## SCHEDULE 2

Article 3(c)

## CONDITIONS AND REQUIREMENTS TO BE COMPLIED WITH BY THE RAILWAY UNDERTAKING

- 1. The carriageway shall be approximately 8.4 metres wide at the crossing.
- 2. The ground at the two edges of the carriageway over the crossing shall be made-up to the level of the carriageway for a distance of approximately 2 metres beyond each edge.
- 3. The surface of the carriageway and footways over the crossing shall be maintained in good and even condition.
- 4. The barriers shall be kept in the fully raised position except during the time when engines, carriages or other vehicles passing along the railway have occasion to cross the road.
- 5. The electric lamps or equivalent (light emitting diodes) on each barrier mentioned in Schedule 1 shall be lit at all times except when the barriers are in the fully raised position.
- 6. The crossing shall be illuminated during the hours of darkness to such a standard that the operator can ascertain in conditions of normal visibility that the crossing is clear before the barriers are fully lowered.
- 7. The protecting signals shall be controlled from the signalling control centre containing the crossing control point.
- 8. The picture of the crossing shall be exhibited on the television monitor before the sequence of events to close the crossing to road traffic begins. The picture shall continue to be exhibited until either the barriers are fully raised after the 'raise' push-button is pressed, or if automatic raising is in operation after the 'crossing clear' push-button is pressed.
- 9. Visual indicators and an audible alarm shall be provided at the control point. The indicators shall show when:
  - (a) the main power supply is available;
  - (b) all the barriers are fully raised;
  - (c) all the barriers are fully lowered;
  - (d) at least one of the intermittent red lights of the traffic light signals on each side of the railway is showing along the carriageway.
  - 10. The audible alarm shall sound if:
    - (a) any barrier is horizontally dislocated when in the fully-lowered position;
    - (b) the main power supply fails;
    - (c) all the red traffic light signals facing in one direction fail.
- 11. When the 'lower' push button is pressed or the train occupies a track circuit, the sequence of events to close the crossing to road traffic shall begin. The sequence shall be:
  - (a) the amber lamps shall immediately show and the audible warning shall begin. The lights shall show for approximately 3 seconds;
  - (b) immediately the amber lamps are extinguished the intermittent red lights shall show;
  - (c) 4 to 6 seconds later, the left-hand side barriers shall begin to descend and shall take a further 6 to 10 seconds to reach the lowered position;
  - (d) the right-hand side barriers shall then begin to descend taking 6 to 10 seconds to reach the lowered position;
  - (e) the audible warning shall stop when all the barriers are fully lowered.

- 12. The arrangements shall be such that the protecting railway signals can only be cleared after the barriers are fully lowered and after the 'crossing clear' push-button has been pressed. Unless the protecting signals have been cleared for another train, all the barriers shall rise simultaneously either after the 'raise' push-button has been pressed or automatically as soon as the train has passed clear of the crossing.
- 13. If a train overruns a protecting signal the arrangements shall be such that the red lights will immediately show omitting the amber sequence, the audible warning will sound and all barriers remain in the raised position.
- 14. Controls to automatically initiate the crossing closure sequence for trains approaching from Bellarena will be implemented at Castlerock Station. The crossing closure sequence will be initiated as a train enters the platform but the barriers will not lower. The road lights shall extinguish after a defined time. Pressing the lower button after automatic initiation of the crossing closure sequence will continue to close the crossing.
- 15. The intermittent red lights shall continue to show until the barriers have begun to rise and shall be extinguished before the barriers have risen to an angle of 45 degrees above the horizontal
- 16. If, during the lower sequence, both red road lights on any RTL are failed before the point in the sequence that the barriers are due to start lowering, then the barriers shall remain in the raised position. In this situation, the barriers can only be lowered from the local control unit until the fault is rectified. Once the barriers have begun to lower a further red light failure shall not stop or prevent them lowering.
- 17. If the barriers do not achieve the fully raised position within 10 seconds of starting to raise, then the barriers stop in their present positions. The red RTL's shall re-illuminate and a failed indication and alarm is given at the supervising control centre. A further 2 seconds may be added if required to allow for relay operation.
- 18. A failure indication can only be extinguished when the barriers are either in the fully raised or fully lowered position. In the fully raised position, the failure indication shall only extinguish if the RTL's are also extinguished. (RTL's shall be taken to be extinguished if the controls are set for them to be extinguished. No light proving is required).
- 19. Should automatic lowering or raising take an abnormally long time an audible and visual warning shall be given at the control point.