The geogrid reinforced soil system, with fully connected concrete panel facing.

# The heart of the matter

Tensar's TensarTech® ARES™ concrete panel retaining wall system was the cost-effective choice for a new elevated arterial road in Lublin city centre.

## CLIENT'S CHALLENGE

Contractor Dura Sp. z o.o. sought a cost-effective alternative to traditional cast insitu reinforced concrete, for the retaining walls supporting a new road in Lublin city centre.

## TENSAR SOLUTION

Tensar's TensarTech ARES retaining wall system was chosen for the project. The geogrid reinforced soil system, with fully connected concrete panel facing, was faster (and therefore more economical) to build than cast insitu walls.

**Lubelskiego Lipca '80**

Retaining Walls

Lublin, Poland

## BENEFITS

**Significant**
cost savings compared with a cast insitu concrete solution

**Modular system**
reduced construction risk during temporary works

**Rapid**
and economical construction

**REF** TEN370

TensarTech ARES delivered significant cost savings compared with reinforced concrete walls.

## PROJECT BACKGROUND

Lubleskigo Lipca '80 is a key road in Lublin city centre. As part of a major regeneration of the area, which included construction of a new 15,500-seat stadium and 'multi-modal' station, the area's road network needed to be upgraded, which included extending Lubleskigo Lipca '80 on a reinforced earth embankment.

After approaching several companies to develop a solution for the retaining walls to support the reinforced earth structure, contractor Dura Sp. z o.o. chose Tensar's TensarTech ARES wall system.

TensarTech ARES comprises concrete panels with short tails of geogrid cast into them, the full designed length of geogrid is mechanically connected to Tensar uniaxial geogrids in-situ to reinforce the soil mass behind. A polymer bodkin connector delivers high connection efficiency without the concern for corrosion. The precast panels come in a range of surface finishes to suit project requirements. The result are strong, durable and low maintenance retaining walls with a design life of up to 120 years.

The TensarTech ARES system met the highway load requirements and, because precast panels were used, the walls could be built without the need for specialist equipment and were faster to construct compared to in-situ concrete. As a result, TensarTech ARES delivered significant cost savings compared with reinforced concrete walls.

Contractor:
**Dura Sp. z o.o.**

Client:
**Zarząd Dróg i Mostów w Lublinie**

*"Using HDPE geogrid reinforcement and connectors allowed a durable corrosion free system that was built on time and on budget"*

**Craig Roberts**
Technology Manager
Walls & Slopes

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