

Inistioge Water Supply Scheme

Irish Water



Contractors

Ward & Burke

Client

Irish Water

Location

Thomastown, Co Kilkenny

Products

Fabricated steel access cover with mechanical struts for lift assistance and fall protection safety grids

Dimensions

Beamed unit with 5 covers to give a clear opening of 5635 x 1855 mm

Overview

Ward & Burke, one of Ireland's leading civil engineering firms, specialising in the design and construction of water and wastewater infrastructure, required a bespoke access cover for a large opening on a valve chamber within Thomastown WTP. The design of an access solution had to allow for ease of delivery to site from a small access road and for regular operation by WTP agents.

An EJ design engineer provided on-site assistance, working closely with Ward & Burke to design an ergonomic solution which facilitated regular access to the chamber. The cover dimensions had to match the internal dimensions of the chamber to within 5mm tolerance across the diagonal in order to be a correct fit.

Proposed solution

A flush fit, fabricated steel, beamed unit with 5 covers each fitted with 3 mechanical struts for ease of opening complete with a fall arrest system was approved. In addition lifting bars were incorporated into the frame gussetts to allow for a safe and seamless delivery to site.





Fall protection safety grids and covers fitted with 3 mechanical struts for lift assistance. Safety stay bars are a standard feature to prevent covers from freely closing.

Key benefit to the Client

From the site survey stage to installation, on-going meetings took place between EJ and Ward & Burke's on-site agent ensuring the proposed solution would be fit for purpose and the installation would be seamless. A key ergonomic feature is the lift assistance provided by the stainless steel mechanical struts – which gives a lifting effort of less than 18kg, required for lifting between 20 to 60 degrees and zero effort before and after this range. Safety for WTP operatives is of paramount importance to Irish Water, each cover is fitted with a hand operated safety blocking system which prevents the cover from closing even in high winds.



Selecting the correct access covers for water networks can be a daunting challenge with factors such as compliance, operator & public safety, ergonomics and asset security requiring equal consideration. Engaging with a reputable manufacturer who will commit to working with you to **design and fabricate access solutions that fully comply with the Irish Water specification** will safeguard your project programme and budget.

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