FACT SHEET

Uisce Éireann
Irish Water

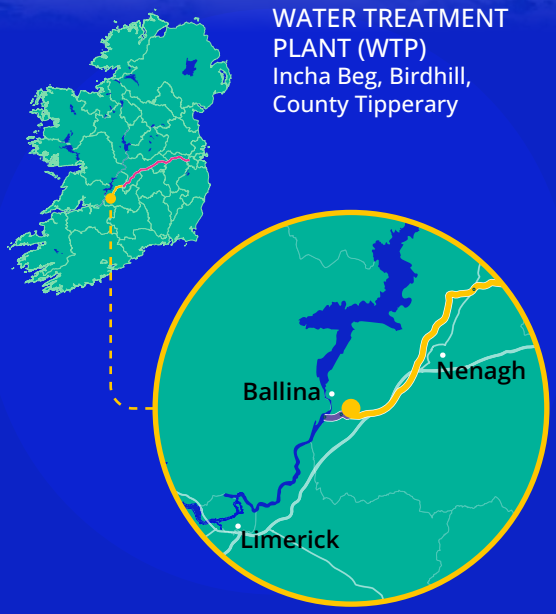
Water Supply Project
Eastern and Midlands Region

Infrastructure Sites – Water Treatment Plant

Incha Beg, near Birdhill, County Tipperary

Overview

The purpose of the Water Treatment Plant (WTP) is to treat the raw water abstracted from Parteen Basin so that it is fit for drinking. The WTP will receive the raw water from the Raw Water Intake & Pumping Station via the Raw Water Rising Mains. The water will be treated at the plant and then pumped to the Break Pressure Tank (BPT). The WTP will be located at Incha Beg, near Birdhill, County Tipperary.



What does the Water Treatment Plant do?

The WTP treats the raw water. This will be done in a number of stages:

1. Firstly, large impurities are removed through pre-treatment and settlement.
2. Then the settled water is passed through filters.
3. The water then undergoes UV treatment and chlorine disinfection before being pumped from the clear water tanks via the High Lift Pumping Station to the BPT.

What does the Water Treatment Plant include?

The WTP will consist of three separate treatment modules, each with its own Water Treatment Module Building. These buildings house the main stages of treatment. Each of the three modules is capable of producing up to 100 Megalitres per day (Mld) of treated water during peak demand.

Architectural Visualisation of the Control Building and Visitors Centre

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FACTSHEET

The Water Treatment Module Buildings will be approximately 141m long, 59m wide and 13m high. The Sludge Storage Silo will be the tallest building on site at approximately 14m tall.

In addition to the Water Treatment Plant buildings there will be a series of buildings needed for other treatment processes including the chemical and UV dosing. There will also be Sludge Dewatering and Storage Buildings, the High Lift Pumping Station and five surge vessels.

A Visitor Centre will be located at the southern end of the Control Building and will contain a reception area and foyer, lecture theatre, display / exhibition area and offices. The Visitor Centre has been included in the design following consultation with the local authority and will be used for pre-arranged events such as school visits.

The site will be permanently staffed with operations controlled from a Control Building, which will include laboratories, a workshop, storage, and welfare facilities for operational staff. The Control Building will be approximately 73m long by 30m wide and 10m high. A new electricity substation, with associated switch gear, will also be required. There will also be a new access road, perimeter fencing, site drainage and buried pipes.

The permanent land take for the proposed site will be approximately 29.3 hectares, including the access road.

How will the Water Treatment Plant be built?

