

CASE STUDY

Sunningdale Level Crossing Renewal

LOCATION:	Sunningdale, Feltham Resignalling Scheme
CLIENT:	Atkins Global
DURATION:	Commenced June 2021, Completion November 2021



Introduction

Global Rail Construction Limited (GRCL) was awarded a multi-disciplinary contract on behalf of Atkins Global for the Civil and S&T installation works for a new level crossing at Sunningdale, which falls within Feltham Resignalling Phase 2.

The overall Feltham Resignalling Project covers the renewal of all signalling assets. Its area is covered by seven scheme plans, with delivery broken down into six separate Phases that align

approximately to the Signalling Scheme Plan boundaries, Feltham ASC Signallers panels and Wokingham Signal Box.

Within the early advanced scope of Phase 2 was Sunningdale MCB-CCTV, which is subject to a full level crossing renewal - due for completion in November 2021. The scope encompasses life extension works with addition of barrier repositioning and narrowing of carriageway.

Civil Engineering and Signalling Scope of Works

GRCL's awarded summary of works for this level crossing renewal includes the full civil engineering scope and trackside signalling equipment installation works. GRCL will deliver and construct these works, where possible, in fenced or Site Warden protected areas. However, there will be requirements for certain areas to be constructed during possessions/line blocks.

All works are being delivered in-house and cover the following items of work:

- ① Barrier and Red Man Standing Signal Bases and associated route/cable entries

- ① Marshalling Box bases and associated route/cable entries
- ① Earth Mat installation
- ① Turning Chamber
- ① Highway Works – Carriageway, Footway & Footpath Works
- ① RTL bases with NAL sockets and associated route/cable entries
- ① Installation of route/cable entries
- ① Existing Barrier Base modifications
- ① Lighting Control Unit Bases
- ① Hardstanding Areas
- ① Removal of existing fencing/gates
- ① Installation of new fencing/gates
- ① Sign Bases

Challenges and Solutions

Stakeholder Management

This level crossing renewal involves several stakeholders including Atkins Global, Network Rail, and other contracted parties. GRCL have worked collaboratively with all concerned and used all reasonable endeavours to coordinate and make necessary allowance for working alongside others to deliver this level crossing renewal in accordance with the overall project programme.

GRCL has been booking all staff, working on site, into NDS:24/7's Site Access Control Centre, prior to the commencement of work and booking them out using the same system on completion of their shift.

GRCL has also provided advance notice and liaison with Network Rail and Station Operators for their works at Sunningdale Station, with all staff signing in/out as required by the local rules/arrangements.

Benefits

As a multi-disciplinary contractor, Global Rail Construction Limited offer rail infrastructure contracting services on a design and construct basis. Our capabilities support the latest technology, management, and engineering know-how, which allow us to deliver rail projects and services to the highest standards of quality and safety.

As a Principal Contractor ourselves, we understand the requirements of CDM 2015 and can support Tier 1 clients through our own experiences of delivering high profile opportunities throughout the UK rail network on both Transport for London and Network Rail infrastructure.

Our in-house professionals have the know-how to deliver multi-disciplinary turnkey design and construct projects and work to meet and exceed our client's needs on time and within budget.

Programme Management

The project has been programmed to be completed in two Stages - Stage 1 Advanced Works in July and August 2021 (to coincide with advanced footpath/carrageway closures and possessions) and Stage 2 Main Works during the de-commissioning/commissioning Period and Road Closure starting week 30 and ending week 31. This has meant that the whole of the Civil Engineering Construction works shall be complete by Saturday 30th October 2021.

Global Rail Construction Limited is also ensuring that Atkins Global are provided with all necessary and relevant input and data for co-ordination with all other parties during the progress of the works. The provision of such data has been made at such times as to enable all other parties to be co-ordinated to meet the requirements of the main project programme and to ensure that the GRCL is able to achieve its own completion date.

This has required high levels of coordination with Atkins Global Signalling Team to ensure that activities, responsibilities, dates, and times are understood throughout the works and our closely monitored by GRCL's site management team.

We understand the importance of collaboration to minimise disruption to their activities and operations while we work.

Working on mainline railways and metro systems in the UK our inclusive approach allows us to offer a full in-house solution and provide full design and build services in the following areas:

- ① Civil, structural engineering and building
- ① Mechanical, electrical and power
- ① Signalling and telecommunications installation
- ① Permanent way