcestershire County Council. The timing was good, as the developers had to build a bridge that would take three boats side by side; essential for manoeuvring boats into the M5 tunnel on a busy day.

It was initially thought that this small stretch of canal was the first 'new' canal to be built in the 21st century; unfortunately a few weeks earlier a new stretch had been completed by British Waterways somewhere up north.

This estate was built on the old Impney farm which originally formed part of the Impney Chateau estate. In 1876 John Corbett created a lane leading from his Chateau to the Roman Catholic Chapel at Hazdor. This lane was specially built for his Irish wife Anna who otherwise would have taken her carriage through the dirty, dusty town of Droitwich which in those days made salt seven days a week and produced an abundance of smoke and smuts from many large chimneys. She could now keep her dress clean.
He had to build a bridge over the Junction canal. This bridge still exists and the parapet can be seen in Impney Way road.

M5 CULVERT - (Bridge number 5)

In the late 1980's when the motorway was widened from two lanes to three, an 'Angel' built a new culvert to take the Body Brook under the motorway and made it wide and high enough to just take a narrow boat. This was done ten years before the restoration partnership was formed. Without this miracle some people

believe that the canal restoration would not have been feasible.
So mind your heads!

EAST OF THE M5 TUNNEL

One good aspect of having a canal is that a linear park can be created. For the next ½ mile we will be going through a very new park; with plenty of wild life and in the summer yields thousands of daises.

This is a new canal cut with concrete locks and good tow paths for walkers, joggers and cyclists.

We now pass the Body Brook pouring into the canal on our left

LOCK 6

Note the Warning sign on the lock side indicating the local water level and no entry if the river is in flood.

Above this lock is a 'winding' hole; this a local widening of the canal so that 73ft long boats can turn round. Finding a place wide enough to turn a boat is important as these boats are very difficult to steer in reverse. Hence boats stopped by a Body Brook flood level can turn back up the canal.

LOCKS 4 & 5

Here two locks combine to form a staircase lock. This less expensive to build than a single deep lock but a little slower to use. If the traffic of boats is all one way then only half the water is used compared with a single lock unless it has a halfway storage pound like the locks 1, 2 and 3 which we will come to later.

Coming up on our left is the Droitwich Rugby Club. This is another place where the only entrance is over a canal bridge.
On our right is the main Gateway to the restored canals - it has a large car park and children's play area.

This area cost the restoration a fortune in preserving wild life; in particular the red headed newts!
Each newt had to be captured and replaced in a habitat of newly purchased land.

RUGBY CLUB BRIDGE (Number 2)

This bridge is new as shown by the corrugated steel shuttering forming the inside.

On our left is the new Droitwich Marina, opened in 2012 with a capacity for 285 boat moorings.

LOCKS 1, 2 & 3

We are now back on the original line of the canal. Up ahead are the final three locks which take boats up a hill to connect with the Worcester/ Birmingham canal. These locks were built at the end of canal building in the 19th Century and incorporates the latest technology for preserving precious water taken from the Worcester/Birmingham canal. They were restored in 1990's by the help of an endowment (see plaque on lock 2) and specialist volunteers.
Each lock has a halfway storage pound which is used to fill the lock halfway on the way up and re-filled as boats descend. This means careful sequence use of the paddle mechanisms when lowering and raising boats. It is believed that these locks are the only fully working half pound locks on the canal system.

Between locks 1 & 2 in 1877 there was a beach hut and organised swimming events. I wonder how clean the water was then! Today we are warned of the dangers of Weil's disease - do not expose canal water to a cut.

WESTFIELD BRIDGE (Number 1)

Through this bridge and a sharp right turn under the Saltway Bridge of the B4090, Hanbury Road, we are now on the Worcester/Birmingham canal moving down the canal towards Worcester.

The eagle and Sun Inn is on our left. Built in 1840, and up to 1900 it was known as the Railway Tavern - the old railway station is just along the road.

On the right was another Ale house serving both the railway and the canal. It was originally a Wharf house , converted in 1822 and until 1910 known as the New Inn and allegedly served the best beers in the area.

We turn just past the lighthouse converted from an old lift crane by George Bate in 1950. That is if we have not already turned round, back the other side of the bridge.

We are now on the five mile pound of the Birmingham/Worcester -so called because there are five miles between Locks.

ODD NOTES FOR THE JOURNEY BACK.

Junction Canal

The Junction Canal was built at a time of intense competition between canal and railway interests and was intended to support the Birmingham and Worcester Canal.
Railways reached Stoke Prior in 1841 and Droitwich in 1851 to help with the salt trade. The proprietors of the canal believed that there would be no future in railways!

The Junction Canal was one of the last canal to be built in England in the 19th century and was opened for traffic in 1854 having cost £28,000, £14m in today's money. Being one of the last canals to be built, the builders had acquired considerable engineering expertise in canal construction and architecture over the years. Indicative of this is the complex system of deep locks and side ponds on the approach to Hanbury Wharf.

To economise on water consumption, the principle of the side pond was adopted. This consists of a brick lined chamber alongside the lock midway between the upper and lower pounds and communicating with the lock chamber by means of a culvert controlled by a 'side-pond paddle.' After a craft has entered the lock and the gates are closed, the water is first discharged into the side-pond. The side-pond paddle is then closed and the rest of the water is released from the lock. When a boat enters the empty lock the side-pond paddle releases water from the side-pond and half fills the lock. The lock is then filled with water from the upper pound. This saves half of a lock of water at each lockage.

