Natural Resources Wales

# **Stephenson Street Flood Alleviation Scheme**

Construction Traffic Management Plan

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# ARUP

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# 1 Introduction

# 1.1 Background

Natural Resources Wales (NRW) has commissioned Ove Arup and Partners Ltd (Arup) to complete the detailed design and consenting of the Stephenson Street Flood Alleviation Scheme (FAS). The scope of these services includes the production of a Construction Traffic Management Plan (CTMP) in support of the planning application and the construction phase of the FAS.

The aim of the scheme is to reduce flood risk from the River Usk for the residents, businesses and infrastructure on the Spytty area of Newport, by installing physical mitigation measures that protect against a 1:200-year tidal flood event.

The scheme comprises construction of 1.7km of new flood defences (bund, sheet pile wall and reinforced concrete wall), 450m of new highway and a floodgate. Figure 1 shows the indicative locations of the proposed flood defences (see detailed planning drawings for full details) and the reduction in 1:200yr flood extent in 2069 provided by the proposed scheme.



Figure 1: Indicative location of proposed flood defences and the 1:200yr flood extent in 2069 with and without proposed flood defences<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Source: <u>https://ymgynghori.cyfoethnaturiol.cymru/communications-cyfathrebu/stephenson-street-flood-scheme/</u> accessed 17 November 2020

# **1.2** Scope of this Plan

The purpose of a CTMP is to ensure that the impacts of construction works on the local transport network are considered and mitigated wherever possible. Safety must be maintained at all times and interruption to residents, businesses, public space and local amenities minimised.

This CTMP has been prepared during RIBA Stage 3 (detailed design) and will be submitted as part of the planning application for the scheme. Pre-construction advice has been provided by Walters, who have been engaged by NRW under an Early Contractor Involvement (ECI) contract for detailed design, and as the Principal Contractor responsible for delivering the construction phase.

By engaging an ECI contractor and considering construction traffic and logistics at this early stage of the project, impacts can be identified and mitigated as part of the design process. The information provided in this plan will therefore provide a high level of surety to the officers of Newport City Council (NCC) with regards to the impacts of construction traffic impact when determining the planning application.

This CTMP will remain a live document following determination of the planning application, with the Principal Contractor required to monitor construction traffic during all construction phases and update this CTMP when needed.

The following matters are covered in this CTMP:

- Section 2 outlines the construction programme, locations of site compounds, facilities, site access and egress, operating hours and construction sequence.
- Section 3 provides an overview of the estimated trip generation as a result of construction, including those from material and plant deliveries, workforce travel and vehicle routes.
- Section 4 details the management of the CTMP, including procedures on site, road cleanliness measures and mitigations to reduce the impact of construction traffic.
- Section 5 summarises the document.

# 2 **Construction Information**

# 2.1 Overview

Construction information has been provided by Walters as the appointed ECI contractor for the scheme, with reference to the design drawings submitted within the planning application. Final construction information will be confirmed following planning consent and the Principal Contractor for the main construction works will be responsible for implementing and updating this CTMP.

# 2.2 Construction Methodology

The proposed flood defences consist primarily of reinforced concrete (RC) and sheet pile flood walls, in addition to earth bunds/embankments. The scheme also incorporates a new section of highway and associated drainage connecting East Bank Road and Corporation Rd.

Prior to the main construction phase, enabling works will include tree felling/site clearance, the establishment of works compounds and temporary means of access for construction vehicles. Construction traffic will be generated primarily as a result of the movement of plant equipment, deliveries of materials, removal of any waste materials and workforce travel.

# 2.3 Site Location

For the construction phase of the FAS, the proposed flood defences, highway works, and ancillary works are split across eight distinct works phases. A description of the proposed defences and works in each location is provided in Table 1 with the site location shown in Figure 2.

#### Table 1: Scheme proposals

Proposed Works	Description
Ground Raising and Road Ramp	Minor land raising at 2No. areas north of Stephenson Street and minor land raising of Stephenson Street highway
Earth Bund to Park	Construction of new earth flood bund along western boundary of Coronation Park, including minor diversion of Public Right of Way
Sheet Pile Wall	Construction of new sheet pile wall (Coronation Park to East Bank Road) and transition to incorporate connecting Wales Coast Path to existing ground level
Public Realm Improvement	Enhancements to public realm within Coronation Park
Industrial Estate RC Wall	Construction of new RC stem wall through industrial estate to south of Corporation Road
Highway Works	Construction of c.450m new 7.5m wide, two-lane single carriageway public highway with footway, connecting East Bank Road and Corporation Rd, including a new T-junction and turning head on East Bank Road
Flood Gate	Installation of moveable flood gate at Corporation Road across railway overbridge
Railway Wall and Nash Wall	Construction of RC stem walls to south-east of Coronation Road adjacent to railway and to north-west of Nash, including creation of permanent access tracks to support future maintenance requirements
Culvert Works	Installation of 2No. duckbill valves on existing Marshalls Railway Embankment Culvert and Liberty Steel Railway Embankment Culvert



