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THE SOUTH STAFFORDSHIRE
WATERWORKS COMPANY



NEWS
REVIEW

RIVER SEVERN SCHEME ISSUE - JUNE 1968



EDITORIAL

This is a special issue of the News Review to commemorate the inauguration of the Hampton Loade Pumping Station and Treatment Works.

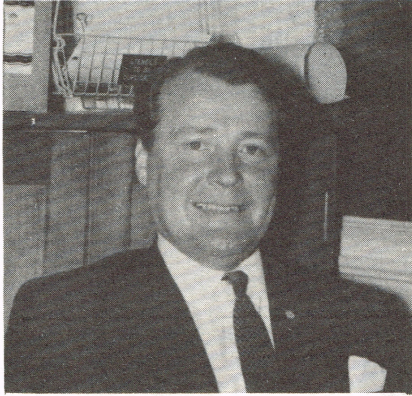
It is also commemorative for two other reasons. One is the changing of the cover style. We have decided to drop the 1930's perspective view of the Head Office and replace it with the Company Crest. The other change affects the editorship and publishing policy. In future the News Review will appear quarterly and there will be three new additions to the editorial staff.

Norah Dayes, who has edited the News Review single-handed since 1950, will continue as supervising editor. Bernard Hawkley will continue as editor, and we shall be joined by three new editorial assistants. They are :-

Janet Crook. Janet's job will be to collect copy and items of interest from the various departments at Head Office, Depots, Pumping Stations &c.

Peter Darby. Peter has kindly agreed to report the goings-on on the Secretary's side.

Finally, Sandra Fawdry has graciously offered to do the typing, type-setting and lay-out.



MR. B. Hawkley, Editor.



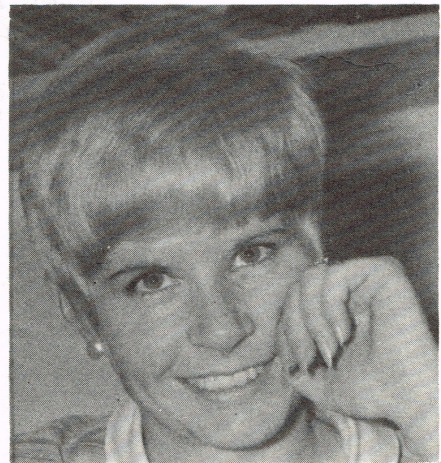
Mr. Peter Darby
Editorial Assistant



Mrs. N. Dayes
Supervising
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Miss Sandra Fawdry
Editorial Assistant



Miss Janet Crook
Editorial Assistant.



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Mr. W. A. Markham
Distribution Engineer



Mr. D. S. Brown
Construction Engineer

RIVER SEVERN SCHEME

INAUGURATION OF
HAMPTON LOADE WORKS

ON

25TH APRIL, 1968



Sir William Goode, G.C.M.G.,
Chairman of the Water Resources Board.
Principal Guest.

The Company's Hampton Loade Works which have been constructed for the joint use of the Company and Wolverhampton Corporation were formally inaugurated on Thursday, 25th April, 1968.

On a day fortunately blessed with brilliant sunshine, the Chairman and Directors of the Company, in conjunction with the Wolverhampton Corporation Water Committee, welcomed over 250 delegates from Local Authorities and Water Authorities within the Company's area of supply and also from those other Authorities receiving supplies of water from the Hampton Loade Works or directly associated with Clywedog Reservoir and the River Severn Scheme.

In addition, neighbouring landowners and tenants with whom the Company have negotiated the necessary land purchases for the works were also present, together with representatives from the major contracting firms and specialist consultants concerned either with the design and construction of the works or with the supply of plant and equipment.

The principal guest was Sir William Goode, G.C.M.G., Chairman of the Water Resources Board. Dr. J.N.W.Ritchie, J.P., President of the British Waterworks Association, and W.J.Glenn, Esq., C.B., Chief Engineer of the Ministry of Housing and Local Government, were also present.

Following a reception by the Chairman, the guests visited Chelmarsh Reservoir and the River Intake Works and Pumping Station by coach and then toured the Treatment Works and High Lift Pumping Station.

At the luncheon which followed the inspection of the works, Sir Charles Burman, D.L., J.P., formally welcomed the guests by stating that it was not his intention to list the difficulties encountered during the project or to detail the technicalities of the works which had been inspected by those present, but to affirm his belief that it was the result of the conception which was paramount. It was felt that in the Hampton Loade Works an efficient unit had been created which would bring a plentiful supply of water to both householders and industry.

Referring to the advantages of the joint scheme with Wolverhampton Corporation, the Chairman confirmed that the cost of water from Hampton Loade would compare favourably with other source works at present operated by the Company.

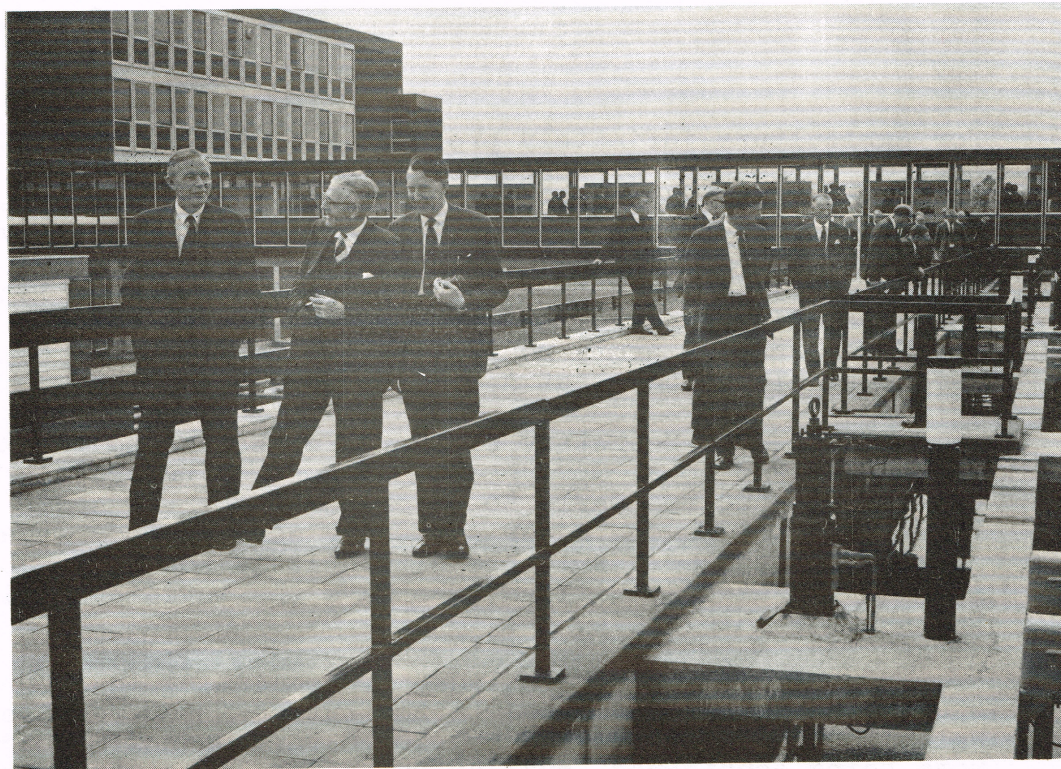
Commenting on the recovery of a 'dug out' canoe in the excavations for one of the abutments to the road and pipe bridge, the Chairman suggested that this was the obvious portent of the Chelmarsh Sailing Club which was now well established.

Welcoming the Chairman of both the Clywedog Reservoir Joint Authority and the Severn River Authority, the Chairman acknowledged that supreme above these Authorities and indeed all Water Authorities was the Water Resources Board.

The Chairman then welcomed the principal guest, Sir William Goode, and commented on the great responsibility which he carried in view of the far-reaching effects which the judgement of the Water Resources Board would have on the future of the water supply industry.

Thanking the Chairman, Sir William Goode replied with spirited comments on the future of the River Severn as a supply source, saying that in the short term another 100 million gallons of water per day would be required in the Midlands by the Mid-1970's and further surface storage such as another Clywedog Reservoir would be necessary in the Upper Severn. He confirmed that the Severn River Authority were already looking for suitable sites and suggested that a reservoir site in the Upper Severn in Wales would be thought by Mr. Cledwyn Hughes, the new Minister

The
Chairman
and Guests
Inspecting
the Works.