This canal was first designed by John Snape to run on the south side of Hanbury road. In 1814 a new survey by Thomas Allen put it on the north side of the road.
Richard Boddington designed the final plan.

- The last 'commercial' use of the Junction canal:
The last commercial narrow boat on the junction canal before its closure was the 'Englishman' owned by George Harris of Stoke Works carrying a load of bricks in 1928. The boat was stopped at the bottom by the police at night as the bricks had not been legitimately acquired, stolen from the brick works near Hanbury Wharf.

WORCESTER/BIRMINGHAM CANAL

This Canal is 30 miles in length with 58 locks to take boats 70 ft by 7 ft. There is a 15 mile level stretch from Birmingham and a long flight of 30 locks at Tardebigge. The deepest narrow canal lock in England is the Summit Lock at Tardebigge which has a fall of 14 ft. This is exceptional since the deeper the lock the greater the water consumed. The average fall of a canal lock is from 6 to 8 ft. The canal took 23 years to complete, 1792 to 1815, due to lack of funds and criticised for using inferior materials. The undertaking did not go smoothly and there was much conflict between lock keepers and mill owners.

Navvies found salt when cutting the canal through Stoke Prior in 1810. At first economically extracting the brine was unsuccessful. Then came John Corbett who solved the technical problems and eventually became a multi-billionaire in today's money.

In 1874 the Sharpness New Docks and the Gloucester and Birmingham Navigation Company took over the Worcester – Birmingham Canal and the Droitwich canals to ward off competition from the railways.

In 1887 the W/B canal narrowly missed becoming the Birmingham Ship Canal: this was the time of the creation of the Manchester Ship Canal. Would we be making this journey if the Birmingham ship canal had become a reality taking 20 ft wide sea going boats?

GENERAL FOR THE BIRMINGHAM / WORCESTER CANAL

The W/B Canal : - Proposed in 1785, act of Parliament in 1791, work started in 1792.. But not completed until 1815 due to delays over land deals. It cost £660,000, more than double the original estimate, caused by legal fees and inflation due to the Napoleonic wars. The Droitwich barge canal opened in 1771 at a cost of only £23,500 and took three years to construct. However, the W/B Canal is 30 miles long with 58 locks; the Barge canal is only 5¾ miles with eight locks.
The Droitwch Junction Canal was not built until 1851.
The W/B canal was surveyed by John Snape who had worked for the famous James Brindley. Brindley died in 1772; one year after his Barge Canal was opened in Droitwich. John Snape died a few days after the W/B canal opened!
The canal was originally built as a wide 'barge' canal with locks designed with one gate both top and bottom. The only sign of this now is the width of the tunnels (and bridges):16ft wide.
The first boat down the canal at the opening was carrying coal, the next carried Birmingham goods.

COMPETITION
In 1785 a different route for the canal was planned, to go from Worcester direct to the coal fields in Stourbridge via Bromsgrove. This was defeated in the Lords. Which is just as well as the River Severn was soon made easily to navigated and traders would have preferred the Stourport route

In 1798 there was aborted competition in the form of a proposed horse drawn tramway to take coal from Birmingham to Worcester.

WATER SUPPLIES - a fundamental requirement for a canal!
The B/W Company was forced to provide five large reservoirs on the river Arrow and river Lea; mainly to protect the existing water mills. In 1821 the Tardebigge was also built and in 1829 the Upper Bittel.
Many early water pump steam engines were installed at great cost due to the fear of drought. However the early 19th century was extremely wet making the engines unnecessary and were soon abandoned. All disappeared when the railways arrived due to reduction of boats on the canal. The two large locks at Diglis basin in Worcester required a large amount of water and also used steam engine pumps in the early days of the canal.
Adequate water at the Bar in Birmingham, to supply both the Birmingham Canal Company and the B/W canal, was a problem and caused many arguments. Two large steam engines were installed to resolve the problem.
Also to preserve water, a large mechanical lift was installed at Tardebigge ;1809-1815. This was soon replaced by 30 locks, due to technical problems.

CANALS IN GENERAL

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The Birmingham Ship Canal - *What could have been*!
The Manchester ship canal was authorised in 1887**.** The vision of a Birmingham Ship Canal bringing sea going vessels from the Bristol Channel to the centre of Birmingham was discussed in 1886. The idea was to dredge and deepen parts of the river Severn, ease the curves on the Gloucester and Berkeley ship canal and deepen and widen the W/B Canal, so that lighters carrying 200 to 250 tons could ply between Sharpness and Birmingham. The advantage was a saving of 50% on transport costs. The W/B locks would be 110 ft long, 20 ft wide, 8 ft deep and a change in level of at least 14 ft. The cost for modification was estimated at £690,000, slightly more than the original cost of the canal.
This was abandoned in favour of improving the canal system to London.
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Droitwich Waterways (Pamela May) Trust Ltd

Registered Charity Number: 1149844 Company Number: 7662700 www.droitwichcanals.co.uk

