



Water Supply Project Eastern and Midlands Region

Infrastructure Sites – Raw Water Intake & Pumping Station Garrynatineel, at Parteen Basin, County Tipperary

Overview

The Raw Water Intake & Pumping Station (RWI&PS) will abstract the raw water from the eastern shore of Parteen Basin, downstream of Lough Derg in the townland of Garrynatineel, County Tipperary. It has been designed to abstract a maximum of 300 Megalitres of water per day (Mld). Once abstracted, the Raw Water Pumping Station will pump the water to the Water Treatment Plant (WTP).



Nenagh



What does the Raw Water Intake and Pumping Station do?



The Raw Water Intake provides the abstraction of water from Parteen Basin through an Intake Chamber. Some initial treatment of the water will be undertaken at the Raw Water Intake site including removal of large debris using screens. A further filtration process will be used to remove invasive species. The Pumping Station will then pump the raw water approximately 2km, through twin 1500mm diameter steel pipes to the WTP. There will be two sets of three pumps and these will operate on a duty/ assist/standby configuration.

Ballin

Limerick

Under normal operation, the water will be abstracted over 24 hours with the pumps operated at variable speed to allow the volume of water to be altered based on the amount needed.

Raw Water Intake & Pumping Station Architectural Visualisation

Safeguarding our water for our future







What does the Raw Water Intake and Pumping Station include?

The RWI&PS site includes a bankside Intake Chamber, a Raw Water Pumping Station Building, two Microfiltration Buildings, an Electricity Substation, a Power Distribution Building and four Surge Vessels. There will also be a new



How will the Raw Water Intake and Pumping Station be built?

Construction will last approximately 5 years between site establishment and demobilisation. The site will also serve as a construction compound during this period.

The proposed construction sequence will include:

• Site preparation works.

access road, perimeter fencing, site drainage and buried pipes.

The Pumping Station Building will contain the pumps and act as the control centre for the RWI&PS. The building will include an entrance foyer, pump room and control/data telemetry room. Although the site will not be permanently staffed there will also be an office and welfare facilities. Below ground will be the raw water pumps and pipework. The building

- Construction of the groundwater settlement basins and construction of Wastewater Holding Tank.
- Construction of a temporary piling platform in Parteen Basin.
- Construction of Raw Water Rising Main Swab Chamber, Flow Meter Chamber, Oil Interceptor and Stormwater Attenuation Tank.
- Construction of RWI&PS and Microfiltration Buildings superstructure.
- Mechanical and electrical installation.

will be approximately 31m long, 38m wide, 10m high and 13m deep.

The Microfiltration Buildings will be approximately 21m long, 16m wide and 11m high and will be the tallest buildings on the site.

The permanent land take for the proposed site will be approximately 4.2 hectares including the access road.

- Construction of a 20 kV Electrical Substation and connection to the power supply.
- Commissioning of the works.
- Site works, landscaping and boundary treatment.

The extent of the total area of land required temporarily during construction will be approximately 5.5 hectares.



