H2TEESSIDE PROJECT

Planning Inspectorate Reference: EN070009/APP/5.16

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

Document Reference: 5.16: Framework Construction Traffic Management Plan

The Infrastructure Planning (Applications: Prescribed Forms and Procedure Regulations 2009 - Regulation 5(2)(q)

Applicant: H2 Teesside Ltd

Date: October 2024

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1.0 INTRODUCTION

1.1.1 This Framework Construction Traffic Management Plan (CTMP) has been prepared to accompany a Development Consent Order (DCO) Application for the Proposed Development.

1.1.2 The Framework CTMP is designed to investigate the likely generation and routing of HGV traffic associated with the construction of both Phase 1 and Phase 2 of the Proposed Development.

1.1.3 This Framework CTMP has been prepared in advance of the appointment of Engineering, Procurement and Construction (EPC) Contractor(s) tasked with the construction of the Proposed Development and thus the management of HGV traffic. The appointed EPC Contractor(s) will be required to use this Framework CTMP as the starting point for the Final CTMP(s)[1] and adapt it to their specific construction methodology. The appointed EPC Contractor(s) will be required to submit the Final CTMP(s) for approval to Redcar and Cleveland Borough Council (RCBC) and consultation with National Highways (NH) prior to the commencement of any construction activities. In this Framework CTMP 'Site' includes construction compounds.

1.1.4 This CTMP forms part of the assessment documentation and should be read in conjunction with the following documents:

- Chapter 15 Traffic and Transport (ES Volume I, EN070009/APP/6.2);
- Appendix 15A: Transport Assessment (ES Volume III, EN070009/APP/6.4); and
- Framework Construction Workers Travel Plan (EN070009/APP/5.15).

[1] It is possible that more than one Final CTMP could be brought forward for approval by the EPC Contractor(s) depending on the phasing / work packaging approach undertaken. For the purposes of this Chapter, references to 'the' or 'a' Final CTMP, should therefore be read as meaning any Final CTMP that is brought forward.

2.0 BACKGROUND

2.1 Site Context

2.1.1 The Main Site is located to the north of Redcar and is accessed from the A1085 Trunk Road which runs east-west to the south of the Main Site linking to the A1053 / West Coatham Lane Roundabout to the west and Redcar to the east. The A1053 in turn connects to the A174 to the south and the A66 to the north.

2.1.2 The A174 provides a link to the A19 to the south which in turn links to the A1 (M). The A1053 and A174 are part of the strategic road network and are part of National Highways (NH) core network.

2.1.3 The connection corridors are located to both the south of the River Tees alongside the Main Site, as well as to the north of the river, south of the A1185 in the west and to the east of the A178 (Seaton Carew Road).

2.1.4 The location of the Proposed Development in relation to the surrounding area and the strategic road network is shown in Plate 2-1 below.

