# **SMARTRAF**

## **Army & Navy Junction**

Client

**Henderson & Taylor** & Essex Highways





Services

Smartraft® & VRS



29th March 2021



**End** Date

25th May 2021



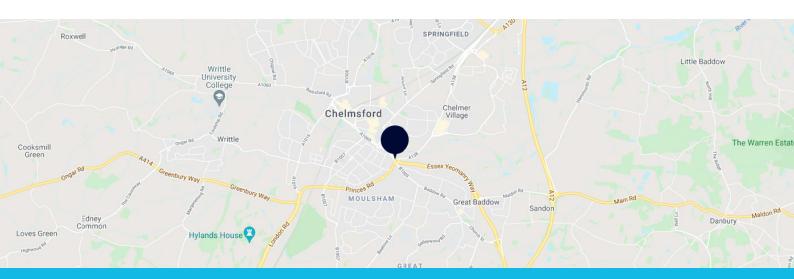
Chelmsford, Essex

## The Project

**Army & Navy Junction** 

The Army & Navy junction consists of a five-arm roundabout which serves approximately 60k vehicles a day travelling through Chelmsford. The temporary varioguard system present at the junction required replacing with a semi-permanent, cost effective solution that supported the safe passage of vehicles through the area.

The solution was the introduction of a new Vehicle Restraint System (VRS), this was undertaken by Henderson & Taylor with sub-contract of VRS elements to Arbus.





## The Challenge

This project included a significant amount of re-design and civil engineering work to provide an improved VRS solution at the junction.

Installation of VRS would typically include driven posts or concrete foundations up to and over 1,000mm in depth.

Physical constraints including services, drainage and hard ground made using traditional installation methods problematic.





### The Solution

Arbus offered a new innovative product, Smartraft® as a potential foundation solution for the VRS system.

After careful consideration and planning, Henderson & Taylor and Essex Highways accepted trialling Smartraft® with an integrated kerb face on the project.



### The Result

Using Smartraft®, which included radius for some sections and an integrated HB2 kerb face, did present its own challenges in ground preparation and connections to existing safety fencing systems, but overall the solution was successful.

Together with the team at Henderson & Taylor and Essex Highways, all obstacles were mitigated safely and efficiently.







### **Feedback**

"Essex Highways and Henderson & Taylor are pleased with having used Smartraft® as a safe, quick solution, helping to reduce the interface with underground services and obstructions, and reduce the carbon footprint of this project."

Essex Highways & Henderson & Taylor