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# 2.4 **Construction Programme**

Construction of the scheme is proposed to be undertaken concurrently at several locations, with a total duration of approximately one year. An indicative construction programme is set out in Table 2 and Figure 3, based on an indicative start on site of 11 October 2021. The construction programme will be finalised post-determination by the Principal Contractor, and so the proposed start date and duration of the works are subject to change.

Ref.	Works Phase	From	То	Duration
1	Site Clearance	11-Oct-21	05-Nov-21	25 days
2	Ground Raising and Road Ramp	18-Oct-21	17-Dec-21	60 days
3	Earth Bund to Park	28-Feb-22	01-Jul-22	123 days
4	Sheet Pile Wall	08-Nov-21	25-Feb-22	109 days
5	Public Realm Improvement	04-Jul-22	11-Nov-22	130 days
6	Industrial Estate RC Wall	08-Nov-21	11-Nov-22	368 days
7	Highway Works	08-Nov-21	08-Apr-22	151 days
8	Flood Gate	11-Apr-22	01-Jul-22	81 days
9	Railway Wall and Nash Wall	04-Jul-22	09-Sep-22	67 days
10	Culvert Works	12-Sep-22	04-Nov-22	53 days

Table 2: Indicative main works construction programme



Figure 3: Indicative main works construction programme

# 2.5 **Operating Hours**

Construction hours are generally planned to be between 08:00 and 18:00, on weekdays. However, on occasion works may also be required to be completed on Saturdays, where specific activities are time-sensitive (e.g. concrete pouring). Limited activities for works on the public highway will also require out-of-hours working to minimise disruption to traffic (installation of flood gate, tie-ins etc). Advance notice will be provided to local businesses and residents when out-of-hours are due to take place, including the timing and duration of the works and any diversions that may be required.

Deliveries will be limited to within the planned construction hours and will be scheduled outside of peak highway hours whenever practicable.

## 2.6 Construction Compounds

Secure construction compounds are to be established at each worksite, using hoarding/heras fencing, encompassing the required work areas, material storage areas and welfare facilities.

The primary construction compound is proposed to be situated within Coronation Park, adjacent to the earth bund embankment to be constructed within the park. Access will be via a temporary haul road from Stephenson Street, as shown in Figure 4. The main compound will include welfare facilities (canteen, toilets, drying rooms), offices for site management, lockable stores, and storage area for materials. Due to spatial constraints at the other sites, some deliveries will be made to this compound and stored here before onward delivery in smaller loads to other sites.

The remaining compounds will incorporate the work areas, with additional satellite compounds provided for material/equipment storage and welfare facilities (towable Oasis units) when these cannot be readily accommodated within the work areas.

Limited car parking will be provided within the compound at Coronation Park, and all other workforce vehicles will be required to park at the other sites, or on local roads. On-street parking is unrestricted in the Spytty area of Newport, with sufficient availability of spaces to accommodate workforce vehicles during weekdays when construction will take place. Secure cycle parking will also be provided within the compound.

Tree protection zones will be required in all compound locations in accordance with the Arboricultural Impact Assessment (AIA) to ensure that no trees are adversely impacted by construction traffic (excluding those identified for removal and replanting to enable construction to take place).

Track mats or similar will be utilised within compounds and on access routes to protect services, landscaping and tree roots where required.

Within all site compounds and working areas, a site speed restriction of 5mph will be implemented, which will be communicated through the appropriate signage. Fully segregated pedestrian access routes will be provided where possible.



Figure 4: Proposed location of main construction compound

### 2.7 Access Routes and Signage

All sites are in close proximity to the A48 Southern Distributor Road – a dual carriageway trunk road, which is suitable for accommodating all construction traffic, including HGVs. The A48 links with the M4 to the east (junction 24) and west (junction 28) of Newport, providing onwards connectivity for long-distance trips, whilst also linking with routes to the city centre and residential areas, where the construction workforce might originate from.