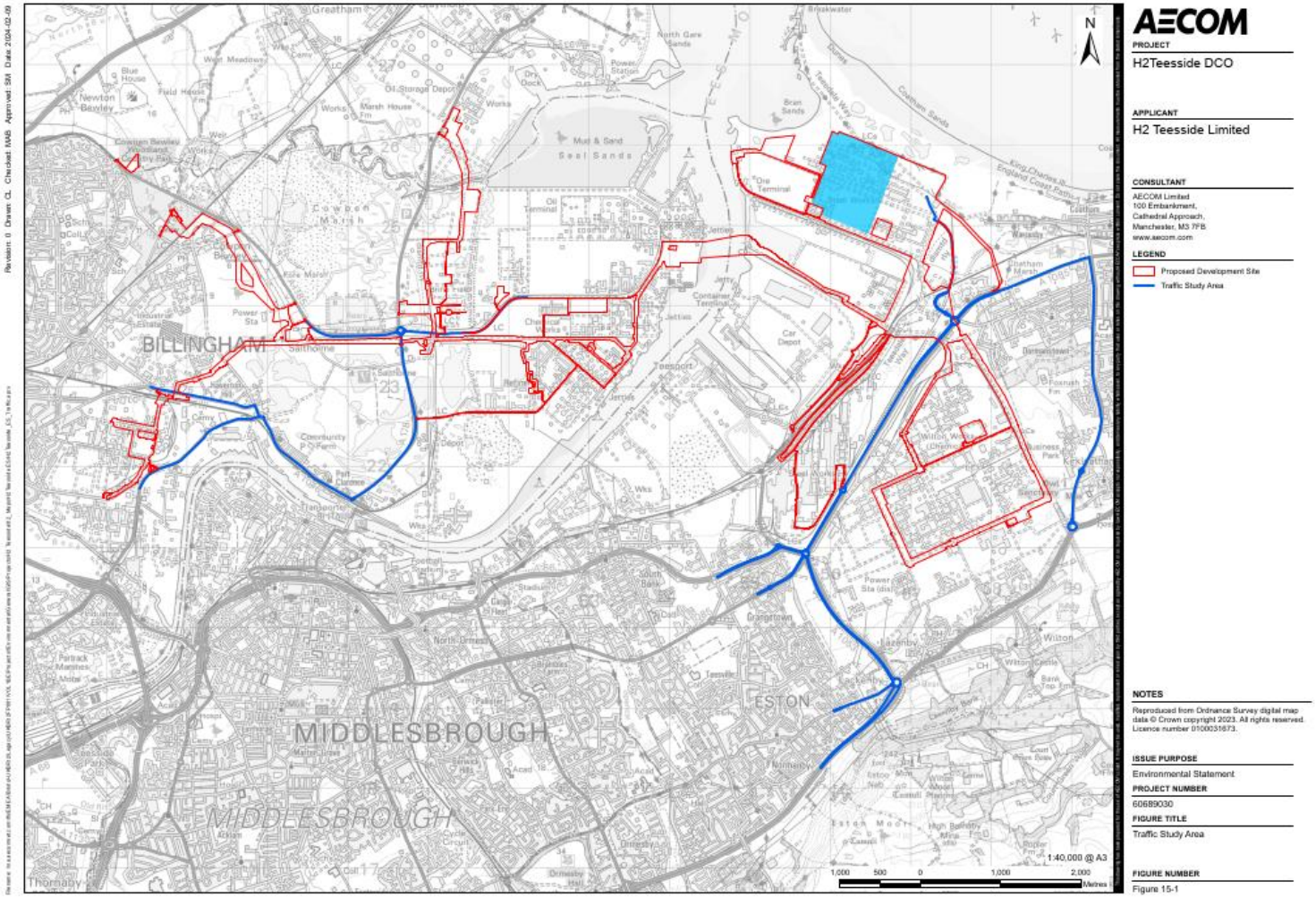

Plate -1: Proposed Development Site Location and Traffic Study Area

2.2 Proposed Development Description

2.2.1 The Proposed Development comprises the construction, operation (including maintenance where relevant) and decommissioning of an up to 1.2-Gigawatt Thermal (GWth) Lower Heating Value (LHV) Carbon Capture (CC) enabled Hydrogen Production Facility in Teesside with associated Connection Corridors.

2.2.2 The Applicant is H2 Teesside Limited, a bp company. H2 Teesside Limited will be the lead developer of the Proposed Development and bp will be appointed as the operator of the Proposed Development.

2.2.3 To facilitate the construction of the Proposed Development, there are seven construction compounds, with four to the north of the River Tees and three to the south, as follows:

- NORTH OF TEES:
  - Seal Sands Compound;
  - Greatham Satellite Compound;
  - Cowpen Bewley Satellite Compound; and
  - Billingham Industrial Park Satellite Compound.
- SOUTH OF TEES:
  - RBT Satellite Compound;
  - Main Site Compound, and
  - Wilton International Satellite Compound.

