

## LEVEL CROSSINGS ACT 1983

### THE NETWORK RAIL CORNTON No.1 LEVEL CROSSING ORDER 2021

Made on 06 May 2021. Coming into force on 10<sup>th</sup> May 2021.

The Secretary of State for Transport, having been requested by Network Rail Infrastructure Ltd ("the operator") to make an Order under section 1 of the Level Crossings Act 1983<sup>1</sup> ("the Act") makes the following Order in exercise of his powers under the Act and all other enabling powers, in accordance with the draft Order which accompanied the request subject to those modifications the Secretary of State thought fit to make.

1. This Order may be cited as the Network Rail Cornton No.1 Level Crossing Order 2021 and shall come into force on 10<sup>th</sup> May 2021.
2. In this Order:
  - (a) "the carriageway" means the carriageway of the specified road, "the crossing" means the level crossing described in Schedule 1 to this Order, "the Regulations" means the Traffic Signs Regulations and General Directions 2016<sup>2</sup>, "the specified road" means the road which crosses the railway at the crossing;
  - (b) the expressions "left-hand side" and "right-hand side" shall be construed as they would appear to a person approaching the crossing along the specified road.
3. The following provisions, being provisions which in the opinion of the Secretary of State are necessary or expedient for the safety or convenience of those using the crossing, apply in respect of the crossing:
  - (a) the operator shall provide, operate and maintain the protective equipment which is specified in Part I of Schedule 2 to this Order;
  - (b) the operator shall observe the conditions and requirements specified in Part II of Schedule 2 to this Order;
  - (c) the local traffic authority shall provide and maintain the protective equipment specified in Part I of Schedule 3 to this Order; and
  - (d) the local traffic authority shall observe the conditions and requirements specified in Part II of Schedule 3 to this Order.
4. The Traffic Signs Regulations and General Directions 2016<sup>2</sup> shall apply to any traffic sign specified in Schedule 3 to this Order as they would to a sign caused or permitted to be placed by a highway authority.
5. The Railtrack Cornton No.1 Level Crossing Order 2003 is revoked.

Signed by authority of the Secretary of State on 06 May 2021



Paul Appleton  
Deputy Director, Railway Safety  
Office of Rail and Road

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<sup>1</sup> 1983 c.16

<sup>2</sup> SI 2016 No.362

## SCHEDULE 1

### **The crossing**

The level crossing known as Cornton No.1, where the B823 Cornton Road is crossed by the railway between Stirling and Bridge of Allan Stations.

At National Grid Reference NS 791 962.

The local traffic authority at the time of making this Order is Stirling Council.

## SCHEDULE 2 PART I

### **Particulars of the protective equipment provided by the operator (Art.3(a))**

1. A lifting barrier shall be pivoted as close to the railway as practicable on both sides of the specified road on each side of the railway.
2. When lowered, the barriers shall be as nearly horizontal as possible and shall extend across the full width of the carriageway and the footways.
3. When lowered, the tops of the barriers shall be at least 900mm above the road surface at the centre of the carriageway. The clearance between the bottom edge of the lowered barrier and the road surface at the centre of the carriageway shall not exceed 1000mm unless a skirt is fitted.
4. When in the fully raised position the barriers shall be inclined towards the carriageway at an angle of between 5 to 10 degrees from the vertical. No part of any barrier or of any attachment thereto which is less than 5 metres above the level of the carriageway shall be horizontally displaced from the nearer edge of the carriageway by less than 450mm, and no part of any barrier or of any attachment thereto which is less than 2 metres above the level of the footway shall be horizontally displaced from that edge of the footway furthest from the carriageway by less than 150mm.
5. The barriers shall be as light as possible but shall also be strong enough to prevent foreseeable distortion or fracture likely to be caused by wind pressure.
6. The barriers shall be fitted with skirts so arranged that when the barriers are lowered the skirts fence in effectively the space between the barriers and the ground.
7. The barriers shall display on both front and rear faces alternate red and white bands each approximately 600mm long and to the full depth of the barriers. A strip of retro-reflective material not less than 50mm deep shall be provided along the full length of each band. The retro-reflective material shall be coloured the same as the band on which it is placed.
8. Suitable guards or other protection shall be provided at each barrier machine to prevent danger to persons from the operating mechanism and moving parts of the machine.
9. Three electric lights, to a suitable recognised standard, shall be fitted to each barrier, one within 150mm of its tip, one near the edge of the carriageway and one near the centre point between the other two. When illuminated the lights shall show a red light in each direction along the carriageway, clearly indicating the position of the barriers.

