

Supporting Documents for Poyston West and Poyston Farm  
Ground Water Transitional Licence Application

Business Trading Name – Messrs Rees

Business Address – Poyston West Farm, Rudbaxton, Haverfordwest, Pembrokeshire, SA62 4DD

Category - Technical Supporting Information

Date -12 November 2019

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## Information

### **Brief history of farm eg type livestock only or mixed with arable crops**

Poyston West and Poyston Farm are modern dairy units located on the outskirts of Haverfordwest Pembrokeshire. The principal contacts are Mr David Rees, Mrs Sarah Rees and their son Mr George Rees. George is the fourth generation of the Rees family to farm Poyston farms.

The dairy farm is an all grass unit and consists of owned and rented land. The farmed land area is 162hectares (400acres) owned and 324hectares (800acres) rented on a farm tenancy agreement.

The land bank is down to grass leys and silage cropping with concentrates fed to the cows to supplement the feed ration. The dairy herd is on a pasture system during the summer months. Under this type of system milk production is predominately from grass with Friesian and Holstein Cross cows producing an annual average 6000- 9000lts per cow and would be classed as a high performing herd.

Average stocking at the farms amounts to 900 dairy cattle split between both units, the cows are kept on cubicles/straw-based systems. The younger stock between 3-13months 250animals and 13-24months 250animals are kept on two separate units that are not connected to the same geological groundwater aquifer. Heifers that are due to calve are brought back to the farms before joining the milking herds. On average this is four animals a week that replace the baron cows that are sent for slaughter. With this type of cow management system, the herd numbers are kept at 900 LSU going through the milking parlours.

All beef bull and heifer calf's are sold from the farm at approximately 3weeks. These animals are fed on a milk substitute and never reach the stage to consume raw water while on the farm.

### **Water Supply**

The farm groundwater source supplies drinking and wash water for the dairy herds via drinking troughs, plate cooler and milking parlour. Both of the dairy units do not have reservoir/tank storage and is regulated from the borehole supply via pressure cut-off switch mechanism. The water that is used for the parlour system wash and bulk tank cleaning is sourced via the public mains supply from DWR Cymru Welsh Water. The farm lies within a groundwater abstraction exempt area Wales.

## Natural Water Resource

A growing number of livestock farmers are seeking to source water from alternative sources such as boreholes, springs, rivers, lakes or rainwater harvesting as costs of mains water increases. Stock farm water is one of the most important natural resources, whether considering direct water consumption being stock drinking, washing and cleaning. Approximately a third to a half of all potable water abstractions are used for drinking with the remaining being used for cleaning parlours, yards and milk cooling.

From the 1 April 2005, an amendment was made to the Water Act 2003 that deregulated abstractions of **less** than 20m<sup>3</sup>/day the law now permits you to abstract up to a maximum of 20m<sup>3</sup>/day (equal to 20,000 litres per day) without the need for a licence. This is subject to conditions:

- (1) You have a legal right to the source of supply if it is on your land.
- (2) The abstraction is not part of a series of abstractions from the same source totalling a quantity greater than 20m<sup>3</sup>/day.

