DOCK COMPANY HOUSING SHARPNESS GLOUCESTERSHIRE

ANTHONY J ISHERWOOD ©

This article studies industrial housing in the dock community of Sharpness in Gloucestershire, where the dock company implemented its own housing scheme. Constructed by the Sharpness New Docks and Birmingham Navigation Company, the scheme consists of five separate terraced rows that were built specifically to house the dock workers and formed part of a company village.

The River Severn in the 18th century was one of the country's most important waterways, but it had many natural defects, especially in the stretch between Gloucester and Berkely Pill (about a mile south of Sharpness) which could only be navigated by larger craft on exceptionally high tides due to sandbanks and shallows. Therefore the idea was put forward for a canal to bypass this section and to link up with the Stroudwater Canal which met the Severn at Frampton, and which would eventually form part of a complete route to London via the Thames and Severn Canal. Plans for the canal were put before Parliament in 1793 (1), surveyed by Richard Mylne, the "Chief and Principal Engineer" to the Gloucester and Berkeley Canal Company. They were approved by Act of Parliament and Mylne commenced construction on the canal. Unfortunately financial difficulties arose and little work was carried out between the years of 1800 and 1817.

However in 1817 the Poor Employment Act was passed, enabling the Government to lend money for projects which would help the unemployed by providing work. Upon the terminal at Sharpness Point being approved by Act of Parliamant a substantial part of the money needed to complete the canal and dock was lent to the company by the Government. Through the large Government loan the canal and docks were finally completed and opened on 25 April 1827 at a cost of £432,000 (1) having taken 33 years to build.

The New Dock

As trade began to steadily increase on the canal it became apparent that the dock and basin at Sharpness Point (Fig 1)

could not cope with any further increase. This was due primar ily to the function that the old dock performed; that of a mooring area while ships waited for the tide on the Severn. Some
ships also had their loads lightened before passing on to
Gloucester or had their cargoes transferred into barges, if they
were too large to navigate the canal. Therefore in 1869 W.B.
Clegram the company's engineer was requested to survey for an
enlargement of the dock area. The overcrowding in the old dock
was emphasised in his report and included the following:-

So great was the crowding of vessels in the tidal basin at Sharpness, that this alone represents an amount of inconvenience, loss and annoyance to the ship-owners, shipmaster, merchant and all parties concerned, that, none would willingly a second time submit to, if it could be avoided; and it can scarcely be concerned that traffic could do otherwise than recede under such circumstances. (2)

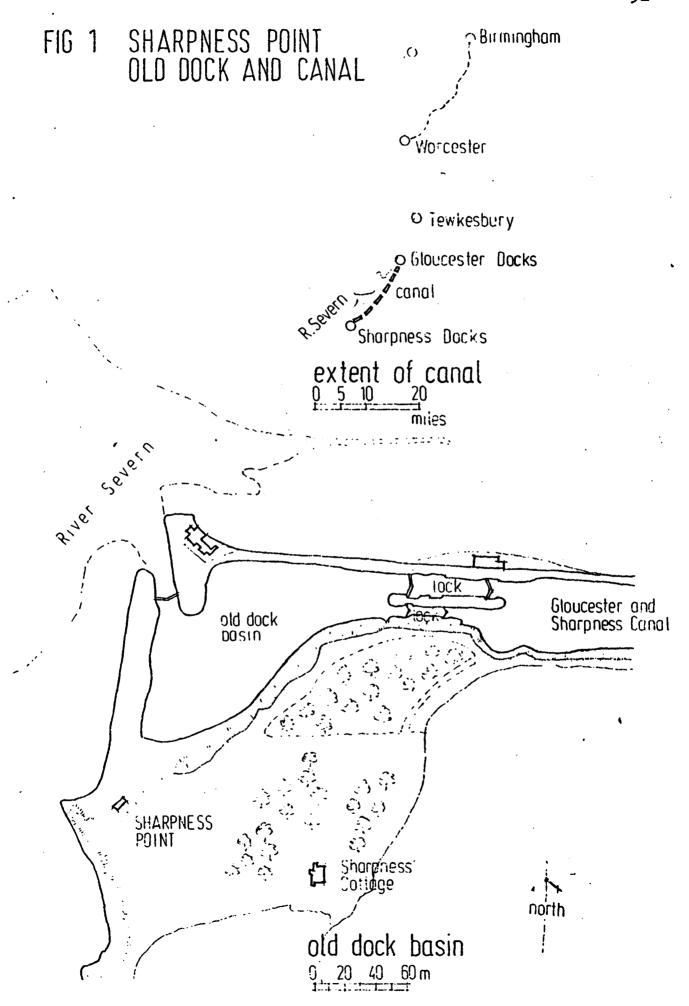
The findings of W.B.Clegram's report suggested a new entrance, tidal basin and dock below Sharpness (Fig 2) at an estimated cost of £150,000. These plans were accepted by the Company who applied to Parliament in the session of 1870 for approval to construct the works and obtain the necessary capital. The original estimated cost was increased by £50,000 to £200,000 of which £75,000 was to be raised by shares and the remainer by loan (1).

