WASC 438

# On Her Majesty's Service

WASC 438

CODE No. 27-31

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## WATERWAYS R.G.P.F.

Supply.

The River-water supply to the R.G.P.F. is obtained from the old River Lea.

The inflow is measured at Fieldes Weir and returns of consumption are forwarded to the W.D. by the Lee Conservancy Board: the consumption allowed W.D. is on record, and a gauge is in the possession of M. Buildings so that at any time a check can be made to see that our agreed consumption is maintained.

W.D. liability for maintenance commences at a point shown A on plan South and West of Kings Weir and ownership of the bed and banks of the river is claimed by W.D. The flow of the water is controlled by gates at Kings Weir by a Lock-keeper employed by the Lee Conservancy Board. The river's course is through fields and enters the Factory at two points near Fishers Green shown 1 and 2 in blue on plan, part is diverted into the Mill Head Stream it continues on the East side to Newtons Pool, where it falls through a sluice gate to a low level, and passes under two aqueducts carrying the high level waters.

The high level waters comprise Mill Head stream, Corn Mill stream, and boating cuts in N.G. area.

It should be noted that R.G.P.F. head of water is 7" (seven inches) above statutory Lee head. This is an agreed arrangement to allow milling of gunpowder (when water wheels were used) and is required for various intakes to power, Boiler and Engine Houses; this head is maintained by a 7" (seven inch) board placed on the sluice gates at the Tumbling Bay Lower Island, and a check is kept on this by the Water Warders.

Powder Mill This is a made cut running West of the Edmondsey Lock and is used by boats for supplying the Upper Works (from the Navigation River) with necessary material. This cut is owned and maintained by W.D.

> This stream runs just West of W.D. boundary fence, it acts as a relief channel, is owned and maintained by W.D.

The stream marked H carries water from Waltham Marsh and the Mill Head stream, it finds its ways under H.B. Street into the water running slightly west of Lower Stores Yard, and is a very good relief channel.

The stream marked E runs West and South of Edmondsey Engine House, this in the past carried a good volume of water from Edmondsey Engine House and No. 2 & 3 Boiler Houses; on my inspection of the 4th inst., the stream had very little water in it and if it is the intention to close down manufacture in the N.G. area, this stream would be of little use and consideration could be given for filling it in.

Tail Streams

The Tail stream on the East side marked F on plan has E & W of Mill not been used for water transport but carries quite a volume Head Stream. of water, supplied by drainage grips, it is useful as a relief channel.

> That flowing on the West side marked G serves as a boating cut and water transport is conveyed through a lock

Ownership

ance.

& Mainten-

High Level Water.

Factory head of water.

Cut.

Horse Mill Island stream & secondary stream.

into Mill Head stream: this also serves as a relief channel.

Intakes.

Intakes shown I on plan at Edmondsey Engine Room (High level): Inc. House Engine rooms, Central Power and No.5 Boiler House (Low level).

Sluice These are shown on plan as S.G. in red and are five in Gates. number :-

> North end of Mill Head Stream (near Old Water Warders I. lobby). II.

Newtons Pool (from Old River Lea).

III. Edmondsey Water Warders Cottage (from Corn Mill Stream). South end of Mill Head Stream (discharging into IV. Hoppet Pool).

Abbey Gates (at S. termination of Corn Mill Stream). V.

## Lower Works.

Supply.

The river water supply to the various Boiler and Power Houses is obtained from the River Lea, and Wells (thro' seepage) the main supply runs from a point on the N and E side of Lower Island Lock marked Syphon on plan; it is syphoned under Cobbins Brook, thence into a well; an additional supply was installed during the war from the New Cut, this was due to porosity of the ballast bed of the well sealing up, causing the supply to fail; this was later rectified. The water is pumped from the well to a reservoir situated at the top of Quinton Hill and supplies are run from this to manufacture.

#### Small River Lea.

Ownership.

W.D. and L.C.B. own separate stretches each being responsible for upkeep of their separate lengths. W.D. ownership is defined on our plans. W.D. use is mainly as a relief when danger of flooding arises.

Flooding.

There is a standing agreement whereby the Lock-keeper at Kings Weir informs the W.D. Const. by telephone after lifting or dropping of boards at the Weir, this information is passed to the Water Warders, who take the required action to deal with the incoming water. When they find our streams and rivers unable to carry more, they request the Kings Weir When they find our streams keeper to open a sluice gate shown S.G. on plan: north of the Aqueduct Lock which when open, allows the water to flow into the Small River Lea and relieves the pressure from the Old River; when the flow has returned to normal the gate is again closed.

## Proposed Filling in.

Upper Works. It was suggested by the C. Supt., (during my visit) that certain cuts could be filled in with advantage to the Factory. On plan, I have shown cuts and waterways marked with X X in red that are serving no useful purpose other than relief channels and might be dealt with in the manner suggested by him.

Lower Works. The Tray Stove cuts now that manufacture has ceased could with advantage be filled in, provided that the buildings are not being used. The Black Ditch comes under the same category.

Material. With regard to the material required for filling in I would suggest that spoil from the traverses in the N.G. area and new N.G. Hill be used for the Upper Works and that from the Tray Stove traverses in the Lower Works.

### General Information.

Dredging & clearing of weeds.

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In the past the clearing of weeds and dredging of Old and Small River Lea has been carried out by arrangement between the W.D. and the L.C.B. The L.C.B. report periodically on the state of the rivers and informs the W.D. when clearing and dredging should be carried out. If W.D. are unable (through labour shortage) to handle this work, the Chief Engineer of the L.C.B. should be asked to do the work and to furnish an estimate. When this is received a works order is put forward and when approved, L.C.B. is instructed to proceed with the work. W.D. are informed when work is proceeding so that inspection may be made that the work is carried out to our satisfaction.

Main Rivers and Streams.

Under the Lea Valley Drainage Act, certain Rivers and Streams are scheduled as main rivers and streams. Mill Head stream comes under this designation, any proposed alteration or heavy maintenance services should be notified to the L.C.B.

Water Warders. The Lee Conservancy Board pay the wages of one Water Warder, this is recovered from them: both are borne on W.D. pay sheet. Account<sup>S</sup> can give the required information when L.C.B. commenced repayment.

Fishing.

The fishing rights on the Old River Lea has in the past been revenue producing to the extent of £60 a year. I understand that at the moment it is a free for all fishery.

> (Sgd) E.T. Upton. late C. of W. R.G.P.F.

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