Borehole and Tank under the Children's Play Ground Gaskell Recreation Ground

This is intended as Background information in relation to the issue of the Borehole and large Tank found beneath the children's play area on the Gaskell Field.

It is of concern to the Town Council in that the Custodian Trustees are the members of the Town Council with the Gaskell Recreation Management Committee acting as management Trustees.

Some information is attached
British History on line records in Much Wenlock ***"In 1900-01 The Borough Council provided the Town with mains water from a Borehole near the Railway Station via a Reservoir" "A second Borehole near the Gasworks was added in 1925"***

British Geological Survey retain the records for Boreholes
SJ60SW9 is the reference for the Gaskell Field Borehole. The indication is also headed Much Wenlock Corp with a depth given as 30.48 meters.
A copy of the records attached are included.

Mouchel Much Wenlock Integrated Drainage Management Plan indicates the Old Pumping Station Tank which apparently sits over the Borehole to be 12 feet by 28 feet.

The second Borehole is SO69NW19 with an indication of Priory Grounds Much Wenlock. Depth also 30.84 meters with a cross reference to the Gaskell Grounds Borehole.

Following Mr Pope Drainage Survey Report before Town Council 30th July 2015 in which he drew attention to this Borehole and Tank and raising questions in relation to the capping of the Borehole work has been undertaken to try to identify who is responsible for the maintenance and the safety of this borehole.

Enquiries have been made by the membership of the Gaskell Recreation Ground Management Committee who have met members of Severn Trent on a number of occasions and corresponded with various levels of staff of Severn Trent.

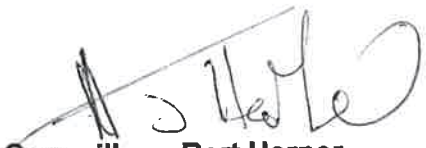
It was hoped that Severn Trent would accept responsibility and management of the borehole but in recent E mails Severn Trent indicate that is not the case and refer the matter to the Town Council. Severn Trent have also been in contact with Shropshire Council and again have been referred back to the Much Wenlock Town Council with Shropshire Council supplying a map to Severn Trent indicating the Pumping Station which stood on the site.

Something clearly needs to be done about this situation. We have children playing above this tank/borehole every day. It is almost a year since the situation was highlighted although it seems the situation has been known for some time before that.

Legal aspects of Legal Ownership and Responsibilities and Management will take some time to resolve without doubt and if Much Wenlock Town Council are indicated as the responsible body then any decision to undertake remedial work may well be at considerable financial cost to the Town Council. All that is not clear at present but it is a marker that we must be aware of with our present Devolved Services discussions.

It is proposed that we commission a survey of inspection of this Tank and Borehole on behalf of the Town Council from a Company who are Specialists in the provision of such Services. A Shropshire Company Wyatt of Whitchurch is such a Company and would appear to be a competent choice. As it is such a specialist field of work there appears little choice. An idea of a possible cost of a Survey will hopefully be available for the Meeting on the 2nd June, 2016.

Submitted for information of all members and for discussion on the 2nd June, 2016



Councillor Bert Harper

Copy each Member of Town Council
Copy for David Gibbon Chair of Gaskell Recreation Management Committee.

