



**RAIL CROSSING EXTINGUISHMENT APPLICATION FORM**

**SECTION 118A HIGHWAYS ACT 1980**

**TRANSPORT AND WORKS ACT 1992**

**NAME AND LOCATION OF RAIL CROSSING** Farnborough North Level Crossing (the Crossing)

**APPLICATION TO EXTINGUISH PUBLIC**

**FOOTPATH NO** Bridleway 24 (BW24)

**IN THE DISTRICT OF** Rushmoor

**LENGTH IN METRES OF PATH OR WAY**

**TO BE EXTINGUISHED** 17 meters

**DESCRIPTION OF PATH/WAY TO BE EXTINGUISHED**

BW24 starts on the footbridge over Blackwater River and proceeds west over the A331 via another footbridge before approaching the eastern side of Farnborough North Rail Station (the Station) before finally traversing the Crossing. As part of this application, BW24, insofar as it traverses Network Rail land, is to be stopped-up.

**NAME OF APPLICANT** Network Rail Infrastructure Limited

**ADDRESS** One Puddle Dock, Lion Wharf, London, EC4V 3DS

**ADDRESS FOR CORRESPONDENCE** Darren James, Floor 4S, One Puddle Dock, Lion Wharf, London, EC4V 3DS

**1 OWNERSHIP OF LAND AFFECTED BY APPLICATION**

**1.1 Are you the owner and occupier of all the land affected by the Application? Yes**  
**If YES go to 1.4**

**1.2 State your legal interest in the land**

The railway, including the Crossing, is owned by the Applicant. The extent of the land ownership is shown on the attached in Appendix 1.

**1.3 Give the following details of all other persons having a legal interest in the land affected by this application Indicate on a plan at not less than**

**1:2500 scale the extent of the interests listed above NOTE:**

You must include written consent from all other persons having a legal interest in land affected by the proposed extinguishment before this application can be processed.

**1.4 NAMES AND ADDRESSES OF PUBLIC UTILITY UNDERTAKERS IN AREA:(a)  
Public gas supplier National Grid Plant Protection Brick Kiln Street Hinckley  
Leicestershire LE10 0NA**

**a) PUBLIC GAS SUPPLIER**

Southern Gas Networks (a Scotia Gas Networks Company) Plc  
Tradeston  
95 Kilbirnie Street  
Glasgow  
G5 8JD

**b) PUBLIC ELECTRICITY SUPPLIER**

Scottish and Southern Electricity Networks Plc  
Inveralmond House  
200 Dunkeld Road  
Perth  
PH1 3AQ

**c) WATER UNDERTAKER**

South East Water Ltd  
Rocfort Road  
Snodland  
Kent  
ME6 5AH

**d) SEWERAGE UNDERTAKER (IF DIFFERENT)**

Thames Water  
Clearwater Court,  
Vastern Road,  
Reading  
RG1 8DB

**e) PUBLIC TELECOMMUNICATIONS OPERATOR**

BT Group plc,  
BT Centre,  
81 Newgate Street,

London  
EC1A 7AJ

## 2 REASONS FOR APPLICATION

- 2.1 Give reasons for the proposed extinguishment of the rail crossing. Include information about the current use of the existing path, the risk to the public of using the present crossing and the circumstances that have given rise to the application, the effect of the loss of the crossing to users and on any connecting rights of way, the opportunity for taking alternative action to remedy the problem such as a diversion, bridge, tunnel or carrying out safety improvements, the estimated cost of any practicable measures and the barriers and/or signs that would need to be erected if the order were confirmed.

### Background to this application

Farnborough North level crossing is one of the highest risk crossings on the applicant's rail network. Consequently, it has been developing various options for reducing the risk and/or closing it since at least 2013.

The Crossing exists in a complex set up, both physically and legally. It is a hybrid crossing which combines a vehicular, user worked crossing with a public bridleway. It is situated in close proximity and gives the only direct access to a busy Farnborough North station.

It is already equipped with unique and very expensive risk mitigation measures; warning lights and interlocking gates operated by a crossing attendant. Despite of the presence of which, the Crossing continues to present a high risk of accident and in Network Rail's expert view, should be closed.

Since 2014, Network Rail has been developing a number of options to close the Crossing. This principally included designing of a pedestrian footbridge which: a) was accessible and step-free; b) was located as close to the Crossing as achievable to continue to cater for the public user, and; c) could physically be fitted on what is a very constrained site whilst keeping in with its surrounds and having minimal impact on neighbouring properties.

None of the multiple options developed between 2014 and 2019 could be built.