10. A traffic light signal of the size, colour and type shown in Diagram 3014 in the Regulations shall be provided on the left-hand side of the carriageway on each approach to the crossing along the specified road and as close as practicable to the barrier. There shall be an additional traffic light signal of the same type on the right-hand side of the specified road on each side of the railway located in line with, or on the railway side of, the stop line mentioned below. The traffic light signals on each side of the railway shall be positioned to face outwards from the crossing towards approaching road traffic. All the signals shall be capable of directional adjustment.
11. A pedestrian light signal of the size, colour and type shown in Diagram 4006 in the Regulations shall be provided on or adjacent to each traffic light signal post, positioned to face outwards from the crossing towards approaching pedestrians.
12. An audible warning device shall be provided on or adjacent to each left-hand side traffic light signal post. These devices shall be capable of volume adjustment to suit local requirements.
13. A reflectorised stop line of the size, colour, and type shown in Diagram 1001 in the Regulations shall be provided across the left-hand side of the carriageway on each side of the railway, approximately 7.8m before the left-hand side traffic light signal on the northern side of the railway and approximately 7.2m before the left-hand side traffic light signal on the southern side of the railway.
14. Where the specified road passes over the crossing reflectorised edge of carriageway markings of the size, colour and type shown in Diagram 1012.1 in the Regulations shall be provided along each edge of each footway.
15. The centre line of the carriageway shall be marked on the crossing between the stop lines mentioned above with a reflectorised double continuous line road marking of the size, colour and type shown in Diagram 1013.1A in the Regulations.
16. A traffic sign of the size, colour and type shown in Diagram 775 in the Regulations shall be provided on each side of the specified road on each side of the railway mounted below or adjacent to the traffic light signal and shall face outwards from the crossing towards approaching road traffic.
17. A traffic sign of the size, colour and type shown in Diagram 788 in the Regulations shall be provided on or adjacent to each left-hand side traffic light signal post and shall face outwards from the crossing towards approaching road traffic.
18. A traffic sign of the size, colour and type shown in Diagram 966 in the Regulations shall be provided on each side of the specified road on each side of the railway mounted below or adjacent to the traffic light signal and shall face outwards from the crossing towards approaching road traffic.
19. The carriageway over the crossing shall be marked with a yellow 'box' marking of the size, colour and type shown in Diagram 1045 in the Regulations.
20. The level crossing shall be supervised from the signalling centre that controls the signals over the crossing. An obstacle detection system, which shall detect any significant obstruction at the crossing, shall be provided at the crossing.
21. The crossing shall normally operate automatically. The crossing shall also have the facility for the signaller to take manual control at the control point.
22. Facilities shall be provided at the crossing to operate the barriers and other protective equipment. This shall include a local control unit and a local crossing-clear unit. A suitable means of communication between an attendant at the crossing and the signaller shall be provided in close proximity to the local control unit and local crossing-clear unit. These facilities shall be positioned so that the attendant has a clear view of the crossing and approaching road and pedestrian traffic.

23. Lighting shall be provided at least to the same standard as the lighting of the carriageway on the approaches to the crossing. Under local operation, lighting by whatever means shall be sufficient for it to be seen by a local attendant that the crossing is clear whilst the barriers are being lowered and until the 'crossing-clear' push-button is pressed.

24. Protecting railway signals shall be provided and these shall be interlocked with the barriers so that it shall not be possible to raise the barriers from their positions across the carriageway after the protecting signal has displayed a Proceed aspect unless any approaching train has passed over the crossing or sufficient time has elapsed to allow a train to have come to a stand. Whilst the barriers are raised it shall not be possible to clear those signals. Minor barrier movements caused by wind, for example, should not result in signals reverting to Danger.

25. All the protecting signals mentioned above shall be provided with suitable approach locking controls.

26. Cattle-cum-trespass guards of standard railway design shall be provided adjacent to both sides of the crossing surface. The guards shall extend the full distance between the fences on each side of the railway.