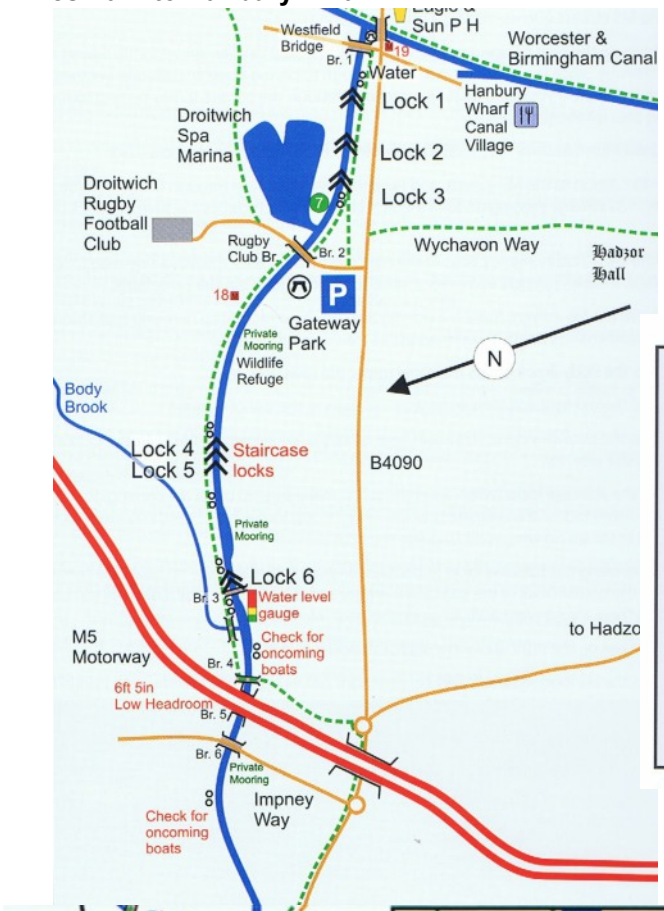
PAMELA MAY TALK

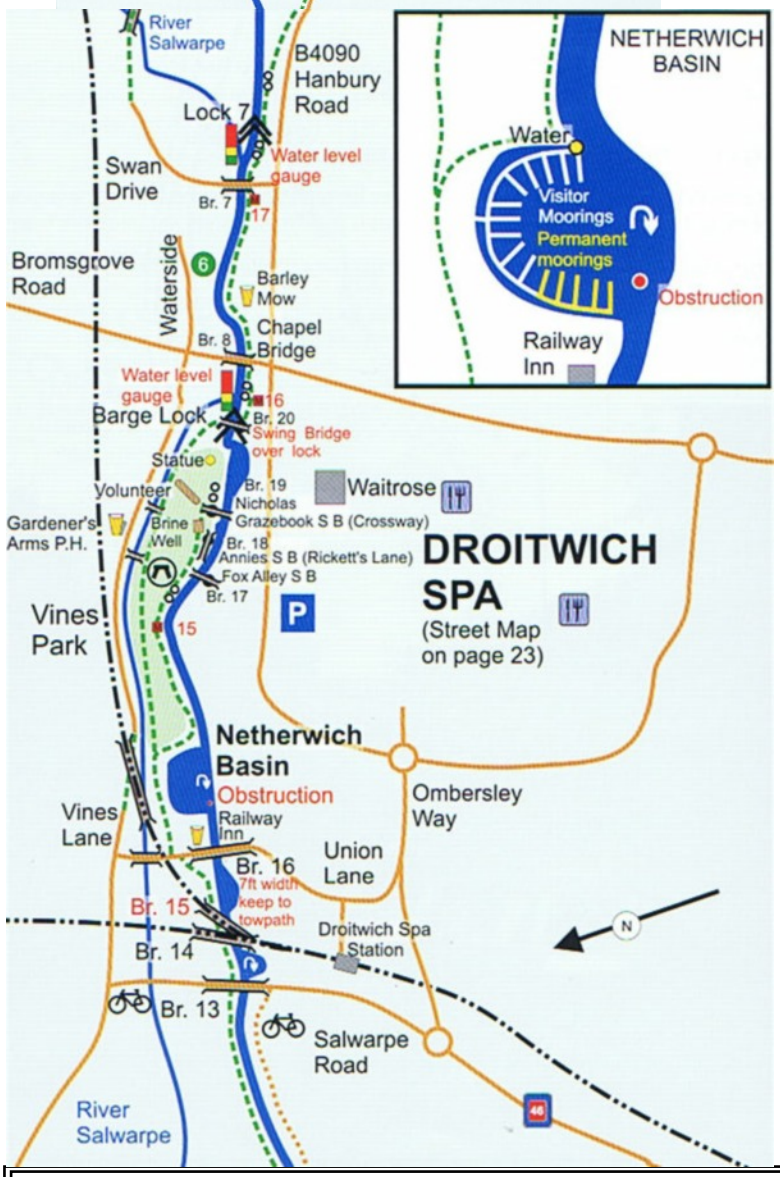
Vines Park to Hanbury Wharf

By Alan Davey

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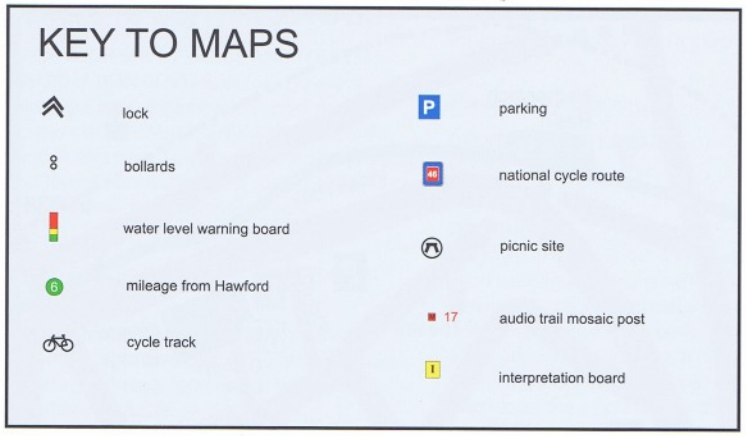
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WORCESTER & BIRMINGHAM CANAL - FIVE MILE POUND

