

 **Brentford to Southall “Golden Mile” Surveys**

**£220k**  
/ Project Value

**October 2020**  
/ Project Commenced

**March 2021**  
/ Project Completed

**Network Rail**  
/Client

Network Rail is developing a scheme to create connectivity for a passenger service between the existing Southall Station and a proposed station called Brentford Golden Mile.

The London Borough of Hounslow has ambitious regeneration plans for the historic ‘Golden Mile’ employment corridor in Brentford which is occupied by GlaxoSmithKline’s global HQ, BskyB’s media campus and a succession of other employers with circa 20,000 people employed along this stretch. The majority of employee’s rely on public transport however the lack of a local rail station is restricting the areas ability to attract future business.

As a result Network Rail were commissioned to complete GRIP 3 Option Selection with BCM Construction and sister company Equate Design supporting through providing survey services



### **The Challenge**

The main challenge on this project was track access planning and coordinating multidiscipline surveys across multiple lines using only a line block strategy along a 3 mile stretch of track with various open lines and various other interfaces with 3<sup>rd</sup> party land owners etc. managing the challenges that the rail environment presents for time and access constraints

### **The Solution**

This scheme was delivered by planning the works and breaking the programme down into a series of mini programmes to suit the survey requirements, while not compromising on key programme dates for overall delivery of the survey works. This was a fully collaborative effort by BCM Construction with our client, Network Rail.

### The Deliverables:

- Topographical Survey and Laser Scan – validation and update of survey control points for survey. Topographical and laser scan survey for full route using highly accurate scanning technology. Data used to create 3D model of route including all layers for vegetation, surface and objects. The topographical survey was detailed and captured the general site layouts, structures including platforms, buildings, footbridges & canopies, column positions, beam positions, retaining walls, lighting columns and boundary fencing to survey the intricacies of the railway.
- Ground Investigation – Borehole and windowless samples at various locations in both rail and highway environment to understand the ground conditions. This included ground contamination, stratum of ground, stability of ground type and understanding ground water levels. All cores sent to laboratory for testing with A factual ground investigation report produced
- Ecological Survey – Site survey of full route to identify and determine how to avoid/manage ecological constraints by undertaking a Preliminary Ecological Appraisal and provide a report
- Vegetation Management – to allow access to works and to accurately complete required surveys completed in line with findings of ecological survey
- UXO and Buried Services – Full services search including all pipeline and utilities in the survey area. This included high density areas of Southall station including platforms, track and public station areas. Unexploded Ordinance survey of the area showing bombing history and assessment of associated risks.
- Tag and Trace Survey – All cables in survey area tagged and traced back to source including signalling, power and telecoms cables

#### Outputs and Benefits

**High Accuracy:** Using the latest survey technology and techniques, BCM Construction has created a high quality, high accuracy output which can be used by our client for design and planning for the future stages of the project.

**Access Management:** BCM Construction are highly experienced in managing access to constrained areas for time and site limitations which on this project we were able to complete the works in line with these limitations