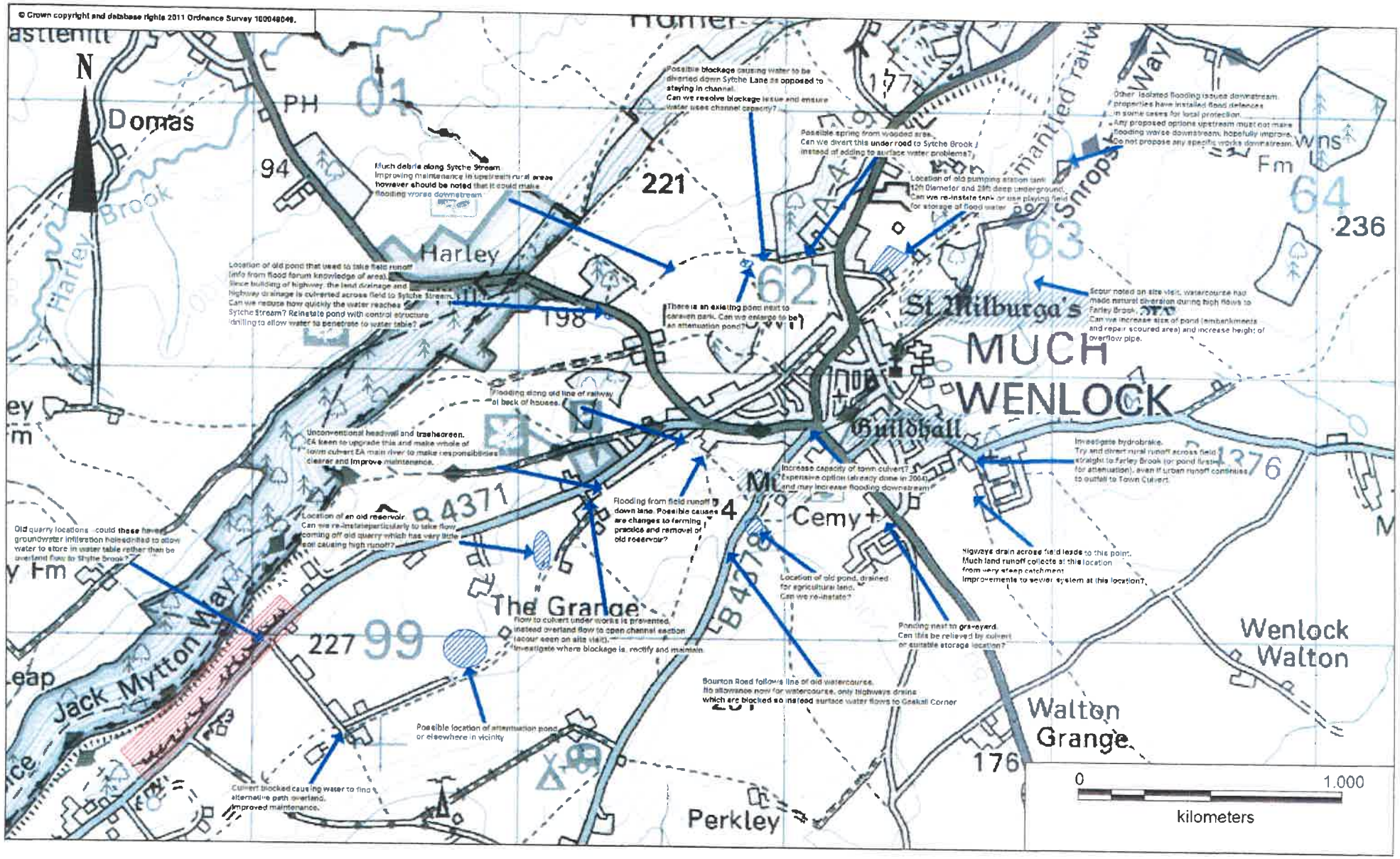
Subject: Fwd: Land ownership query
Date: Friday, 20 May 2016 at 11:52:25 British Summer Time
From: Trevor <trevorchilds@rocketmail.com>
To: Town Council <townclerk@muchwenlock-tc.gov.uk>, Gaskell Management <windmill45@btinternet.com>, Gaskell Management <graham.ev@btinternet.com>, Gaskell Management <plaming1@gmail.com>, Chris Bowden <chris.bowden@emerson.com>, Bert Harper <hharpermtc7@yahoo.co.uk>