2.2.4 The access to each of the above construction compounds will be designed to ensure that they accommodate all required vehicle movements safely so as not to impact upon existing road users.

2.3 Indicative Construction Programme

2.3.1 As set out in Chapter 5 (ES Volume I, EN070009/APP/6.2), permitted preliminary works for Phase 1 are expected to start in the third quarter (Q3) of 2025 (subject to the granting of the DCO), with the main civils works beginning in Q4 of 2025. Construction of Phase 1 is anticipated to last approximately 32 to 36 months and is expected to be complete in Q2 2028.

2.3.2 The early enabling works for Phase 2 may overlap with commissioning for Phase 1 in Q2 2028. It is expected that the main civils works for Phase 2 will begin in Q3 of 2028 (after Phase 1 is commissioned) and be completed by the end of 2030. It is proposed that there will be no overlap between the main construction phases of Phases 1 and 2.

2.3.3 The Indicative Construction Programme for the Proposed Development can be seen in Table 2-1 below.

Table 2-1: Indicative Construction Programme for the Proposed Development

DEVELOPMENT PHASE	2025				2026				2027				2028				2029				2030			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PPW Phase 1																								
Construction Phase 1																								
Phase 1 Operation Commences																								
Enabling Works Phase 2																								
Construction Phase 2																								
Phase 2 Operation Commences																								

2.4 Construction Phase Site Worker Traffic Generation

2.4.1 The assumed worst case is that the construction workforce would peak with a total of 1,300 workers on site per day. With an average occupancy of two workers per car, this results in 650 worker car trips arriving and departing each day.

2.4.2 The Framework Construction Workers Travel Plan (CWTP) (EN070009/APP/5.15) provides detail on construction worker traffic generations and the proposed measures to be implemented to encourage sustainable travel modes.

2.5 Construction Phase HGV Traffic Generation

Proposed Development Construction

2.5.1 The peak of construction is assumed to occur in Phase 1 during June 2026 (month 12) with a total of 2,210 HGVs in the month, of these, 1,610 are associated with the Main Site and 600 are associated with the connection corridors, both north and south of the River Tees.

2.5.2 Based upon an average of 20 working days in the month this results in the following HGV movements as shown in Table 2-2 below.

Table 2-2: Construction HGV Movements

LOCATION	TOTAL MONTHLY HGVS	TOTAL DAILY HGVS (BASED UPON 20 WORKING DAYS PER MONTH)
Main Site	1,610	81
Connection Corridors	600	30
Total	**2,210**	**111**

2.5.3 Therefore, based upon the above, there is predicted to be a total of 111 HGVs on average per day arriving and departing.

2.5.4 The Connection Corridors construction HGVs have been split north and south of the River Tees according to the length of the overall connection corridors, as shown in Table 2-3 below.

Table 2-3: Construction HGV Split – Connection Corridors

LOCATION	PERCENTAGE SPLIT	TOTAL NUMBER OF HGV MOVEMENTS (ONE WAY)
North of the River Tees	60%	18
South of the River Tees	40%	12
Total	**100%**	**30**

2.5.5 Based upon the number of HGVS to the Main Site and the connection corridors HGV split, the number of HGVS to each of the construction compounds can be set out as shown in Table 2-4 below. Please note any minor variations in totals is due to rounding errors and does not materially affect any of the assessment.

Table 2-4: Construction HGV Traffic data

LOCATION	PERCENTAGE SPLIT OF TRAFFIC	ARRIVALS	DEPARTURES	TWO WAY
Main Site				
Construction worker car trips per day to Main Site	100%	81	81	162
Total	100%	81	81	162
Connection Corridors North of River				
Construction car trips per day to Billingham Industrial Park Satellite Compound	21%	4	4	8
Construction car trips per day to Cowpen Bewley Satellite Compound	26%	5	5	10
Construction car trips per day to Greatham Satellite Compound	28%	5	5	10
Construction car trips per day to Seal Sands Compound	25%	5	5	10
Total	100%	19	19	38
Connection Corridors South of River				
Construction car trips per day to RBT Satellite Compound	50%	6	6	12
Construction car trips per day to Main Site Compound	25%	3	3	6
Construction car trips per day to Wilton International Satellite Compound	25%	3	3	6
Total	100%	12	12	24

2.5.6 As can be seen there are a total of 112 arrivals and 112 departures per day, giving a total of 224 two-way HGV movements per day.