Hampton
Loade
Inauguration,
25th April, 1968



for Agriculture, infinitely preferable to having a considerable part of Shropshire or Worcestershire converted into an inland reservoir even though he might previously have had other thoughts about such a scheme when he had been Secretary for Wales.

Sir William went on to say that any new use of land was bound to raise great controversy and high emotions but it was the Water Resources Board's responsibility to make sure decisions were not delayed and that new needs were met.

Indeed, the Secretary of State for Wales and the Minister of Housing and Local Government had gone on record as recognising that it was not too early to be prepared for the needs of the 1970's and the Severn River Authority were already faced with looking for the most suitable site. It is the Severn River Authority, said Sir William, who have the invidious role of having to take the initiative.

Sir William Goode concluded by commenting on long term studies being carried out into the future water requirements in Wales and the Midlands and mentioned various new methods which were being considered, such as barraging of estuaries and desalination to meet long term requirements.



The Chairman's Inaugural Address





CLYWEDOG RESERVOIR PROJECT

For a number of years the maintenance of an adequate minimum flow in the River Severn has been a matter for concern to the Severn River Board and others interested in the river. In recent years a number of applications to abstract more water from the river have been opposed by users of the river's water because of the limited dry weather discharges.

In 1959 a hydrological survey of the Severn basin was carried out by the Surface Water Survey of the Ministry of Housing and Local Government. In 1960 their report was published and its main conclusions were that the River Severn Basin, the largest in Britain, had water resources capable of further development and that it would be possible to "provide an additional 250 m.g.d. for water supply, to maintain an adequate flow in the river at all times and to give a modicum of protection against flooding by the use of regulating reservoirs".

In 1961 a Working Party of interested Authorities, known as the River Severn Water Resources Committee, was formed under the aegis of the Ministry of Housing and Local Government and whose purposes were to consider :-

- (a) the general character of the Severn river system and how the short term needs of water undertakings abstracting or proposing to abstract from the river can be met.
- (b) the powers needed, and possible methods of financing to be employed, by a body charged with the duty of constructing conservation works.

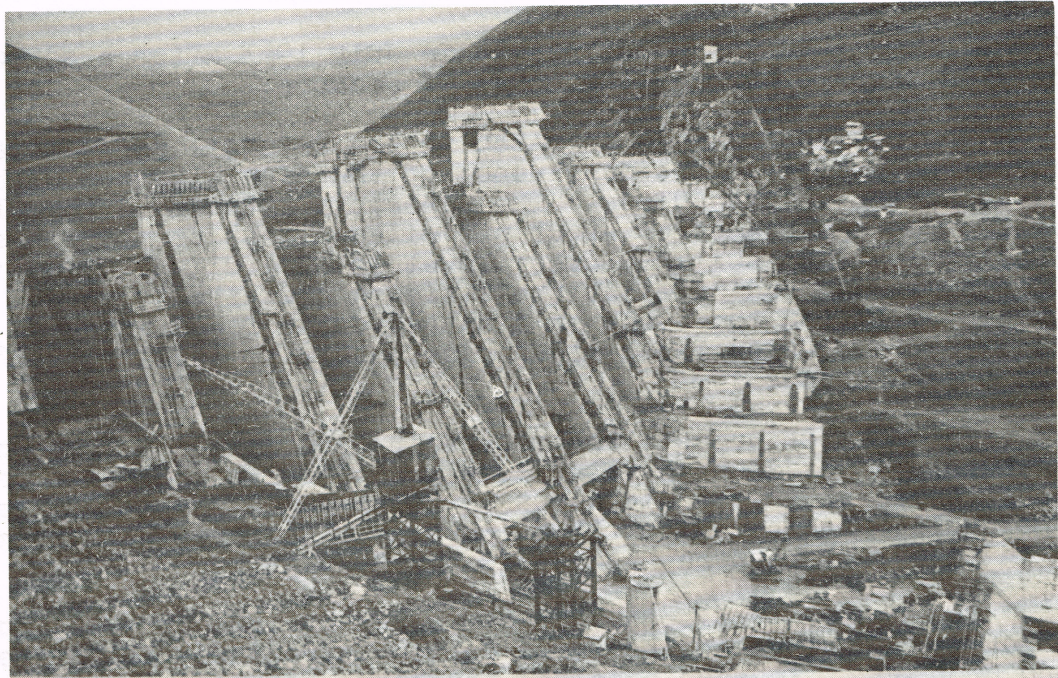
Also during 1961 a report entitled "The Water Resources of Wales" was published which classified all possible reservoir sites into various degrees of suitability. The most promising site in the Severn Basin was that at Clywedog where a reservoir of some 11,000 million gallons capacity could be constructed which would be capable of both sustaining a minimum flow 160 m.g.d. at Bewdley (the minimum flow recommended in the hydrological survey) and allowing additional abstractions to be made at various points on the river by the statutory water undertakings represented on the Working Party.

During 1961 Sir William Halcrow & Partners were appointed to consider existing projects already examined by the City of Birmingham Water Department and by The South Staffordshire Waterworks Company and to undertake site surveys and geological investigations so as to report on three possible dam sites in the Clywedog valley. A "Preliminary Report on the Clywedog Reservoir Project" and a supplementary geological report were both produced during that year. The recommendation made to the Working Party was that the most economic arrangement of a dam or dams to provide the prescribed storage volume was a single dam in the Bryntail gorge where a thick band of hard rock crosses the valley. For economy and speed of construction a dam of the round head concrete buttress type was suggested.

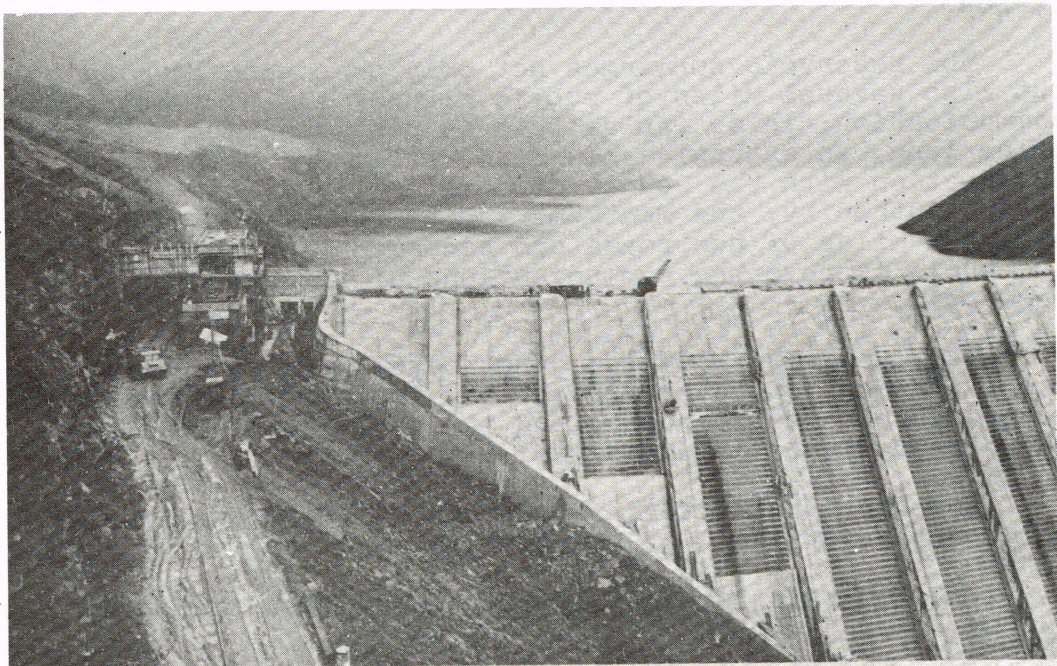
The report was accepted and after somewhat prolonged discussions as to the basis upon which the cost of such a project should be divided amongst the participating authorities, agreement was reached and the task of the Working Party was completed.

For the purpose of preparing a Bill in Parliament a new Joint Committee of Promoters was formed with substantially the same authorities as members. The constituent members of the Clywedog Reservoir Joint Authority, which came into being on the 25th September, 1963, are the Corporations of Birmingham, Coventry, Shrewsbury, Wolverhampton and Worcester; the Central Electricity Generating Board; the Bristol, East Worcestershire and South Staffordshire Waterworks Companies; the Cheltenham and Gloucester, East Shropshire and Montgomeryshire Water Boards; the Severn River Board and the Montgomeryshire County Council.