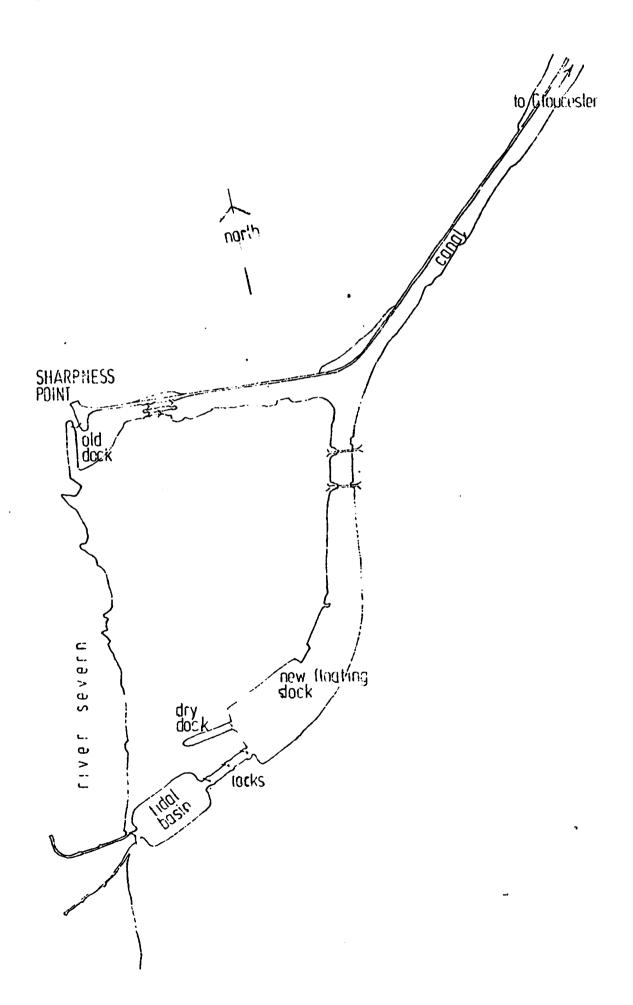
The construction of the new dock began in the spring of 1871. Brick and lime kilns, and mortar making mills were set up nearby, with the clay dug out from the workings being used for the ordinary bricks in walls and other constructions. Staffordshire blue bricks for the more critical positions were also used. Stone that was also required was transported in vessels along the canal to the construction site. Holes for the foundation of the piers needed to be blasted out of the solid rock. As this was a new construction site, all the workers employed were billeted in timber huts with the exception of a few who lived within the surrounding area.

Sharpness New Dock was opened on 18 November 1874, this date being chosen because the highest spring tide occurred at this time. The final cost of the new dock was £400,000, twice the figure estimated at the dock's approval stage.

This new dock provided an entrance three quarters of a mile lower down the Severn with a lock 320' X 57', a tidal basin 540' X 300' and a floating dock 2000'X 320'. This enabled ships up to 5000 tons to berth at Sharpness. The water area and facilities were available for intense dock activity to begin. It was soon to be a centre for loading, discharging and lightening of vessels and rapidly began to rival Gloucester in this respect.

There was little need to retain the old entrance lock after the opening of the new dock, although it remained in use until 1910. The old dock which is still in existence, although the lock gates





are out of use, is now occupied by privately owned pleasure boats.

In the same year as the completion of the new dock, the Gloucester and Berkeley Canal Company acquired the Worcester and Birmingahm Canal, and changed its name to the Sharpness New Docks and Gloucester and Birmingham Navigation Company. With the opening of the new dock the need became apparent for a rail connection, preferably to a coal field to serve the ships that berthed there. The obvious move was a bridge across the River Severn to link with the abundance of coal in South Wales and the Forest of Dean. This was found to be feasible and an Act was passed authorising the Severn and Wye and Severn Bridge Railway Company (3) to build this bridge, which was to cross the river north of the new dock and link with the Severn and Wye Railway. Opened on 17 October 1897 this bridge served as a very important link to the docks until November 1959 when it was closed after suffering damage when two tankers on the Severn collided with it. Because it was so badly damaged it was not re-opened and finally pulled down in 1967.

Another rail link was provided for the dock with the opening of the Midland Railway which connected Sharpness with the line from Birmingham to Bristol. At the dock the line was described as the Great Vestern and Midland Joint Severn and Wye Railway with Sharpness Station providing the connecting link between the different lines. (3)

As the industrial activities increased so too did the population of Sharpness; from 562 in 1871 to 1313 in 1881 (4). Hence the housing demand similarly increased, this being supplied by the erection of firstly the dock company housing and secondly speculative housing. These two different types of housing were separated by the Midland Railway mentioned above, which effectively divided Sharpness into two separate communities; 1) New Town (originally named Oldminster) and 2) Dock Town. The latter has been described in the following way:-