2.5.7 From the above the daily profile of HGV movements can be set out as follows in Table 2-5. Please note any minor variations in totals is due to rounding and does not materially affect any of the assessments.

Table 2-5: Daily Construction HGV Traffic data

HOUR BEGINNING	% OF DAILY INBOUND	% OF DAILY OUTBOUND	CONSTRUCTION HGV ARRIVALS	CONSTRUCTION HGV DEPARTURES	TWO WAY DAILY HTGV MOVEMENTS
0600	0%	0%	0	0	0
0700	9%	8%	10	9	19
0800	9%	8%	10	9	19
0900	9%	8%	10	9	19
1000	9%	8%	10	9	19
1100	9%	8%	10	9	19
1200	9%	8%	10	9	19
1300	9%	8%	10	9	19
1400	9%	8%	10	9	19
1500	9%	8%	10	9	19
1600	9%	8%	10	9	19
1700	9%	8%	10	9	19
1800	0%	8%	0	9	9
1900	0%	0%	0	0	0
2000	0%	0%	0	0	0
2100	0%	0%	0	0	0

Total	100%	100%	111	111	221

3.0 MEASURES TO CONTROL HGV ROUTING AND IMPACT

3.1 Designated Routeing

3.1.1 It is proposed that all construction HGVs associated with the Main Site and the connection corridors to the south of the River Tees, would arrive and depart via the existing site entrance to the former Redcar Steelworks site located off the A1085 / West Coatham Lane Roundabout.

3.1.2 Materials required to carry out the construction of the connection corridors on the north of the River Tees, will be delivered direct to the relevant construction compound rather than the Main Site, using the B1275 and A1046 to the access the Strategic Road Network.

3.1.3 The HGV routing plan will be distributed to all drivers during their induction. It will be a condition of contract between the Applicant and the EPC Contractor(s) to ensure that all HGV deliveries to the Proposed Development are instructed to use the planned designated route to access and egress the construction site save where road closures or access restrictions prevent these routes from being able to be used. Contractual Sanctions will be put in place to deal with non-compliance.