The Clywedog Reservoir Joint Authority Bill was first considered by the House of Lords and certain aspects of the land compensation clauses were referred to a Select Committee as the result of a petition by the National Farmers' Union. The Bill



CLYWEDOG RESERVOIR JOINT AUTHORITY - CLYWEDOG RESERVOIR PROJECT
Clywedog Dam
Dam Site Viewed from West Bank 29.11.66



CLYWEDOG RESERVOIR JOINT AUTHORITY - CLYWEDOG RESERVOIR PROJECT
Clywedog Dam
West End of Dam Viewed from Downstream 27.11.67

finally received the Royal Assent in July 1963 after a somewhat delayed passage through the House of Commons.

The Clywedog dam is situated in the Bryntail gorge some three miles upstream from the confluence of the Afon Clywedog with the River Severn at Llanidloes. The reservoir extends up the Clywedog valley for a distance of about six miles almost to the village of Staylitttle. The spillway crest level is +927.0' O.D. (Newlyn) and the present stream bed level at the Clywedog dam site is about +715.0' O.D. In the event of a catastrophic flood entering the reservoir the water level might rise nearly to level +931.0' O.D. for short periods.

In order to prevent the reservoir from spilling into an adjacent valley at high water levels a 30' high earthfill has been constructed at the saddle known as Bwlch-y-gle. This dam carries the public highway which, when improved elsewhere, will form the main road link between Llanidloes and Staylitttle.

The reservoir floods some 615 acres of land at +927, most of which is contained in the farms called Ystradynod, Eblid, Aberbiga and Gronwen. In each case the farmhouse has become submerged. Some fourteen other farms are also affected but mostly to a very minor degree except for Crowlym which lay in the shadow of the dam and was untenable as a farmhouse during the three year construction period.

The reservoir submerges not only some good farming bottom land but also several miles of public highway and numerous footpaths of communication; in so far as this is possible with a reservoir six miles long, an extensive new road system has been worked out in conjunction with the County Council and local farmers. On behalf of the Authority, the Montgomeryshire County Council has constructed some ten miles of new roads and accommodation roads which will on the whole improve the communications of the area surrounding the reservoir.

The Authority has also constructed some seven miles of stock proof fencing to prevent sheep etc. from getting drowned in the reservoir at steep places along the perimeter. No other surrounding fence is envisaged.

Briefly, the criteria laid down in the Clywedog Reservoir Joint Authority Act 1963 are that :-

1. The flow at the Clywedog gauge must always be in excess of 4 m.g.d.
2. The flow in the River Severn at the Bewdley gauge must always be in excess of 160 m.g.d.

3. The reservoir level is to be drawn down by 12 feet (i.e. to +915.0' O.D.) on the 1st November and allowed to rise gradually until the reservoir is full on the 1st May each year.
4. Provision is also made so that a piped supply of $2\frac{1}{2}$ m.g.d. may be provided from the dam for the Montgomery Water Board at all times.

The Authority have plans for developing the reservoir for amenity purposes.

A BRIEF ENCOUNTER

During the recent visit to the Hampton Loade Works I stood near the Pumping Station and pondered on some of the happenings I had experienced during the years since work had begun on this magnificent project.

One episode that readily springs to mind happened after the 45" inlet main to Sedgley had been completed. We had commenced charging and chlorinating. This operation was carried out by introducing water into the 45" main from the Sedgley Tank Zone. To avoid inconvenience to the consumer the operation was started in the early evening and continued into the night. The events to be related happened in the early hours of the morning of Saturday, 30th October, 1965 - to me a memorable night.

We had estimated that a charge of approximately 360,000 gallons would be required to fill the section of main under test. At 3 a.m. this amount had been poured into the main. There was, however, no indication that the main had been fully charged. It was suspected that something was amiss and an inspection for leakage would have to be carried out. The access to most of the fittings on the main is via farmland and one air valve on this particular section is situated in the middle of a large field. I climbed over the boundary fence and made off in haste for the air valve chamber but about twenty yards from the chamber the batteries of my torch gave out and I was plunged into absolute darkness. I did not relish the trek back across the field to the van for a spare torch and in any case I had with me a box of matches. I reasoned that once I found myself at the chamber I could manage with these. The air valve chamber is so constructed that the top two feet or so protrude above ground level and the chamber is topped with a flat concrete roof to which has been cast an access hatch.

Leaning over the hatch with my arms and head inside and at the same time striking matches, I was able to examine the air valve for leaks. At this moment I felt a nudge in the back of my legs. I instinctively turned round and shakily called out -

"Who's there?".

There was no answer. I called out again - still no answer. I started to strike matches furiously in an attempt to illuminate the unknown but still could see nothing, but I was aware of its presence. By now I had just about sufficient composure to think about the torch in my pocket. I pulled it out and to my relief found that the batteries had recovered. A weak flicker of light emitted into the blackness and what did I behold? Sheep! Not one or two but dozens. Evidently it was their wont to shelter near the air valve chamber and I had disturbed them.

Who was the most relieved, the sheep or myself, no-one will ever know. I still smile when I think about this incidence but I must admit at the time I was far from amused.

D.I.J.

THE CONSTRUCTION OF HAMPTON LOADE WORKS
AS SEEN THROUGH CIVIL ENGINEERING
DEPARTMENT'S EYES.

Civil Engineering operations at the Hampton Loade Works commenced with a site investigation contract at the Chelmarsh Reservoir site in 1961. This information was extended by further investigation work carried out at Chelmarsh, the site of the River Intake and at the Treatment Works in 1962.

Following confirmation of the Parliamentary Order in March, 1963, construction work began in earnest with a contract for Chelmarsh Reservoir and associated access roads which commenced in August, 1963, and this was followed by a contract for the main access roads to the Intake and Treatment Works site.

Work proceeded concurrently on the Midland Electricity Board's sub-station and switch house followed by the Company's switch house which was designed as a replica of the Midland Electricity Board's building.

In January, 1963, a contract was awarded for the design and supply of the water treatment plant and final plant layouts were only completed after numerous treatment plans operated by other



(left)
Mr. M. Upstone,
Deputy Head of
Civil Engineering
Dept.



(right)
Mr. D. N. Earp,
Deputy Distribution
Engineer, (Formerly
Resident Engineer,
Chelmarsh)



Mr. D. E. Burgess,
Civil Engineering
Assistant, (Formerly
Resident Engineer,
Hampton Loade)



Mr. R. S. Pangborn,
Superintendent,
Hampton Loade.



Mr. J. P. Lewis,
Civil Engineering
Assistant.



(Left)
Mr. H. E. P. Jones,
Engineering
Assistant.

(right)
Mr. C. E. Packwood,
Draughtsman.



Authorities and of similar capacity had been inspected by the Company's design team.

In September 1963 the contract for the 45" diameter main from Hampton Loade to Sedgley Beacon was awarded and contracts for the filters and accelators, the chemical house and high lift pumping station, the river intake works and the road and pipe bridge followed in rapid succession.

It is of interest to note that the Hampton Loade Road and Pipe Bridge is unique in that it is the only bridge in this country where the road, capable of carrying full highway loading, is supported from the arch pipes.

Completion of all contracts associated with the Treatment Works was not achieved until the end of 1967 but by careful planning of the construction and due to the considerable efforts of all Departments a temporary supply scheme was commissioned in 1966. Recently contracts for the construction of cottages for the resident site staff, additional access roads, sewage treatment plant and general landscaping have been carried out.

Even today work at Hampton Loade is by no means complete and whilst temporary plant now adequately deals with sludge treatment the design of permanent work is virtually complete and a contract for the construction work is to be commenced in the very near future. A Reservoir Keeper's cottage is also to be erected at Chelmarsh and this contract is now in the course of preparation.

In their 'spare time' members of the Civil Engineering Department design team dream about Phase II of the works and on occasions even dare to contemplate the re-roofing of Barr Beacon No. 1 Reservoir and the development of the newly acquired Crumpwood Pumping Station at Uttoxeter.

Company people who knew Hampton Loade of old in what can only be termed as the 'muddy days' and who now revisit the site are immediately convinced that for some unaccountable reason they have taken the wrong turning when confronted by the areas of lush green grass and trees and bushes which are already taking on an established look. On closer examination the familiar figure of the Resident Chemist, John Deakin, is seen sampling the 'waters' and after a moment's look at the sludge lagoons the visitor is rapidly reassured and promptly readjusts to the previously unfamiliar surroundings.