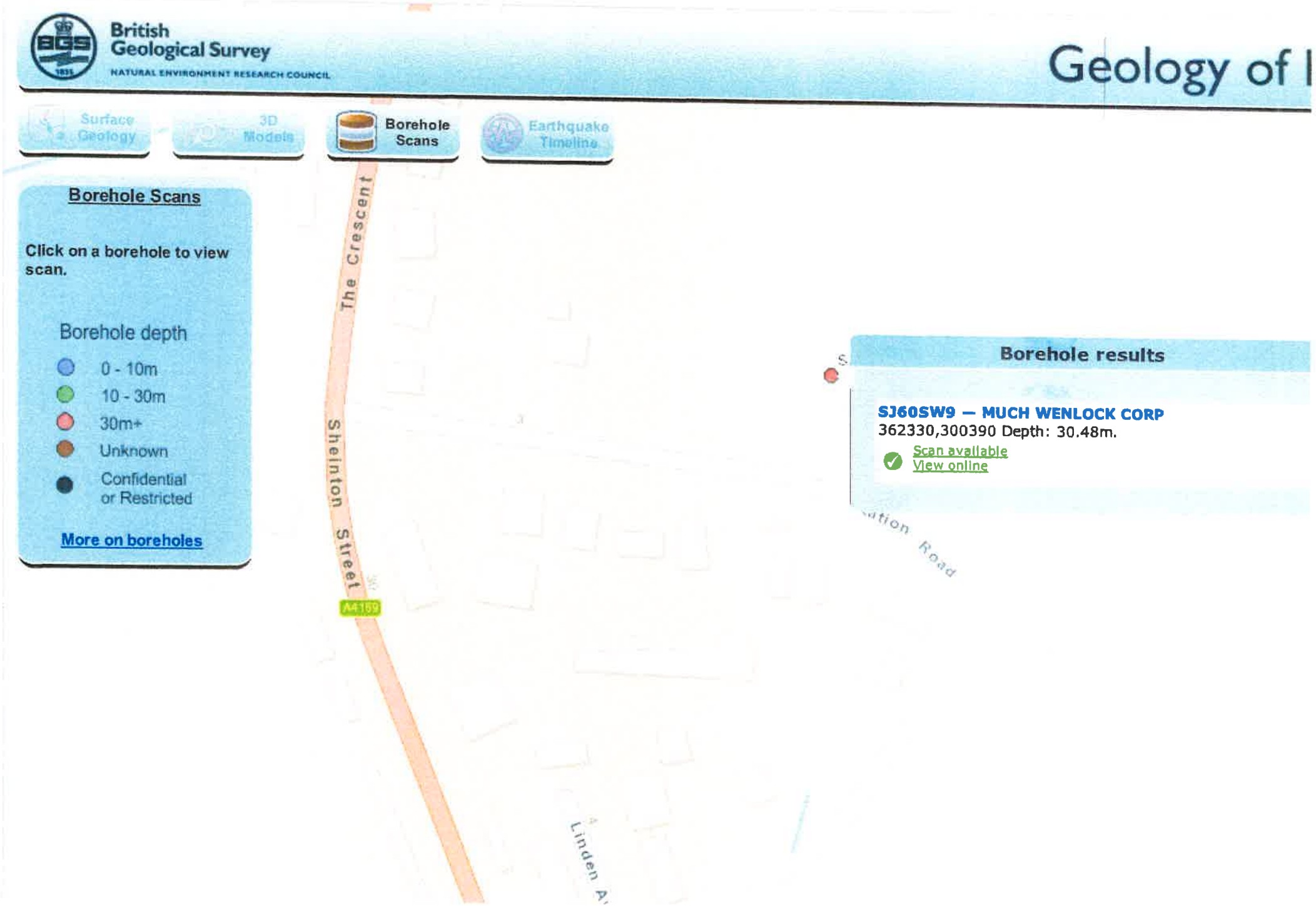
Sent from my iPad

Begin forwarded message:

> **From:** "Perry, Paul" <Paul.Perry@severntrent.co.uk>
> **Date:** 20 May 2016 at 11:46:04 BST
> **To:** "'trevorchilds@rocketmail.com'" <trevorchilds@rocketmail.com>
> **Subject: Land ownership query**
>
> Hello Trevor,
>
> As discussed this morning to the best of our knowledge we cannot find any connection linking Severn Trent Water to this asset. As the council are the registered owners of the land I suggest you refer this issue to them, I will drop a mail to Shropshire Councils flooding and water department with the details of your concern.
>
> Hopefully the council may have records which may be able to shed some light on what this asset actually is.
>
> On the map below there is an abandoned Severn Trent covered reservoir which we discussed, as you can see the abandoned main runs past the playground in the road and up to the reservoir along the black line with crosses in the plan below but it doesn't appear to go near the chamber under the playground.
>
> If I can be of any further help let me know.
>
> Thanks
>
> Paul

Appendix D – Initial Flood Mitigation Measures




British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL
Geology of
Surface Geology
3D Models
Borehole Scans
Earthquake Timeline
Borehole Scans
Click on a borehole to view scan.
Borehole depth
0 - 10m
10 - 30m
30m+
Unknown
Confidential or Restricted
More on boreholes
The Crescent
Shelton Street
A4169
Linden A
Borehole results
SJ60SW9 – MUCH WENLOCK CORP
362330,300390 Depth: 30.48m.
Scan available
View online

SJ 60SW/9
6233 0039

152

12

(B1050) Wt. 6066—6111—3,000 6/24 Sp. 108 O.A.

