Certificate of Temporary Non-compliance with a Railway Group Standard

(in accordance with part 6 of the Railway Group Standards Code)

1. Type of deviation

Deviation Number: 12/226/TNC

Temporary non-compliance

2. Details of applicant:

Network Rail (London North Eastern), The Quadrant: MK, Furzton, Floor 3, Desk 054, Elder Gate, Milton Keynes, MK9 1EN

3. Your reference number:

Tracker No. 11985

4. Status of applicant:

Infrastructure Manager, RSSB Member

5. Title of certificate:

St Neots station - Platforms 1, 2, 3 & 4: temporary reduced platform clearance to structures.

6a. Details of Railway Group Standard (RGS):

RGS Number:	Issue No:	Issue Date:	Title:
GI/RT7016	Four	September 2010	Interface between Station Platforms, Track and Trains

6b. RGS clause(s):

7.2

6c. RGS clause requirements:

"7.2 New single face platforms

7.2.1 The usable width of a new single face platform shall be nowhere less than:

a) 3000 mm where the permissible or enhanced permissible speed on the line adjacent to the platform exceeds 100 mph (165 km/h)

b) 2500 mm at other platforms".

7. Scope of deviation:

St Neots station is located at 51m 1276yds on the East Coast Main Line, between London Kings Cross and Peterborough.

Platforms 1, 2, 3 and 4: temporary reduced platform clearance to structures.

8. Impacts of complying with the current RGS requirement:

This temporary non-compliance relates to the horizontal clearance between the platform edge and temporary construction hoardings on all platforms (Platforms 1, 2, 3 & 4) at St Neots Station.

It is noted that St Neots station consists of 2Nr island platform each with 2Nr platforms. However, the temporary situation has been considered as a single face platform as this seems more applicable once the hoarding has been erected.

The station consists of 2 Nr. island platforms, with 2Nr. platforms / island, the layout is as follows:

- Platform 1 Down Slow, Line Speed 80 mph
- Platform 2 Down Fast, 125 mph
- Platform 3, Up Fast, 125 mph
- Platform 4, Up Slow, 75 mph.

Temporary hoardings are required to facilitate the construction of the new footbridge, specifically the foundations and lift shaft pit, at 51ml 1292yds, approximately 50 metres (55yds) north of the existing station footbridge, ECM1/132.

The maximum hoarding length, hence the length of reduced platform clearances, will be 10 metres.

The total length of foundation works extend over a distance of approximately 26 metres; the work will be done sequentially, with the hoarding being moved to suit whilst remaining at the maximum of 10 metres.

To construct the footbridge, it will be necessary to provide foundations and lift shafts, which will require excavation, piling and concreting works. As the station and all platforms are to remain operational, hoarding will be provided to enable the construction works to be delivered safely (see hand marked up drawings CS-055692-111 Rev 0).

Consequently, during this period, clearances will be reduced temporarily. Hoardings will be placed with 1.8 m clearances to the slow line platforms (1 and 4) and 2.2 m clearances to the fast line platforms (2 and 3) with a maximum length of 10 m, running parallel to the platform edge.

In summary, the temporary minimum platform clearance which will be achieved on each platform is as follows (also see Drawing DWG-002 A):

- Platform 1 Down Slow, 1.8 m (2.5 m minimum required for line speeds less than 101 mph)
- Platform 2 Down Fast, 2.2 m (3.0 m minimum required where line speeds exceed 100 mph)
- Platform 3, Up Fast, 2.2 m (3.0 m minimum required where line speeds exceed 100 mph)
- Platform 4, Up Slow, 1.8 m (2.5 m minimum required for line speeds less than 101 mph).

(Foot note)

The proposed footbridge is to be sited at the widest point of the platform which avoids OLE structures, existing station buildings and other operational equipment. At this point, the platform widths are:

- Platform 1/2 - 7.2 m
- Platform 3/4 - 7.3 m.

Once installed, the new footbridge's platform clearances will be non-compliant, as shown below. A derogation on these clearances has previously been agreed (deviation Ref. 12/027/DGN - Tracker No. 9957):

- Platform 1 Down Slow, 2.0 m (2.5 m minimum for line speeds less than 101 mph)
- Platform 2 Down Fast, 2.9 m (3.0 m minimum where line speeds exceed 100 mph)
- Platform 3, Up Fast, 3.0 m (3.0 m min where line speeds exceed 100 mph)
- Platform 4, Up Slow, 2.1 m (2.5 m minimum for line speeds less than 101 mph).

(Site constraints are such that compliant platform clearances cannot be achieved whilst ensuring that sufficient stair widths are provided to safely evacuate passengers from the station in case of emergency).

The difficulty with complying with RGS, in the temporary condition, is that both existing island platforms have a restricted width, thus there is limited scope to provide a fully compliant solution without requiring major track and signalling work.

