A66 Northern Trans-Pennine Project
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2.7 Environmental Management Plan Annex B13 Construction Traffic Management Plan (Rev 2) (Tracked)

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2.7 ENVIRONMENTAL MANAGEMENT PLAN ANNEX B13 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

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B13 Construction Traffic Management Plan

B13.1 Introduction

Purpose

B13.1.1 This document forms Annex B13 of Environmental Management Plan (EMP) (Application Document 2.7). Annex B13 is an extended essay plan for the Construction Traffic Management Plan (CTMP) for the A66 Northern Trans-Pennine project (the Project). It will be completed on an iterative basis by the Principal Contractor (PC) as the Project progresses through detailed design and will set out the proposed Temporary Traffic Management (TTM) measures for implementation during the construction of the Project.

B13.1.2 This plan shall provide details of how the works will be phased and how the associated TTM measures will be implemented for each phase in order to deliver the Project safely and efficiently, while minimising the impact on the road users and other stakeholders affected by the project, including the operations of National Highways' asset management and maintenance providers.

B13.1.3 Future versions of the CTMP for the Project shall be informed by detailed design, detailed construction planning and consultation with local highways authorities. Major local businesses and other stakeholders that are likely to be impacted by the proposed traffic management will also be consulted regarding this CTMP. This will ensure that a comprehensive, detailed Traffic Management Plan is available and understood by all parties prior to commencing the works on site.

B13.1.4 The CTMP will be developed to ensure that the following key objectives are considered and addressed:

- Safety of the travelling public, non-motorised users and roadworkers to ensure that no person is injured either working within or travelling through the site on the strategic road network
- Clarity of temporary traffic management schemes to ensure that the CTMP is built around the customers and stakeholders
- Minimising delays to travellers on both trunk and local roads
- Meeting the needs of the relevant Local Highway Authorities
- Addressing the needs of key local stakeholders
- Maintaining adequate access for the emergency services and all affected properties during the construction works.

Project overview

B13.1.5 The Project comprises the improvement of the A66 between the M6 at Penrith and the A1(M) at Scotch Corner, as shown in ES Figure 2.1: The Project (Overview) (Application Document 3.3), comprising of the following eight individual schemes:

- M6 Junction 40 to Kemplay Bank
- Penrith to Temple Sowerby

- Temple Sowerby to Appleby
- Appleby to Brough
- Bowes Bypass
- Cross Lanes to Rokeby
- Stephen Bank to Carkin Moor
- A1(M) Junction 53 Scotch Corner.

B13.1.6 The Project comprises upgrades to the existing single carriageway sections of the A66 to dual carriageway, as well as other improvements such as junction works at the M6 Junction 40 at Penrith. In some locations online widening of the carriageway is proposed and in other locations widening will be offline (that is new sections of road that follow a different route but reconnect into the main A66 alignment). Once complete, the Project will lead to the entire 80km route having two lanes in both directions. This will improve journey time, safety and connectivity.

B13.1.7 Further details about the Project and scheme-by-scheme descriptions as proposed are provided in ES Chapter 2: The Project (Application Document 3.2).

Traffic modelling

B13.1.8 The design of the project is underpinned by traffic modelling, which has demonstrated the need for the proposed upgrades and informed the alignment of the routes and junctions. The traffic modelling undertaken to date is set out in the Combined Modelling and Appraisal Report (Application Document 3.8).

B13.1.9 A full Transport Assessment has been completed and is presented in the Transport Assessment (Application Document 3.7). The modelling demonstrates the changes in traffic that would be expected on the A66 as a direct result of the Project. It also considers the changes that would occur as a result of the Project on the wider Strategic Road Network and the local road network (together, referred to as the Affected Road Network, or ARN).

Challenges and considerations

B13.1.10 The existing A66 route sees daily traffic figures, and importantly HGV content, much higher than the national average for the classification of road. This results in peak time queueing around the M6 J40 and Kemplay bank junctions. These need to be taken into consideration in the detailed traffic management planning.

B13.1.11 Some sections of the A66 have lane widths narrower than current design standards would allow without departures from standard. This could present a challenge when it comes to maintaining passage for non-motorised road users such as cyclists as they pass through the roadworks. To negate this, the works are being planned to be completed offline as much as is practicable, keeping construction activities a suitable distance away from the existing carriageway to minimise impacts.

B13.1.12 Any sections of temporary road required to facilitate construction will need to be constructed with enough width to allow for HGVs to overtake cyclists safely. Advice note TAL 15/99 – Cyclists at road works[1] sets out guidance to be followed to achieve this.