3.1.4 The designated HGV routing plan is shown indicatively below in Plate 3-1.

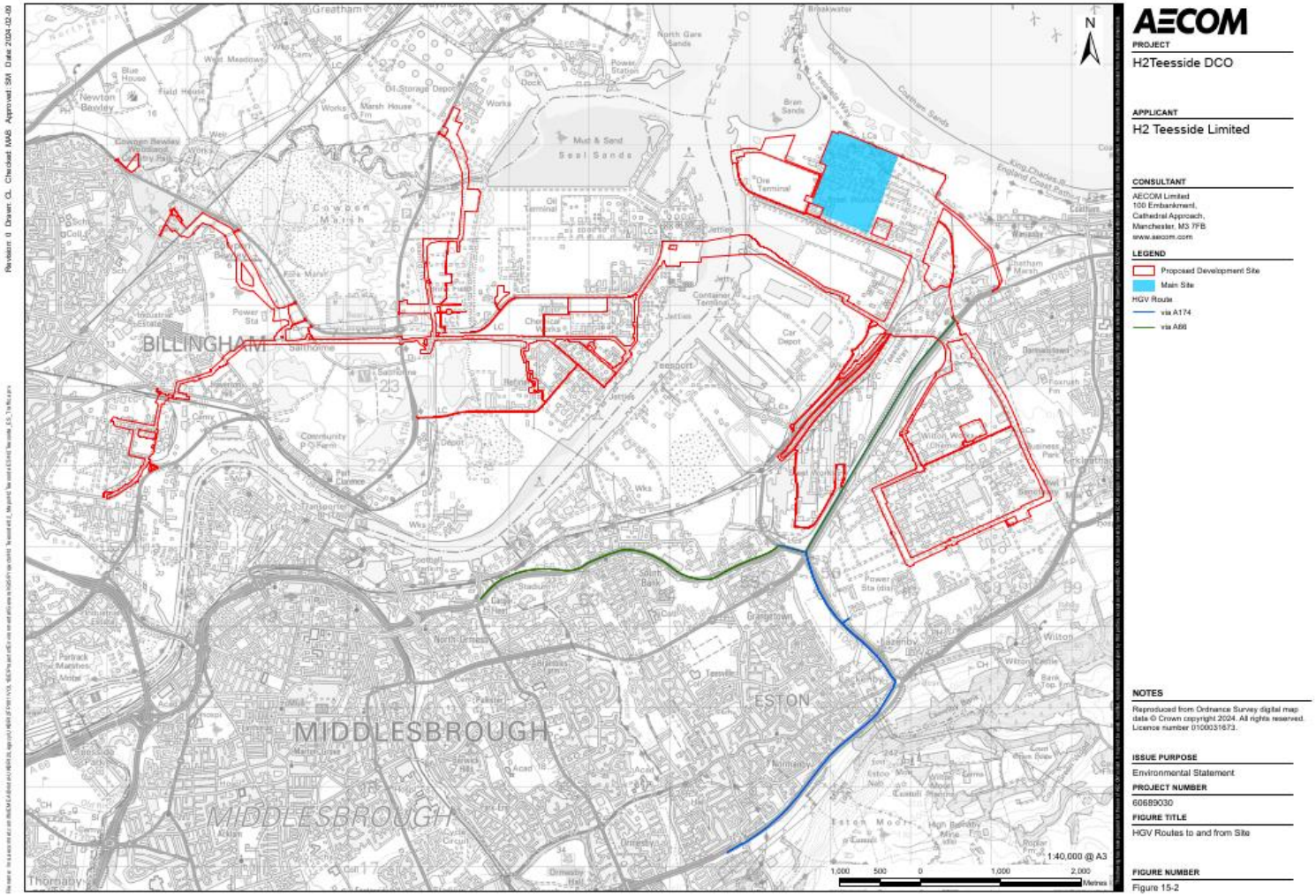

Plate 3-1: HGV Designated Route Plan

3.1.5 HGV traffic associated with the Main Site and the Connection Corridors to the south of the Tees has been assigned via the A1085 Trunk Road. At the junction with the A66/A1053, it is assumed that 50% would continue west on the A66 and 50% would head south on the A1053 then west on the A174.

3.2 Construction Programme / Site Hours

3.2.1 The full construction programme is to be carried out over a 66-month period, beginning in Q3 2025 and ending in Q4 2030.

3.2.2 In order to minimise the disruption to the public the standard construction hours will be restricted to the following (with the Framework CEMP explaining the exceptions to this):

- Monday to Friday: 07:00 to 19:00; and
- Saturday: 07:00 to 13:00.

3.2.3 It is proposed that during weekdays HGV deliveries will be made between 07:00 and 19:00 hours and on Saturdays between 07:00 and 13:00, with deliveries outside of these times agreed in advance with the local authority.

3.3 Wheel Cleaning Facility

3.3.1 In the interests of highway safety, wheel cleaning facilities will be installed onsite for use from the start of the construction phase. Wheel cleaning facilities should also be located at each of the construction compound access points. All HGVs leaving the construction site will be required to wheel wash when exiting the construction site. The need for this measure should be periodically reviewed throughout the construction period.

3.3.2 In addition, the EPC Contractor(s) will ensure that all roads immediately adjacent to the construction compounds are kept clean and clear of debris and will undertake regular road cleaning as required.