This is further complicated by the need to maintain a fully operational station.

The programme has been best developed taking account of these restraints, trying to maximise productivity whilst trying to keep passenger disruption to a minimum.

Several different options have been considered, with different configurations of hoarding and working arrangement; however, most were rejected due to the hoardings being: too long; creating passenger blindspots; confusing, requiring many / continual alterations.

Working on one platform at a time / island would minimise reductions in platform clearances; however, this would elongate the programme, hence extend the period of time that passengers would be inconvenienced, and would increase the cost of the scheme to such an extent that the project would not go ahead.

Deliberation has been given to the use of selective door opening to the various stopping trains, but its use has been rejected because it is not possible to manage the train / platform interface. The existing service does not allow for selective door opening on the rolling stock that stops at the station. Even where it is possible to restrict the opening of doors of a particular vehicle, its impact on the performance of the service is deemed unacceptable.

The current passenger usage of St Neots Station is increasing year on year and a balance must be struck between the construction modifications that are carried out by the project and the width of the platforms available to these passengers during the construction phase.

The works must be carried out in a safe and controlled environment, maintaining clear segregation between the passengers, operation staff and the construction works.

The use of hoardings is the best way that this can be achieved.

9. Proposed alternative actions:

The mitigating measures that are proposed to be put in place to manage risks to ALARP include:

1. The platform will be covered by CCTV and platform staff. Additional First Capital Connect (FCC) and Network Rail staff and their representatives are in attendance at the station to guide and direct passengers (particularly during peak periods). Regular meetings will be held to assess the impact of the Works and make alterations to hoardings or working practice as necessary.
2. Site meetings have been held with FCC at the peak periods to review passenger flows and passenger habits. The operational hazards during and after the bridge has been constructed have been reviewed at a HAZOP meeting between Network Rail and FCC.
3. A planned trial of hoardings with staff in attendance will take place in morning and evening "rush hours".
4. The locations of existing CCTV monitoring equipment will be adjusted as necessary so that the hoarding installations do not create any blind spots in monitoring of the platforms.
5. Any existing station signage equipment masked by the hoarding will be relocated on to it.
6. Hoardings will be limited to a maximum length of 10 metres.
7. Hoardings will be smooth faced (without projections) with blocked colour painted surfaces. Customer facing hoardings will be regularly inspected, cleaned and maintained in good condition.
8. Platform surface area to be hatch painted.
9. Lighting will be assessed but, as a minimum, will match existing.
10. Extra station announcements will be made to warn passengers of the platform restriction.
11. Customer information /briefing points will be erected at the access point to the bridge within the station building to advise customers of the works /progress and programme. This will be updated regularly and have attendance at key stages of the development to advise and answer any questions.
12. The platforms will be de cluttered* of platform furniture, i.e. brick flowerbeds, to maximise the available platform areas for passengers to congregate.
13. Section 'C' notices will be submitted to inform train drivers of the works.

* Note: with Platform 1/2 decluttered, 3No flower beds removed, 9 m², the existing waiting shelter removed, 10.54 m², and the temporary hoarding, 32 m², in place, the reduction in available platform area = 12.46 m². (between the existing footbridge and the proposed footbridge location).

The majority of passengers disembark trains (from London) on these platforms so there will be little waiting.

Forty-two trains stop at platform 1 during a week day with twenty-five trains travelling straight through.

Four trains stop at platform 2 during a week day with ninety-six trains travelling straight through.

Note: with Platform 3/4 decluttered, the waiting shelter removed, 67.84 m², and the temporary hoarding, 32 m², in place there will be increase in available platform area = 34.84 m² (between the existing footbridge and the proposed footbridge location). There are no flower beds to be removed.

The majority of people will board trains (to London) on these platforms.

Three trains stop at platform 3 during a week day with ninety-eight trains travelling straight through.

Forty one trains stop at platform 4 during a week day with twenty-three trains travelling straight through.

The clearances to the hoardings would have improved clearances to the Up Fast platform edge to 2200 mm against the existing waiting shelter clearance of 2150 mm.

10. Impacts of the alternative actions:

The temporary non-compliant platform widths are introduced over a short distance.

The planned duration for the temporary non-compliance is approximately 20 weeks, from May 2013 to October 2013.

(Total construction period: 22/04/2013 to 21/04/2014)

Despite the narrow clearances, the risk to passengers is deemed to be acceptable.

St Neots is a category D station and so there are no significant passenger volumes using the facilities.

With the mitigations previously noted (Section: Control of Risk.), i.e. trials, monitoring, meetings / action, communication, it is believed that any potential safety risk associated with the temporary reduced clearances will be reduced to an acceptable level.