PAMELA MAY TALK - FROM VINES PARK TO HANBURY WHARF



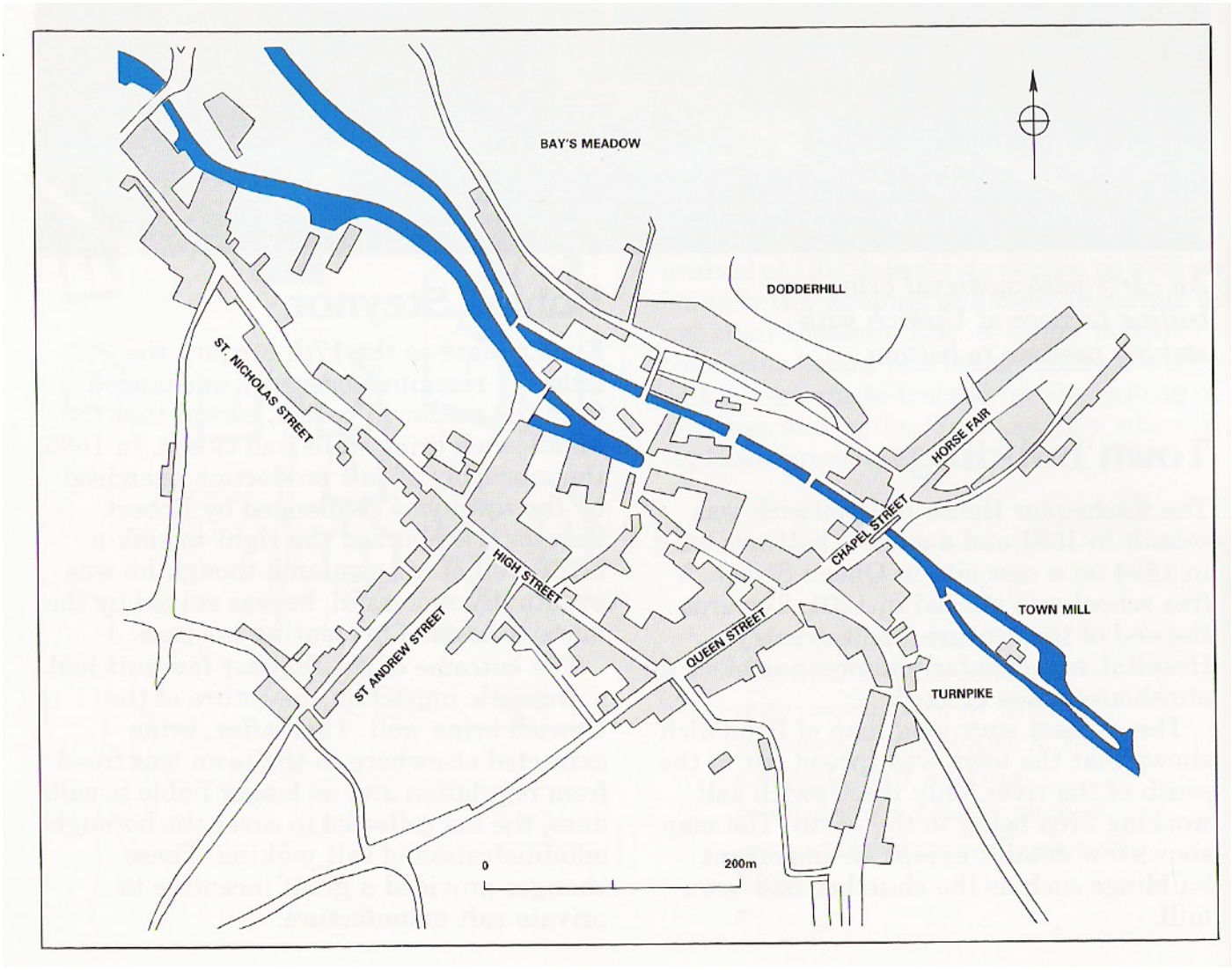
Extract from 'THE DROITWICH CANALS NAVIGATION & VISITOR GUIDE' pub. by Droitwich Canals Trust

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- Trip Commentary:
Vines Park to Hanbury Wharf:

DROITWICH

BARGE CANAL MAP: 1786



- Trip Commentary:
Vines Park to Hanbury Wharf:

Information for a talk to passengers cruising from Vines Park in the centre of Droitwich Spa to Hanbury Wharf on the Worcester/Birmingham Canal

Includes data collected from the book: The Worcester and Birmingham Canal -Chronicles of the Cut - by Revd. Alan White

OUT OF DROITWICH SPA THROUGH VINES PARK GOING EAST

We are on the Droitwich Barge canal soon to join the Droitwich Junction canal. The Barge canal was one of the first canals built at the beginning of the Industrial Revolution. This area was also the first part of the canal to be restored in the late 1970,'s by hundreds volunteers, removing spoil put there during the construction of the M5 Motorway.

Swing bridges were installed to allow access to the town shops. They are a similar design to that installed by Brindley in 1772 further down the canal. If you take a journey down there you may see an engineering first - the application of the first use of caged ball bearings.

This park - Vines Park - was created by the District Council when thousands of volunteer hours created a three mile isolated land locked waterway in the late '70's. People Power. This was the first restoration action of the canal trust. The easiest and the most profitable, creating boating, walking and fishing activities which raised money maintained interest in the canal. Without it restoration may not have been completed.