B13.2 Construction Traffic Management Plan - detailed description

Customer requirements and customer requirements log

B13.2.1 This section will set out the key customers and stakeholders relevant to Traffic Management. At this stage this is anticipated to include, but not limited to, the following:

- National Highways
- Cumbria County Council
- Durham County Council
- North Yorkshire County Council
- Eden District Council
- Richmondshire District Council
- Emergency Services
- Traffic Police
- Travelling Public
- Local Residents and Landowners
- Local Businesses
- National Freight Services
- Abnormal Loads Officer.

B13.2.2 Project specific customer requirements for the CTMP will be detailed in Table 1: Project specific customer requirements for the CTMP along with how the Project aims to achieve these principles in order to improve customer satisfaction.

B13.2.3 The information presented in Table 1: Project specific customer requirements for the CTMP is considered indicative at this stage and will be updated by the PC as detailed design is progressed and the detailed CTMP developed.

1 Department for Transport, 1999; TAL 15/99 Cyclists at road works.

Table 1: Project specific customer requirements for the CTMP

Customer group	Who is affected by this project?	What are their requirements and how are they impacted?	How will the CTMP take these requirements into account and proposed mitigations using the customer principles?
Customer	Freight drivers	• Journey time reliability • Advance warning of closures and/or diversions • Appropriate diversion routes • Maximised lane widths where possible	• Sufficient notification of closures • Closure clashes – not having closures on alternative routes that are not subject to diversions • Diversion routes avoid narrow roads and low bridges • Diversion routes that can accommodate stacking and/or Tacho breaks • Use of variable message signing, both permanent and temporary, to support and inform of any scheme related incidents and/or planned works
	General road users	• Journey time reliability • Advance warning of closures and/or diversions • Safe passage through roadworks	• Sufficient notification of closures • Free recovery service where it is deemed necessary • Well-designed traffic management layouts
	Disabled car drivers	• Method of recovery that is suitable for PRMs and their vehicles • Suitable roadside facilities for disabled users (toileting and medication stops)	• Recovery vehicles are wheelchair accessible • Welfare points with disabled access
Stakeholder	Commercial business	• Closures/diversion that may impact on journey time reliability to and from the facility • Appropriate diversion routes for delivery traffic	• Advance warning and early engagement to understand their needs around required closures, so we can balance their needs with the needs of the scheme, e.g. weekend closures instead of night time closures
	Tourist attractions	• Closures/diversions that may impact on journey time reliability to and from attraction	• Advance warning and early engagement with venues to understand any sensitivity around significant events, particularly evenings and weekends
Partner	Aggregate suppliers	• Clear route for ease of delivery • Journey time reliability to site • Suitable access and egress	• Manage haul roads to facilitate site deliveries • Access and egress points clearly marked and close to delivery site

Customer group	Who is affected by this project?	What are their requirements and how are they impacted?	How will the CTMP take these requirements into account and proposed mitigations using the customer principles?
	Emergency services	• Appropriate diversion routes • Clear route for blue light journeys • Early engagement to understand impact and their needs. • Advance warning of closures and/or diversions	• Process and procedure for allowing blue-light travel through the works/haul road • Diversion routes avoid narrow roads and low bridges • Consider traffic signal timing modifications or preventing right hand turns to improve traffic flow. • Sufficient notification of closures
Community	Local residents	• Advance warning of closures and/or diversions • Sensitivity to local requirements e.g. market days, harvest • Minimal disruption due to works, including environmental factors (e.g. noise, dust, lighting) and diversion routes	• Notification and liaison with individuals and/or local group representatives • Diversion route signs and information to meet customer service standard for diversion routes for planned works and activities. • Optimise usability to reduce opportunities for error and therefore reduce congestion
	Local community groups. Walkers, Horse riders etc.	• Advance warning of closures and/or diversions • Sensitivity to local requirements	• Sufficient notice of any planned change in available routes • Advance warning and early engagement with groups to understand any sensitivity around significant events
	One-off events – Music festivals, Horse fairs	• Minimum disruption due to works to and from venue	• Closures/diversions to avoid such events and/or simultaneous activities
Client	Housing developments	• Closures and congestion during peak trading periods	• Sensitivity to trading cycle and appropriate use of diversion and/or closures

Nature of the works

B13.2.4 This section will provide a detailed description of the nature of the works on scheme-by-scheme basis, based on current levels of understanding. This will include, but is not limited to, key structures, details of cuttings and embankments and earthworks associated with junctions and link roads.

B13.2.5 The Project includes the improvement of the A66 between the M6 at Penrith and the A1(M) at Scotch Corner across the eight individual schemes listed B13.1.5.

B13.2.6 Traffic Management will be designed in accordance with Part 1 of Chapter 8 of the Traffic Signs Manual[2] allowing working room to construct as well as the minimum safety zones. Barrier restraint systems will be assessed in accordance with IAN 142/11[3], this advice note has been withdrawn as of April 2022 with no replacement but serves as a guide.

