

DUNLOPILLO SITE, PANNAL, HARROGATE **S278 & S38 HIGHWAY WORKS** HARROGATE

D&C Section 278 & 38 highway and infrastructure works for a new Care Home under construction on green field site off the A61.

CLIENT
RYCROFT GROUP (HOLDINGS) LTD

VALUE
£1.80M

PROCESS
ROADS AND HIGHWAYS

This scheme included S278 and S38 highways for a major new care home on a green field site outside Pannal, North Yorkshire. Through existing Design Partner relationships we were asked to help undertake Value Engineering to find cost savings as the scheme was over budget.

Design solutions put forward by AEY included raising the level of the proposed A61 roundabout by 0.4-0.8m removing the requirement to reduce the carriageway levels while still meeting NYCC highway requirements. This solution eliminated the need to divert nationally important fibre-optic BT cables at an estimated cost to the Client of £1M+ that was threatening the scheme's viability. Our proposals led to us negotiating the contract for the works.

AEY entered into a direct contract with BT to provide fibre optic cable protection, and provide ducts and boxes to divert copper BT cables, this generated further £300k saving against the original BT quote to the Client. The new roundabout levels eliminated the need for substantial excavation, further cost and programme implications whilst minimising disruption to traffic on the A61.

S278 Highways Works included:

- traffic and pedestrian management working off-peak restricted hours on the live very busy A61
- construction of new A61 roundabout & carriageway widening
- drainage works, ducting, and street lighting
- Statutory Undertakers diversions

S38 Works included:

- construction of a new 250m long adoptable road from the new A61 roundabout to the new care home in green field land with bulk earthworks re-using existing material on-site and soil modification/ground stabilisation to create new embankment
- ducting and street lighting
- footway construction
- new foul and surface water drainage and the construction of a new attenuation tank constructed using pre-cast concrete box culverts
- accommodation works for new incoming services
- road signage, timber post and rail boundary fencing

Additional VE activities undertaken post tender resulted in the following innovative solutions:

- AEY proposed the re-use of 12,000m³ of existing waste arisings already on site from an adjacent project rather than importing quarried stone for embankment fill and capping layer. Using lime and cement soil stabilisation/modification techniques to improve CBRs resulted in £50k cost saving and significant environmental savings (CO₂, reduction in wagon movements on local roads).



