

Q11.4 – 667 Words

Shelter Hall, Brighton – Phase 2

Client: BHCC

Contact: Leon Bellis, BHCC Project Manager – leon.bellis@brighton-hove.gov.uk

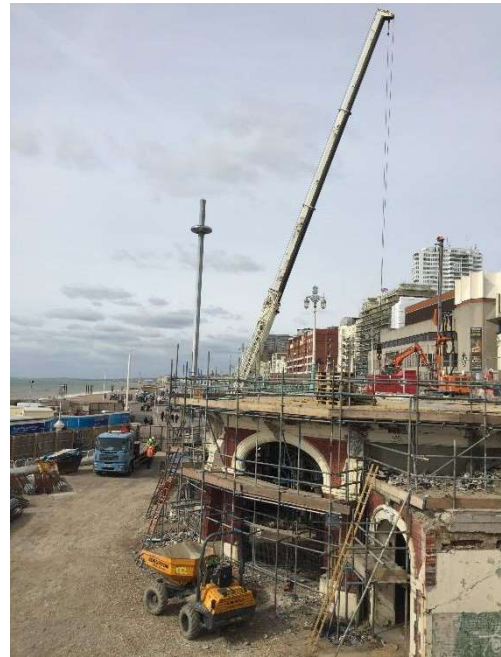
Contract Start: March 2017

Contract Completion: November 2017

Value: £2,067,913.00

Description of Contract & Scope

Edburton Contractors Ltd (ECL) acted as Principal Contractor in providing structural support to the main A259 at its junction with West Street and the Victorian seafront building known as Shelter Hall. Once the structural support works were completed ECL demolished the old building leaving the site safe and ready for development. The environment was particularly challenging due to existing retail use of nearby arches, proximity to the i360 Observation tower, foot traffic along the beach walkway & road traffic / pedestrians on the A259 above.



Delivery Principles



ECL were engaged on a negotiated fee basis through its then Term Highways Maintenance Contract amended to suit the following disciplines:

- Design responsibility for Temporary Works
- Contract specific insurance to protect Clients' risk
- Contiguously piled temporary retaining wall
- Screw piles and raking shores for permanent works pending construction of the new building
- Demolition of the old Shelter Hall Structure.

A dedicated design team was established prior to commencement including:

- Clients Representative – Leon Bellis
- Structural Engineers - HOP
- CAT 3 Structural Engineers – Tony Gee & Partners
- Contractors Team – Edburton

Regular meetings were held stating in January 2017 (see attached Q11.4 Diagram 01 for example) to ensure that strict control was maintained:

- Designers Risk Assessments and subsequent Contractors RAMS
- Surety of maintaining the integrity of the existing Highway Asset (A259)
- Public liaison
- Cost monitoring
- Future development of the new Shelter Hall building



Risk Management and Scheme Challenges

Through Early Contractor Input and holding regular progress / design meetings the following design methodology was jointly agreed and undertaken:

- Installation of a contiguously piled retaining wall with 600mm diameter piles up to 20.0m deep plus an RC capping beam. This was particularly challenging due to a 3.0t weight limit over a large footprint of the site
- Temporary RC bases within the original building supported on mechanical screw piles to be used for temporary propping prior to demolition
- Permanent RC retaining walls within the original building prior to demolition to be used as temporary works during demolition
- Installation of RMD Kiwkform raking shores
- Robotic and traditional demolition



Emergency Work Planning

- Due to the nature of the environment and the proximity to the sea we had to react within 24 hours to adverse weather warnings to protect against beach erosion which threatened to undermine the site compound which included all welfare, contractors and client offices, parking and storage.
- Through ECL owning and operating its own haulage fleet, including a 42.0 GVW low loader along with a large fleet of 3.5t – 25.0t 360 excavators it was able to provide labour and plant at very short notice to replenish shingle

Innovation

Due to the 3.0t weight limit imposed on the Shelter Hall roof we had a very limited footprint within which to operate. Through early engagement with piling specialists Van Elle to select a compact but high performing piling rig, use of the lower prom for craneage and the storage of reinforcement we were able to keep all pedestrian and vehicular routes open as well as having zero effect on neighbouring business premises



Outcome – Budget, Schedule and Quality

The project successfully delivered the ability for the next phase of the development which was to be construction of the new Shelter Hall.

The project demonstrated ECL's ability to achieve BHCC's key outcomes for this Highways Services Contract as follows:

BHCC Key Outcomes	Project Achievements
Environmental	Worked to correct beach erosion. Demolition waste removed for recycling.
Cost management	Cost control undertaken closely with the Client
Customer satisfaction	Successful completion facilitated the next phase of building works
Quality assurance	Innovative techniques introduced to solve problems
Safety	Pedestrians and motorists safely segregated from the works. All works planned and executed to ensure ongoing structural integrity
Social value	No disruption to adjacent businesses. Prom remained open for pedestrians
Schedule management	Works undertaken to planned programme
Well Planned Permits	Works undertaken under BHCC Permit