Hampton Loade Works has been the product of a dedicated but nevertheless happy and enthusiastic team and now that the 'embryo' has become reality everyone who has shared in the enterprise cannot doubt that the effort was worthwhile.

RIVER SEVERN SUPPLY SCHEME
JOINT SUPPLY WORKS AT HAMPTON LOADE
THE SOUTH STAFFORDSHIRE WATERWORKS COMPANY.
WOLVERHAMPTON CORPORATION WATER UNDERTAKING

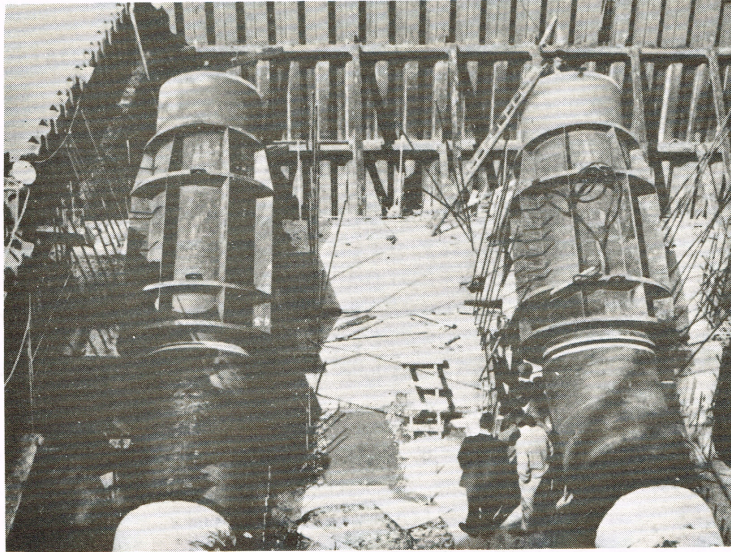
Over the past century the development by both Undertakings of local sources of water supply from underground or surface sources has proceeded steadily to keep pace with increasing demands. Some ten years ago, however, it became apparent that the local sources were, for all practical purposes, fully exploited and it was clear that any further substantial augmentation of water supplies must come from the River Severn.

The river, which flows a few miles west of the areas of supply of both Undertakings, is not capable of meeting any additional demands upon it during low flow conditions. It was clear, at the outset, that storage would have to be provided so that during dry weather the natural river flows could be augmented by the discharge of stored water.

Numerous other water undertakings, some of which were already taking supplies from the river, were also in need of new or additional supplies and after protracted negotiations a joint scheme for the construction of the Clywedog Regulating Reservoir to augment dry river flows was agreed upon and authorised in 1963. This reservoir has now been constructed by a consortium of eleven water undertakings and the Central Electricity Generating Authority, the The South Staffordshire Waterworks Company and Birmingham Corporation being the major contributors.

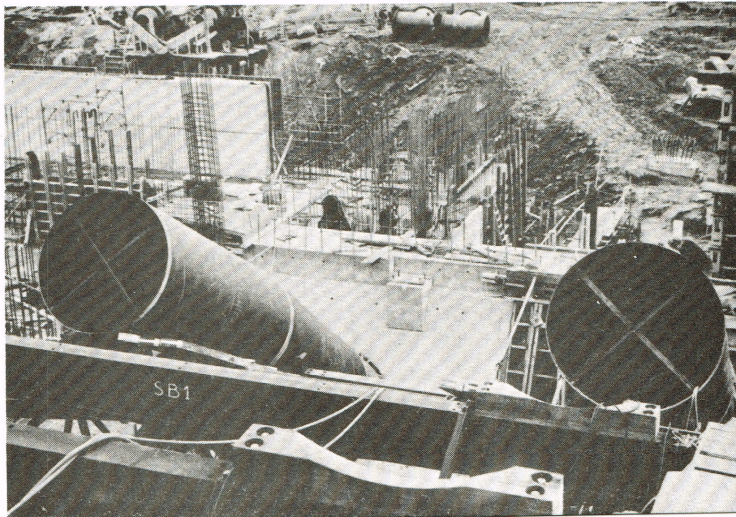
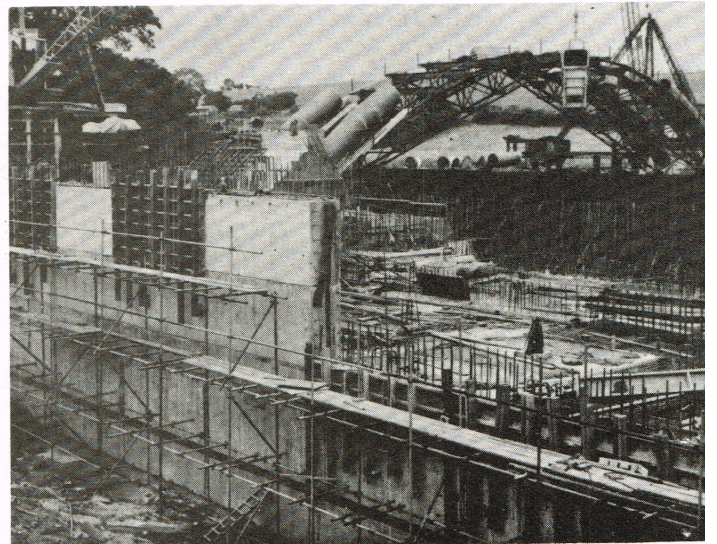
In 1960, whilst the Clywedog negotiations were proceeding, it became essential for the Company to seek powers to take a supply of water from the river by direct abstraction in order to meet the increasing demands for water.

Birmingham and Wolverhampton Corporations were likewise in need of additional supplies and powers were obtained in a Joint Order to enable each undertaking to take a supply from the river prior to regulation. As The South Staffordshire Waterworks scheme for an intake and treatment works at Hampton Loade, some five miles below Bridgnorth and a pipeline to convey treated water to an elevated storage reservoir at Sedgley Beacon, was equally convenient to serve the Wolverhampton area, it was agreed that these works would be constructed jointly by the two Undertakings. The cost is shared in proportion to their respective abstractions in the ratio of two thirds by The South Staffordshire Waterworks Company and one third by Wolverhampton, the Company being responsible for the design, construction and operation of the works.



Hampton Loade Pipe
Bridge - Support
Pipes prior to
concreting into
abutment

Hampton Loade Intake
and Pipe Bridge
under construction.



Inlet and outlet
pipes approaching
Bridge summit

Work on this scheme was commenced in the Autumn of 1963 and a limited supply of water was made available in February, 1966, the first phase being fully commissioned in December, 1967, making 15 m.g.d. of water available. The second and third phases will follow as required to meet the supply position, the ultimate capacity of the works being 45 m.g.d.

The site of the intake and treatment works at Hampton Loade was governed by its distance from the supply area and by the need for suitable geological conditions for the works.

The intake and treatment works are on the east bank of the river but the storage reservoir to assist in treatment and for use when the river water is of bad quality had to be sited on the west bank on account of topographical and geological considerations.

A feature of the riverside works is the 150 ft. span self-supporting arched bridge formed by twin 60" diameter steel inlet and outlet mains across the river, which support a roadway connecting the works on either bank.