SECTION OF Borehole § # **at** Much Wenlock

Maps: One-inch 152 NS. Six-inch 50 N.E / E County Salop

Height above O.D. * Latitude Longitude

Communicated by Messrs Thos. Matthews, Ltd (Rushton Handsell) copied by A. Templeman 1937 Date of Sinking [before 1914]

Made by Much Wenlock Corporation Dip of Strata

Vertical section shows:—

		Thickness. ft.	in.	Depth from Surface. ft.	in.
	Boring began at			30	.
Prob. Mg. soft — Lower Ludlow Shales / ? Lower Ludlow Shales	Hard shale	35	.	65	.
& Wenlock Limestone	" grey rock	32	.	100	.

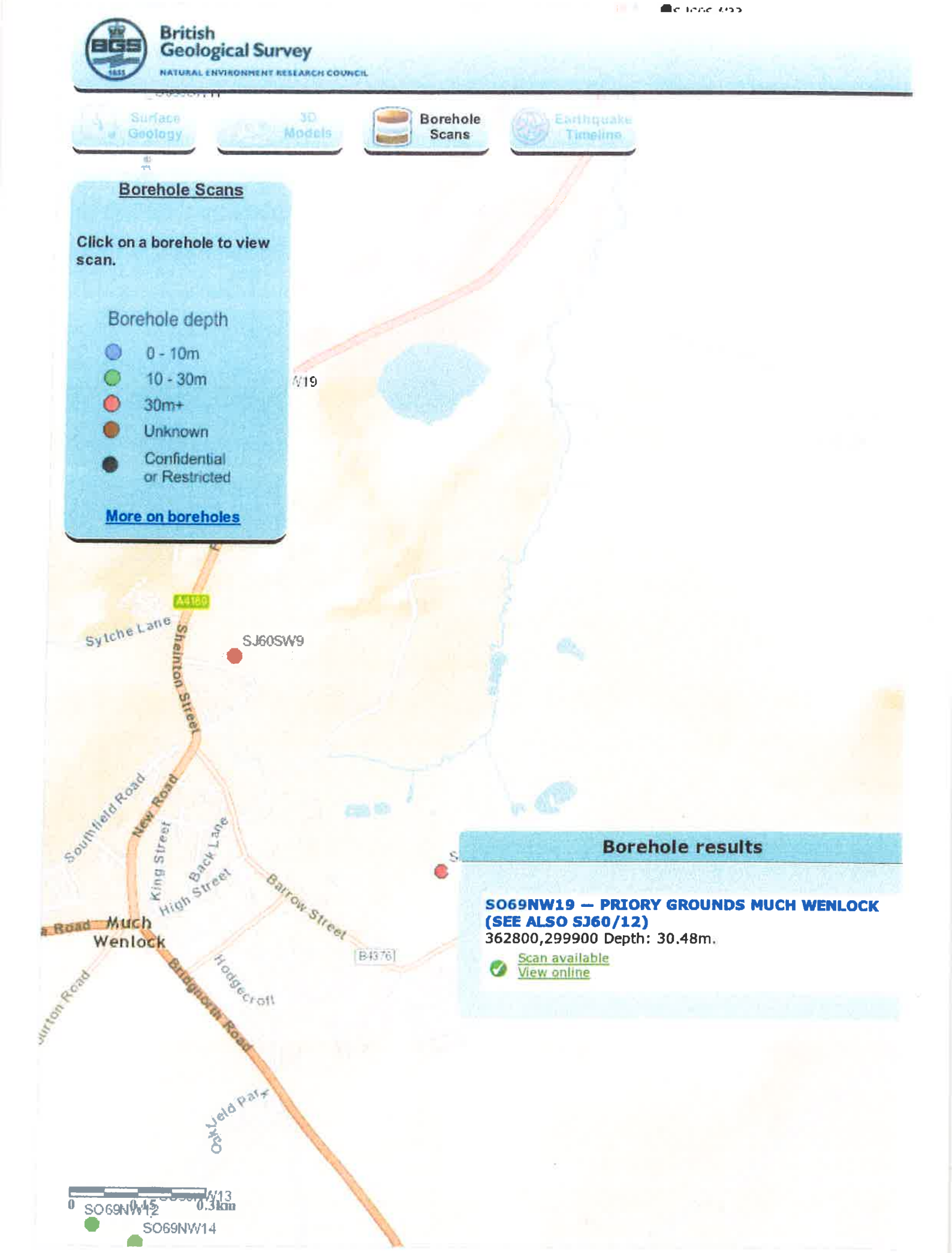
§ (Acc. to "Return of Water Undertakings" 1914, p. 153):— The Wenlock Town Council (Much Wenlock & Harrington, Sutton Maddock (1" 153)) has well & boring in Wenlock Limestone, Much Wenlock; "average daily quantity of water available" from it is 12,000 gallons. There is a reservoir at Much Wenlock 90,000 gallons. Water is good; hardness 25°, no action on lead.