Sharpness proper, across the railway-lines and a couple of intervening fields, is a rather likeable jumble of docks, fields and streets. Ranks of red-brick houses huadle around the granaries and derricks, almost in the shadow of masts and funnels of steamers from Russia, Germany and elsewhere. (5)

The dock company housing was built solely for company employees and the speculative housing for the persons connected with trades that were developing around the dock. This meant an increase in housing built, from 108 in 1871 to 232 in 1881 (4)

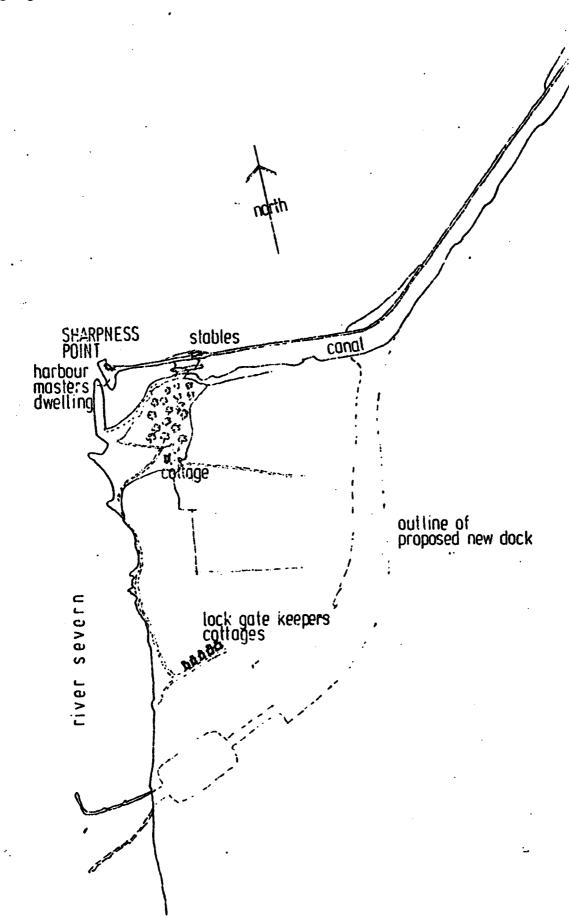
Settlement of Sharpness 1800 - 1874

Sharpness Point, when it was the southern terminal of the Gloucester and Berkeley Canal, was a very small settlement and grew little prior to the opening of the new dock in 1874. settlement consisted almost totally of lock gate keepers cottages whose occupants were employed on the dock. These cottages which still remain are located to the south of Sharpness Point and were constructed during the 1850's. The actual date they were built is difficult to establish because no maps prior to 1880 are in existence for this area (at a scale where individual dwellings are indicated). However they are evident on the Census of 1861 (6) and there is photographic evidence of their existence before the new dock was built. Numbered 1 - 9 inclusive in the present day Dock Road they comprise of (No 1) a detached two storey cottage that was originally the head lock keepers dwelling (7) and was then occupied by the harbour master after the new dock was completed. The following six dwellings (Nos 2 - 7 inclusive) are three pairs of semidetached two storey dwellings that housed the lock keepers. A survey was carried out on number 5. Numbers 8 and 9 Dock Road were originally the final pair of semi-detached dwellings for the lock gate keepers, but were converted into a bank/pilotage agent (number 9) and dock office (number8) after the opening of the new dock in 1874. The first floor of the two properties was combined to form the bank managers flat. At an unkown date during the 20thc number 8 was re-converted into a two storey dwelling with the bank managers flat being altered accordingly. The external walls of all these dwellings are constructed in brickwork with a facing brick finish. The roof construction of 225 x 75 purlins supporting the 100 x 50 rafters are finished with natural slates.(8)

The apparent reason for the distance between these cottages and the old dock was that of land ownership. The Earl of Berkeley originally owned all the land on Sharpness Point and the land where the cottages are located was the extent of his estate. The only dwelling on his land however was a cottage known as Sharpness Cottage. Other dwellings that were constructed prior to 1874 were the dock managers house located on the entrance quay to the old dock and the horse stables adjacent to the lock gates (Fig 3). This was how the settlement of Sharpness Point remained until the new dock emerged - and with it the Company Village, the nucleus of present day Sharpness.