B13.2.7 “No Construction Traffic” signs will be installed at appropriate locations to ensure construction traffic does not use local side roads which are not suitable for large vehicles. All deliveries will be informed of the approved delivery route to the site, which would be mandatory.

Proposed traffic management measures

B13.2.8 This section will detail the proposed traffic management measures and should make use of Traffic Management Phasing Plans to illustrate proposed measures at each stage of the project (i.e. they shall be produced to illustrate the proposed traffic management at each stage of the construction for each scheme or location).

B13.2.9 Potential traffic management topics are detailed in the subsections below. The PC will be responsible for detailing each traffic management measure in full as detailed design is progressed

Restricted routes for construction vehicles

B13.2.10 The PC will provide detailed restrictions of route and carriageway closures for construction vehicles.

Operating lanes

B13.2.11 The PC will provide details regarding operating lanes (lanes open, speed limits) on a scheme-by-scheme basis.

Speed limits

B13.2.12 The PC will provide details on speed limits, including maintenance of existing limits and any temporary restrictions on a scheme-by-scheme basis.

[2] Department for Transport, 2006; Traffic Signs Manual – Guidance for traffic authorities on the use of traffic signs and road markings
[3] Highways England, 2011; IAN 142/11 Temporary barrier decision tool (now withdrawn)

Length of the traffic management

B13.2.13 An example table has been provided in Table 2: Indicative length of traffic management to outline the indicative length of traffic management and will be completed by the PC iteratively as this plan is updated.

Table 2: Indicative length of traffic management

Carriageway	Works location	Traffic management restrictions	Length of TM (km and/or m)
[Insert details of carriageway name]	[Insert location of works]	[Insert details on restrictions, e.g. speed limits, lane restrictions]	[Insert length of TM restrictions]

Carriageway and slip road closures

B13.2.14 The Project will attempt to limit the number of full carriageway closures to minimise impact and disruption to the travelling public.

B13.2.15 Table 3: Anticipated carriageway and slip closures will list the operations identified which would require full closures due to the proximity to the lanes or works on/over the carriageway.

Table 3: Anticipated carriageway and slip closures

Operation	Number of closures	Reason for closure	Mitigation measures to minimise number of closures
[Insert operation]	[Provide details of number of closure, directions of closure and timelines]	[Insert justification for closure]	[Detail any relevant mitigation which could be used to minimise number of closures]

Adjacent roadworks and other traffic management

B13.2.16 Liaison would be in place between the Project team and the National Highways Delivery Team, Design, Build, Finance & Operator (DBFO) Contractor to identify future schemes or maintenance within the area so that interfaces can be successfully managed.

Bank holidays and embargos

B13.2.17 Where feasible and practical, traffic management would be removed during bank holiday weekends.

Significant events and seasonal traffic

B13.2.18 The PC, in consultation with stakeholders, will confirm it is aware of any significant events occurring in proximity to the Project where road closures should be avoided.

Incident management

B13.2.19 This section will detail the approach to incident management for key risks to the A66 route relevant to traffic management. This will include details of responsibility for road maintenance and incident management.

B13.2.20 An incident management plan will be developed by the PC, National Highways Traffic Officers, local highways authorities and emergency services.

B13.2.21 The incident management plan is likely to include, but is not limited to:

- Free recovery within the roadworks, including details of recovery vehicles, welfare facilities and procedures
- The procedures for recording incidents and identifying any unexpected levels or categories of traffic related incidents
- A formal reporting procedure
- An operational structure
- Outline contingency plan
- Undertaking desktop incident management scenarios.

Incursion risk management

B13.2.22 An incursion risk matrix and risk assessment will be prepared and detailed in this section. This shall assess the risk of public vehicle incursions into the roadworks (i.e. drivers accidentally or deliberately entering roadworks areas) and identify mitigation required to prevent this from occurring (such as additional signage, barriers and monitoring).

Driver compliance

B13.2.23 It is anticipated a number of different tools would be available to assist with driver compliance through the roadworks. This section will set these out, and will likely include:

- Use of Vehicle Management Systems to provide accurate up to date information.
- Vehicle activated signs on approach to risk areas such as works accesses and exits.
- Implementation of local stakeholder driving groups to share updates on the traffic management and advise on correct behaviours through roadworks.
- Enforcement of speed restrictions.
- Use of 'Ignore Satellite Navigation Systems' signs during road closures and phasing works.

Safety measures

B13.2.24 The safety of the travelling public and the workforce will be the first priority of the Project.

B13.2.25 Table 4: for each customer group.