* According to 6" map (1903 edn) the Corpⁿ "Pumping Station" is about 100 yds N.N.W. of railway station, and its O.D. is > 500 < 550 say 520

According to T. Robertson (Swansea Memoir, wg. typescript) Much Wenlock derives its water from two borings, both in the Lower Ludlow. One is situated about 100 yds north-west of Much Wenlock station, and the other in the Priory Grounds 450 yds E.S.E. of the church [6" field slip shows it as in middle of small circular clump of trees in mid field] "The first yields ... 12,000 g.p.d. ... total hardness .. 25 degrees"

The Much Wenlock Corpⁿ was written to in [illegible] of 1935, but have not yet replied (August 1935) — so we still lack these borehole site location ground levels.

20.xi.35, Mr. F.W. Darg, Town Clerk, Wenlock Borough, writes in reply to viii.35 that these two borings of Matthews are "despite the existing bore & near the Railway Station" (G.S.M. 6-456) he also says that Wenlock town is supplied chiefly from these two bore holes, one near the Railway Station and the other in the Abbey Park [Priory ground] & and he refers back chiefly [illegible] Harrington supply — the Harrington Joint Water Undertaking


British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL
Surface Geology
3D Models
Borehole Scans
Earthquake Timeline
Borehole Scans
Click on a borehole to view scan.
Borehole depth
0 - 10m
10 - 30m
30m+
Unknown
Confidential or Restricted
More on boreholes
A4169
Sytche Lane
Sheinton Street
SJ60SW9
Southfield Road
New Road
King Street
Back Lane
High Street
Barrow Street
Much Wenlock
B4376
Bridgnorth Road
Hodgecroft
Oakfield Park
SO69NW12
SO69NW14
0
0.15
0.3km
Borehole results
SO69NW19 -- PRIORY GROUNDS MUCH WENLOCK (SEE ALSO SJ60/12)
362800,299900 Depth: 30.48m.
Scan available
View online

please see note below *

~~SJ 6233 0039~~ SJ60/12 SO69/29

152 / 12 (14)

(P1000S) Wt. 5056—8111—2,000 6/26 Gp. 100. O.A.

SECTION OF Borehole § # at Much Wenlock

Maps: One-inch 152 NS Six-inch 50 N.E / E County Salop

Height above O.D. * Latitude Longitude

Communicated by Messrs Thos. Matthews, Ltd. [illegible] (copied by A. Tr[illegible] 1947) Date of Sinking [before 1914]

Made by Much Wenlock Corporation Dip of Strata

SO628 999

Vertical section shows:—

		Thickness ft.	in.	Depth from Surface ft.	in.
	~~Boring began at~~			30	.
Prob. M[illegible] Ludlow Shales	~~Hard shale~~	38	.	68	.
? Lower Ludlow Shales & Wenlock Limestone	~~grey rock~~	32	.	100	.