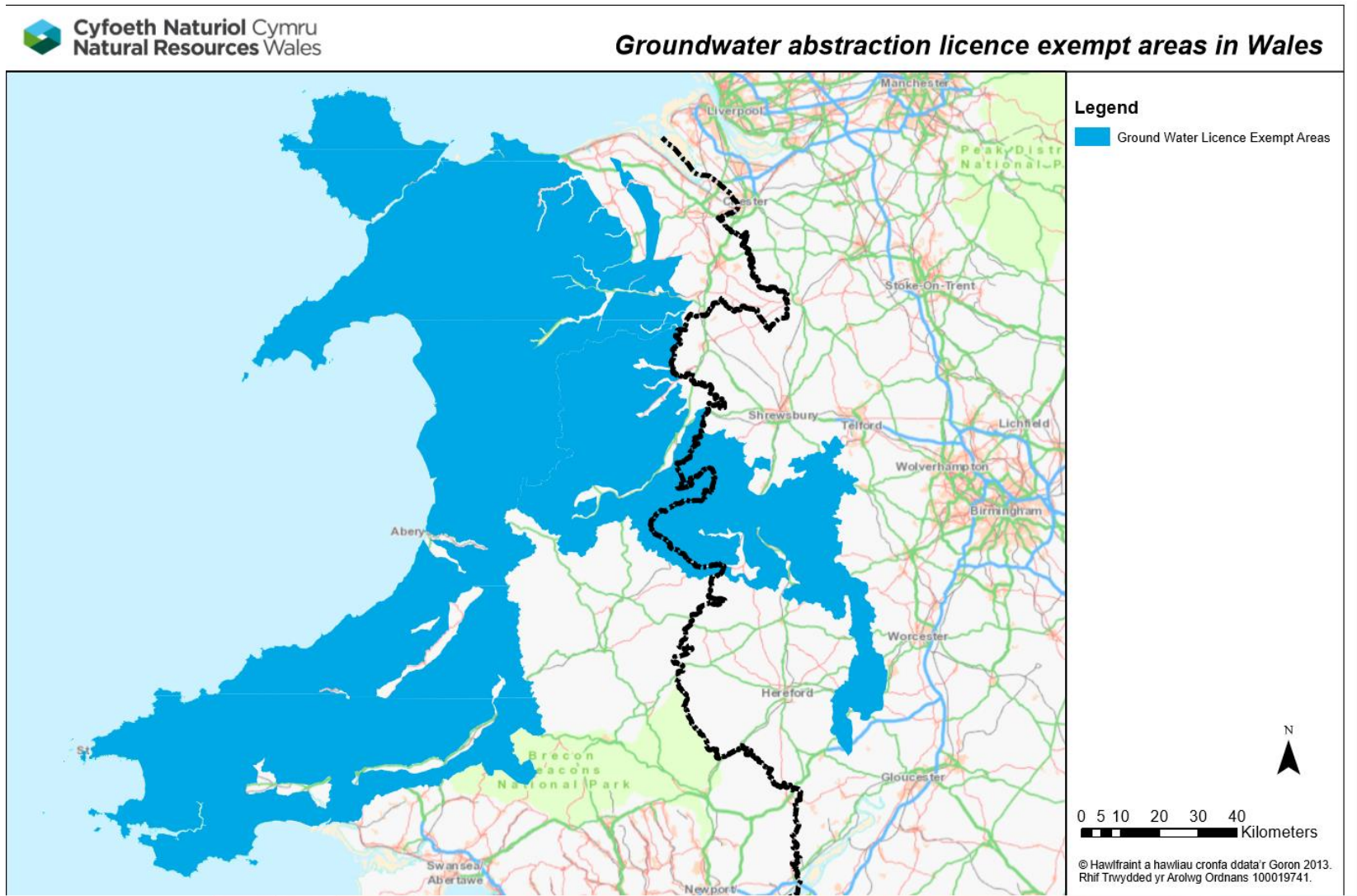
Natural Resources Wales have introduced an application window where a transitional licence application is required to be submitted during this period 1 January 2018 until 31 December 2019. Following this, there is up to a 3-year determination period. The application fee is currently £135. Transitional licence applications are required to be submitted during the application window 1 January 2018 until 31 December 2019 if you abstract more the exempt limit.

After the 31 December 2019 if more than 20m<sup>3</sup>/day a full licence application will have to be submitted to continue using the groundwater abstraction.

If a farm has several boreholes which one of them may be a domestic supply which all abstract from the same source of supply, i.e. the same groundwater source that in total abstract more than 20m<sup>3</sup>/day will require a licence.

Areas within Wales that are outside the Groundwater exempt area should all have an abstraction licence if they abstracted more than the exempt limit.