BARGE LOCK

Most locks are numbered , but not this one. This lock is at the joining of the Barge canal to the Junction canal. The Barge canal is a wide canal built to take 14 ft wide Wychbarge sailing craft taking salt down to the river Severn and beyond. The Junction canal is narrow built to fit and join the Worcester Birmingham canal taking salt into Birmingham. This canal was opened in 1854, possibly the last canal built in the 19th Century

So why is this lock a wide lock? The answer may be to allow wide wychbarges into a salt factory situated on the side of the River Salwarpe which forms the first part of the Junction canal.

The Barge lock allows a step down from the river Salwarpe to the Barge canal. Usually the levels are the same allowing both gates to stay open. When first built the Barge lock had four sets of gates. Two sets facing opposite ways to be operated depending on the relative water levels of the canal and the river. The weirs now ensue that the levels are either equal or the river is higher. In the old days, dumping of excess brine from salt production sometimes made the canal water higher than the river. This stopped with end of salt production in 1922. The Barge canal has always depended on the River Salwarpe to provide its main source of water.

Note the weir on our left. This lets water from the canalised river carry on down the river proper after maintaining a correct water level for the canal.

CHAPEL BRIDGE (Bridge 8)

So called because from about 1500 to 1700 there was a Chapel built across the bridge with a toll for travellers who did not want to risk the ford. Horse drawn carts sometimes disrupted religious services in the chapel.
There is a ghost on the bridge but this story is best told at night during a Ghost walk through the town.

Under the bridge and on the right is the remains of the original canal with tunnels leading to loading bays.

From now on we will be on a new part of the restored canal the first part being the canalised River Salwarpe until reaching the next lock: number 7.

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ALONG THE RIVER SALWARPE

There are no mooring points along this stretch until we get to the embarking moorings serving Lock 7. This is because the river could flood without warning and boats could be damaged if left overnight.

There was a mill was on the right in 1851 and the start of building the canal build was delayed by resistance by the mill owners over water supply rights. History was repeated. During the restoration, construction this part of the canal was again held up for over 18 months due to cancellation of the development of a first class hotel, caused by the 2008 financial recession.

SWAN DRIVE BRIDGE (Bridge 7)

This bridge was built in 1995 to allow a single road access to the Swan Drive Estate, built on the old Droitwich rugby club grounds. This land was prone to flooding so most of the houses were built on raised ground. A few houses were flooded in July 2007. The completion of the Droitwich canals now -hopefully - has taken them completely out of one in a 100 years flood area

When the bridge was first built, some of the technical members of the Canal Trust thought that it was too low for future boats to pass under. However as you can see there is plenty of head room.

LOCK 7

This is the first (or last) lock on the Junction Canal and takes us off the canalised river up onto part of the original line of the Junction canal. What is new is that the locks are made of concrete; not bricks and mortar. However, the gates and water control mechanisms use the same design and materials as that originally used in the 18th century

At the bend here we leave the original canal line and move onto the bed of the Body Brook.
On our left is a weir which takes flood water from the Body Brook. Just behind on our right is an offshoot for normal Body Brook flow of water. This maintains the water level in the canal and passes excess to an outflow the other side of the Barge Lock through two large underground pipes This separates canal water from the River Salwarpe and keeps the farmers and Environment Agency, happy.

The original line of the canal went straight through the garden of the house on the right.
On the left is a public open space which acts as a flood plane if the Body brook floods.

IMPNEY BRIDGE (Number 6)

The Impney Way housing estate on our left, is another state built with only one entrance. It was constructed in the year 2000 at the same time that the restoration partnership started with £1M each from Wychavon District Council and Worcestershire County Council. The timing was good, as the developers had to build a bridge that would take three boats side by side; essential for manoeuvring boats into the M5 tunnel on a busy day.

It was initially thought that this small stretch of canal was the first 'new' canal to be built in the 21st century; unfortunately a few weeks earlier a new stretch had been completed by British Waterways somewhere up north.

This estate was built on the old Impney farm which originally formed part of the Impney Chateau estate. In 1876 John Corbett created a lane leading from his Chateau to the Roman Catholic Chapel at Hazdor. This lane was specially built for his Irish wife Anna who otherwise would have taken her carriage through the dirty, dusty town of Droitwich which in those days made salt seven days a week and produced an abundance of smoke and smuts from many large chimneys. She could now keep her dress clean.
He had to build a bridge over the Junction canal. This bridge still exists and the parapet can be seen in Impney Way road.

M5 CULVERT - (Bridge number 5)

In the late 1980's when the motorway was widened from two lanes to three, an 'Angel' built a new culvert to take the Body Brook under the motorway and made it wide and high enough to just take a narrow boat. This was done ten years before the restoration partnership was formed. Without this miracle some people

believe that the canal restoration would not have been feasible.
So mind your heads!

EAST OF THE M5 TUNNEL

One good aspect of having a canal is that a linear park can be created. For the next ½ mile we will be going through a very new park; with plenty of wild life and in the summer yields thousands of daises.

This is a new canal cut with concrete locks and good tow paths for walkers, joggers and cyclists.

We now pass the Body Brook pouring into the canal on our left

LOCK 6

Note the Warning sign on the lock side indicating the local water level and no entry if the river is in flood.

Above this lock is a 'winding' hole; this a local widening of the canal so that 73ft long boats can turn round. Finding a place wide enough to turn a boat is important as these boats are very difficult to steer in reverse. Hence boats stopped by a Body Brook flood level can turn back up the canal.

