



## Conversion of Former Cold-Store

### Whapload Road, Lowestoft

**Sector:** Commercial  
**Client:** Perter Colby Commercials  
**Value:** Unknown  
**Completion:** Early 2016

Technicus Consulting was appointed to provide structural design and consultancy services for the conversion and extension of an existing cold-store building. The existing structure comprises a steel portal framed warehouse with attached 2 storey office area of masonry construction.

Whilst the more modern steel framed portion of the building was in generally good condition, the masonry built office area had suffered degradation of the structure due to years of water ingress.

The roof and first floor structures comprise in-situ concrete suspended slabs with Hyrib type reinforcement and permanent shuttering to the bottom face. Ongoing water ingress had caused notable corrosion of the reinforcement thus weakening the slabs.

The client requested that the existing slabs were retained and reused if possible. However, due to the level of corrosion this was not considered feasible without strengthening. To minimise disturbance to the existing structure, a sealing and anti-corrosion coating was specified along with a steel supported timber deck structure positioned tight to the underside of the existing slabs thus making them structurally redundant.

This system of repairs and additional support structure allowed the client to renovate the structure ready for reuse with minimal disturbance to the existing building fabric.



*View of Office Area Prior to Works*



*Corroded Support Beam and Slab Reinforcement*



*Proposed Office & Warehouse*