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N.I.R.N.S.

Chilton Pond Drainage

The minutes of the R.L.B.C. Site Clearance Sub Committee meeting of 5th February, record a discussion on the Chilton Pond Scheme.

I have set out below for your information a brief description of the instruments being installed and suggestions for further investigations of the capacity of the Chilton Pond System.

1. Flow Measurement

Flow measurement is by channel and standing wave flume located just West of A34. The expected maximum flow rate is 2000 c.f.m. when the contributing ~~area~~ ^{area} is fully developed.

The instrument being installed will measure flow rates up to 1000 c.f.m. initially and can be modified later to read higher flows.

The instrument is electrically driven and will record flow on weekly circular charts.

2. Flow Sampler

This unit is to be installed in the flow recorder house with 1. above. It will abstract from the flow in the flume channel a half pint sample every hour and pass the samples to a storage drum.

3. Water Level Recorder

One water level recorder is to be installed in the second Chilton Pond. The recorder is clockwork driven and will record pond water level on 7 day circular charts.

The flow sampler was provided on the advice of Industrial Chemistry Group to provide a facility for testing the surface water flow for radio activity.

The flow and level recorders were provided to give information on the adequacy of the Chilton Ponds to accept the surface water flow from the site, and on which to base the design of any improvements which may be required at the ponds.

As the site is developed the surface water flow to the ponds will increase and at some point the present pond system will become inadequate.

It is at the moment impossible to predict the capacity of the pond system to soak away surface water, but it should be possible to deduce this information from readings of flow and pond level to be obtained over the next year or two.

The information available will be:-

1. Total impervious area connected to system.
2. Flow records.
3. Pond level records.
4. Rainfall records (A.E.R.E.)

/I understand

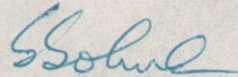
I understand that N.I.R.N.S. Services Section will maintain the flow and level recorders and keep the charts and that I.C.G. Harwell will be responsible for the flow sampling.

I would suggest that for the next year we should keep charts showing:-

1. Daily rainfall
2. Daily runoff.
3. Maximum pond level.

This information will pinpoint conditions which create high water levels in the ponds, which can be more closely investigated using the recorder charts.

If you agree I will start collecting the necessary rainfall figures and calculating the present impervious area connected to the system.

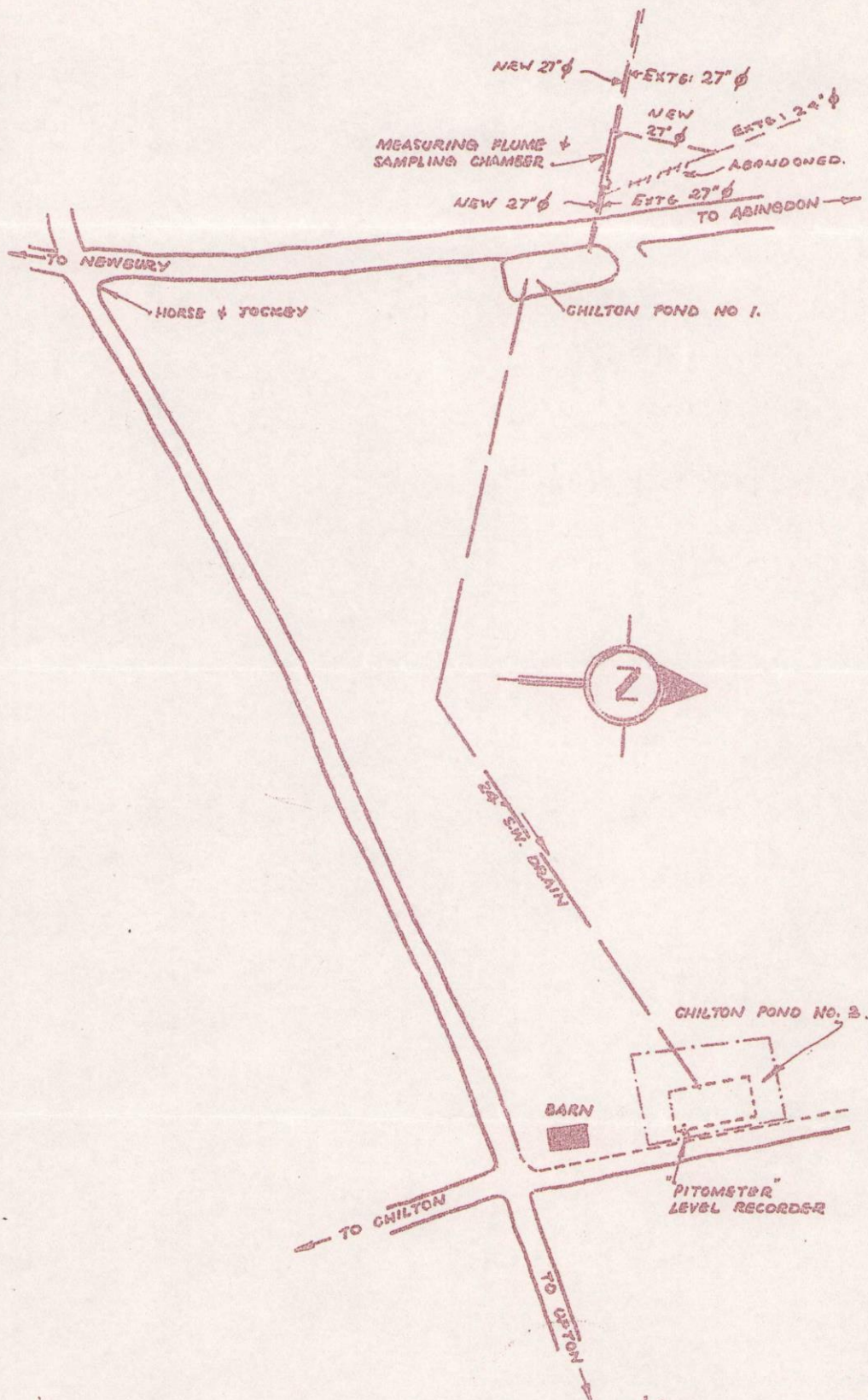


J. Johnson,
Senior Civil Engineer.

S.W.O.
Tadley.

21st March, 1962.

c.c. Mr. P. Bowles, ✓
Mr. Dixon,
Mr. Choate.



LOCATION PLAN 1/2,500