The Company Village c 1874 - 1910

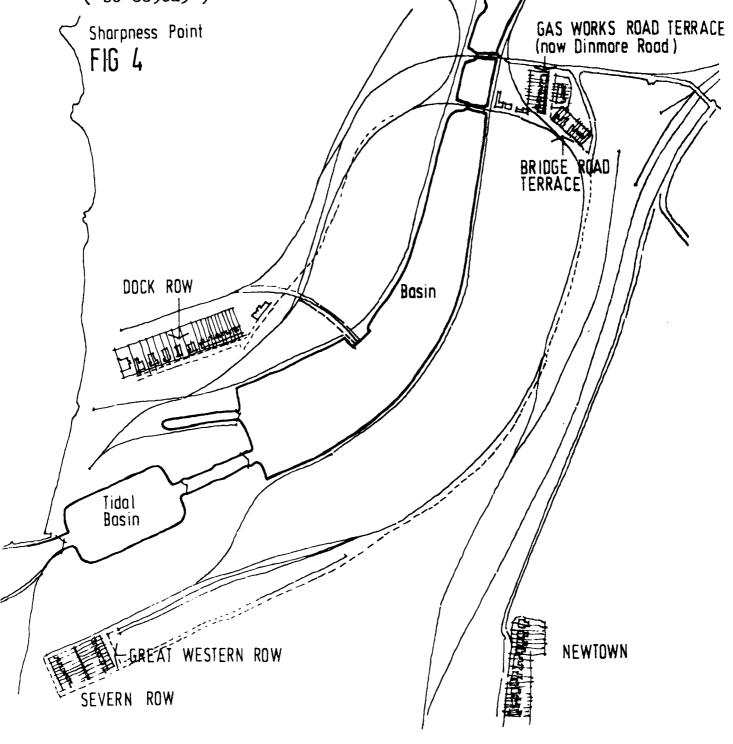
Unlike the Port of Gloucester where the docks were on the fringe of the city and it was possible to draw on an already existing labour force, Sharpness was in contrast a new site. Workers had to be brought from outside and accommodated. Accordingly the Charpness New Docks and Gloucester and Birmingham Navigation Company decided in 1874 to plan and construct a company village (9). This fell into the following four



separate groups :-

- 1) Offices and shops on both sides of the ship lock (so 670023)
- 2) Two terraces, namely Dinmore Road (previously named Gas Works Road) and Bridge Road, near the low-level bridge at the north end of the Floating Dock (so 674028)
- 3) Two terraces namely Severn Road and Great Western Road and a school near the South Pier (so 668020)

4) On the west side, looking down onto the Graving dock a terrace namely Dock Road adjoining the existing cottages (so 669025)



Dating evidence :-

The earliest houses that were built as part of the company village were Severn Road (originally Severn Row) comprising ten dwellings, Great Western Road (originally Row), nine dwellings and Dock Road (originally Row) of twelve dwellings. All are evident on the first edition of the 25" to 1 mile O.S. map of 1880 sheet number XLV II 8 Glos. (West division). Of the three terraces, it has been established that Severn Road was the first constructed. This was determined by discussion with local inhabitants and appears to be well founded for the following reasons. Firstly, the design of this terrace differs both spacially and in detail from all the other company housing which could suggest that these houses were the initial attraction to better paid workers who were being brought from outside to be accomodated. Secondly, through a physical survey of one of these dwellings it was found to be built directly off the bedrock with a semi-basement provided up to ground level. This is also different from the other two terraces which are on made up ground, presumably that excavated from the dock workings (10). It is also significant that the dwellings in Great western Road and Dock Road are virtually identical in appearance and floor area (see later).

By this date (1880) several warehouses each with its own steam power to operate the lift machinery for loading and unloading vessels had been erected to the east of the dock basin. Similarly small offices and shops appeared around the dock basin (11).

The second edition of the 25" to 1 mile 0.S. map of 1902 indicates the remaining company housing (see Fig. 4). These were Bridge Road comprising fifteen dwellings, Gas Works Road (now Dinmore Road after demolition of the Gas Works) seventeen dwellings and a further two located at the north end of Dock Road, namely a post office and shop, both with flat over. An additional dwelling was built in 1901 (8) at the extreme south west end of Dock Road, to house the dock superintendant. This two story brick built house is now falling into a state of disrepair after being left unoccupied for the last ten years. The last two dock superintendants have found the house too large and apparently also preferred to live away from the dock. Evidence is also shown on the map of the school, erected, with residence for the master in 1885 (12) at the sole cost of the Built to cater for 150 children it was entirely dock company. supported by the dock company and sited adjacent to Great Western Road. It is probable that as the school was built in that year the remaining company housing mentioned above was also The completion of the company village was also built by 1885. evident on the secondedition of the O.S. map of 1902 and included the shops and offices on the east side of the dock basin. Although these buildings are not to be studied in detail, it is of interest to note that they were of timber framed construction and have only recently been earmarked for demolition (apparently by the end of 1976).

The only other housing linked with Dock Town at this time was a terrace of houses originally owned by the Severn and Wye Railway Company and sited to the north of the new dock. At the same time as this expansion in bock Town, across the railway lines of the midland Railway the community of Sharpness New Town was similarly expanding due to the increased activity of the dock.