Consequently, in 2019, Network Rail commenced a Transport and Works Order (TWO) process to compulsorily acquire neighbouring land (builders merchant behind platform 1), obtain a deemed planning permission for a footbridge with lifts and to extinguish all rights in the Crossing along with dedication of new public rights on the proposed footbridge.

In light of the delays in producing essential evidence required to promote a TWO by Network Rail's supply chain, which knock-on effect is such that the scheme (including build-out) could not be completed within the current, funded, control period, Network Rail decided to pursue closure of the Crossing under traditional legal

means. This was to deliver the footbridge before the unavoidable expiration of funding in March 2024, with the resulting, very significant abortive (public) cost.

The Crossing formally carries a public bridleway (Rushmoor 24 [BW24]), restricted under a traffic regulation order (TRO) on public safety grounds. It is a common ground between Network Rail and Hampshire County Council that, the Crossing is unlikely to ever be reinstated for equestrian use, nor is there such requirement – the bridleway links two urbanised, mainly residential and industrial localities and is intersected on its other end by another high-risk crossing – Hatches level crossing (also subject to a TRO) which Network Rail also proposes to close. Against this backdrop, it is difficult to see under what circumstances the restriction could be lifted.

Having thoroughly consulted with Hampshire County Council (HCC) about the most appropriate legal route for delivering Network Rail’s objectives, we were advised that a stopping-up application under section 118A of the Highways Act 1980 should be made to extinguish the section of BW24 over the Crossing.

Following which, Network Rail in a separate and subsequent application, will dedicate a public footpath over its platform and a new footbridge at the station to link with the remainder of BW24. The net outcome is effectively downgrading the existing BW24 to a footpath over part of the platform and proposed new footbridge. The exact course of the new route and the footbridge specifications have been annexed to this application.

The rationale for the stopping-up of BW24 is set out below.

### **Risk assessment**

Network Rail’s operating licence states that its primary obligation is to run a safe and efficient railway. Consequently, it is bound to continuously assess and eliminate unacceptable risks to ensure the safety of passengers, staff and members of public.

The latest version of the Narrative Risk Assessment (NRA) was completed in September 2021 (Appendix 2). Network Rail’s method of risk assessment of its crossings comprises two components:

1. Quantitative – a mathematical model called All Level Crossings Risk Assessment Model (ALCRM) which is composed of two elements:
  - (a) Individual, expressed by a letter on a scale of A to M where A represents the highest individual risk, and;
  - (b) Collective, expressed by a number on a scale of 1 to 13 where 1 represents the highest collective risk.
2. Qualitative – in the form of Narrative Risk Assessment which is complimented by ALCRM but also feeds important data into the ALCRM. It contains an assessment of the risk observed at the crossing, including but not limited to: line speed and train frequency, frequency and type of public use and misuse, sighting distances, environmental factors relevant to safety.

In its most recent risk assessment this crossing has been assigned an ALCRM score of E2, which means it is has high level of both individual and collective risk. This means that the Crossing is ranked as the 4<sup>th</sup> riskiest of 151 open footpath/bridleway

crossings on the Wessex route at the time of assessment (despite being equipped with (uniquely – more than) maximum risk mitigation measures available). The current risk profile would be 90 % higher if there were no crossing attendants.

The following key risk drivers were identified by ALCRM and contributed towards the risk score:

### **Safety concerns due to trains passing each other the Station**

A common feature at locations like the Crossing with two or more railway lines is that there is a high risk that a second train approaching the Crossing on the second set of rails can become fully obscured by a train that has just passed a user on the nearer line, and the user could then step out onto the deck to cross without seeing or hearing the second train. This accounts for 43 % of the risk profile at the Crossing and is effectively the largest single risk driver.

Passing trains generate an additional hazard as they may block the user's sighting of another approaching train. A user who starts traversing the Crossing on the basis that the train has passed may then step out behind a train assuming that it is safe to do so, only to step in front of another train. External influences such as being in a hurry, wearing headphones or simply the noise of the train passing may also impact on the user's decision-making process to identify if another train is coming.

### **Misuse**

The Crossing has a long history of misuse and near misses which only exacerbates its risk profile and accounts for 30 % of the overall risk driver. These are incidents which involve cyclists and pedestrians traversing straight over the Crossing without reacting to the miniature stopping light (MSL) warnings.

