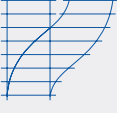







Oban Rail Siding and Road Surveys

<p>Case Study</p>  <p>Rail Survey</p>	<p>Client</p> 	<p>Project Date</p>  <p>March 2017</p>	<p>Location</p>  <p>Oban, Scotland</p>
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Scope

UTEK StarNet were contracted to produce a topographic survey of Oban Station Down Sidings, and surrounding area, as part of the proposed siding alterations at Oban.

The survey extended along all three tracks from Albany Street Overbridge to the buffers of each siding and through any S&C (switches and crossings).

The survey location was adjacent to Oban Station at the terminus of the line from Crianlarich on the main West Highland Railway and the access roads to the Ferry Terminal.

- Mileage of Site: 71m 500yds & 71m 900yds
- Linespeed: 10mph in the sidings
- Three Sidings
- The survey was coordinated into a local grid and tied into Ordnance Survey control, established off track, in accordance with Network Rail & Mapping advice NR/L3/TRK/3101 & NR/GN/TRK/3103

Solution

Two UTEK surveyors, with Network Rail Personal Track Safety (PTS) accreditation, carried out the project which took four days utilising UTEK's Leica TS16 1" Total Station a Trimble S8 1" Total Station. A Local control point was installed to allow re-establishment of survey control in accordance with the Network Rail Survey & Mapping Advice Note NR/EE/AN/00026.

UTEK's surveyors collected the following data from each site:

- Rail positions of all rails from the gauge point on the running edge
- Track surveyed at 10m intervals. This was reduced to 5m intervals for curves with a radius less than 500m



- Track features: Welds, joints, twist rails, IBJs, cable routes, location cases, signalling equipment & any other relevant features
- Track materials
- Back of the Platform wall at Siding No.1 to be gauged at 5m centres and construction noted
- S&C switch tips, crossing noses, first and last though bearers
- Point numbers
- Signal posts and ground signals, including type and signal numbers
- Telecomms masts and bases
- Fence Lines and types of fencing
- Spot levels in the sidings at 10m grid centres
- Cable routes and cross track cables, noting width and type
- Drainage features along the length of the surveyed track and within the S&C to include: culverts (position and invert levels at ends); drainage routes where visible; catchpit and manhole covers (including accessible invert levels)
- Mileposts
- Location Cases including text string of LC number if available
- All signs including text string of sign
- Any feature that may affect gauging
- Existing ferry terminal access roads
- Existing buildings perimeter
- Indexed digital photographs



UTEC's surveyors supplied the following data to the client:

- Full survey report with PGM diagrams
- AutoCAD 2D and 3D .DWG and PDF files of survey data
- AutoCAD 2D and 3D .DWG and PDF files of survey data
- GENIO .GEN format files (all rail strings were continuous and running in one direction, from low mileage to high mileage)
- Indexed topo photography
- Indexed rail photography

Result

"I was impressed by the survey teamwork provided by UTEC, from the management & the surveyors, as well as their subsequent results. All survey work was completed as planned and we had no issues at all with the detailed information provided."

John Bell | P. Way Design Consultant, Transportation, UK & Europe

About UTEC

Since 2005, UTEC, an Acteon company, has grown to become one of the world's largest independent offshore and onshore survey providers.

We provide a wide range of survey, positioning and data management services using the most advanced equipment and techniques.

Our highly experienced team have more than 4000 years of combined survey experience and can find solutions for our clients' most complex challenges.