3.4 Advance Warning Signage

3.4.1 Advance warning signage will be erected on streets prior to the temporary construction compound site entrances associated with the Connection Corridors construction. The erection of signage will warn drivers of the construction access ahead and the potential for slow turning vehicles. An example of the proposed signage is shown below.

Plate 3-2: Example of Proposed Warning Signage for Public Highway

3.4.2 The appointed EPC Contractor(s) will ensure that all works within streets will have all required signage and traffic management measures in place to ensure the safety of workers and all other road users. These measures will be confirmed in the Final CTMP(s).

3.4.3 The appointed EPC Contractor(s) and their sub-contractors will be required to maintain all signage and Traffic Management.

3.5 Climate Change

3.5.1 Whilst full details are included within the Framework Construction Environmental Management Plan (CEMP) (EN070009/APP/5.12), the EPC Contractor(s) would be encouraged to adopt measures to reduce any impact upon Climate Change

3.5.2 This could be potentially achieved by the following, although this is not exhaustive and would be agreed with the Local Authority prior to commencing on site through the Final CTMP(s):

- incentivising / encouraging electric / low emission vehicles; and
- encouraging low carbon transport of material.

3.6 Contact Details

3.6.1 Twenty-four-hour contact details will be provided on the Applicants website so that residents can get in touch to find out further information. The appointed EPC Contractor(s) will delegate an individual to act as the initial point of contact for members of the community to find out further information.

4.0 ABNORMAL INDIVISIBLE LOADS

4.1.1 It is possible that Abnormal Indivisible Loads (AILs) may be required during the construction period. Where practicable this will be avoided by division of loads into multiple HGV loads.

4.1.2 The EPC Contractor(s) would be required to liaise with the Local Authority, NH and the Police to ensure that they complied with all required procedures for moving AILs as set out within the Electronic Service Delivery for Abnormal Loads (ESDAL) online portal.

4.1.3 Some AILs could arrive at the RBT Satellite Compound by ship, and in this situation would be transported to the construction area using the internal Teesport road network.

5.0 MONITORING

5.1.1 Monitoring will be undertaken by the EPC Contractor(s) to assess the effectiveness of the measures included in the Final CTMP(s) to control the routing and impact of construction HGVs. Monitoring will also provide a firm basis upon which to answer queries and complaints regarding the HGV traffic impact during construction. A 24-hour contact name and number will be established by the Contractors and displayed at the Site.

5.1.2 The EPC Contractor(s) will maintain gatehouse records of construction HGVs entering and leaving the construction compound and they will be available to the Local Authorities on request.

5.1.3 Should any complaints be raised by members of the public with regards to construction HGVs not using the dedicated HGV route to the Site, gatehouse records will be used to identify the HGV at fault and appropriate measures put in place to ensure no repeat events.

6.0 CONSULTATION

6.1.1 A formal process of liaison between all key stakeholders (Contractors, RCBC and NH) would:

- establish a channel of communication between the EPC Contractor(s) and the regulating authorities;
- make all parties aware of the results of monitoring of the Final CTMP(s);
- provide a route by which any complaints can be communicated and dealt with;
- provide a route through which transport related issues can be identified and dealt with; and
- provide prior notice of significant events e.g. delivery of abnormal loads, in accordance with standard protocols.

6.1.2 It is proposed that a short-written report is prepared by the EPC Contractor(s) on a six-monthly basis and circulated to all key stakeholders. Any comments generated by the report will be circulated to all key stakeholders and a meeting may be held if required. Some other parties may need to be consulted from time to time (e.g. Royal Mail).

6.1.3 Where required (depending on the works and location) a copy of each detailed Final CTMP(s) approved pursuant to this Framework CTMP, along with information on working hours and proposals for traffic management or works on the highways network (including any road closures, diversions or alternative access arrangements) will be provided to affected parties relevant to that part of the Proposed Development (including Royal Mail) at least one month before the relevant works are anticipated to commence.