## Map showing Exempt Groundwater Area Wales



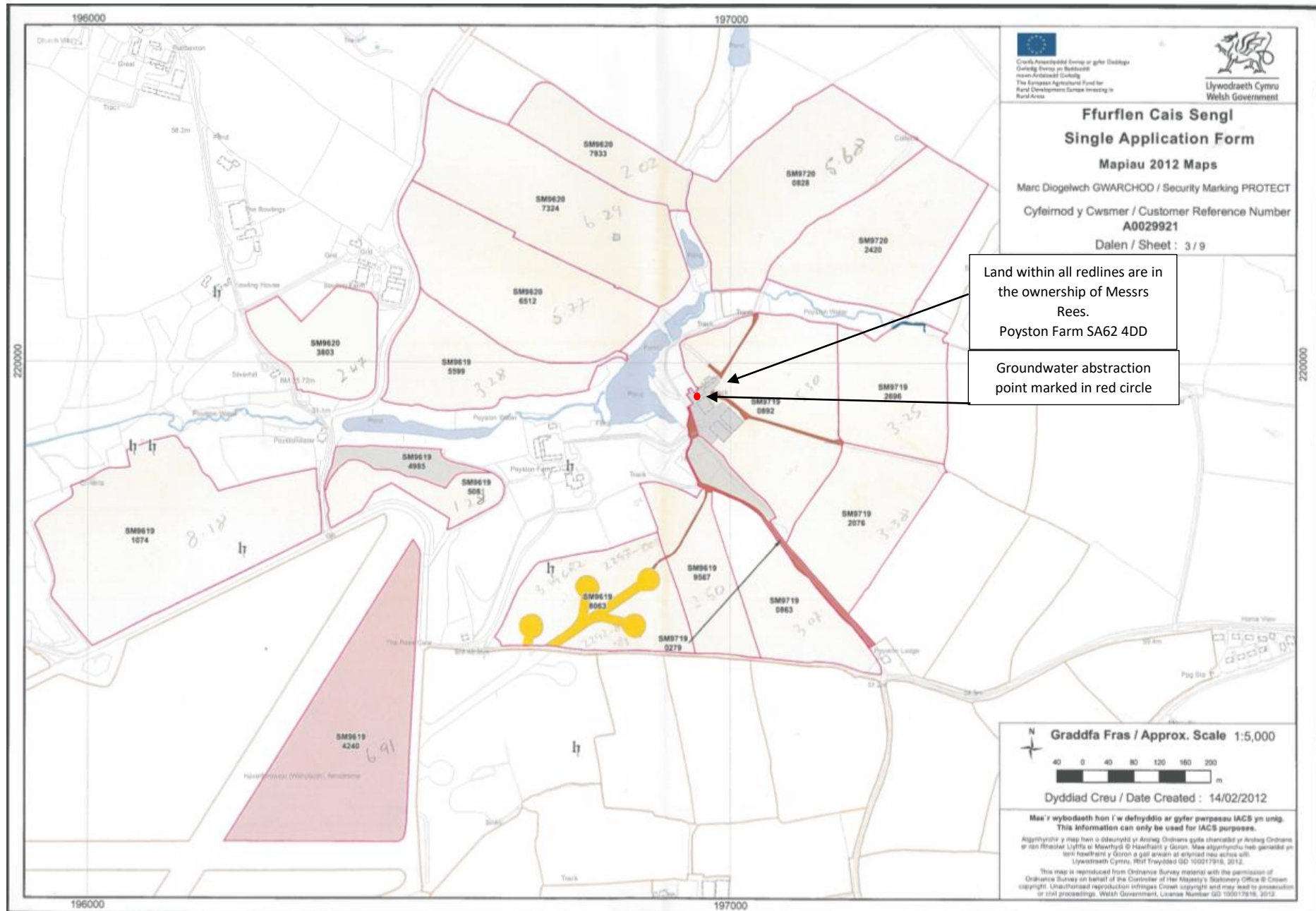
## Doc1 Letter of Authorisation





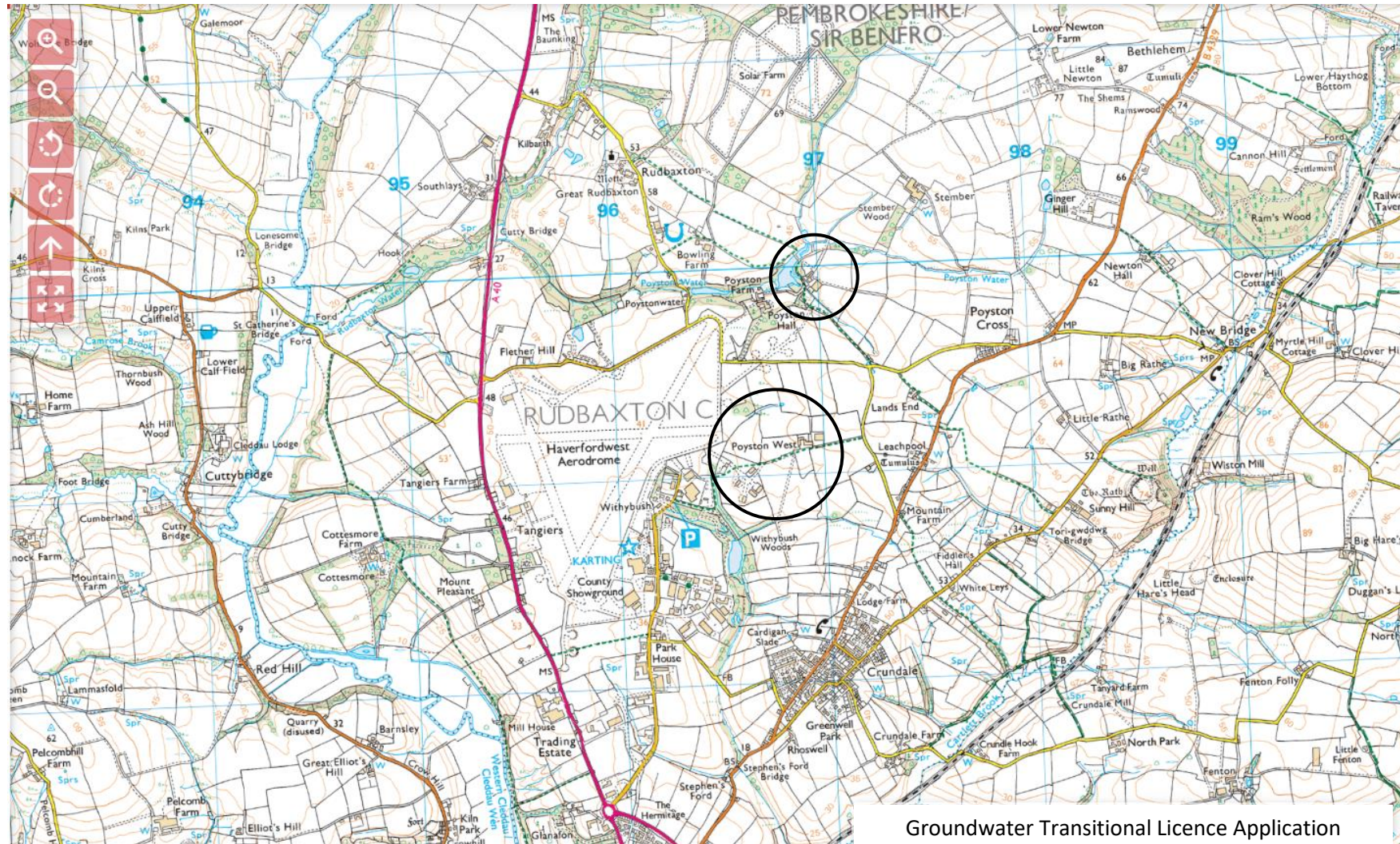


