



# September 2022

# Case Study: Downer EDI Wingfield Asphalt Plant - Recycling Client Recycles Weighbridge

## CLIENT

Downer EDI Wingfield Asphalt Plant

## OVERVIEW

Forward thinking organisations are embracing the circular economy by using recycled products and environmentally sustainable processes. One company - a leading road and infrastructure construction organisation - is currently expanding its operations to include sustainable asphalt production using waste road material.

For EPA monitoring, reporting and compliance purposes, the waste material must be weighed each time a truck enters the recycling plant. The repurposed finished product is also weighed as it leaves the plant.

At the Company's recycling plant, there was an old weighbridge that hadn't been used since the site was purchased 11 years ago. The company was keen to repurpose the old weighbridge if practical so they contacted NWI for an assessment.

Remarkably, the old weighbridge deck and pit were in excellent condition - particularly as they had been abandoned and left to the elements for years. However, the system

## SOLUTION

It wasn't feasible to extend internet access to the old weighbridge site so NWI installed a weighbridge control cabinet with a Winweigh Industrial PC to store the data locally. A 4G modem was also installed inside the control cabinet allowing daily data reports to be collected remotely via a tablet or phone.

The new weighbridge set-up also includes:

- Bilanciai CPD digital load cells which are connected to a Bilanciai DD2050 self-serve driver terminal
- Position sensors to ensure accurate weighing every time
- Access gate control (positioned at cabin height) which drivers operate with a swipe card
- Security gate
- CCTV to remotely monitor the site from the control room located far from the weighbridge
- Customised software to provide live data and immediate scheduling updates to eliminate the need for any manual data entry

## OUTCOME

The client now has a highly efficient weighing and data collection system that's tied to their own reporting system. It collects information on:

- Where the waste material was collected
- Type of waste collected
- Name of collection client
- Gross and Net weight
- Truck overload details

All data is accurately captured and daily reports provided - without any manual inputs. This greatly simplifies daily data collection and the compliance auditing process.

The whole system has been so easy for staff to learn and use that they haven't required any follow-up troubleshooting visits from the NWI team. What's more, the refurbishment has added another 10-20 years of efficient service to an old and disused weighbridge. This makes the upfront investment a wise decision for the client company and demonstrates its commitment to the circular economy.

