

Water Supply Project Eastern and Midlands Region

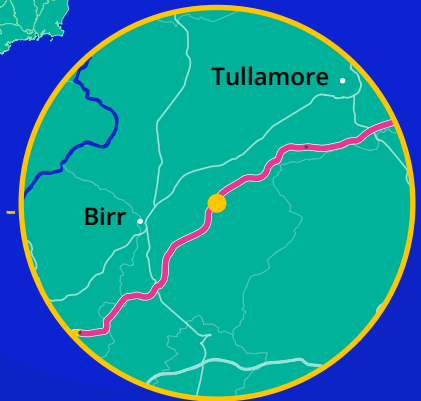
Infrastructure Sites – Booster Pumping Station *near Birr, Coagh Upper, County Offaly*

Overview

The Booster Pumping Station (BPS) provides the additional pressure required to deliver water from the Break Pressure Tank (BPT) to the Termination Point Reservoir (TPR) when the demand for water is above approximately 170 Megalitres per day (Mld). It will be located on agricultural land to the east of Birr at Coagh Upper, County Offaly.



BOOSTER PUMPING STATION (BPS)
Birr at Coagh Upper, County Offaly



What does the Booster Pumping Station do?

The BPS will have three functions during operation:

1

It will provide the pumping needed to increase the flow in water through the pipeline when the demand for water goes over approximately 170 Mld.

2

When the demand for water is below approximately 170 Mld the pumps are not required and the BPS will allow water to bypass the pumping system.

3

It will provide surge protection to manage changes in the pressure within the pipeline.

The site will not be permanently staffed and operatives will only be needed on site intermittently for routine maintenance and inspection.

Booster Pumping Station Architectural Visualisation





What does the Booster Pumping Station site include?

The BPS will include a Booster Pumping Station Building, Surge Vessel, Electricity Substation Building and two transformers. Perimeter fencing, site drainage, buried pipes and a new access road to the substation will also be required.

The BPS Building has been designed as a single-story building approximately 60m long, 36m wide, 8m high with a basement 4m deep.

It has been designed to look similar to an agricultural barn. The ground level will contain offices, control equipment, and a gantry crane for maintenance of the pumps. The basement will contain the pump hall, which will have space for six pumps.

The permanent land take for the proposed site will be approximately 2.6 hectares, including the access road.



How will the Booster Pumping Station be built?

Construction will last approximately 4 years between site establishment and demobilisation. During this period the site will also be used as a construction compound.

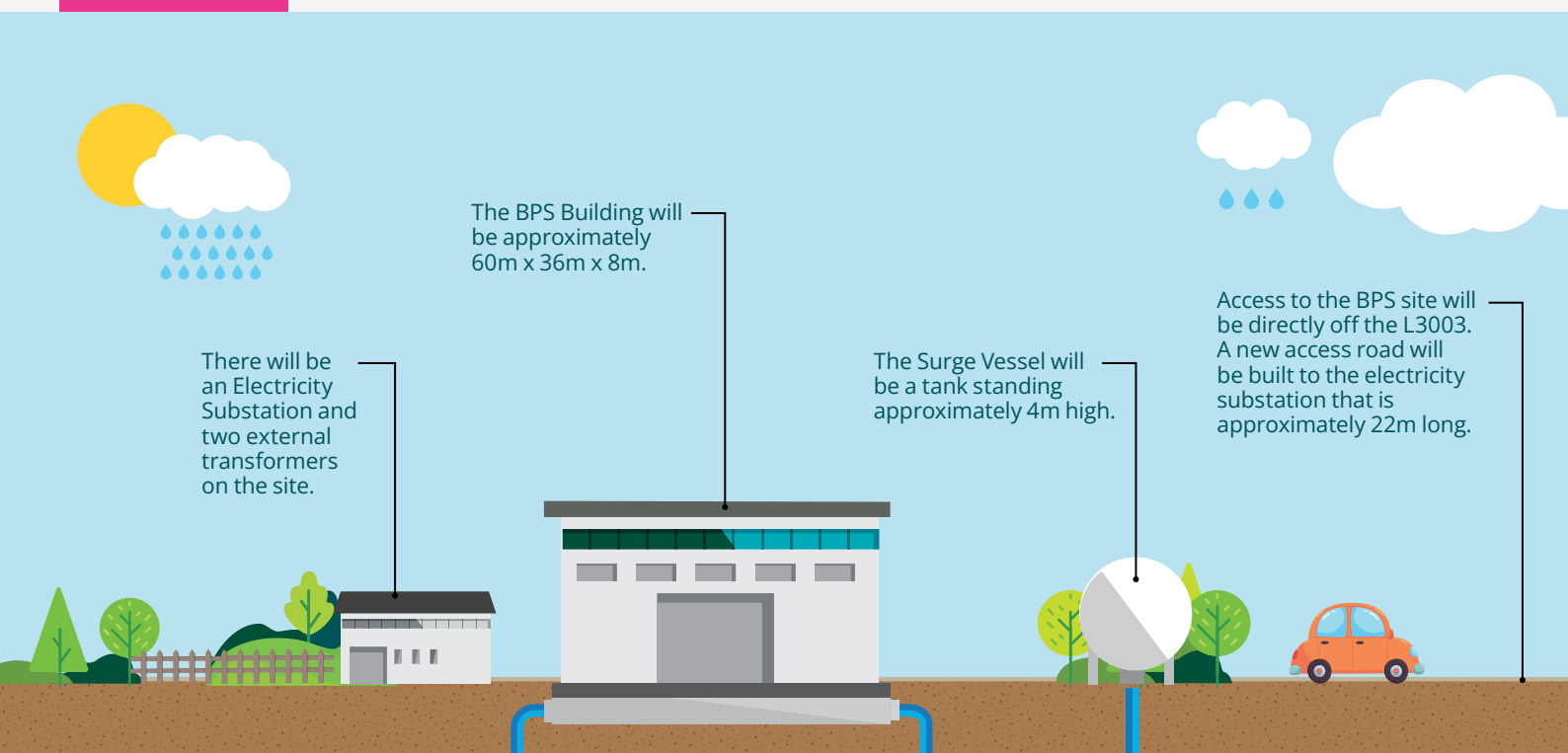
The proposed construction sequence includes:

- Site preparation works.
- Topsoil stripping.
- Earthworks to achieve required ground levels.
- Excavation for BPS substructure.

- Construction of BPS substructure and installation of below ground pipework.
- Construction of the electricity substation, including switchgear, and installation of the electricity substation in full supply.
- Reinstatement of the site, including landscaping and boundary treatment.

The extent of the total area of land required temporarily during construction will be approximately 6.4 hectares.

KEY FACTS



There will be an Electricity Substation and two external transformers on the site.

The BPS Building will be approximately 60m x 36m x 8m.

The Surge Vessel will be a tank standing approximately 4m high.

Access to the BPS site will be directly off the L3003. A new access road will be built to the electricity substation that is approximately 22m long.

The permanent land take required for the Booster Pumping Station will be approximately 2.6 hectares (including the access road)