Misuse at the Crossing significantly reduced when level crossing attendants were introduced in December 2014. However, there still were incidents of deliberate misuse of the Crossing which involved 9 events between April 2014 and September 2022, most of which occurred when the Crossing and MSL was activated. There are no permanent misuse recording methods at the Crossing which will provide a more accurate synopsis of the misuse profile. The incidents which we know about are reported empirically by railway staff, train drivers and members of the public. As such, our experience dictates that the incidents reported are significantly less than the actual number of misuse events.

The propensity for misusing the Crossing combined with the risk of being struck by a second train accounts for a total of 73 % of the overall risk driver. Therefore, they cannot be examined in isolation. The usual manner in which the Crossing is misused increases the risk of being struck by a second train. And, short of closing the Crossing, there is essentially no more feasible mitigation measures at our disposal. Currently, the presence of MSLs and level crossing attendants will naturally reduce the risk somewhat yet still ranks as the 4<sup>th</sup> riskiest crossing on the route. In the absence of level crossing attendants, the risk would be 90 % higher. Appreciably, the Crossing exceeds our risk appetite despite the relevant mitigations implemented thereby rendering permanent closure the only safe and viable alternative.

Please refer to the table below which shows the recorded misuse events:

OFFICIAL

Event Date	Description
May 19,2022	LC Misuse - a MOP had put their hand over the crossing to operate the green release button when the barriers were closed at Farnborough North Level Crossing.
May 19,2022	LC Near Miss - 1V38 07:02 Gatwick Airport – Reading involving a group of 20 - 30 users crossing Farnborough North Public Footpath Crossing (MSL). EBA applied.
Aug 14,2020	LC Misuse - Nuisance calls made to the signaller from Farnborough North level crossing
Jan 26, 2020	LC Misuse & Trespass - Two youths at Farnborough North level crossing were jumping over the gate before running on the tracks between the two platforms
Jun 9, 2018	LC Misuse - 2V46 (GWR 05:24 Gatwick Airport to Reading) reported a person ran across Farnborough North foot crossing in front of the train and on to the platform in an attempt to board the train
Oct 10, 2017	Misuse LC – Crossing keeper reported a male walked the round locked gates at Farnborough North LC.
Jul 27, 2016	LC Misuse - A young male ran across as a train was approaching at Farnborough North LC, Farnborough - Reported by crossing keeper
Jun 30, 2016	LC Misuse - Cyclist was seen to cross over Farnborough North LC, Farnborough as a train was approaching - Reported by 1052
Apr 13, 2015	LC Misuse - 2V50 0624 Redhill to Reading reported person crossed in front of train at Farnborough North Foot Crossing. Not near miss.
<b>Dec 1, 2014</b>	<b>ATTENDANT NOW IN SITU*</b>
Nov 11, 2014	LC Misuse - 2V65 1529 Redhill - Reading reported a person walk in front of train at Farnborough North LC
Sep 18, 2014	LC Misuse - 2044 1604 Reading - Redhill reported person ran out across Farnborough North LC
Sep 12, 2014	LC Misuse - 2V631434 Redhill - Reading reported two girls crossed in front of the train at Farnborough North Level Crossing - Not near miss.
Jul 19, 2014	LC Misuse - 2V67 1634 Redhill - Reading reported a MOP cross in front of train at Farnborough North LC. Not a near miss.
Jul 10, 2014	LC Misuse - Person walked across Farnborough North LC from the Down to the Upside as 2044 1604 Reading - Redhill was approaching.
Jun 26, 2014	LC Misuse - 2050 1904 Reading - Shalford reported that person ran out across Farnborough North LC in front of train
May 25, 2014	LC Misuse - 1076 1318 Reading - Gatwick reported 2 teenagers run across track at Farnborough North LC
May 9, 2014	LC Misuse - 2029 07 34 Reading - Gatwick Airport reported person crossed against warnings at Farnborough North Level Crossing.
Apr 4, 2014	LC Misuse - 2027 0606 Reading to Shalford reported crossing misuse at Farnborough North Level Crossing.
Mar 31, 2014	LC Misuse - 2038 1204 Reading - Redhill reported a MOP walk from down to up line at Farnborough North LC
Mar 15, 2014	LC Misuse - 2053 2134 Reading - Gatwick Airport reported that MOP ignored road lights at Farnborough North LC & walked across

Train speeds

The maximum attainable line speed at the Crossing is 70mph on both lines for passenger and freight traffic. However, not all railway traffic will be travelling at line speed due to several factors such as red signals, and trains accelerating and decelerating to and from the Station.

The variation in the speed of the trains as the Crossing introduces a distinct risk in so far as waiting times will vary as the timing on the MSL is set to allow enough time for the fastest service to approach safely. Slower, stopping services will extend that waiting time causing frustration and potentially lead to misuse from those not prepared to wait for extended periods.