§ (Acc. to "Return of Water Undertakings" 1914, p. 153):— The Wenlock Town Council (which has [illegible] Homington, Sutton [illegible] 6" 158) has

* well & boring in Wenlock Limestone, Much Wenlock; "average daily quantity of water available" from it is 12,000 gallons. There is a reservoir at Much Wenlock 90,000 gallons. Water is good; hardness 25°, no [illegible] [illegible]

SJ60/12

* According to 6" map (1903 edn) the Corpⁿ Pumping Station, about 100 yds N.N.W. of railway station, and its O.D. is >500 <550 say 520

\# According to T. Robertson (Summ. Memoir orig. typescript) Much Wenlock derives its water from

SJ60/12

* two borings, both in the Lower Ludlow. One is situated about 100 yds [illegible] of Much Wenlock

SO69/29

station, and the other in the Priory Grounds 450 yds E.S.E. of the church [6" field slip shows it as in middle of small circular clump of trees in mid field] "The joint [illegible] yield ... 12,000 g.p.d. ... total hardness .. 25 degrees"

The Much Wenlock Corpⁿ was written to in May & June of 1935, but have not yet replied (Aug. 1935) — so we still don't know to which site these records belong. *

20.xi.35, Mr. F.W. [illegible], Town Clerk, Wenlock Borough, writes us in reply to [illegible] 35 that there [illegible] of Matthews was "daughter of the existing bore [illegible] near the Railway Station" (F.S.M. 64/06). He also says that Wenlock town is supplied chiefly from the two [illegible], one near the Railway Station and [illegible] in the Abbey Park [Priory grounds]; and he refers back chiefly [illegible] Harrington supply — the Harrington [illegible] Water Undertaking

* This site is also registered on ~~SO69/29~~ SJ60/12 see sentences underlined in red.

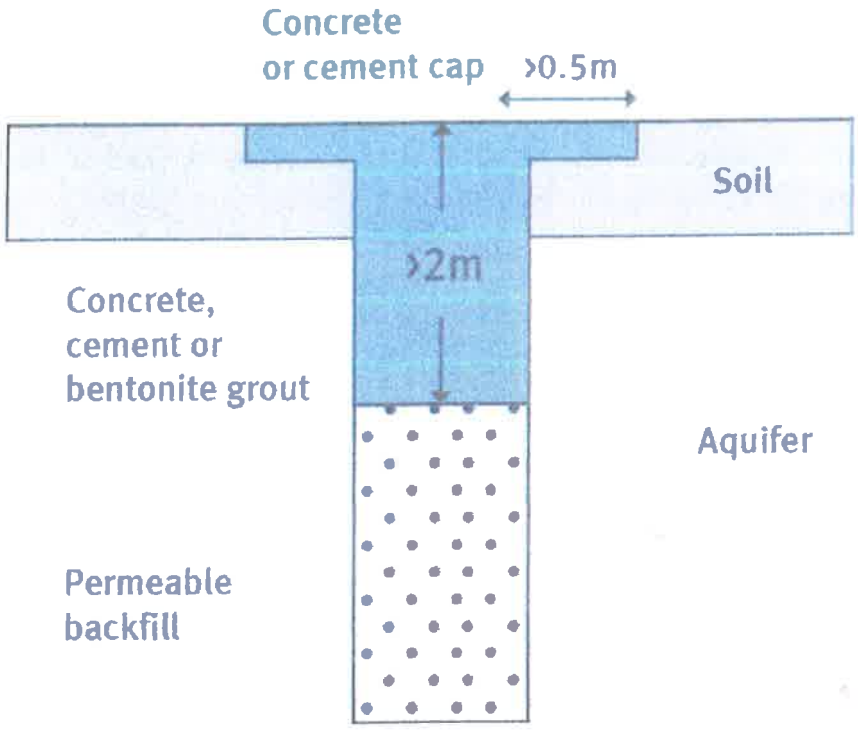


Figure 2: Schematic diagram for borehole seal and cap

Step 5 - Recording details and informing others

You should keep an accurate record of the abandonment details for future reference, including:

- The reasons for abandonment (for example water quality problems).
- Measurement of groundwater level prior to backfilling.
- The depth and position of each layer of backfilling and sealing materials.
- The type and quantity of backfilling and sealing materials used.
- Any changes made to the borehole/well during the abandonment (for example casing removal).
- Any problems encountered during the abandonment procedure.

The location of abandoned borehole and wells should be clearly marked on site records This is essential where any part of the well has not been filled.

It is also very good practice to mark or deeply inscribe well caps with the word "WELL". Even if done crudely it can avoid considerable risk, delay or uncertainty in the event of the structure being discovered during excavation by others in the future, who may not otherwise know what the feature is.