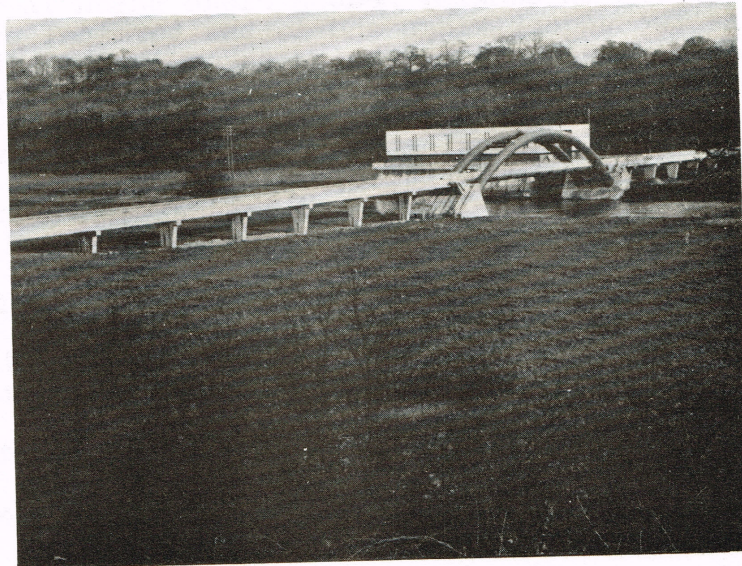
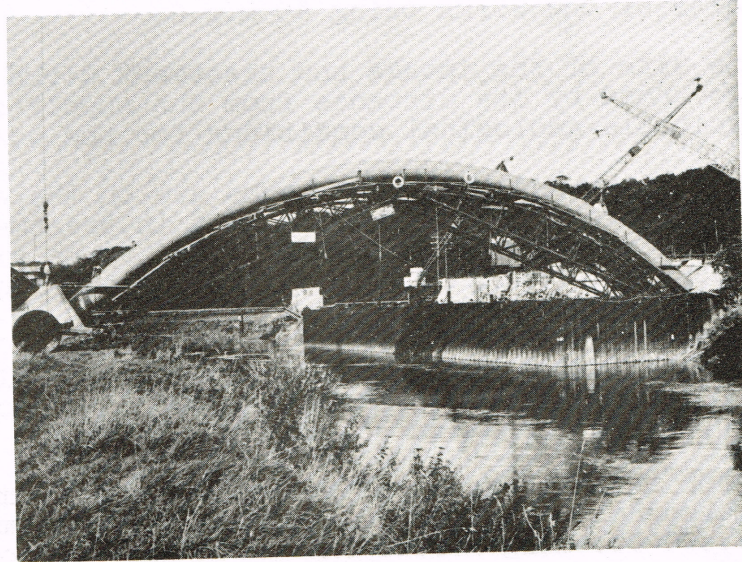
After coarse screening the raw water is pumped into the Chelmarsh Reservoir formed by an earth embankment some 93 ft. high and 2,300 ft. long across Chelmarsh Brook, from which it gravitates to the treatment plant, comprising circular clarifiers and rapid gravity sand filters.

After filtration and sterilisation, the water is pumped through some 12 miles of 45" diameter main to service reservoirs to be constructed on Sedgley Beacon ridge which is the common boundary of the two undertakings and is the terminal point of this joint project. Great care is being taken in the siting and external treatment of the works at Sedgley Beacon to break up the artificial lines of the reservoir and close liaison has been maintained between the Landscaping Consultant engaged for this work and the Local Planning Authorities. Similar care and consultations have taken place on the layout and landscaping of the works on either side of the river at Hampton Loade.

The joint scheme is an excellent example of what can be achieved by co-operation between neighbouring water supply authorities and the significant benefits which can be achieved both financial and in flexibility of operation.

Both Undertakings have much in common, their areas of supply comprising a dense industrial area with heavy demands for water for trade purposes together with fairly substantial residential populations and extensive rural areas.

Pipe Bridge nearing completion.



Pipe Bridge Road and Intake Works complete

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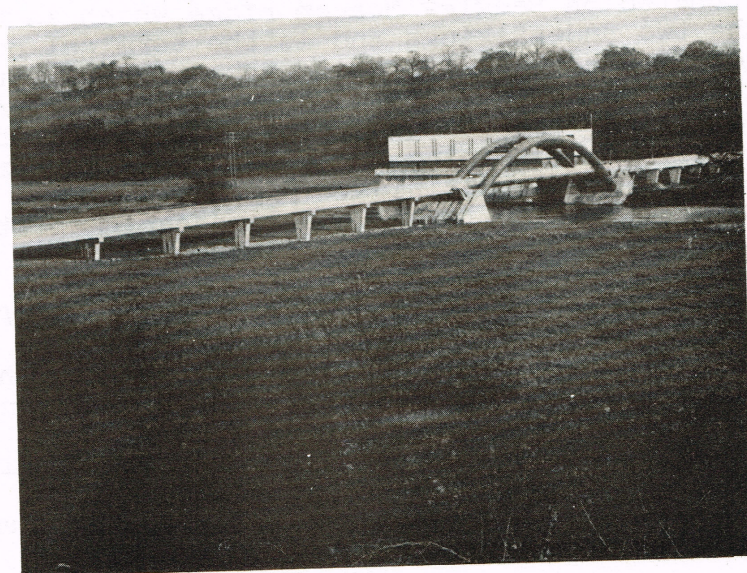
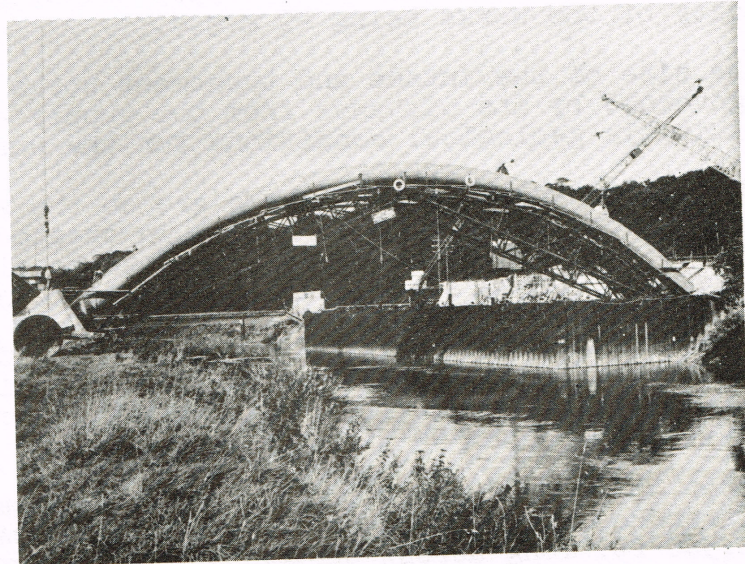
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Pipe Bridge Road and Intake Works complete

The South Staffordshire Waterworks Company which is the fourth largest undertaking in the British Isles in terms of population supplied, was incorporated in 1853 and has expanded continuously over the past 100 years or more to serve a population of 1,171,000 over an area of 502 square miles. The area of supply includes the County Boroughs of Warley, Dudley, West Bromwich, Walsall and Burton-upon-Trent, extends from the outskirts of Derby and Stafford in the north to Kidderminster in the south and is flanked by the Birmingham area to the east and Wolverhampton to the west.

Wolverhampton Corporation Water Undertaking started as a statutory water company in 1845, but was transferred to the Corporation in 1868 and now serves a population of 377,000 with a supply area of 152 square miles. This area includes the County Borough of Wolverhampton and those parts of the County Boroughs of Walsall and Dudley not supplied by The South Staffordshire Waterworks Company; also parts of the Rural Districts of Cannock, Seisdon, Shifnal and Bridgnorth.

With the current pattern of growth it is anticipated that the present authorised abstraction from the river will suffice to meet the Company's requirements until the mid-seventies, and Wolverhampton's needs until the early eighties.

It is clear that the future water supplies for the two undertakings concerned, together with those of the other undertakings associated with the Clywedog Reservoir project, are dependent upon the further development of the water resources of the River Severn basin. The Company and several other abstractors have already given advance notice to the Severn River Authority of their need to secure future supplies from the river and the River Authority have initiated surveys into suitable sites for an additional regulating reservoir in the upper reaches of the Severn Catchment Area.

The Water Resources Board are now engaged upon a study of the water resources and requirements of the whole of Wales and both the East and West Midlands, so that the problem can be studied as a whole.

There would appear to be no practical hydrological or engineering problems in meeting the foreseeable demands for water from the River Severn for the Midlands for many years to come, but many other and wider issues are involved and the outcome of the current study will be of considerable importance to the water supply position in the whole of the Midlands area.

NOTES ON THE RIVER SEVERN SCHEME
ELECTRICAL/MECHANICAL DEPARTMENT

Consideration had been given to abstracting water from the River Severn in early 1961 and negotiations were undertaken with the Midland Electricity Board regarding the large amount of power which would be required for pumping.

The first work to be undertaken was the construction of Chelmarsh Reservoir, in order that this would be ready to receive water as soon as the first pump was available.

After a large number of proposals and preliminary drawings for plant and buildings had been considered, scale models of some parts made and tested, discussions undertaken with various contractors and manufacturers, and similar works of other undertakings visited, an acceptable arrangement finally emerged. The main contracts were let in 1964.

It soon became apparent that water would be required from these Works, by Wolverhampton as well as ourselves, before the permanent installation could be commissioned and certain temporary works had to be undertaken.

