



Study, project management and monitoring of works for construction of multi-purpose workplace in Melle



Description

The 2008-2012 management contract between the Belgian government and the NMBS (Belgian national railway company) included a growth target of 25% more passengers on inland transport in 2012 compared to 2006. In the 2000-2010 period the number of passengers also rose by 46%.

To achieve this the NMBS is investing in additional rolling stock for which suitable maintenance infrastructures are required.

Because the current workshop in Merelbeke and the central workplace in Gentbrugge are no longer suitable for the productive, modern and environmentally friendly maintenance of rolling stock, it has been opted to centralise these NMBS activities at a new multi-functional workplace in Melle.

The new workshop will therefore take over the activities of the existing workshop in Merelbeke and the central workplace in Gentbrugge, so the current workplaces can be closed in due course.

Infrabel is also planning large-scale infrastructure works. One of these concerns the Regional Express Network

(REN). Melle is located close to different end points of the REN network.

As a result, the existing railway site in Melle (a former marshalling yard along the Nonnenwegel) with its location and size is the most suitable place for the maintenance and repair of the REN equipment (Desiro).

The most important work is the construction of:

- a workplace for locomotive equipment with 17 internal tracks (TW);
- a workplace for towed stock with 9 internal tracks (WGM) with a washing line for goods material;
- a building for the storage of hazardous products;
- two receiving units with boarding platform for interior cleaning;
- two technical buildings (gatekeeper building and tank building);
- a tank installation (150,000 litres).

The work started in June 2014.

Assignment of TUC RAIL

Within the context of the multi-purpose Melle workplace, TUC RAIL is carrying out the following work by order of the NMBS:

- Project management and monitoring of the work for the construction of a new multi-purpose workshop on the site of the old shunting station in Melle;
- Project management;
- Studies and preliminary studies;
- Submission of licence applications and OHD (exemption file);
- Drawing up tender documents (specifications);
- Administrative procedures (public procurement);
- Monitoring of sites;
- Safety coordination during the design and construction phases.

TUC RAIL solutions for restrictions inherent to this project

With a programme of such scale one must take account of numerous preconditions. These are integrated in the Programme.

The site was heavily bombed during the World Wars. This means one must proceed with a bomb investigation. Various explosives have already been found. The site had to be preventively evacuated twice when Belgium's bomb disposal unit was called on to the site for disposal purposes.

The workplaces must suffice with regard to the requirements of annex 6 (industrial buildings) of the Royal Decree of 7 July 1994 (establishment of basic standards for the prevention of fire and explosion). A fire prevention strategy has been developed to meet these requirements. This includes rainwater being stored as extinguishing water. The buildings are also fitted with a sprinkler installation and smoke and heat extraction system.

To meet the energy performance and indoor climate standards it was also decided to install a combined heat and power system, a heat pump and a solar boiler.

Various alleviating measures were detailed in the exemption file. Different embankments were constructed, sown and planted on the site. This is a consequence of the landscape study that ensures optimal landscape incorporation in the environment. The site also has an infiltration buffer to compensate for the paved surfaces. To restrict the inconvenience for the people living in the vicinity to a minimum, the design was also subjected to a noise and a light study.