27. A telephone, linked to the signalling centre and provided for use by members of the public, shall be provided in a suitable position on each side of the railway. The position of each telephone shall be clearly marked by traffic signs of the size, colour and type shown in Diagram 787 in the Regulations. Suitable notices giving instructions to users shall be provided and maintained adjacent to the telephones and shall be legible at all times.

28. A datalogger recording the operation of the crossing shall be provided. A video recording system shall be provided. The system shall record the entire period of the crossing operation from the start of the amber light sequence until the barriers are fully raised after the passage of a train.

## **SCHEDULE 2 PART II**

### **Conditions and requirements to be observed by the operator (Art.3(b))**

29. The surface of the carriageway and footways over the crossing shall be maintained in a good and even condition and, with the co-operation of the local traffic authority, kept consistent with the surface of the carriageway and footways on each approach. The carriageway shall be approximately 7.9 metres wide and the footway 1.8 metres wide on each side of the carriageway.

30. The barriers shall be kept in the fully raised position except during the time when any train passing along the railway has occasion to cross the specified road, or when it is necessary to lower the barriers for short periods for the purpose of maintenance or testing. The electric lights on each barrier shall be lit except when the barriers are fully raised.

31. The protecting signals shall be controlled from the signalling centre containing the supervising point. Under normal automatic operation, when a route is set from a protecting signal, this shall cause: the obstacle detection system to check for pedestrians; the barriers to lower automatically on the approach of a train; the obstacle detection system to check for obstructions on the crossing; and, if clear, the protecting signals shall clear to a Proceed aspect. The crossing barriers shall rise automatically after the train has traversed the crossing. If an obstruction is detected on the crossing when the barriers have fully lowered, the exit barriers shall rise automatically in order to allow the release of the obstruction.

32. Suitable visual indicators and audible alarms shall be provided to indicate the condition of the crossing.

33. When the automatic lower is initiated or when the 'lower' control is selected, the sequence of events to close the crossing to road traffic shall begin. The normal sequence shall be:
- (a) the amber lights shall immediately show and the audible warning for pedestrians shall begin. The lights shall show for approximately 3 seconds;
  - (b) immediately the amber lights are extinguished the intermittent red lights and the pedestrian light signals shall show;
  - (c) during the activation of the lights and prior to the descent of the left-hand side barriers, the obstacle detection system shall scan the crossing area to check for the presence of pedestrians;
  - (d) if no pedestrian is detected, 4 to 6 seconds after the intermittent red lights have begun to show, the left-hand side barriers shall begin to descend and take a further 6 to 10 seconds to reach the lowered position;
  - (e) if a pedestrian is detected, descent of the left-hand side barriers shall be delayed by up to 15 seconds such that a maximum of 21 seconds after the intermittent red lights have begun to show, the left-hand side barriers shall begin to descend and take a further 6 to 10 seconds to reach the lowered position;
  - (f) if the obstacle detection system confirms the crossing is clear, the exit barriers shall begin to descend and take 6 to 10 seconds to reach the lowered position;
  - (g) the audible warning for pedestrians at the crossing shall stop when all the barriers are fully lowered.
34. Under normal automatic operation, the obstacle detection system shall be used in lowering the exit barriers to avoid trapping road users.
35. The protecting railway signals shall only be cleared once the barriers are fully lowered and after either the obstacle detection system has confirmed that the crossing is clear or 'crossing clear' has been confirmed at the local crossing-clear unit. All the barriers shall rise simultaneously either automatically as soon as the train has passed clear of the crossing or after the 'raise' control has been selected, unless a second train has struck in.
36. If a train passes any protecting signal at Danger, the red lights in the traffic light signals mentioned above shall immediately illuminate bypassing the amber phase. The barriers shall not automatically lower.
37. It shall not be possible to raise the barriers unless the protecting signals are at Danger and free of approach locking.
38. The intermittent red lights of the road traffic light signals and the pedestrian light signals shall continue to show until the barriers have begun to rise and shall be extinguished before the barriers have risen to their fully raised position.
39. If any barrier fails to rise from the lowered position the intermittent red lights of the road traffic light signals and the pedestrian light signals shall continue to show.
40. The operator shall periodically monitor the duration of closures of the crossing to road traffic and shall take action to ensure that closure times are minimised effectively.
41. The operator shall take the lead in developing with the local traffic authority an agreed long-term strategy regarding the use of the crossing and the safety and convenience of users. The strategy, which shall be reviewed periodically, shall take into account: incidents at the crossing; anticipated changes in use; all costs and consequences of continued operation; and shall consider what measures might be necessary or practicable to permit the crossing to be closed to road traffic and pedestrians.