Dock Company Housing

All five terraces already mentioned were built for the specific purpose of housing workers for the Sharpness New Docks and Gloucester and Birmingham Navigation Company.

most if not all of these dwellings were modernised between 1963 and 1970 after the docks came under the ownership of the British laterways Board. The improvements incorporated single storey kitchen and bathroom extensions. However through obtaining some original drawings (13), conversing with the occupants and surveying the areas of the properties that are still in original condition, a reconstruction of the various house types has been established

Severn Road (Fig 5)

Comprising a single terrace row of ten dwellings, single fronted and two storeys high, they are located nearest of all the company housing to the Severn Estuary and look across the river in a south westerly direction. Unlike any other of the company housing this terrace incorporates a basement, which originally extended from the front to back of the two ground floor living However this has now been back filled to a distance midway along the depth of the dwelling. (This was done in connection with other remedial works to overcome damp problems Apparently at the end of the 19thc some of these basements were used as workshops by the occupants (15). Brick built with & 360mm thick front wall and 280mm thick rear wall the natural facing brickwork appearance has been lost in lieu of an applied With alternate houses being handed, this is reflected in the elevational treatment of the terrace through two front doors being located side by side, then two windows etc., until one reaches the end dwellings. In this way the length of the terrace tends to be visually reduced by virtue of there being five groups of two entrances rather than ten isolated ones, and the number of chimneys are reduced. The elevational treatment at first floor level includes a blank or dummy window positioned centrally above the two doors. As this occurs directly across the party wall it can be assumed that this was included purely on visual grounds adding to the overall symetry of the terrace. Other details that are alien to all other dock company housing are the timber columned mullions to the front ground floor windows and the semi-circular arches above the front door openings. These auditional qualities together with their location support the sale estion that this terrace acted as an initial attraction to the workers. All the lintels and cills to windows are stone

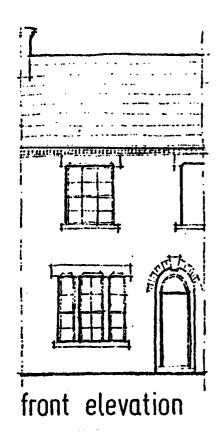
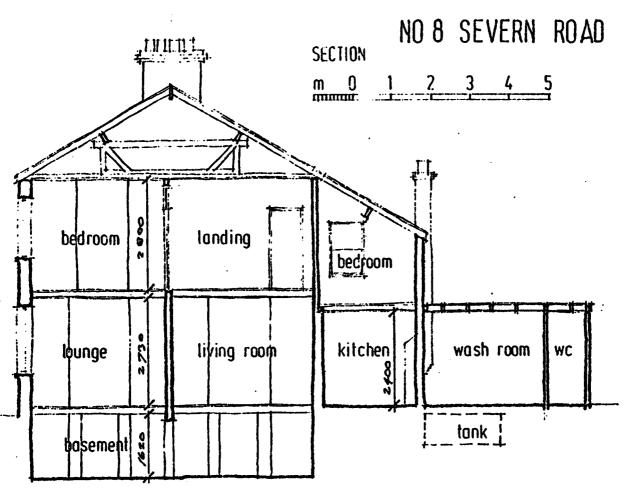


FIG 5 NO 8 SEVERN ROAD

m 0 1 2 3 4 5



cross section

in common with other company housing. The roof finish of the whole terrace retains most of the original natural slates.

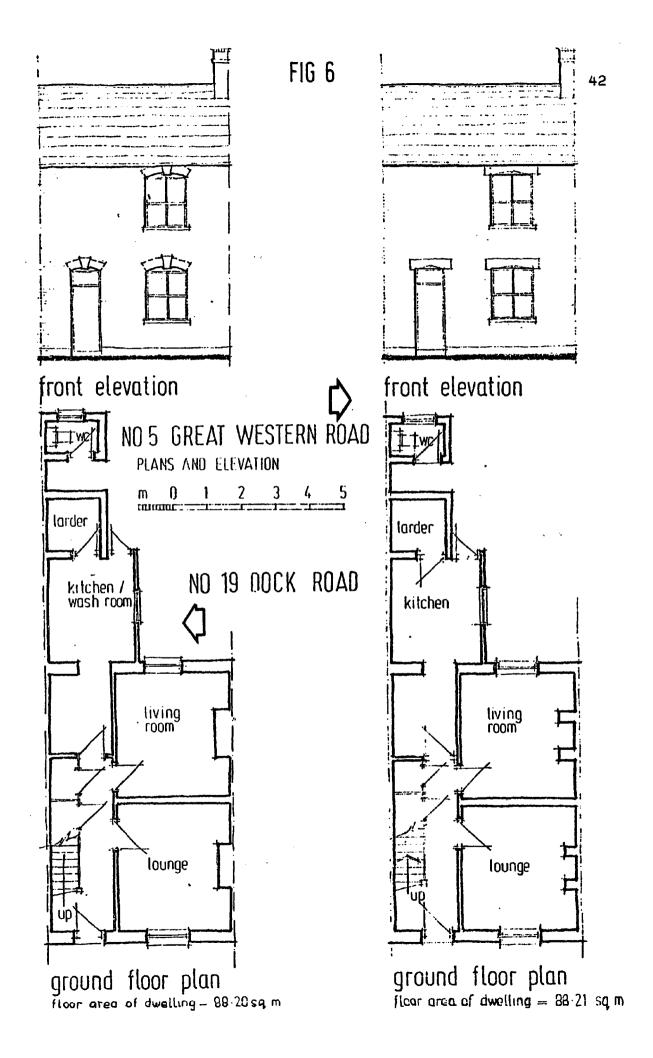
The dwellings were heated by four open fireplaces, located in two ground floor rooms and two bedrooms. Sanitation was provided to the extent of an external water closet. Before a water supply was installed, a water storage tank and pumps were located beneath the wash house/store at the rear of the dwellings. All rainwater was stored here and then pumped to a sink in the kitchen above as and when required. Two wells with hand pumps were also evident, one located at the end of the rear garden of number 8 and a second at the southern end of the passageway between Severn Road and Great Western Road. Although the pumps are now removed, the wells are still in existence.