## Doc 2 – Entitlement to Land SFP Poyston (Welsh Assembly Government) Maps





## Doc3 Farm Location Map Poyston West/Poyston

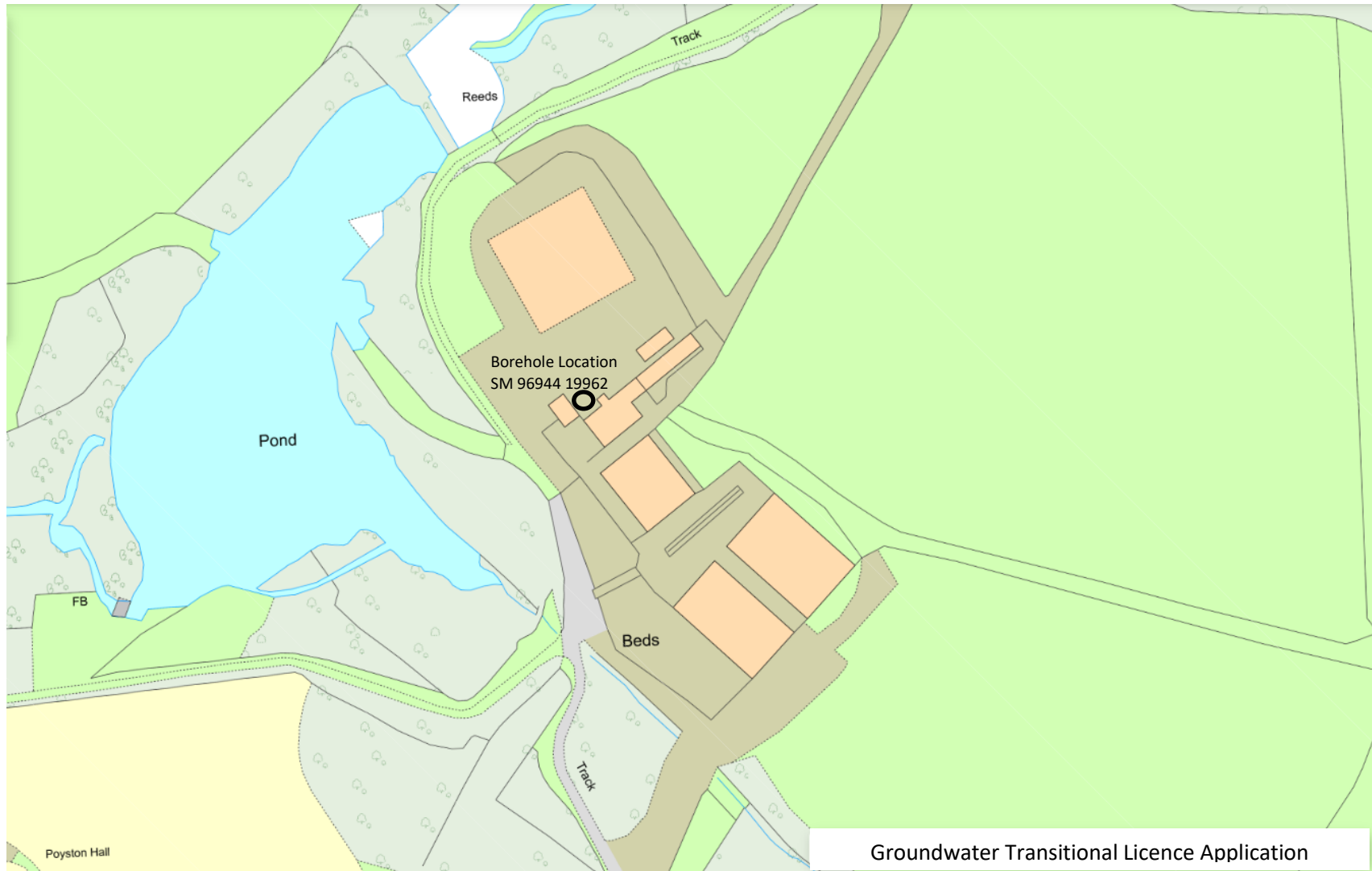