The Midland Electricity Board completed their sub-station, and part of the equipment in our adjoining switchhouse was brought into commission in the autumn of 1965.

A temporary intake was constructed near the upstream boundary of our acquired land and a temporary pipeline was constructed across the river to supply water to Chelmarsh Reservoir. This temporary pump was first tried, pumping to waste, in November 1965.

In order to operate the plant continuously from now onwards, volunteers were recruited from the nearest stations - Churchill, Cookley, Prestwood and Ashwood. Shift working commenced in January 1966 with the start of pumping to Chelmarsh and the Treatment Works. Pumping into supply was commenced in February 1966 and from then onwards two on shift at a time were required.

Mr. Pangborn and Mr. Shaughnessy took up their duties as Superintendent and Deputy in the middle of 1966 but it was more than a year later before the station houses were ready for occupation. This meant a lot of travelling, sometimes in very adverse conditions, to keep the station operating.

The installation of the pumping plant in the permanent positions was started in January 1967, while building work was in progress, with the inevitable complaints of everyone working in each other's way. Pumping from the permanently installed plant was commenced in June, 1967, still with difficulty from building operations.

At the beginning of this year the date of 25th April was fixed for the inauguration ceremony. It required great persistence on the part of all concerned to complete the work on time and the result was greatly to everyone's credit.

This Station has now been pumping into supply for almost 2½ years with only minor interruptions to the output.

DISTRIBUTION OF WATER FROM HAMPTON LOADE

When the Hampton Loade Scheme is complete the Company will be taking 30 million gallons of water per day from the River Severn. After the supply has left the Treatment Works, the next problem is its distribution. Once the water leaves the quiet of the Severn Valley, it will not see daylight again until it emerges from a draw off tap or discharges into a storage tank in the heart of the Black Country. On its travels to these outlets, it will have passed through a network of pipes and valves, which is acknowledged to be one of the most complicated in the World.

Although this is probably all the Hampton Loade project means to the average householder - and indeed it should mean no more - it is very much an over-simplification of the problems involved. It will, in fact, take a little more than a decade of constant analysis, redesigning, and modification of the trunk mains' system, in order to deliver the Severn water to more than a million points of draw-off.

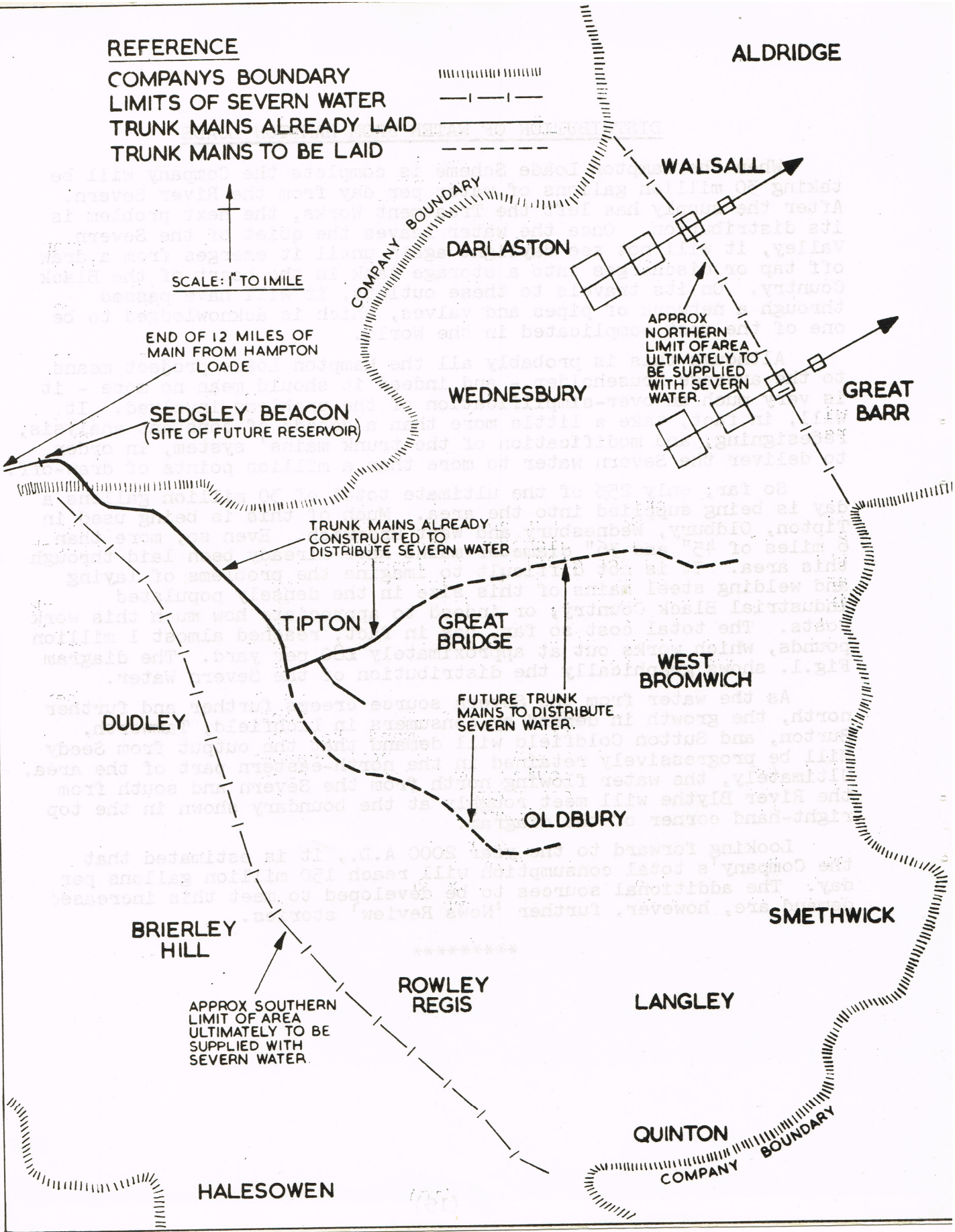
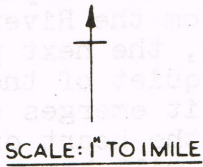
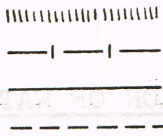
So far, only 25% of the ultimate total of 30 million gallons a day is being supplied into the area. Much of this is being used in Tipton, Oldbury, Wednesbury and West Bromwich. Even so, more than 6 miles of 45" and 36" diameter mains have already been laid through this area. It is not difficult to imagine the problems of laying and welding steel mains of this size in the densely populated industrial Black Country, or indeed to appreciate how much this work costs. The total cost so far, has in fact, reached almost 1 million pounds, which works out at approximately £80 per yard. The diagram Fig.1. shows graphically the distribution of the Severn Water.

As the water from the Severn source creeps further and further north, the growth in demand by consumers in Lichfield, Tamworth, Burton, and Sutton Coldfield will demand that the output from Seedy Mill be progressively retained in the north-eastern part of the area. Ultimately, the water flowing north from the Severn and south from the River Blythe will meet roughly at the boundary shown in the top right-hand corner of the diagram.

Looking forward to the year 2000 A.D., it is estimated that the Company's total consumption will reach 150 million gallons per day. The additional sources to be developed to meet this increased demand are, however, further 'News Review' stories.

REFERENCE

- COMPANYS BOUNDARY
- LIMITS OF SEVERN WATER
- TRUNK MAINS ALREADY LAID
- TRUNK MAINS TO BE LAID



END OF 12 MILES OF MAIN FROM HAMPTON LOADE

SEDGLEY BEACON (SITE OF FUTURE RESERVOIR)

TRUNK MAINS ALREADY CONSTRUCTED TO DISTRIBUTE SEVERN WATER

FUTURE TRUNK MAINS TO DISTRIBUTE SEVERN WATER.

APPROX NORTHERN LIMIT OF AREA ULTIMATELY TO BE SUPPLIED WITH SEVERN WATER.

APPROX SOUTHERN LIMIT OF AREA ULTIMATELY TO BE SUPPLIED WITH SEVERN WATER.