LOCKS 4 & 5

Here two locks combine to form a staircase lock. This less expensive to build than a single deep lock but a little slower to use. If the traffic of boats is all one way then only half the water is used compared with a single lock unless it has a halfway storage pound like the locks 1, 2 and 3 which we will come to later.

Coming up on our left is the Droitwich Rugby Club. This is another place where the only entrance is over a canal bridge.
On our right is the main Gateway to the restored canals - it has a large car park and children's play area.

This area cost the restoration a fortune in preserving wild life; in particular the red headed newts!
Each newt had to be captured and replaced in a habitat of newly purchased land.

RUGBY CLUB BRIDGE (Number 2)

This bridge is new as shown by the corrugated steel shuttering forming the inside.

On our left is the new Droitwich Marina, opened in 2012 with a capacity for 285 boat moorings.

LOCKS 1, 2 & 3

We are now back on the original line of the canal. Up ahead are the final three locks which take boats up a hill to connect with the Worcester/ Birmingham canal. These locks were built at the end of canal building in the 19th Century and incorporates the latest technology for preserving precious water taken from the Worcester/Birmingham canal. They were restored in 1990's by the help of an endowment (see plaque on lock 2) and specialist volunteers.
Each lock has a halfway storage pound which is used to fill the lock halfway on the way up and re-filled as boats descend. This means careful sequence use of the paddle mechanisms when lowering and raising boats. It is believed that these locks are the only fully working half pound locks on the canal system.

Between locks 1 & 2 in 1877 there was a beach hut and organised swimming events. I wonder how clean the water was then! Today we are warned of the dangers of Weil's disease - do not expose canal water to a cut.

WESTFIELD BRIDGE (Number 1)

Through this bridge and a sharp right turn under the Saltway Bridge of the B4090, Hanbury Road, we are now on the Worcester/Birmingham canal moving down the canal towards Worcester.

The eagle and Sun Inn is on our left. Built in 1840, and up to 1900 it was known as the Railway Tavern - the old railway station is just along the road.
On the right was another Ale house serving both the railway and the canal. It was originally a Wharf house , converted in 1822 and until 1910 known as the New Inn and allegedly served the best beers in the area.

We turn just past the lighthouse converted from an old lift crane by George Bate in 1950. That is if we have not already turned round, back the other side of the bridge.

We are now on the five mile pound of the Birmingham/Worcester -so called because there are five miles between Locks.

ODD NOTES FOR THE JOURNEY BACK.

Junction Canal

The Junction Canal was built at a time of intense competition between canal and railway interests and was intended to support the Birmingham and Worcester Canal.
Railways reached Stoke Prior in 1841 and Droitwich in 1851 to help with the salt trade. The proprietors of the canal believed that there would be no future in railways!

The Junction Canal was one of the last canal to be built in England in the 19th century and was opened for traffic in 1854 having cost £28,000, £14m in today's money. Being one of the last canals to be built, the builders had acquired considerable engineering expertise in canal construction and architecture over the years. Indicative of this is the complex system of deep locks and side ponds on the approach to Hanbury Wharf.

To economise on water consumption, the principle of the side pond was adopted. This consists of a brick lined chamber alongside the lock midway between the upper and lower pounds and communicating with the lock chamber by means of a culvert controlled by a 'side-pond paddle.' After a craft has entered the lock and the gates are closed, the water is first discharged into the side-pond. The side-pond paddle is then closed and the rest of the water is released from the lock. When a boat enters the empty lock the side-pond paddle releases water from the side-pond and half fills the lock. The lock is then filled with water from the upper pound. This saves half of a lock of water at each lockage.

This canal was first designed by John Snape to run on the south side of Hanbury road. In 1814 a new survey by Thomas Allen put it on the north side of the road.
Richard Boddington designed the final plan.

- The last 'commercial' use of the Junction canal:
The last commercial narrow boat on the junction canal before its closure was the 'Englishman' owned by George Harris of Stoke Works carrying a load of bricks in 1928. The boat was stopped at the bottom by the police at night as the bricks had not been legitimately acquired, stolen from the brick works near Hanbury Wharf.

WORCESTER/BIRMINGHAM CANAL

This Canal is 30 miles in length with 58 locks to take boats 70 ft by 7 ft. There is a 15 mile level stretch from Birmingham and a long flight of 30 locks at Tardebigge. The deepest narrow canal lock in England is the Summit Lock at Tardebigge which has a fall of 14 ft. This is exceptional since the deeper the lock the greater the water consumed. The average fall of a canal lock is from 6 to 8 ft. The canal took 23 years to complete, 1792 to 1815, due to lack of funds and criticised for using inferior materials. The undertaking did not go smoothly and there was much conflict between lock keepers and mill owners.

Navvies found salt when cutting the canal through Stoke Prior in 1810. At first economically extracting the brine was unsuccessful. Then came John Corbett who solved the technical problems and eventually became a multi-billionaire in today's money.

In 1874 the Sharpness New Docks and the Gloucester and Birmingham Navigation Company took over the Worcester – Birmingham Canal and the Droitwich canals to ward off competition from the railways.

In 1887 the W/B canal narrowly missed becoming the Birmingham Ship Canal: this was the time of the creation of the Manchester Ship Canal. Would we be making this journey if the Birmingham ship canal had become a reality taking 20 ft wide sea going boats?