Number 8 Severn Road was surveyed, see Fig.5. Access to the basement is through a 1050 x 540 softwood trapdoor located in a cupboard beneath the stairs. A vertical ladder completes the access route. Within the basement all walls with the exception of the party wall that incorporates the chimney stack were taken down to the bedrock via arches then linking every two dwellings together at basement level (Fig. 5). Originally this meant that the basements were open at the front but because they were exposed to the south westerly winds and damp problems arose it was found to be necessary to back fill with rubble to close this exposed area. A landing on the first floor provides circulation to the two main bedrooms both of which have open fireplaces. Access to the third bedroom is from the last tread (a winder) of the staircase and there is then one step down into the bedroom. All internal partitions with the exception of the brickwork wall supporting the floor and ceiling joists, are timber studded lath and plaster. Finally the windows are all softwood sash type and have stone lintels and cills

Great Western Road (Figs. 6 & 7)

This terrace backs on the Severn Road and comprises a single row of nine two storey single fronted dwellings. As with all other dock company housing they are brick built but have had their natural facing brickwork finish replaced by an applied painted finish. Again the elevational treatment reflects the plan form, with the symetry of the row provided by the window and door positions. At first floor level only one window is provided per dwelling, lighting the main bedroom. Stone lintels are provided above both door and window openings. Cills to all windows are also stone. The first floor construction is identical to Severn Road, as are heating and sanitation.

Number 5 was surveyed. The headroom of both floors were lower than Severn Road being 2690mm on the ground floor and 2530mm on the first floor. The layout differed from Severn Road in that the hall provided direct access through the kitchen, along-side the staircase. This is reflected in the elevational treatment by the space between one front door and the next. Access from the hall is provided in to the two ground floor living



rooms, both of which have open fireplaces. Within the washroom to the rear of the kitchen a boiler was located the flue of which can be seen on the outside of the rear wall. On all properties with the exception of number 3 these stacks have been cut back to eaves level and sealed up, after removal of the boilers. The chimney stacks located centrally in the main two bedrooms are curved on one side towards the ceiling and form an arch in the roof space where the two flues converge at the ridge of the roof.

Dock Road (Figs 6 & 7)

This terrace of twelve two storey single fronted dwellings is sited next to the original lock gate keepers cottages and is brick built with a slate finished roof. Dwellings numbered 10 to 21 inclusive were found to be virtually identical to those of Great Western Road. The differences occurred on the elevational treatment where brick arches with carefully cut key stones are provided over both door and window openings. Another difference only relates to numbers 10 and 11 which have bay windows to the front ground floor rooms.

Gas works Road (now Dinmore Road) (Fig 8)

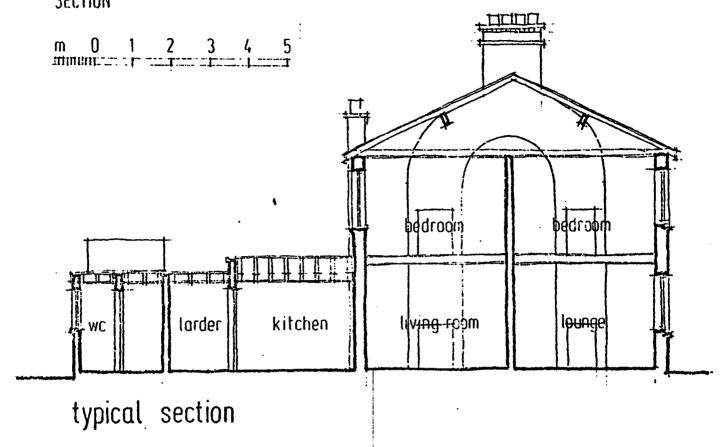
Two terraced rows of eleven and six dwellings, the seventeen houses are all single fronted two storey and brick built with slate finished rooves. Sited at the north end of the dock basin these were part of the 'second phase' of company housing built after 1880 and all these dwellings in this phase still retain their original external appearance. The row of eleven dwellings on the west side are 'stopped' at the end by the gable end wall of number 12 Bridge Road. To complement this the row of six houses opposite have this visual 'stop' provided by the gable end wall of number 17 Dinmore Road. With the exception of number 17 all the dwellings in pinmore Road incorporate brick 'arched' lintels over all structural openings on the ground floor and stone lintels on the first floor.