ALDRIDGE

WALSALL

DARLASTON

WEDNESBURY

GREAT BARR

TIPTON

GREAT BRIDGE

WEST BROMWICH

DUDLEY

OLDBURY

BRIERLEY HILL

ROWLEY REGIS

SMETHWICK

LANGLEY

HALESOWEN

QUINTON

COMPANY BOUNDARY

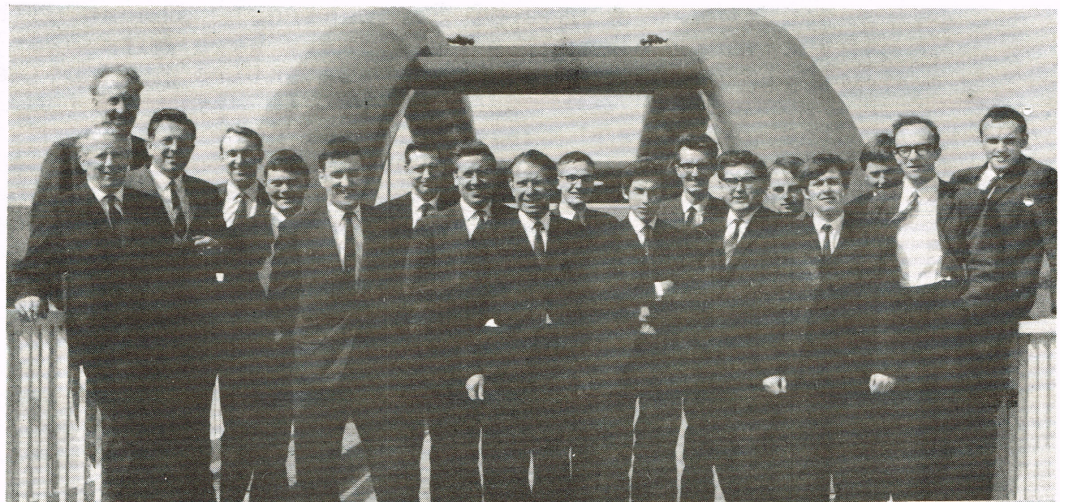
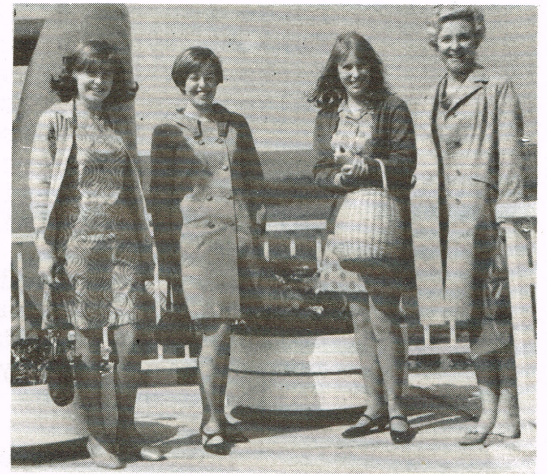
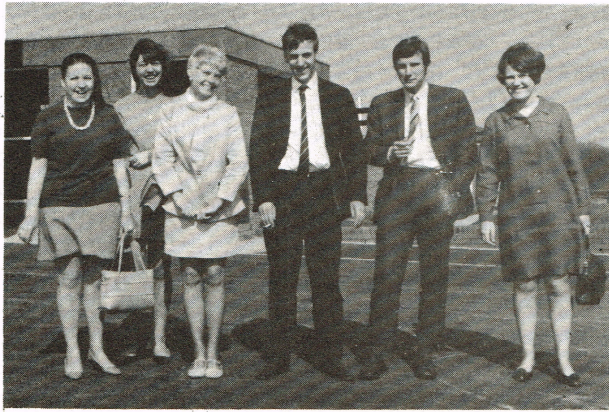
COMPANY BOUNDARY

Hampton Loade - How it appeared to the Staff

Hampton Loade has certainly been the Company's most important project in recent years. To those professionally involved in its design, construction and day to day running, it has been part of their life. But to many of us not so intimately concerned it has merely been a name. If it has had any meaning at all it might be vaguely remembered as a picnic spot or as the site of a ferry across the Severn.

On Friday, 26th April, many of the staff saw Hampton Loade for the first time. This was to be the opportunity for the typists to see the accentriflocs, chlorine contact tanks and filter beds, about which they had typed such voluminous reports. The tracers were to see the accelators and high lift pump house and all manner of engineering wonders which were the manifestation of their inked tracings. As far as the engineers and their assistants were concerned this was the culmination of years of design and construction. In a way this was to be a day of judgment. The engineers, who had supervised the detail undertaken by the junior members of the staff, were today to be judged by their lay colleagues. What had hitherto been paper born was now a monolithic reality. The following is a narration of collated opinions expressed by the staff.

More than two hundred of the staff set out from Sheepcote Street. Many of them had no preconceived ideas of what they were about to see. They had been transported from the heart of Birmingham on an ordinary working day unto the banks of the River Severn as it gently flowed through this south-east corner of Shropshire. Almost without exception the young element of the party were outspokenly unanimous in their opinion. To them the entire project was either "wonderful" or "smashing". In spite of the best efforts of the guides and their informed description of each part of the plant all but a few found they were listening to a bewildering sequence of technical terms. For some strangely feminine reason most of the girls remarked upon the beauty of the green tiled staircase. Another feature which is perhaps typical of enigmatic feminine perception was the comment about the apparent anonymity of the Works. It seemed incredible that so much water was being pumped from the river, treated, and put in the distribution system and hardly a soul in sight. One visitor remarked that she had always regarded pumping stations as an ostentatious edifice to Victorian over-embellishment. By contrast the Hampton Loade project impressed her as an elegantly conceived building which had been beautifully contrived to blend with the quiet loveliness of the Severn valley. She went on to say that it was certainly less offensive than the regiments of multi-coloured

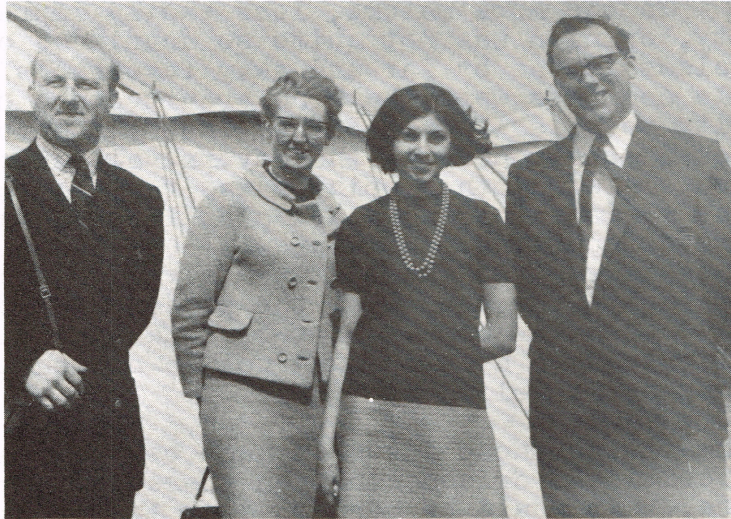


Staff Visit to Hampton Loade,
Friday morning, 26th April, 1968

caravans to be seen elsewhere on the river bank or indeed the monuments to electric power which had been allowed to desecrate the Severn. She may not have used this exact terminology.

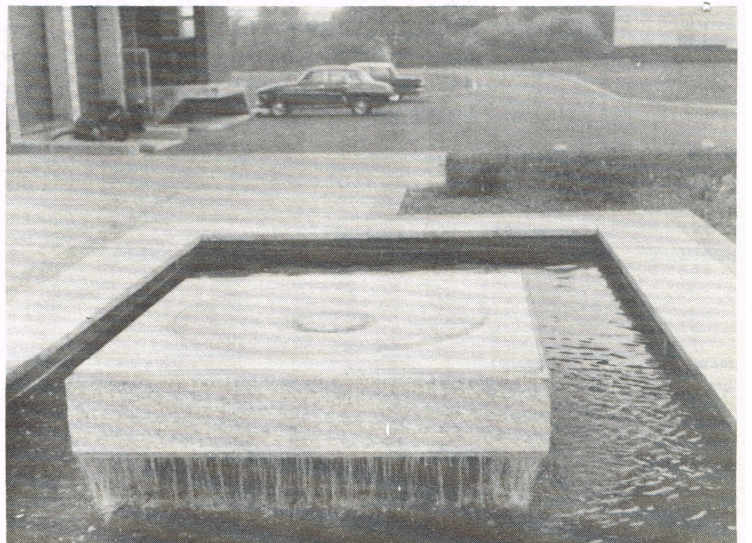
In another context some of the visitors immediately began to equate the tranquil working environment with the academy of dramatic art at Sheepcote Street. But this was a divided issue. To some the hurly-burly of Head Office was food and drink compared to this obscure inactive river bank backwater. One very prevalent opinion was that the lofty spaciousness of the buildings were very much in contrast with the cramped office accommodation which was for many their working day environment. Another item of the Works which was praised and condemned in almost equal proportions was the water feature. To some this was a delightful piece of nonsense in the best of taste, to others it was insignificant, uninspiring, and unworthy. To the more mature, less easily impressed element of the party, opinion was not quite so unanimous or enthusiastic. Nevertheless it was by far and away favourable. Some of the indelible comments were that the architecture bore a striking similarity to Walsall Gala Baths, that the incongruity of a red bricked monstrosity in the Severn valley would for ever be offensive. Yet another opinion was that the 60" pipes from which the road is suspended are a brilliant example of how the insensitive functional engineer will unhesitatingly intrude upon aesthetics. In short it was a vulgarising feature that adds nothing to the beauty of the project. Strangely, it would have been far more acceptable had the bridge profile been a little more gracious and not so obviously interrupted by the segmental welded sections.