11. What other options have been considered?

Several different options have been considered, with different configurations of hoarding and working arrangement; however, most were rejected due to the hoardings being: too long; creating passenger blindspots; confusing, requiring many / continual alterations.

Working on one platform at a time / island would minimise reductions in platform clearances; however, this would elongate the programme, hence extend the period of time that passengers would be inconvenienced, and would increase the cost of the scheme to such an extent that the project would not go ahead.

Deliberation has been given to the use of selective door opening to the various stopping trains, but its use has been rejected because it is not possible to manage the train / platform interface. The existing service does not allow for selective door opening on the rolling stock that stops at the station. Even where it is possible to restrict the opening of doors of a particular vehicle, its impact on the performance of the service is deemed unacceptable.

The current passenger usage of St Neots Station is increasing year on year and a balance must be struck between the construction modifications that are carried out by the project and the width of the platforms available to these passengers during the construction phase.

The works must be carried out in a safe and controlled environment, maintaining clear segregation between the passengers, staff operation staff and the construction works.

The use of hoardings is the best way that this can be achieved.

12. Consultation with affected parties

- Train Operators
- Local Authority.

Discussions have been held with the Station Operator / Train Operator (First Capital Connect) concerning this temporary non-compliance. A site meeting was held during the morning peak period to review the problems and identify acceptable solutions which would safeguard passengers whilst enabling the works to be completed. A joint HAZOP meeting has been held between FCC and Network Rail to review the hazards.

13. Additional actions/observations:

Upon receipt, the applicant is required to identify affected, interfacing parties and copy this certificate, together with supporting information, to those parties.

Attachments:

- First Capital Connect's letter of support dared 29/01/2013
- First Capital Connect's presentation dated November 2012: St Neots – New Integrated Footbridge Scheme, Risk Workshop Meeting for development of buildability proposals
- Network Rail's Report Ref. SNO-AFA-SCA-CAR-0001 Version 1.3: Access for All – St Neots Station, Capacity Assessment Study
- Network Rail's drawing No. DWG-02 Revision A: New combined station bridge and link bridge (extent of temporary hoarding).

14. Method of elimination:

Site constraints are such that compliant platform clearances cannot be achieved whilst construction works are ongoing.

The programme has been developed to keep the disruption to a minimum.

The proposed hoarding layout will be placed in stages (see hand amended staging drawings CS-055692-111 Rev 0 (several) and photographs attached), to allow the following works to take place (platforms 1/2 and 3/4 concurrently). References to areas are as denoted on the attached staging diagrams:

- Demolish existing shelters, divert services where required.
- Area 15 (on staging diagrams): erect hoarding for base 4 and lift shaft base; install piles and place concrete to base 4.
- Make good platform: piles / pile caps to be protected / boxed to form temporary seating, approximately 400 / 450 mm high (Areas B, C and D); seating will be placed perpendicular to platform edge so on arising, passengers will have to turn to approach the platform edge; dismantle hoarding.
- Area 11: erect hoarding for bases 2 and 3; install piles.
- Make good platform; dismantle hoarding.
- Area 16: erect hoarding for base 1; install shuttering and reinforcement for foundation.
- Make good platform; piles / pile caps to be protected / boxed to form temporary seating, approximately 400 / 450 mm high (Area A). Seating will be placed perpendicular to platform edge so, on arising, passengers will have to turn to approach the platform edge; dismantle hoarding.
- Area 20: erect hoarding for bases 2 and 3; excavate, provide shuttering, reinforcement and concrete for pile caps.
- Area 21: erect hoarding for lift shaft pits; excavate, place reinforcement and concrete.
- Concrete Areas A, B, C and D (these areas will be done in a possession / isolation when the station will be closed).
- Make good platform; piles / pile caps to be protected / boxed to form temporary seating, approximately 400 / 450 mm high (Areas A, B, C and D). Seating will be placed perpendicular to platform edge so, on arising, passengers will have to turn to approach the platform edge; dismantle hoarding.
- Area 23: erect hoarding; concrete to base 1.
- Dismantle hoarding; resurface works around new foundation (prior to bridge installation).

The remaining works involve the installation of the steel footbridge, stairs and lifts. As such, no hoardings will be required (other than to prevent unauthorised access onto the stairs / lift shaft). The clearances will now be those to the new footbridge, hence covered in the deviation for the permanent works.

15. Start and end date:

From 08/01/2013 to 31/10/2013

16. Signature of applicant:

Head of Civil Engineering

Date of application:

13/12/2012

17. Lead Standards Committee details:

Name of Committee:	Date of meeting	Minute reference:
Infrastructure	08/01/2013	13/INS/01/030

Authorised by:

Signed by Cliff Cork on 18/02/2013

Date of Authorisation:

18/02/2013

Cliff Cork
Head of Delivery, Infrastructure and Rolling Stock