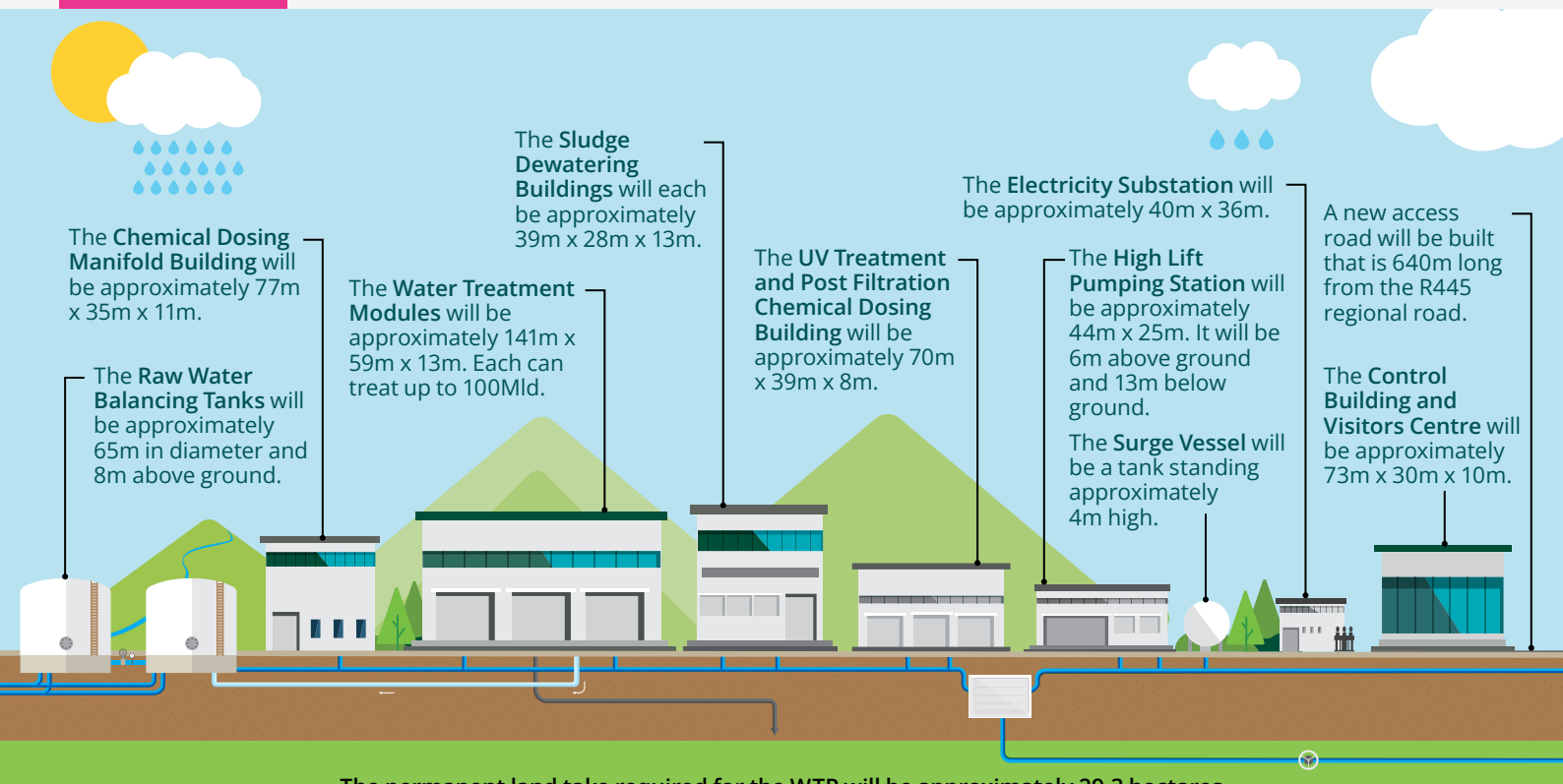
Construction will last approximately 5 years between site establishment and demobilisation. During this period the WTP site will also be used as a principal construction compound.

The proposed construction sequence includes:

- Site preparation works.
- Topsoil stripping.
- Phased earthworks to achieve the required ground level across the site.
- Installation of site drainage and construction of Tank Draindown Management and Commissioning Lagoons.
- Construction of Raw Water Balancing Tanks, Chemical and UV Dosing Manifold Building and temporary water treatment facility.
- Construction of Backwash Water Tank and Pumping Station, Clear Water Storage Tanks and High Lift Pumping Station.
- Construction of filters, tanks and settlement areas.
- Construction of Water Treatment Module Buildings.
- Construction of Sludge Dewatering Buildings.
- Construction of Sludge Storage Buildings.
- Site works, landscaping and boundary treatment.

The total area of land required temporarily for the construction of the site is approximately 31.8 hectares.

KEY FACTS



The permanent land take required for the WTP will be approximately 29.3 hectares (including the access road)

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