The majority of construction traffic will access sites directly from the public highway, from Corporation Road and the secondary roads within the industrial estate. The only site not to be accessed via Corporation Road is the Nash Wall site, which will instead be accessed from the Nash Road. Figure 5 shows the proposed access routes from the A48 for each worksite. Finalised routes will be agreed post-determination in agreement with NCC and landowners where necessary.



#### **Figure 5:** Access routes

Access routes have been reviewed in terms of acceptability to accommodate the anticipated types of construction vehicles, which are set out in the Section 3.2. The majority of the construction sites would be accessible directly from public highways. Existing land uses in the area already generate large volumes of goods vehicles and as such, the highways from the A48 are provided with sufficient widths and corner radii to enable manoeuvring by HGVs. All routes appear to be in good condition with standard pavement construction.

Some construction sites will require short sections of temporary haul road to be constructed to enable access beyond the extents of the public highway. These include the earth bund, sheet pile wall and public realm works within/adjacent to Coronation Park, as shown previously in Figure 4.

Prior to construction of the flood defences at the railway wall site and Nash wall site, permanent means of access are to be established as part of the scheme, which will support future maintenance requirements in addition to construction access.

The proposed access route to the railway wall site would utilise a section of National Cycle Route 4 from its junction with Corporation Road, followed by a short section of new haul road, as set out in the planning drawings. Utilising this route for construction traffic has the potential to increase the risk of collisions between construction traffic and pedestrians/cyclists on the path. Therefore, two options for mitigating this risk are currently being considered:

- This short section of NCN4 could be temporarily closed with a suitable diversion route identified; or
- The path could be kept open, subject to a 5mph speed limit and the utilisation of a banksman to safely shuttle vehicles along the path. Additional signage warning of construction traffic would also be required.

The preferred option will need to be discussed and agreed post-determination between NRW, Sustrans and NCC.

Similarly, it is proposed to construct a permanent means of access to the Nash wall site through the Dwr Cymru Welsh Water (DCWW) facility to the south of the proposed flood defence, subject to the agreement of DCWW. The proposed access would follow an existing maintenance track with a short section of haul road also required.

Articulated vehicles are not anticipated to be required, based on the type of plant and material to be delivered. However, should this need change, then some unloading may be required on roads in the vicinity of the worksites.

Signage to each individual site will be provided on Corporation Road at the required junctions, and as many suppliers are likely to make multiple deliveries across multiple sites over the course of construction, clear directions will be provided to all suppliers.

# **3** Trip Generation

# 3.1 Overview

The trips generated by the construction activities of the proposed scheme broadly fall within two categories;

- Trips associated with the delivery/removal of plant and material to and from the site; and
- Trip associated with workforce travelling to and from the site.

The quantity of trips to and from site by various modes of travel is estimated and discussed in the sections that follow.

## **3.2 Deliveries of Materials and Plant**

All materials and plant will be delivered to site or removed from site by highway, using both heavy and light goods vehicles (HGVs and LGVs). Table 3 outlines the estimated average daily highway trips associated with deliveries by site. All trips in Table 3 are assumed to have an inbound and outbound leg.

Trips have been calculated based on approximate volumes of materials to be moved and the anticipated plant equipment required to complete the works.

Ref.	Works Phase	OGV 1 (Rigid)	OGV 2 (Artic.)	LGV	Total
1	Site Clearance	2	0	1	3
2	Ground Raising and Road Ramp	5	0	1	6
3	Earth Bund to Park	20	0	1	21
4	Sheet Pile Wall	1	0	1	2
5	Public Realm Improvement	5	0	3	8
6	Industrial Estate RC Wall	8	0	3	11
7	Highway Works	15	0	2	17
8	Flood Gate	2	0	1	3
9	Railway Wall and Nash Wall	2	0	1	3
10	Culvert Works	1	0	1	2

Table 3: Estimated highway delivery trips to/from site for an average working day

Section 3.4 considers the cumulative number of trips per day over the course of the construction programme, based on which works are sequential and which are concurrent.

## **3.3** Workforce Travel

The site workforce is expected to originate largely from the Newport area. However, the industrial character of the area provides few travel options by the way of public transport, and so it has been conservatively assumed that all trips will be private vehicle, with some multiple occupancy trips taking place. Shared trips will not realise additional vehicle trips. Table 4 outlines the estimated average daily workforce trips by mode and by works phase. All trips in are Table 4 assumed to have an inbound and outbound leg each working day.