### **Vulnerable users**

As part of our risk assessment criteria, vulnerable users are a special category of users whose ability to traverse a level crossing is impeded by one or more factors. These factors include, the elderly, mobility impaired, visual and audio impaired, unaccompanied children, people with prams, family groups with children, mounted cyclists dog walkers and fishing persons with fishing kit trolleys. Vulnerable users are considered to have certain characteristics which impede their ability to safely use the Crossing in comparison to the ordinary able-bodied pedestrian. Consequently, we increase the time it takes to traverse the Crossing by 50% to allow vulnerable users to safely traverse the Crossing. Further, any mitigations implemented will be introduced against the expected traverse time of vulnerable users. From the census data collected at the Crossing, we observed regular use by large groups of school children, users encumbered by fishing trolleys and large shopping bags, and users wearing headphones which effectively renders them audio impaired. The natural consequences of vulnerable usage of the Crossing becomes confounded when combined with other factors such as sighting distance and adverse weather. These will be explored further below.

### **Sighting distance and vulnerable users**

The sighting distance for the approaching trains at the Crossing is non-compliant with the prescribed minima. The sighting distance is the amount of sighting a user has at the level crossing of an approaching train. It is the key decision-making tool at this location of a user to decide if it is safe to cross or not. At this location there is insufficient sighting in the downside direction to allow the user to safely reach the other side if they decide to cross with a train approaching.

The recommended decision point for a footpath crossing stands at a minimum of 2 metres from the nearest running rail. From this position a crossing user should be able to decide if it is safe to cross the line. The length of traverse is then calculated from this point until 2 metres past the furthest running rail. Anything below the 2-meter range is considered the danger zone. The sighting at the respective decision points is impeded as follows:

1. From the upside – the decision point here is obscured by the level crossing attendant's hut forces the user to move to 1.2 meters from the running rail.
2. From the downside – the decision point here is obscured by the MSL equipment and fencing which forces the user to move to 1.5 meters from the running rail.

The overall traverse length at the Crossing is 10 metres and a walking speed of 1.189 metres per second is used to calculate the time it takes for an able-bodied user to traverse the Crossing – this would give an overall traverse time of 8.4 seconds. However, the traverse time is increased by 50% if there is evidence of vulnerable users which, in this case, there is. As such, the adjusted overall traverse time is 12.62 seconds to traverse the Crossing. However, given the sighting obstructions, the effective traverse length relative to the sighting distance is 9.3 meters which gives even less time (approximately 11.7 seconds) for users to traverse the Crossing from an unsafe decision point. Nonetheless, these calculations become irrelevant if the user obeys the MSL signals which, often, is not the case and only exacerbates the risk profile despite the mitigations implemented.

The maximum line speed at the Crossing is 70mph for passenger and freight trains. For sighting calculations, the assessment is mandated to use the maximum attainable line speed that trains can travel. At 70mph, a train coming from the downside direction will cover the available sighting distance faster than it takes a user to complete the traverse if they approach from the upside or downside (see below table). A sighting distance of 395 metres is required to safely traverse, but in one direction there is only 366 metres available and in another only 309 metres giving a user up to two-thirds of the warning time required.

The table below shows the recorded sighting distances as part of the NRA.

	Required Minimum Sighting for 12.62s traverse time	Ideal Sighting Distance	Measured Sighting	Actual Warning time	Measured from crossing to?
Upside looking towards Up direction train approach	395m	489m	489m	15.62 s	Vegetation on upside curvature
Upside looking towards Down direction train approach	395m	489m	366m	11.71s	Vegetation on upside curvature
Downside looking towards Up direction train approach	395m	489m	437m	13.97s	Vegetation on upside curvature
Downside looking towards Down direction train approach	395m	489m	309m	9.87s	Vegetation on upside curvature

It is worth highlighting at this stage that a user who misuses the Crossing despite the real risk of a second train coming, the MSL signal, and sighting obstructions faces a unique risk of a fatality. Commensurate to these risks, there is an unacceptable level of misuse which cannot reasonably be mitigated against save for complete closure of the Crossing.

**Recorded daily usage of the Crossing and vulnerable users**



A motion sensor camera census carried out between 20<sup>th</sup> and 28<sup>th</sup> March 2021 to assess the usage of the Crossing. It was revealed that the average daily usage was 1,863 pedestrians and 78 cyclists.