Summarising these views it must be said that for every word of criticism or condemnation there were many, many words of praise. It would be hard to deny the comment that Hampton Loade must be one of the most gracious buildings to be seen on the River Severn. Its beauty will be enhanced with age and although its machinery will never have the romanticism as the old steam engine, there is some comfort in the compensation that in retrospect and prospect the elegance of the building and the loveliness of the setting will be a lasting credit to its designers.



Our colleagues
from Walsall Depot
enjoying the
sunshine.

Water
Feature at
Hampton
Loade



SUPERANNUATED MEMBERS' VISIT

Friday, 26th April, 1968

All doubts about the weather had almost disappeared when Friday morning arrived - we had had good weather all the week and surely it would continue for this special day. We were right - it was a perfect day, just like midsummer.

There was a record attendance of 220. The party included wives, and widows of former employees and five Midland Red coaches were needed to convey all our colleagues from the various picking-up points. The journey to Hampton Loade was most enjoyable, through the countryside just tinged with green, and it was good to hear old colleagues greeting each other with obvious affection.

Mr. & Mrs. R.H.Taylor and Mr. & Mrs. A.W.Tibbenham were waiting to receive their guests, and with the photographer busy, soon everyone was expressing delight at our new works.

Before being conducted on a tour of the works, icecream was provided and soon the extremely efficient guides were explaining the purpose of all the buttons and levers. One comment which I heard on more than one occasion was "All this machinery, and only one man sitting at a desk in charge". Such is progress.

The Reservoir at Chelmarsh was compared with the beauty of Blithfield - quite favourably - and all agreed that nothing had been done to detract from the beauty of the countryside.

A particularly delightful tea was ready in a huge marquee; it was a happy party, quite able to enjoy the meal and talk to their old friends at the same time. One heard so many times - "Do you remember when" "Do you ever see old So and So", "How's your garden", etc.

One thing which struck me most forcibly during the afternoon was the obvious pride our old colleagues took in being associated with the Company and many were the questions asked about the men who had been "on the job". Remembering working at Blithfield they certainly knew what a mammoth task had been undertaken at Hampton Loade.

VISIT BY THE CATERING STAFF

Miss Irwin and her Catering Staff were delighted to be given the opportunity to visit the new works at Hampton Loade on Tuesday, 18th June.

When it was first suggested, they wondered whether they would find the project a little boring but have since expressed their pleasure at the visit which they found extremely interesting. In fact, they now feel that they have benefited by this late visit as the guides were able to give much more detailed information.



Superannuated
Members' Visit
to Hampton
Loade, Friday,
26th April, 1968.



ODE TO THE LOADE

The sun did glow as bright as June
That pleasant Friday before noon,
Whence all that should with burrowed brow
Through the daily routine plough
But were released to so be led
To Hampton Loade by Midland Red.
There midst rolling hills and dales
The river runs twixt us and Wales.

Reception in a canvas room
Built upon some mammoth loom,
Boys and girls did bottoms up
If only with a coffee cup
And then for want of things to do
A few did wander to the loo,
A place that was a must to see
All built of canvas - hastily
With little units neat and clean
That ne'er a sewer pipe have seen.
Could those smiles of disbelief
Be really smiles of much relief.

And thus the tourists left the tent
And soon with guide were westward sent.
O'er a bridge of massive tube
Which proves that boffins never boob,
Tribute to a sweating brow
That saw a vision of a bow
And turned it as it stands today
Into a mighty right of way
To hold the road that led us hence
Beyond the hills and farmyard fence
Till like a massive limpid pool
We view the lake that is a tool
Of water types who spend the day
Keeping thirst and drought at bay.
Thus the view did please the eye,
Water 'neath the springtime sky
And where the bank curves like a bay
The breeze will make the boats to sway.

Which brings me to the very thought
That makes this pen with fingers taut
Fly with purpose, almost madness,
To state the slightly inner sadness.
For opportunity so plainly lost
And no-one there to count the cost.
View the site that is to be
A sailing club but not for thee.

Think of what a pleasant thing
'Twould be each pleasant sunny spring
To roll along a western route
With lunch and coffee in the boot,
And knowledge that you soon would float
Upon the waters in a boat
Set midst rolling greenery,
A haven for a weekend spree.
But stay! for this is but a dream
For things are never what they seem.
It is not we who will be there
With sunburned face and ruffled hair,
With canvas sails and oilskin coat
To mess about in one's own boat.
But strangers from another life
With strapping sons and horsey wife
Will tread these shores each windy day
And launch their boat and sail away.
Will they be good as they should oughter
And never spoil the drinking water,
For when one's interest is boats
Who cares what passes down our throats,
'Tis sad the staff "interested parties"
Could not become the weekend hearties
With rolling gait and captains lid
Potential Chichesters make their bid.
But nay 'tis never so to be,
The die is cast and so this plea
Comes much too late to do aught good
Unless some others catch the mood
And with a yen at good intent
Become a Mr. "ten per cent",
For has it not been written thus
That one in ten must be from us.
Perhaps my figures awry be
But you could always ask to see,
And so become within the clique.
Don't count on me - I get sea-sick.

Then once more back across the flow
Of river water precious now,
Round the rooms and roofs we rushed,
Watching the water as it flushed
Tank to tank and filter bed.
Firmly to the coaches led,
Down the sunny lanes again
To the second city came
And to the place from whence we left.
Desire for work is now bereft,
And as I watch the crowd disperse
Back to desk or lunch or worse,
I feel the need to just remind
All those with a nautical turn of mind
As you hurry for the pub,
What about the sailing club!



Sailing on Chelmarsh Reservoir

IT WAS BETTER THAN TYPING

The day we set forth for Hampton Loade was the kind we rarely see. Full of sunshine and warm breezes. So with radios blaring, we were raring to go and view the subject of reams of foolscap and sore finger-tips.

Through wonderful countryside we toured at a reasonable pace, until we arrived at a sign "To The Lion Inn". Looking down we saw the buildings of Hampton Loade Treatment Works, minute within the greens of a slight incline.

On arrival we were served with coffee to revive us after our journey; a man with a camera said 'Smile please', and then we were off up a 1 in 6 gradient track to view the beauty of Chelmarsh Reservoir. This was impressive with the same aura of magnificance as any large expanse of water with the sun flickering upon its ripples. An informative guide described the fish, sailing, and Sailing Club membership, then back to the Treatment Works.

In a room similar to a coin operated laundrette, we stared at cold machines which stared back with an obvious awareness of their own importance. These machines probably explain the vast shortage of the male species. We passed on to another building. Airy, modern and clean, with pictures telling which door to choose. We trudged along in a line whilst the guide explained the various machines, lights and levers. Unfortunately, those in the front were constantly jostled along by members bringing up the rear, so we had little time to spend on each part. What was obvious was that the water was once green, then the algae and other impurities were removed, and it became clear.

The question now arises, do Hampton Loade Treatment Works spoil the look of this green, pleasant land? But this is progress. Progress is a necessity. As a necessity Hampton Loade Treatment Works are as inconspicuous as they could be.

Wishing we could stay there all that glorious day, we unwillingly clambered on to the coach and returned to work.

J.M.C.