Number 5 was surveyed. The houses are considerably smaller than the earlier dwellings, made possible by the lack of any hallway. The front door opens directly into the front room and the staircase access to first floor is positioned in the front left hand corner of the living room adjacent to the front door. The two main ground floor rooms are separated by a 112.5mm brickwork partition wall which incorporated the chimney stack centrally along its length serving both rooms via open fireplaces. A door at the extreme left provides circulation between rooms and the kitchen access is directly off the rear living room.

Bridge Road (Fig 8)

The terraced housing in Bridge Road is substantially made up of two rows (numbers 1 - 7 inclusive and 8 - 11 inclusive). Of these terraces the former has the visual 'stop' as in Dinmore Road terrace, but in this case at both ends. Again this has been done by 'turning' the last dwelling so that the gable end faces the road. The other terrace (numbers 8-11) has one gable end facing the road (that of dwelling number 8), but the other

FIG 7 NO 5 GREAT WESTERN ROAD



NO 19 DOCK ROAD

SECTION

m 0 1 2 3 4 5

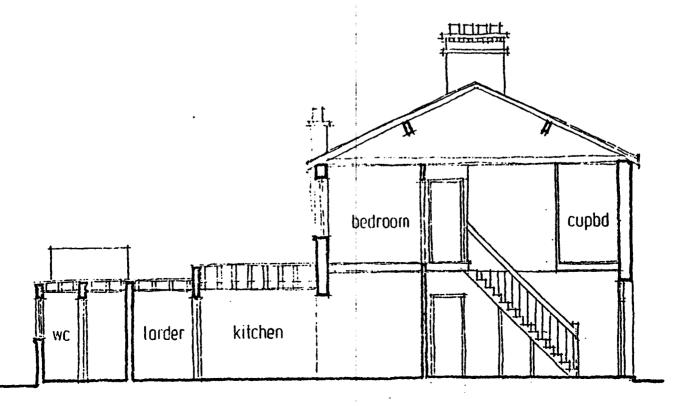
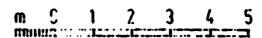
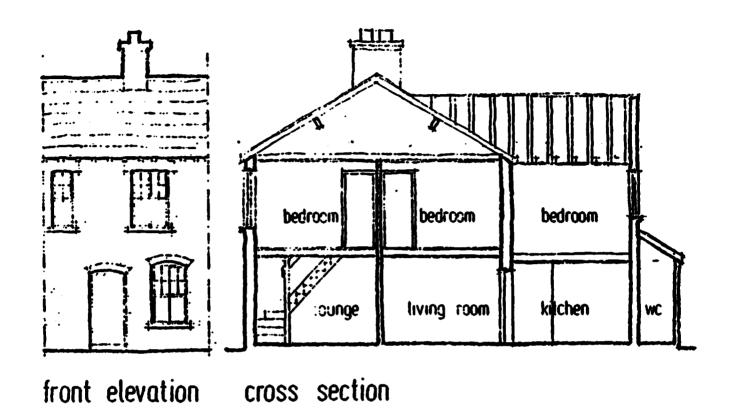
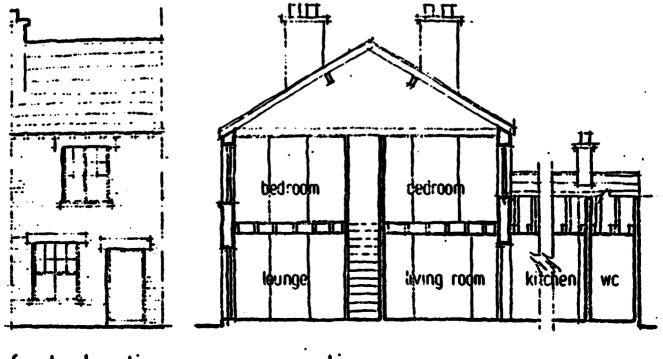


FIG 8 NO 5 DINMORE ROAD ORIGINALLY GAS WORKS ROAD





NO 3 BRIDGE ROAD m 0 1 2 3 4 5



front elevation

cross section

end dwelling is typical of those intermediate with the exception of the entrance. In this case it is at right angles to Bridge Road in the end wall of the terrace. Other company housing in Bridge Road comprises number 13, a three storey detached house and finally the last building adjacent to the low level bridge. This comprises number 14 and 15, both two storey dwellings on an 'L' shape plan.

The timber provided in the company housing was substantial in size, particularly in Severn Road. This was probably due to the use of timbers in bulk that were available from the cargoes of imported softwood that were being unloaded at Sharpness. There was also the need for a larger section of timber in the trussed roof construction to allow for the necessary jointing in the timbers i.e. tusked tenon joints. Floor joists which were all rough sawn were 75mm thick, larger than necessary but readily available whereas equipment for cutting the timbers down was probably not so easy to come by. As the following rows were less substantial it could be suggested that Severn Road had an over structured design and that the craftsmen learnt from this hence the purlin only construction used to support the rafters in Great Vestern Road, Dock Road and the remaining housing in Phase II.

The variety of detailing in the various house types such as the stone lintels, the brick half arches and full arches with keystones are probably a reflection of the variety of craftsmen that were employed on the new dock workings and retained to carry out the construction of the company village. This tends to provide a sense of identity for each row, which are all different if only slightly in their elevational treatment.