Of the daily usage, there is a high proportion of vulnerable users which includes elderly, unaccompanied children, those who are mentally impaired, people with prams, family groups with children and those with more than one dog on a lead. Evidence also shows that users often wear headphones which introduces further risk.

As vulnerable users are expected to take more time to traverse the Crossing, it follows that the mitigations in the current form are insufficient in view of our safety ambitions. As such, permanent closure of the Crossing is the only safe and viable option to completely eliminate risk.

### **Obstructions caused by weather conditions**

Low horizon can result in sun glare at certain times of the day/year when a user may be dazzled by the sun when trying to locate trains approaching the crossing. Furthermore, a train driver may also be dazzled by the sun glare resulting in reduced visibility of the tracks and level crossing. Should there be a user crossing, the driver of a non-stopping train may not see them. Other weather conditions such as fog or heavy rain also limit a user's sighting and would be dependent, if compromised, on the user returning and potentially misusing the Crossing to complete their journey.

### **Consultation carried out**

Network Rail has been consulting its proposals for the Crossing continuously since 2014. Consequently, there is a good degree of awareness of its proposal amongst local authorities, statutory consultees, local residents and public at large alike.

The most recent round of consultations was concerned with the TWO application, yet the merits of the proposal remained unchanged.

Network Rail has organised several public meetings both in Farnborough and Frimley, consulted with all local authorities and consultees as well as kept HCC abreast of the progress. No voices of opposition were raised.

For these reasons, Network Rail proposes, in the current application to consult again during the formal consultation of the order.

### **The footbridge**

The provision of an access for all footbridge is the only appropriate method of crossing the railway based on the recorded usage at the Crossing whereby the known risks are eliminated. The access for all element of the footbridge includes cycle guttering for cyclists and lift shafts for those with prams, fishing trollers and mobility issues. The stairs will be provided for all other able-bodied users.

From the census data collected, we have learned that there was minimal usage of the Crossing for ordinary users, and no usage for vulnerable users, during the unstaffed hours which are 00:30-05:30 Monday to Friday, 00:30-05:45 on Saturday and 00:30-06:15 on Sundays. The lift will be operational during the staffed ours which are 05:30-00:30 Monday to Friday, 05:45-00:30 on Saturday, and 06:15-

00:30 on Sundays. There will be no step free access over the footbridge during the unstaffed hours.

Network Rail has a statutory duty to have due regard to the needs of those with protected characteristics. This is demonstrated through a diversity impact assessment (see Appendix 3) to assess the needs of those with protected characteristics pursuant to the construction of the footbridge. Resultantly, we hypothesised that out of hours access to the footbridge is likely to disproportionately affect mobility impaired and other encumbered users such as people with prams as they will not be able to use the step-free facility during those hours. However, we found that commensurate to the recorded usage of the Crossing during the unstaffed hours, those with mobility impairment and other use encumbrances will not be disproportionately impacted.

Other users such as pedestrians, dog walkers and cyclists will be able to use the footbridge 24 hrs of the day which is consistent with the current usage profile. Therefore, the net outcome as regards the usage profile will not be significantly changed by the construction of the footbridge.

Specifications for the footbridge have been appended to this application in Appendix 4

**3 Are you prepared to enter into an agreement with the Council in accordance with section 118(5)?**

Yes

**4 DECLARATION**

**We:**

**4.1 agree to pay any compensation which may become payable as a result of the coming into effect of an extinguishment order made as a result of this application**

**4.2 confirm that I am the sole owner and occupier of land affected by this application**

**OR**

**enclose letters of consent from all those having a legal interest in land affected by this application**

**4.3 confirm that the existing definitive route is fully available to the public and will not be obstructed before an extinguishment order is confirmed and comes into effect OR understand that it is an offence to obstruct a public right of way and that I/We may be required to remove any obstructions before this application is processed**

**4.4 agree to pay the full advertising and administrative costs associated with the processing of this application.**

- 4.5 agree (should the Order be opposed) to allow the Inspector appointed by the Secretary of State and his/her accompanying parties access to the existing right(s) of way and/or the land around it/them, as appropriate.
- 4.6 undertake to pay the fees associated with this application to Hampshire County Council as a non-returnable fee.

We declare that all of the information contained in this application is true to the best of my/our knowledge and belief

Signed

*D. James*

Date 15/06/2023

This form together with a plan at not less than 1:2500 scale should be returned to Hampshire County Council, The Castle, Winchester SO23 8UJ

#### Data Protection Act

To progress this application we may need to disclose information we receive from you to others, including other Central Government Departments, public bodies, local authorities, other organisations and members of the public.