Ref.	Works Phase	Vehicle - Alone	Vehicle - Share	Public Transport	Walking & Cycling	Total
1	Site Clearance	5	5	0	0	10
2	Ground Raising and Road Ramp	3	4	0	0	7
3	Earth Bund to Park	3	3	0	0	6
4	Sheet Pile Wall	5	5	0	0	10
5	Public Realm Improvement	12	6	0	0	18
6	Industrial Estate RC Wall	15	12	0	0	27
7	Highway Works	10	10	0	0	20
8	Flood Gate	5	4	0	0	9
9	Railway Wall and Nash Wall	5	4	0	0	9
10	Culvert Works	5	5	0	0	10

 Table 4: Estimated workforce trips to/from site for an average working day

Section 3.4 considers the cumulative number of trips per day over the course of the construction programme, based on which works are sequential and which are concurrent.

# **3.4 Total Vehicle Trips**

By combining material and plant deliveries and workforce travel, the estimated total number of vehicle trips for an average working day, by site is given in Table 5. These trips are all assumed to be two-way, with an inbound and outbound leg to each trip.

Ref.	Works Phase	Private Vehicle	OGV 1 (Rigid)	OGV 2 (Artic.)	LGV	Total
1	Site Clearance	5	2	0	1	8
2	Ground Raising and Road Ramp	3	5	0	1	9
3	Earth Bund to Park	3	20	0	1	24
4	Sheet Pile Wall	5	1	0	1	7
5	Public Realm Improvement	12	5	0	3	20
6	Industrial Estate RC Wall	15	8	0	3	26
7	Highway Works	10	15	0	2	27
8	Flood Gate	5	2	0	1	8
9	Railway Wall and Nash Wall	5	2	0	1	8
10	Culvert Works	5	1	0	1	7

Table 5: Estimated total vehicle trips to/from site for an average working day

As set out previously in Section 2.4, construction of the flood defences and highway works will be generally be undertaken concurrently in a maximum of three locations. Therefore, to consider the cumulative impact of construction traffic across all sites over time, the variation in trips over time must be understood. Figure 6 sets out the estimated cumulative number of construction vehicle trips on an average working day, based on the proposed one-year construction programme to complete the works across all sites. These trips are all assumed to be two-way, with an inbound and outbound leg to each trip.



Figure 6: Weekly profile of two-way construction vehicle trips

Figure 6 shows that the average number of total two-way construction vehicle trips per day over the course of the one-year construction programme would be 50-60 vehicles. Peak construction traffic is estimated to be 70-80 vehicles per day for limited periods of more intensive activity.

#### **3.5** Impact of Construction Traffic

The impact of construction traffic associated with the scheme can be estimated with reference to the observed baseline traffic conditions in Newport. Department for Transport (DfT) traffic counts provide the estimated Average Annual Daily Flows (AADF) for a number of locations near Stephenson Street<sup>2</sup>, which are reproduced in Figure 7.

<sup>&</sup>lt;sup>2</sup> Source: <u>https://roadtraffic.dft.gov.uk/#16/51.5737/-2.9704/basemap-countpoints</u>

Stephenson Street data factored from 2009–2019 by same growth rate recorded on A48



Figure 7: Baseline traffic flows in Spytty, Newport

In Section 3.4, it was shown that the peak number of construction vehicle trips is estimated to be 80 two-way trips (i.e. 80 inbound and 80 outbound trips per day). Assuming 50% of trips are to/from the east and 50% are to/from the west on the A48, this would only represent an increase of daily traffic on the A48 of only 0.5% both directions.

As construction trips are spread out over the course of the day, construction traffic would not therefore result in a significant increase in traffic, particularly during the more congested AM and PM peak periods. The maximum number of construction trips would also be time-limited, only occurring for approximately 12 weeks of the one-year main construction programme, with the impact of construction traffic decreased by approximately 25% for the remaining c.40 weeks of the construction programme.

Whilst completing the works at some sites concurrently rather than sequentially would result in increased peak construction traffic levels, the benefits of a reduced construction programme outweigh any disbenefits, including reduced site management costs and enabling the flood defences to completed in a shorter time, improving the resilience of Newport to flood events as soon as possible and reducing the duration of the period of disruption to local businesses and residents.

The impacts of construction traffic on the local highway network have therefore been demonstrated to be negligible, subject to appropriate implementation and management of this CTMP and the measures included therewith.

# 4 Management of Plan

# 4.1 **Overview**

The Principal Contractor appointed for delivering the proposed flood defence scheme through the construction phase of the project will be responsible for implementing and updating this CTMP. This responsibility also reflects the duties of the Principal Contractor under the Construction (Design and Management) Regulations 2015 (CDM 2015) to plan, manage, monitor and coordinate health and safety during the construction phase, which includes the risks associated with construction traffic.