Evaluating Performance in Social Terms

People employed by the dock company included; office staff, stevedores, maintenance men, tradesmen (carpenters etc), lock gate men, tugboat men and painters and decorators. In total approximately 80 people (18) were employed and all housed in dock company houses. Speculative housing provided accommodation for the dockers and warehousemen engaged on the dock who were employed by such dockside companies as:-

Severn Port Warehousing Ltd. - grain

Chadbourns - general stevedoring

G.T.Beard - general stevedoring

Foster Brothers - oil seeds

Price Nalker - timber merchants

Cardiff Channel Dry Dock Company

Apart from these workers, it was often necessary to engage additional work force, from outside the dock at busy times, making an approximate total of 600 workers.

The following table (19) indicates the annual figures of number of houses built and the increase in population for the years 1871 - 1911 inclusive :-

TABLE 'A'

1110200 11	nous es		Persons per
Date	Built	Population	Dwelling
1871	108	562	5.2 persons
1881	232	1313	5.6 persons
1891	271	1629	6.0 persons
1901	3 3 4	1763	5.3 persons
1911	3 86	1885	4.9 persons

From these figures, the occupancy level has been determined, as indicated in the last column. This shows the vast increase in population that occurred after 1874 when the docks were completed, and also how the housing supply had difficulty in keeping up with the demand. This reached a peak in 1891 when the occupancy level was 6 persons per dwelling.

Of the total number of houses built during this period the dock company completed 65 out of the 163 by 1891, by which time all the dock company houses had been built. This represented 30.9% of the housing market, which was a considerable amount.

Response from the speculative housing side was slow, suggesting that the occupancy level of the dock company housing around 1891 was 5 persons per dwelling. However as this is only an average figure it means that at least some of the housing had more than 6 persons which would suggest that a level approaching overcrowding standards could have occurred during this period. This increased occupany level is substantiated through the fact that lodgers were known to have boarded in some of the company housing between 1890 and 1905. In general, however, the dock company provided very adequate living conditions in terms of space provision for the occupants.

Rent and Wage Levels

The earliest date for which rent and wage levels have been established is 1904 due to the loss of original records. At this time Sharpness, in terms of wage levels was still treated as an agricultural area. This meant that for a lock gate keeper employed by the dock company at Sharpness, his weekly wage would be 19s0d, whereas a person carrying out the identical job at Avonmouth would earn 21s0d per week (20). Whether it was done in the hope that it would have a psychological effect on the employeesthat they were earning more, or just to save on office work, the company paid the wages fortnightly so that the gate keepers pay was £1.18s0d. It would appear that the highest wages at this time were £1.12.0d per week, paid to the employees with a trade such as carpenters (20).

The rents of the company housing varied according to their size and location from 4s6d to 7s per week. If these figures are related to the wages mentioned above, it meant that the dock employees were paying between 23% to 33% of their wages on rent, which appears to be considerably higher than the national average which was nearer 16% of income. The rents charged would suggest

that the nature and cost of the dwellings erected by the dock company were inappropriate for their purpose - designed more for the artisan than the labouring class. To give some idea of the standard of living that the workers could afford in 1904, one must ascertain the real value of wages.

Typical Weekly Budget for two wage categories :-

Bread and Flour Butter (2 lb) Cheese (½ lb) Milk Tea Sugar (3 lb) Butchers Meat (5 lb) Salt Potatoes	19s Od per week s d 3 9 1 4 4 6 6 6 1 0 2 6	21s Od per week s d 3 9 1 4 4 6 6 6 1 0 2 6
Vegetables Soap and starch	Home grown	6_
	10 7	10 7
Rent Coal /cwt Tobacco (loz)	4 6 1 0 4	6 6 1 0 4
	17 5	19 5

Although some employees earned 2s Od more than others, it can be seen above that because they tended to pay higher rent on their houses, the amount left from their wages could only buy the same quantity of goods as the lower paid worker. With the 1s 7d left he would have to buy clothes for the family plus any household items that were necessary. However, being a dock company employee did qualify each worker to a single working suit each year and an overcoat every five years, these being supplied free of charge from the company. Any costs that may have been incurred on education however, were saved through the dock company providing free tuition in their company owned and run school (sited at the end of Great Western Road).

It was not until after the freeze on rents during World War I that the employees of the dock company began to realise a better standard of living due to the rent level related to wages being more in keeping with the national average. By 1920 wages were between 30s and 40s per week and the rents from 5s9d to 7s10d.

Although it has not been possible to confirm, it is highly probable that the dock company took advantage of an Act of Parliament in 1866 to help finance their housing scheme. This Act enabled the Public Norkers Commissioners to make advances towards the erection of 'model' dwellings for the working classes

and loans to railway dock and harbour companies were quite commonplace. This financial backing was normally repaid over a forty year period at an interest rate of about 4%. If this was the case in Sharpness, it would partly account for the substantial size of the company housing, which without this government loan would have been far smaller.

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