## Document 4 Poyston West Farm: Groundwater Borehole location





## Document 4 Poyston Farm: Groundwater Borehole location



## Doc5 - Photographic Evidence Borehole Chambers

### GW Abstraction point 1 Poyston West Pump Type/Specification





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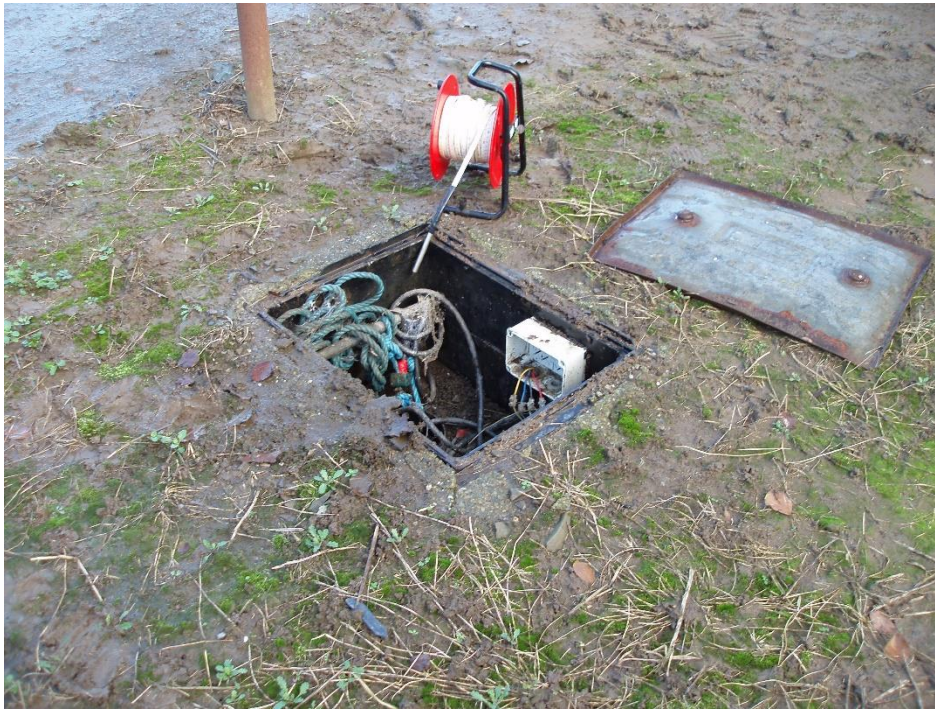
## Doc5 - Photographic Evidence Borehole Chambers