Always notify the Environment Agency and British Geological Survey of the abandoned well location and structure.

Private Water Supply

No more water bills...

With the ever increasing costs of mains water supply, borehole wells are becoming more and more popular throughout the UK as an alternative clean, sustainable and cost effective source of water.

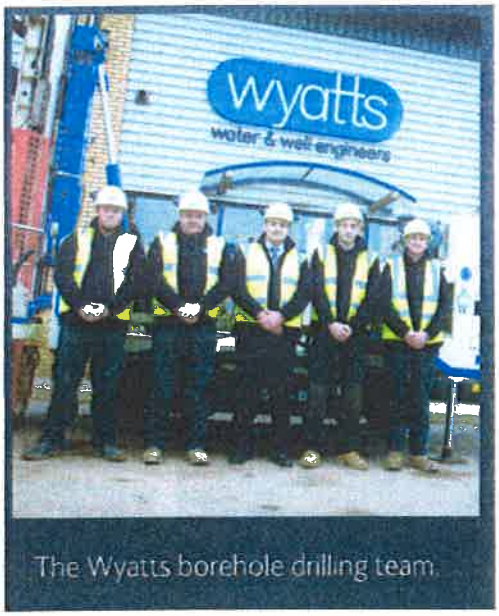
Extracting your own water is a lot easier than you might think. We have an in-house hydrogeological team who will look at the geology of your property and identify any areas that could yield water sustainably.

We are also lucky enough to have the records of every private water supply job we have completed since the company began in 1879 – an invaluable resource when a potential job is close by to an existing Wyatts borehole.

With 135 years of experience in well drilling, we have developed unique techniques of problem solving in all aspects of well installation. Our experience is combined with the newest technology in borehole design, surveying and testing.

The Wyatts fleet of rigs, operated by our highly experienced drill crews, allow drilling in all ranges of diameter and depths, enabling us to access any location including wet grounds, steep slopes and city centres. Owning a wide range of specialist tools and machinery ensures that all work is done to a high standard and to specific time schedules.

Unlike other drilling companies, Wyatts offer an in-house consultancy service, allowing us to scientifically back up our drilling works as well as complying with Environment Agency rules and regulations.



The Wyatts borehole drilling team.

Case study - **Dairy Farm, Cheshire**

- We recently installed an abstraction borehole and permanent pumping equipment to supply 20m³ of water per day to a dairy farm of around 200 cattle.
- Client was paying £1.40 per cubic metre attaining to a spend of **£10,220 per annum**.
- Borehole construction, test pumping and water analysis totalled: **£6,195**
- Permanent pumping equipment and installation thereof totalled: **£4,787**
- **Total cost of project: £10,982** – client sees full pay back of investment in just over a year.


Customers see a great return on investment through their new private water supplies.

wyatts

The Water Experts
Est. 1879

Waymills Industrial Estate | Waymills | Whitchurch | Shropshire | SY13 1TT.
Telephone : 01948 662526 Fax : 01948 667560
E-mail : info@wyattbros.com Web : www.wyattbros.com

So what is a borehole?

An agricultural or domestic borehole is usually about 100/200mm in diameter and is drilled to a depth of up to 200 metres. However, it may be considerably less as this is dependent on the depth of the water table at the site of the borehole.

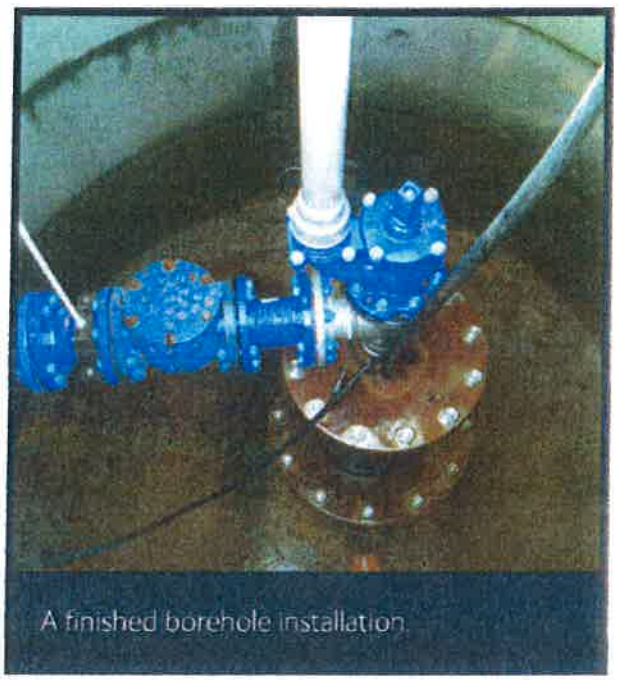
The well is lined with a solid casing – this stops the collapse of the borehole walls and prevents surface pollutants from contaminating the well.

