

Preston Barracks S278, Brighton

Client: U+I Plc

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Contract Start: 2019

Contract Completion: 2022

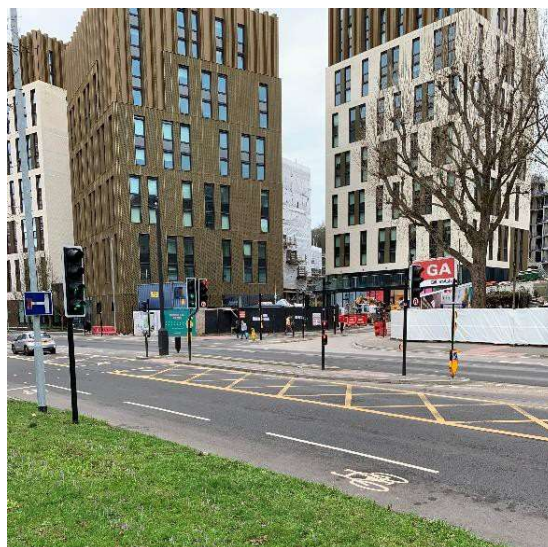
Value: £945K (S278 Highway works)

Description of Contract & Scope

Edburton Contractors Ltd (ECL), as Principal Contractor, carried out enabling, S278, hard and soft landscaping works to develop the former MOD barracks site on Lewes Road, Brighton into a mixed development of student accommodation, study space and housing. The contract was undertaken on a JCT form of contract.

A significant highway improvement contract was delivered on Lewes Road including:

- Removal of:
 - trees and vegetation
 - signs and redundant street lighting
 - CCTV masts
- Installation of:
 - highway drainage network
 - signage
 - street lighting and CCTV masts
- Construction of:
 - 2 signal-controlled junctions including duct networks, traffic signals and signal commissioning
 - new tarmac footpaths including tactile crossing points
 - three new roads into new development
- Resurfacing of Lewes Rd outside developments
- Application of new road markings
- Soft landscaping works to verge areas



Risk Management and Scheme Challenges

Traffic Management –ECL worked with BHCC to develop a traffic management (TM) system for this busy Brighton thoroughfare to mitigate the use of temporary traffic signals and maintain constant traffic flows. ECL produced multiple TM plans to allow the implementation of the different phases of the works and used these to apply for Temporary Traffic Regulation Orders (TTRO) from BHCC to alter the traffic flows and close adjoining side streets where required.

A contraflow system allowed the usually segregated bus, cycle and traffic lanes to pass through the works whilst maintaining pedestrian segregation in both directions. Temporary signalled pedestrian crossing points at strategic points throughout the works allowed pedestrians to safely navigate traffic-controlled areas.



Interface with Adjacent Sites - The works required co-ordination with three other main contractors on adjacent sites who were constructing nine different buildings in order to maintain access for constructions activities. As buildings were handed over in a staged process during the project, measures were required to allow residents and office users access through our works. ECL constructed extensive temporary access routes to enable vehicle and pedestrian access while keeping fire routes clear.

Utility Diversions and Installations – ECL co-ordinated utility works within its TM in order to:

- Divert utilities in order to realign existing kerbs and footpaths to minimise TM required and maintain traffic flows along Lewes Rd.
- Install utility supplies to the new developments including high & low voltage cables, Openreach & Virgin ducts, Southern Water mains and SGN gas installations.

Night Working - As each phase of work was completed large sections of the project required carriageway tarmac resurfacing. ECL undertook the resurfacing and road marking works at night in order to maintain the quality of the surface finish by occupying a greater road width than was possible under the daytime TM system without temporary traffic signals which would cause severe traffic delays during the day. The works were undertaken during mild dry weather to ensure a high quality of road surface and markings were achieved.

ECL worked with BHCC and in particular the Environmental Health department to determine the noise levels of the construction plant and ensure the works would not cause undue disturbance to local residents who were informed via letter drops of the upcoming works.

Innovation

Several large trees lined the eastern edge of Lewes Road where ECL were required to install a duct run to connect the northern and southern signal-controlled junctions. ECL undertook trial holes and in conjunction with the BHCC tree officer it was determined that these new ducts could not be laid in the footpath without causing damage to the tree roots. It was therefore decided that the ducts should be laid in the carriageway. This meant excavating near a number of water mains and electricity cables. To mitigate the risk of damage to these utilities ECL used a vacuum excavator to excavate the trench safely.



ECL have now adopted this innovative excavation technique on other schemes for BHCC including traffic signals projects and a SuDS scheme at Carden Avenue where it was used to safely excavate around tree roots and a medium pressure gas main.

Outcome – Budget, Schedule and Quality

The project successfully delivered new access roads into the high-profile Preston Barracks redevelopment project and provided safer means for pedestrians to cross Lewes Road.

The project was delivered to budget with tight cost-control governing all works and variations.

Whilst the Covid pandemic, high volume of additional utility works and developer-imposed constraints caused some extension to the overall project, the S278 works themselves did not interrupt site handovers. The works were sequenced to ensure a managed completion and there was no impact on the opening of the new student accommodation and commercial spaces.

Works were monitored using the ISO9001 Quality Assurance scheme. This details how works are undertaken and checked to ensure compliance. We worked in close liaison with the Clerk of Works. Snagging was undertaken as the works progressed.

Despite the high volume of both pedestrian and road users that passed through the works during the programme there were no reported accidents and complaints were minimal. Brighton events such as the Marathon, Pride and London to Brighton cycle race all took place and were unaffected by the works which is testament to the delivery teams co-ordination and planning of the project.



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

BHCC Key Outcomes	Project Achievements
Carbon neutrality	Re-routing ducts to prevent damage to trees and utilise vac-ex
Cost management	Project delivered to budget
Customer satisfaction	Traffic flows maintained and adjacent sites serviced
Quality assurance	On going QA monitoring ensured snag free handover
Safety	TM segregation of pedestrians through works
Social value	High profile local events unaffected by the project
Schedule management	Interfaces with other main contractors maintained access and handover dates
Well planned Permits	Multi-disciplinary working within Permitted TM minimised disruption, saved TM costs and demonstrated collaboration