GENERAL FOR THE BIRMINGHAM / WORCESTER CANAL

The W/B Canal : - Proposed in 1785, act of Parliament in 1791, work started in 1792.. But not completed until 1815 due to delays over land deals. It cost £660,000, more than double the original estimate, caused

by legal fees and inflation due to the Napoleonic wars. The Droitwich barge canal opened in 1771 at a cost of only £23,500 and took three years to construct. However, the W/B Canal is 30 miles long with 58 locks; the Barge canal is only 5¾ miles with eight locks.
The Droitwch Junction Canal was not built until 1851.
The W/B canal was surveyed by John Snape who had worked for the famous James Brindley. Brindley died in 1772; one year after his Barge Canal was opened in Droitwich. John Snape died a few days after the W/B canal opened!
The canal was originally built as a wide 'barge' canal with locks designed with one gate both top and bottom. The only sign of this now is the width of the tunnels (and bridges):16ft wide.
The first boat down the canal at the opening was carrying coal, the next carried Birmingham goods.

COMPETITION
In 1785 a different route for the canal was planned, to go from Worcester direct to the coal fields in Stourbridge via Bromsgrove. This was defeated in the Lords. Which is just as well as the River Severn was soon made easily to navigated and traders would have preferred the Stourport route

In 1798 there was aborted competition in the form of a proposed horse drawn tramway to take coal from Birmingham to Worcester.

WATER SUPPLIES - a fundamental requirement for a canal!
The B/W Company was forced to provide five large reservoirs on the river Arrow and river Lea; mainly to protect the existing water mills. In 1821 the Tardebigge was also built and in 1829 the Upper Bittel.
Many early water pump steam engines were installed at great cost due to the fear of drought. However the early 19th century was extremely wet making the engines unnecessary and were soon abandoned. All disappeared when the railways arrived due to reduction of boats on the canal. The two large locks at Diglis basin in Worcester required a large amount of water and also used steam engine pumps in the early days of the canal.
Adequate water at the Bar in Birmingham, to supply both the Birmingham Canal Company and the B/W canal, was a problem and caused many arguments. Two large steam engines were installed to resolve the problem.
Also to preserve water, a large mechanical lift was installed at Tardebigge ;1809-1815. This was soon replaced by 30 locks, due to technical problems.

CANALS IN GENERAL

Donkeys
Donkeys were used with advantage usually in pairs. They worked harder than horses, lived longer, hardier, less fussy about food and drink. They could be taken on board when going through a tunnel. Had hard hoofs, no need to shod and was sure footed. But they were stubborn.
In 1875 a reward of £5 was offered for anyone who gave evidence of ill treatment of a donkey. This was soon reduced to 10/- due to the overwhelming number of applications!

Electric Telegraph
By 1862 most canals had a line of telegraph poles along the tow path. They disappeared between 1910 and 1939 due to rows over rent. They must have been useful for lock to lock communication.

Lock Keepers
In the 1800's generally there was one lock keeper per six locks. There were two keepers on the Junction Canal, one at each end. Some lock keepers also acted as lengths men.
The locks were padlocked at night and up to 1840 were locked Sunday morning and afternoon.

Toll Clerks
The was a toll house at Hanbury Wharf and another at Lock 17 at the bottom of the Astwood locks. Both served the Droitwich Junction Canal.

Canal Highway Code
In 1809: one of the ten rules, stated that all boats must have a qualified helmsman.
In 1816 new rules were added: one stated that 'no boat is to be more than five minutes in a lock'.

Pleasure Boats
Until 1867 there was no charge to use pleasure boats on the canal. A charge of £1 per annum per boat was then introduced. Reason: it was the 'in thing' to take rides in the new steam powered trip boats.

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In the 19th Century there were some hard winters. Special iron clad boats were used to beak up ice - critical for people earning their living on the canal. A team of people dispersed the ice by rocking the boat from side to side. Crowds gather to watch this entertaining skilful activity.
From 1918 ice breaking was done by the motor tug 'Sharpness'.

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The Manchester ship canal was authorised in 1887**.** The vision of a Birmingham Ship Canal bringing sea going vessels from the Bristol Channel to the centre of Birmingham was discussed in 1886. The idea was to dredge and deepen parts of the river Severn, ease the curves on the Gloucester and Berkeley ship canal and deepen and widen the W/B Canal, so that lighters carrying 200 to 250 tons could ply between Sharpness and Birmingham. The advantage was a saving of 50% on transport costs. The W/B locks would be 110 ft long, 20 ft wide, 8 ft deep and a change in level of at least 14 ft. The cost for modification was estimated at £690,000, slightly more than the original cost of the canal.
This was abandoned in favour of improving the canal system to London.
In 1900 and again in 1923 this huge project was reviewed without success.

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- Trip Commentary:
Hanbury Wharf to Dunhamstead:

Droitwich Waterways (Pamela May) Trust

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Pamela May talk

Hanbury Wharf to Dunhamstead

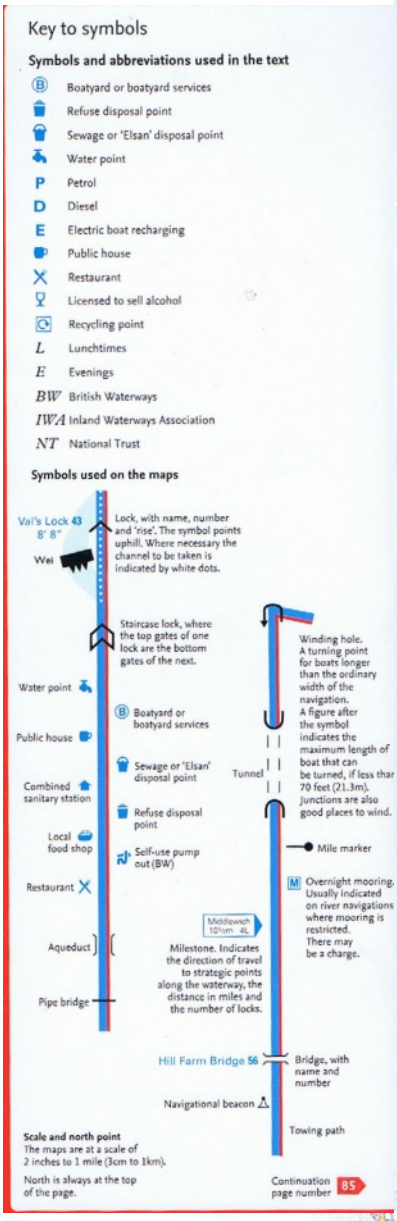
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PAMELA MAY TALK - FROM HANBURY WHARF TO DUNHAMSTEAD

WORCESTER & BIRMINGHAM CANAL - FIVE MILE POUND





Extract from Nicholson's Waterways Guide 2

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INFORMATION FOR A TALK FOR PASSENGERS CRUISING FROM THE DROITWICH JUNCTION CANAL AT HANBURY WHARF TO DUNHAMSTEAD WINDING HOLE ON THE WORCESTER/BIRMINGHAM CANAL IN THE PAMELA MAY

Data collected from the book: The Worcester and Birmingham Canal -Chronicles of the Cut - by Revd. Alan White

HANBURY WHARF TO DUNHAMSTEAD

This part of the canal has no locks and was known as the five Mile pound. It was staked out in 1810 in five one mile parts (or cuts) and all started together with different teams.
The chief land owners were Mr Phillips of Hanbury Hall, Mr Ammllett of Hadzor and the Dean and Chapter of Worcester cathedral.

Entering the B/W canal from the top of the Droitwich Junction Canal.
The Droitwich Junction Canal was opened in 1854, although an attempt to get permission was originally made in 1786. Problems encountered by the B/W Canal Company caused the delay.
This canal was first designed by John Snape to run on the south side of Hanbury road. In 1814 a new survey by Thomas Allen put it on the north side of the road.
Richard Boddington designed the final plan.
The Oxford, Worcester and Wolverhampton Railway Company was building a railway during the time the canal was being built.

Under Westfield Bridge into the B/W Canal, then right, through the B4090 Saltway bridge.
Immediate to the right of the bridge opening was a stable and hay loft.
Further to the right is Wharf House. In 1822 to 1910 the house was converted to an Ale House for canal traders and known as the New Inn and had a good reputation for good beer.
On the left is the Eagle and Sun, built in 1840. Before 1900 it was known as the Railway Tavern and served both canal and railway users.
The lighthouse on the right was originally a crane used for moving timber. It was disguised as a crane by George Bate in 1950.
On the right near Wharf House was a Weighbridge called the Round House as it was originally semi-circular to allow movement of horse drawn carts round the rear of the building. It has now been altered to be rectangular.
Most of the factory, shops and storage facilities seen on the right were there at the early days of the canal.

Coffin Bridge
This bridge is unique as it is the only original foot bridge on this canal and is only 3 ft wide.
Possibly called Coffin Bridge due to coffins being taken from Huntingdrop Farm to Hazdor Church. Today it can only be used to cross from the towpath to the private moorings.

Hadzor bridge and Hammond's Bridge are Accommodation Bridges.
Accommodation Bridges were built over canals to preserve ancient rights of way and typically they were provided for the convenience of farmers who required access to their fields that lay on the opposite side of new canals.

Shearwood Green road bridge
There are rusted remains of a weight restriction notice on the bridge.
On the tow path there are some blue corner bricks containing large groves made by tow ropes of horse drawn boats.
Round the bend before Dunhamstead Tunnel there is an a low lying wild area. This was the site of a basin, where in 1820-1850, limestone, conveyed by a horse drawn tramway from quarries in Saleway Farm and Himbleton areas, were stacked and loaded onto boats for lime-burning kilns at Tardebigge..

Dunhamstead Tunnel
Brick lined in two months and opened in 1812.
This has less head room than all the other B?W tunnels -only 9 ft. This allowed boats to be legged through more easily using the roof.

Brook Line Boat Yard
Hidden on the left is the Fir Tree Inn, situated between the canal bridge and the railway level crossing. This inn was advertised in the local paper in 1816. In 1968 it was rebuilt and reestablished by Alan and Jane Picken. They ran a trip boat called the Cypress, a hire boat business -'The Water Folk' and a small museum/shop in the Old Forge Building. The Old Forge is now occupied by the canal Artist Andy Edwards who freely gave his time to paint the Pamela May.
On the right is the Brook Line Narrowboats, holiday hire and boat repair establishment.

Turn at the Winding Hole just before Lake bridge
or the next one just after Oddingly No. 1 bridge (No. 26)

Oddingley
Murders: - The field between the church and the canal on the right was the scene of two murders in 1806. The Rector, Rev George Parker, who had threatened to raise the tithes, was shot dead in his field by Richard Hemming who had been hired as an assassin by a local farmer, Capt. Samuel Evans of Church Farm. Hemming was himself murdered by Evans, but his remains were not discovered until 24 years later. By this time Evan had died and so escaped the Gallows.
The church is worth a visit.

Notes for the journey back

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