The water found at the borehole is supplied by an 'aquifer' – a wet underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand or silt) from which groundwater can be extracted.

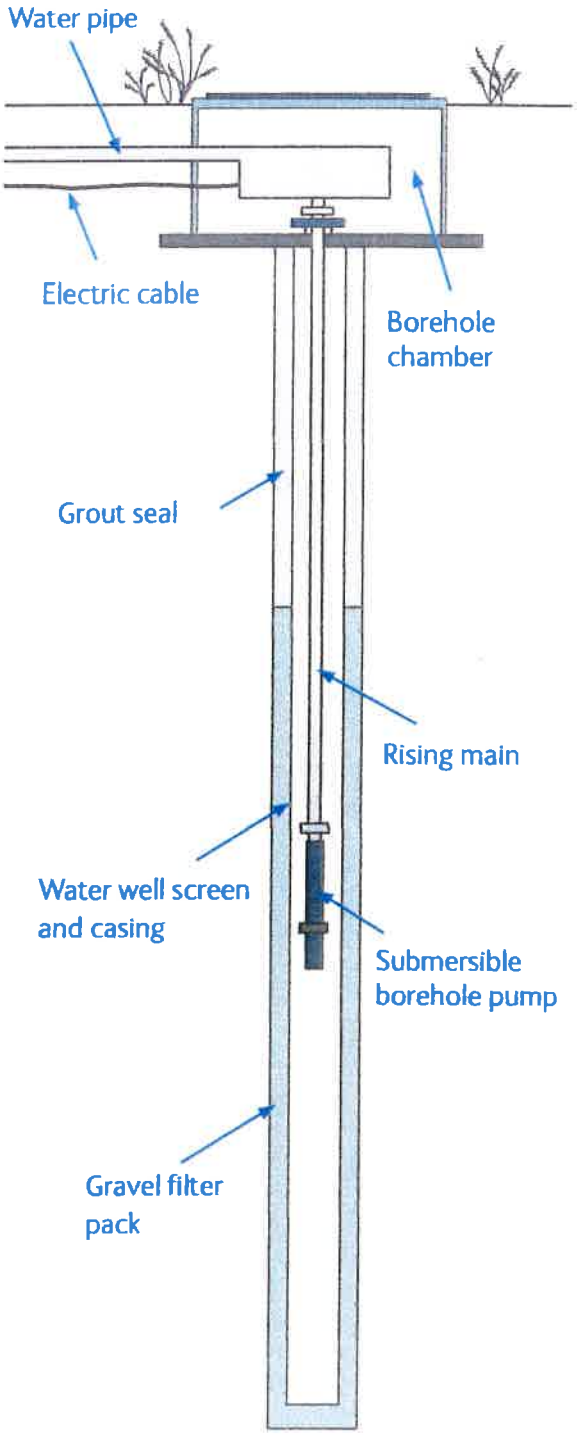
We will also look at any sources of potential contamination, groundwater flow direction, investigate the flooding history in your area and check on your water quality.

Once we have this information we are then able to design and construct the borehole that will produce your private water supply, and if needed, install any water treatment.

Anyone may draw up to 20,000 litres of water per day, without the need for any abstraction licence or permission. A family of four uses approximately 1,000 litres of water per day for the entire household's needs, so it is usually a business or a large farm that requires a licence for extracting a private water supply.



A finished borehole installation



wyatts
The Water Experts
Est. 1879

Waymills Industrial Estate | Waymills | Whitchurch | Shropshire | SY13 1TT
Telephone : 01948 662526 Fax : 01948 667560
E-mail : info@wyattbros.com Web : www.wyattbros.com