

Private and Confidential.

The University,

Edgbaston,

Birmingham.

27th September 1921.

To the Chairman & Directors of the
South Staffordshire Waterworks Company.

Gentlemen,

On September 13th. I attended a Conference with Dr. Lapworth and Mr. Dixon at Paradise Street to discuss particulars of the sites for the proposed Pumping Stations at Little Hay, the Sandhills, the Rolling Mill near Rugely, and Prestwood. The rest of that day and the following day were devoted to an inspection of the ground. I understand from Mr. Dixon that it is desirable I should set down my opinion and conclusions I then came to. They are as follows :-

(1) The Little Hay Site.

The new, and as yet unpublished, Six-Inch map of the Government Geological Survey of the Little Hay area is now available for study, and the detailed mapping shown thereon throws new light on the water potentialities of this area. The impervious Keele Beds which underlie the water-bearing Bunter Beds are shown outcropping a little over a mile to the east and less than a mile to the south of the site provisionally fixed at the Bogs, so that it is highly probable that the Bunter Beds at this spot are quite thin.

This confirms an opinion I came to years ago when examining the ground with the late Professor Lapworth, and the same fear was expressed in my Report of July 25th last. It seemed to me advisable, therefore, that a site should be chosen further north where the Bunter Bed's are probably thicker. We finally fixed upon a field between the road and Little Hay Brook and about midway between Little Hay and Manley Hall. This site is centrally placed to tap the underground waters of the area. It is about 1½ miles from Shenstone Pumping Station, so that any interference between it and the new Pumping Station would be inconsiderable. It is invisible from Manley Hall

and some 700 yards distant from it. A heading driven southwards would catch the waters which undoubtedly exist near the surface in this direction, and a sufficient depth of Bunter rock may be reasonably expected at the site to enable the pumping to draw in these more distant waters.

(2) The Sandhills Site.

I have read with interest the Report by Mr. F.W. Clarke, the Mining Engineer, on the possible extension of mining operations in the near future eastward from the Eastern Boundary Fault of the South Staffordshire Coalfield, and therefore towards the Sandhills Site. The confident opinion of such a high authority in Mining matters that no interference as between the proposed Pumping Station and subsequent mining in the area need be contemplated, removes the only serious objection to this site, as referred to in my previous Report. I therefore confirm my previous opinion that the Sandhills Site should be scheduled in the Bill.

(3) Site at the old Rolling Mill near Rugeley.

I am still of opinion that the site at the old Rolling Mill on the south side of Hagley Park is the most favourable in the Rugeley area. Sufficient land should be scheduled to permit of the construction of headings in a south, east and west directions. The heading westward might penetrate the north and south fault shown on the geological map and thus tap the underground waters from which the Seven Springs obtain their supply.

(4) The Prestwodd Site.

In my Report of July I referred to a possible site near Dunsley Hall which, while on the same rich water-bearing ^{belt} ~~site~~ as Ashwood Pumping Station, has the advantage of being over two miles to the south of it, and therefore distant enough to draw upon an entirely new ground. There are, however, serious objections to a site hereabouts; for although a spot could be chosen where the Pumping Station would be practically out of site of any habitation, there

th are several very large houses in the immediate vicinity such as Dunsley Hall, Stourton Castle, Stourton Hall, the Stewpony Hotel, etc., and it is certain that the proposal would encounter strenuous opposition.

The necessity for an arrangement with the Kinver Water Authority, and the possible objection raised owing to the presence of The Whittington and Stourbridge Sewage Works a mile to the south-east must also be taken into account.

I am inclined to the opinion therefore that the site at Prestwood has the balance of advantage at the present time. It is only just outside the boundary of the South Staffordshire Waterworks area; the site is advantageously situated between the Staffordshire and Worcestershire Canal and a good road, and further, a large supply of water may be confidently anticipated from borings at this spot.

If powers are granted to pump four million gallons per day at Ashwood, we have to face the possibility that a station at Prestwood and the Ashwood Station might draw upon the same underground source to some small extent. But in my opinion the great bulk of the supply which would be tapped at Prestwood would come from the west and south-west, and would thus constitute a new and separate source from that which supplies Ashwood. In my opinion we may reasonably expect six million gallons per day from Ashwood and Prestwood combined.

Yours faithfully,

W. J. Boulton