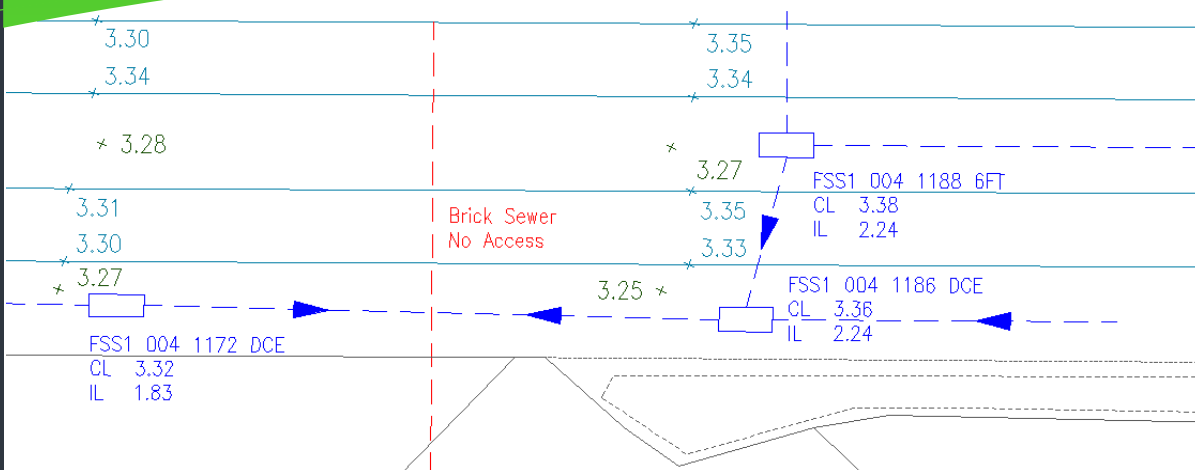


# Pro Rail Services



## CLIENT NAME

Network Rail

## PROJECT NAME

Plaistow  
Drainage survey

## SECTOR

Railway Drainage

## DURATION

4 Midweek Nights

## LOCATION

Plaistow to Upton Park

## CONTACT US

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Unit 2 – 4 Little Ridge, The  
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## PLAISTOW TO UPTON PARK – DRAINAGE SURVEY AND MAPPING

### INTRODUCTION

Pro Rail Services Ltd. Is a Railway civil engineering contractor who execute railway drainage maintenance contracts on Network Rail infrastructure. This project took place between Plaistow and Upton Park on Anglia Route.

### THE CHALLENGE

Track drainage in the area was both unknown and not functional, causing numerous wet beds on the track.

Pro Rail Services Ltd. was commissioned by Network Rail Anglia Route to survey and map the drainage system in the area, identify key points such as outfalls, flow directions, invert levels and connections between the Cess and 6 foot drainage systems.

The project took 4 midweek nights with jetting unit, CCTV and topographical survey support.

### THE SOLUTION

The Pro Rail Services Ltd planning team developed a project plan that ensured the works could be completed safely and effectively between both stations, which are located 1.3 km apart.

The team consisted of:

- Site manager
- Surveyor
- Two jetting lorry units
- RRV team with suction unit
- POS Supervisor
- RRV Operator
- Crane Controller
- CCTV survey team
- Six multi skilled operatives working across the site

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## PLAISTOW TO UPTON PARK – DRAINAGE SURVEY AND MAPPING

### DELIVERING THE SOLUTION

Over four midweek nights, Pro Rail Services Ltd team surveyed and mapped out the full 1.3km length between Plaistow and Upton Park stations using the Leica GPS GS10 and Leica Total Station TS06 Plus survey equipment.

With support from our jetting and CCTV units, we were able to determine outfalls, locate and clear the most serious pipe blockages and identify poor condition of track drainage sections such as collapsed and broken pipes.

On track plant provided by our in house fleet included:

- Doosan DX270 RRV Excavator
- RRV Trailer and Boxes
- RRV Drainage Suction Unit

Off track support included:

- Jet Vac Unit
- High Pressure Jetting equipment

### THE RESULTS

- All 63 catchpits, rail and surrounding ground levels between the stations were mapped and invert levels measured in ordnance datum Newlyn coordinates
- 3 extra catchpits were found and dug out while buried under the ballast
- AutoCAD drawings were provided with all necessary details for future repairs and designs to prevent further floods and general drainage improvements