42. The operator shall make arrangements for the legibility and visibility of road traffic signs and road markings relating to the crossing for approaching road traffic to be checked periodically, and to draw any deficiencies to the attention of the local traffic authority.

43. The operator shall maintain communication links with local emergency services.

44. The operator shall give notice in writing to the Secretary of State as soon as the provisions of Articles 3(a), 3(b) and 3(c) have been met and shall request that the crossing be inspected as soon as possible thereafter.

### **SCHEDULE 3 PART I**

#### **Particulars of protective equipment provided by the local traffic authority (Art.3(c))**

45. On the northern side of the railway, the centre line of the carriageway shall be marked for a distance of approximately 21 metres measured along the centre of the carriageway from the stop line with a reflectorised double continuous line road marking of the size, colour and type shown in Diagram 1013.1A in the Regulations. The centre line shall be continued for a distance of approximately 37 metres measured along the centre of the carriageway from the ends of the double continuous line with a reflectorised double line of the size, colour and type shown in Diagram 1013.1D in the Regulations wherein the continuous line is on the left-hand side of the broken line.

46. On the southern side of the railway, the centre line of the carriageway shall be marked for a distance of approximately 12 metres measured along the centre of the carriageway from the stop line with a reflectorised double continuous line road marking of the size, colour and type shown in Diagram 1013.1A in the Regulations. Thereafter the centre line to Diagram 1013.1A shall adjoin the road marking to Diagram 1040.

47. At least one road marking of the size, colour and type shown in Diagram 1014 in the Regulations shall be marked on the carriageway in an appropriate position on the approach side of the road markings described above.

48. Traffic signs of the size, colour and type shown in Diagrams 770 and 773 in the Regulations shall be provided together on the left-hand side of the carriageway on the northern approach to the crossing. Traffic signs of the size, colour and type shown in Diagrams 770 and 773 in the Regulations shall be provided together on the left-hand and right-hand sides of the carriageway on the southern approach to the crossing. Traffic signs of the size, colour and type shown in Diagrams 770 and 773 in the Regulations (permitted variant with directional arrow) shall be provided together on the left-hand side of the carriageway on Forth Park. All the signs shall be provided in a suitable position facing approaching traffic.

49. Traffic signs of the size, colour and type shown in Diagrams 779 in the Regulations with associated plate legend showing safe height shall be provided together on the left-hand side of the carriageway on each approach to the crossing in a suitable position facing approaching traffic.

50. A tactile threshold of a type specified in published guidance shall be provided in each footway on each approach to the crossing in an appropriate position.

### **SCHEDULE 3 PART II**

#### **Conditions and requirements to be observed by the local traffic authority (Art.3(d))**

51. The vertical profile and surface of the carriageway and footways approaching the crossing shall be maintained in a good and even condition and, with the co-operation of the operator, kept consistent with the surface of the crossing to ensure safe and even passage of road traffic and pedestrians over the crossing.

52. Where a deficiency in visibility or legibility of a road traffic sign or road marking is identified by the operator, the local traffic authority shall take action to ensure that adequate visibility or legibility is restored.

53. The local traffic authority shall consult the operator before any traffic signs or other road equipment other than those specified in this Order are placed or caused to be placed on the road in the vicinity of the crossing.

54. The local traffic authority shall consult with the operator when any significant permanent or temporary change occurs or is proposed which might affect to any significant extent the type, characteristic, likely behaviour or amount of road traffic using the crossing, or its ability freely to exit the crossing.

55. The local traffic authority shall take into account any records of incidents at or near the crossing made available by the operator in exercising its responsibilities in relation to the specified road in the vicinity of the crossing.

56. The local traffic authority shall periodically monitor the amount and characteristics of road traffic using the specified road and shall inform the operator where there is any significant change.

57. The local traffic authority shall co-operate with the operator in the preparation and periodic review of a long-term strategy in relation to the continued operation of the crossing.