Table 4: Safety Measures

Customer group	Safety measure
[Insert relevant customer group, e.g. customer, stakeholder]	[Provide details of the safety measure for that customer group during traffic management]

Human factors

B13.2.26 The 'Raising the bar 11: Influencing driver behaviour at roadworks'[4] document provides guidance on how driver behaviour can be influenced to help manage a safe traffic management system. This would be provided in the preparation for construction revision and would detail the principles used for each customer group.

B13.3 Proposals for management of network occupancy

B13.3.1 This section will outline proposals for managing the capacity of the network. Below are a series of indicative measures that would be taken.

B13.3.2 Project traffic manager will ensure the roadspace booking procedure follows the guidance set out by National Highways.

B13.3.3 During the Project delivery, the current network occupancy procedures will be followed for accessing the network. Road space bookings will be issued each week, in line with the National Highways booking requirements.

B13.3.4 Works on the local network will be coordinated with the relevant local authority through the relevant local procedures they utilise. Further details will be added as this plan develops.

B13.3.5 In order for the Project to positively contribute to the accuracy of information relating to traffic management, and support National Highways' target of 90% accuracy of roadworks information, 7 days in advance of planned works by 2024/25, the following steps will be taken:

- Ensuring that planned start times are met, and that any deviation from the planned start time is reported to the appropriate Network Control Centre (NCC) 15 minutes prior to the planned time.
- If there is a delay for any reason, then this must be reported to the NCC as early as possible, and not later than the planned start time.
- If work is to be cancelled, then this must be reported to the NCC at the earliest known time of cancellation.
- If the works are to overrun, then the NCC must be informed at the earliest known time and be given an estimated time of completion.
- When the works are complete, the NCC must be notified no later than 15 minutes after the last cone has been lifted.
- If there are any TM layout changes planned, then the NCC should also be informed of the end time of each layout (as per item 5) and the start time of the new layout (as per item 1).

B13.3.6 National Highways are trialling a soft launch of a new roadspace booking system. The 'National Road Space Booking Portal' is being trialled in most areas and this plan will be reviewed and amended should there be any differences to what is already described within this document regarding road space bookings and network management.

[4] Highways Agency (2013), Raising the bar 11: Influencing driver behaviour at roadworks (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/358896/B11_Influencing_Driver_Behaviour.pdf)

B13.4 Implications of traffic management measures

Intelligent transport service

B13.4.1 Traffic flow and queue assessments will need to be undertaken in the preparation for construction phase of works to determine the impact from any proposed traffic management measures on operations and the Intelligent Transport Service.

Operations

B13.4.2 Please refer back to Table 3: Anticipated carriageway and slip closures above.

Maintenance activities

B13.4.3 The PC for the Project will be responsible for routine maintenance on the A66 between the extents of the traffic management. Pre-existing defects or known maintenance issues should be identified to the PC prior to the commencement of works so that any works could be incorporated into the Traffic Management Plan.

B13.4.4 This section will provide details on responsibilities.

B13.4.5 Winter maintenance on the A66 will continue to be the responsibility of National Highways. The PC Traffic Management Manager (as defined in the EMP, Application Document 2.7) will be responsible for making regular contact with the National Highways Winter Maintenance Team. The Winter Maintenance Team will be kept updated on the changing layout of the scheme and would be notified in advance of any changes to traffic movements. A Detailed Local Operating Agreement (DLOA) would be developed and agreed with the local highway authorities. The DLOA would provide clarity on the various maintenance responsibilities.

Other service providers

B13.4.6 Abnormal loads will continue to be assessed by the DBFO Contractor. As the Project progresses through different construction phases, new structures would be opened.

B13.4.7 The National Highways abnormal loads team would be issued with the Approval in Principle (AIP) and Construction Certificate for the structure by the PC to allow the abnormal load assessments to be undertaken. Wide load and abnormal load holding laybys would be provided as part of the traffic management on both carriageways to ensure that wide or abnormal loads can continue to utilise the A66 route where reasonably practicable.

B13.5 Traffic Management Plan management

B13.5.1 This section will be updated during PCF Stage 5 (Construction Preparation) and will set out the measures to be implemented to ensure the CTMP measures are effective.

B13.5.2 Within this section the measures to monitor changes in traffic flows on routes adjoining the scheme during construction will be set out (e.g. on the A67).

~~B13.5.1~~B13.5.3 This section will also set out how relevant monitoring information gathered in accordance with other management plans (e.g. Annex B4 Air Quality and Dust Management Plan) shall be used to inform traffic management actions. For example, NO_2 monitoring gathered on The Sills in Barnard Castle shall be evaluated and action taken if the evidence shows air quality is at risk of exceeding the annual mean objective, with concentrations over 36 *ug*/m^3.