

## Transport Statement

**Ref: 231206TS-v1 (6<sup>th</sup> December 2023)**

**Project: Hydropower scheme for Ifan W. Jones at Tŷ Mawr, Mallwyd, SY20 9HS**

The normal operation of the farm involves 40 foot articulated deliveries (52 foot including the cab by 9 foot wide) of hay/straw with weights up to 25 tonnes plus vehicle weight. All deliveries related to the construction of the micro-hydro scheme will be of this size or smaller as follows:

- The penstock (pipe) delivery will be carried out in three deliveries, usually in one day, on 40 foot articulated lorries, 52 foot including the cab, 9 foot wide. The lorries will have HIABs for offloading. 776 metres of 355mm diameter SDR26 HPPE pipe weighs about 12 tonnes (this is the total required for the project). The penstock will be offloaded on land owned by the applicant opposite The Brigand Inn (Mallwyd) at NGR SH8621212642. The reason for this is so that the articulated lorries can avoid using the difficult junction between the A458 and the single track highway (C2017). There is good access to this land from the A470 and the lorries can leave the highway and off-load on the applicant's land. The field is flat and, during summer months, it is suitable for the lorries to turn around here. The applicant will then move the pipes to the site, as and when they are needed, using a 28 foot long trailer, which they own and currently use for their farming activities.

Field where the pipes will be offloaded

Existing access to field  
NGR SH8621212642



- The armoured power cable, voltage sensing cable and intake level sensor cable will all be delivered on one vehicle, probably a small flat bed with a HIAB, smaller than the articulated vehicles used currently for straw deliveries. These will be delivered to Ty Mawr farm.
- The turbine and generator are relatively small components and will be delivered directly to Ty Mawr farm. The turbine will be delivered by the manufacturer on their Transit sized van. The generator will be delivered separately on a Luton style van with a tail-lift for offloading (3.5tonne vehicle, 2.5m wide, 6.6m long, 3.1m tall).
- Concrete for the weir will be mixed on site using a pan mixer on a tractor adjacent to the site. One ready mix delivery, in a standard vehicle considerably smaller than the articulated lorry, will be required for the power house.

The above material deliveries will not be required on the same day. The penstock would usually be delivered weeks in advance of the weir or power house construction i.e. before any concrete ready mix delivery. Due to the long lead times for the generator and turbine, these will be delivered a few months after the work on the penstock, power house and intake is complete.

Staff vehicles for the installation would be cars and Transit sized vans. Two members of staff, one vehicle, will be required for the laying and joining of the penstock and this will take about two weeks to complete. This would not be carried out at the same time as the construction team building the intake weir. The intake work would normally be done two or three weeks prior to the laying of the penstock. The intake work will take about two weeks to complete and involve two to three people and two to three cars or vans.

Two electricians will be required for three to four days to install all the electrical components in the power house and connect the main cable to the grid. They will usually use one Transit sized vehicle. Following this the installation of the turbine and generator usually requires two to three members of staff, two cars or vans, for two to four days.

There is adequate parking within the farm boundaries for the staff cars and vans, so no parking will be required on the single track highway (C2017).

The overall construction period will be about four months. As explained above, construction work will not be continuous throughout this period. Due to the long lead times for the generator there will about a two to three month break in construction traffic until the supplier delivers the generator, after which the final installation and commissioning takes place.