### GW Abstraction point 2 Poyston Pump Type/Specification

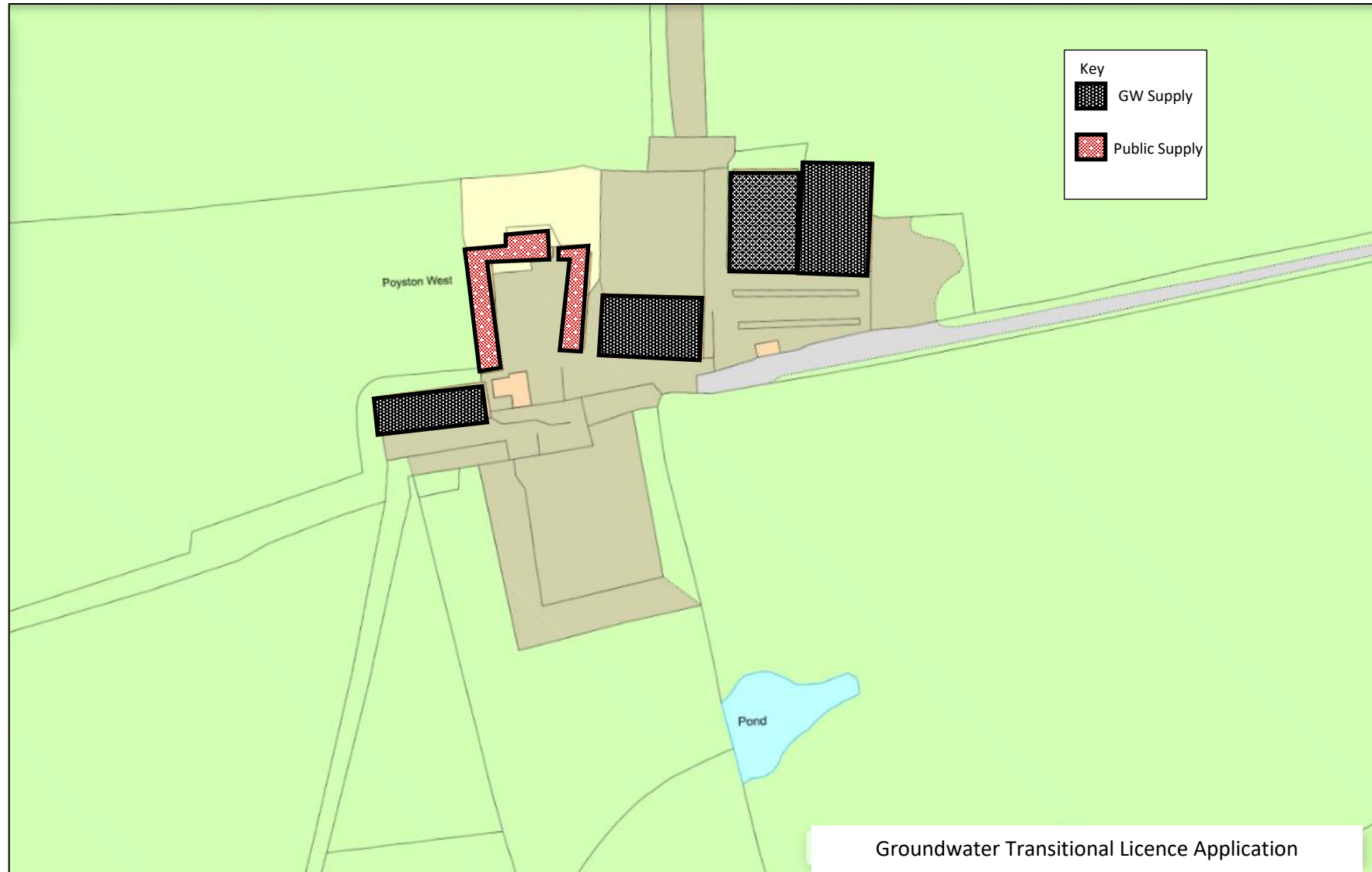




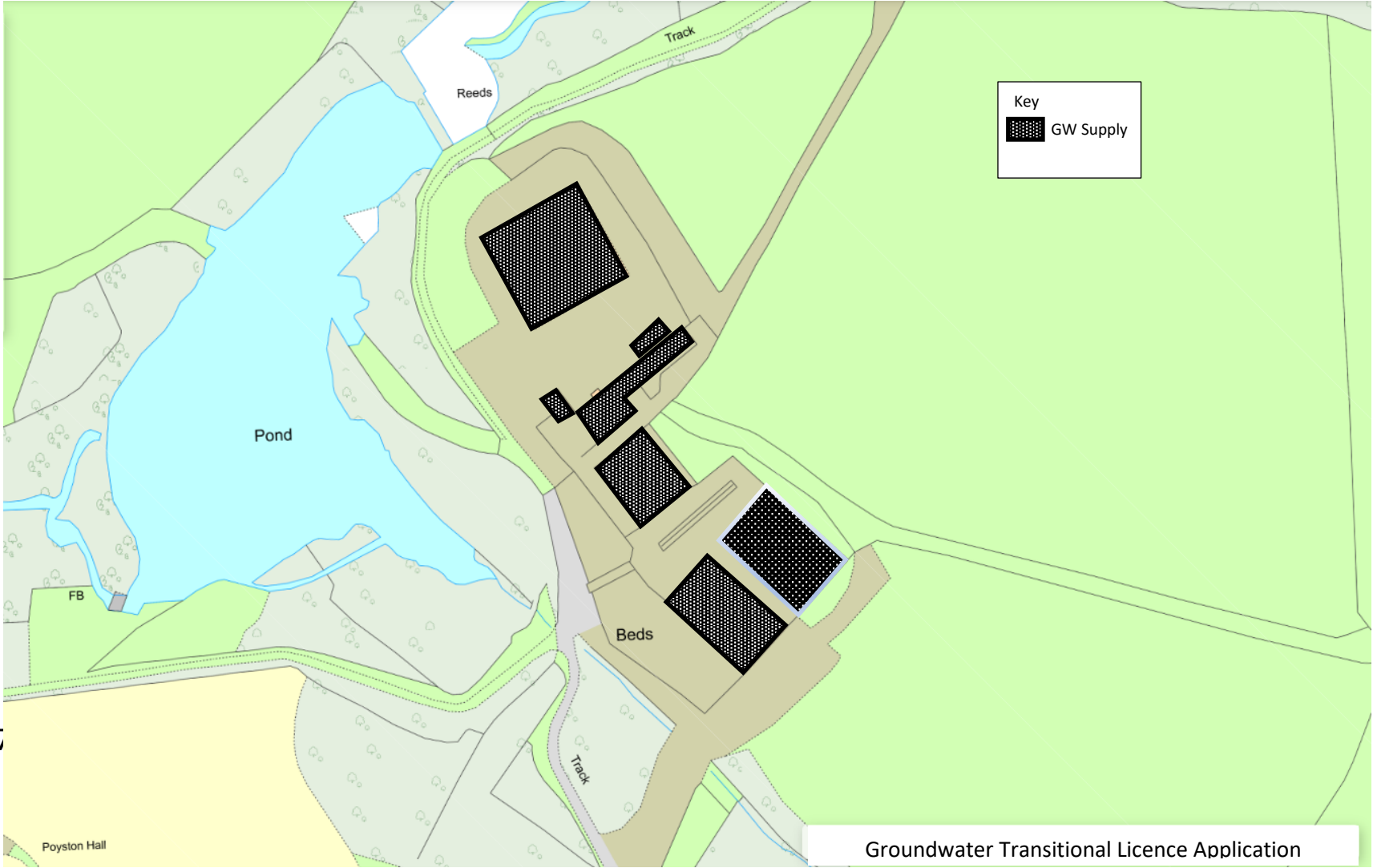
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## Doc6 Poyston West Farm: Borehole Distribution Plan



Doc6 Poyston Farm: Borehole Distribution Plan



Doc7

## Doc8 Livestock numbers and water volume used 2011-2017 Poyston West

	water cons	livestock no	daily consum	monthly consum	annual consum	flow rate litre per hour	flow rate litres per second	pump time for drinking water (seconds)	pump time for drinking water (hours )	pump time for parlour washings (seconds)	pump time for parlour washings (hours )
2011											
dairy cows in milk	100	300	30000	900000	10800000	6500	1.8	16615.4	4.6	4984.61538	1.4
cow with calf	50	0	0	0	0						
heifers 24 month	50	0	0	0	0						
<12 month	36	0	0	0	0						
Bull	100	0	0	0	0						
total livestock water use			30000	900000	10800000						
parlour washings	30	300	9000	270000	3240000						
2012											
dairy cows in milk	100	300	30000	900000	10800000	6500	1.8	16615.3846	4.6	4984.61538	1.4
cow with calf	50	0	0	0	0						
heifers 24 month	50	0	0	0	0						
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British Cattle Records 2016 TB Test for 2016

See Attachments from Animal & Plant Health Agency