Individual sub-contractors will be required to submit a weekly programme of activities and deliveries to the Principal Contractor. Regular meetings will be held between the Principal Contractor and all individual contractors to discuss construction activities.

The Principal Contractor will manage, maintain and control the effective delivery of this CTMP, throughout the Construction phase of the project. While some elements of traffic management will be best determined by the appointed subcontractors as the scheme moves forward to Construction, the Principal Contractor is ultimately responsible for ensuring that the effects of construction activities on movement and travel are managed according to the principles set out within this plan. As such, this plan provides a framework to be adhered to by all contractors engaged on the project.

# 4.2 Access and Egress to Site

Access and egress from the site will be monitored, both to limit access to authorized personnel only, and for the safeguarding of the workforce in the event of a fire/incident to ensure compliance with health and safety legislation. Monitoring is also currently required as part of the *COVID-19: Workplace guidance for employees, employees and the self-employed.*<sup>3</sup>

The number of vehicles reporting to the site will be monitored to check compliance with the predicted construction traffic volumes stated in prior sections of this document.

# 4.3 **Diversion Routes**

The need for diversion routes for vehicles, pedestrians and cyclists has been set out in Section 2. Detailed diversion plans will be prepared, agreed and published locally in advance of works commencing at each site. All such detailed plans will ensure that pedestrians are provided with safe crossing points, adequate footway

<sup>&</sup>lt;sup>3</sup> Source: <u>https://gov.wales/construction-and-outdoor-work-coronavirus-workplace-guidance-html</u> accessed 10 March 2021

widths and appropriate signage for wayfinding. The proposals will minimise the deviation of pedestrian desire lines as much as is reasonably practicable.

Vehicular and pedestrian diversionary signage will be provided to The Traffic Signs Manual Chapter 8.

# 4.4 Application of Vehicle Routing

During procurement of materials and plant, the access points and directions to each worksite, as set out in Section 2, will be communicated to any supplier making deliveries.

Usage of these access points will be monitored, by confirming with a sample of drivers on arrival the route they have travelled by, including seeking feedback on the ease of access of the site and the visibility of signage to ensure any improvements to vehicle routes can be identified and implemented.

# 4.5 Road Cleanliness

The construction compounds will also be where wheel cleaning facilities for the site will be located, to ensure that exiting vehicles do not spread debris and mud onto the public highway outside of the site. The preference will be for the use of dry wheel wash units. Road sweeping will be organised by the Principal Contractor in addition to wheel cleaning facilities as and when required.

Load protection will also be implemented and enforced at the access compound points to minimize the impact of construction traffic on road safety. A minimum vehicle safety requirement list will be set out by the Principal Contractor, and transmitted to all suppliers. Spot checks will be undertaken on vehicles accessing and leaving the site against the safety requirements.

# 4.6 **Community Considerations**

Consideration has been given to the impacts of construction on the local community, including the following measures:

Works commence from 08:00, which requires staff to arrive on-site outside of the morning peak hour on the local highway network, reducing impact for local residents and businesses;

- Highway tie-ins and flood gate installation to be completed at night to minimise disruption to local businesses. Sequencing of the works has also been planned to reduce disruption, by completing the construction of the new highway prior to the installation of the flood gate, therefore ensuring an alternative access route is available during road closures for installation of the flood gate;
- Clear signage of diversions for pedestrian and cycle routes during works;
- Communication plan to be implemented with local residents and businesses in properties adjacent to works. Communications should be a

mix of verbal (face to face), online information, and physical information, presented in both English and Welsh. This will include advance notice for any out-of-hours works due to take place, including the timing and duration of the works and any diversions that may be required.; and

• Feedback mechanism to be provided to local businesses (e.g. project mailbox published on NRW website), for any issues/concerns to be raised by local businesses during construction.

## 4.7 Measures to Reduce Impact of Construction Traffic

Beyond the community consideration previously listed, additional measures are proposed to reduce the overall impact of construction traffic, including:

- Highway deliveries will be timed to avoid the busiest rush hour periods whenever practicable. Drivers and suppliers will be provided information related to site plans and routes prior to the commencement of the works in order to minimise instances of vehicles using inappropriate or incorrect access routes;
- Local labour, sub-contractors and material suppliers are to be used where practicable, minimising the impact on the wider region;
- Information on sustainable transport options to site will be provided to workforce during inductions, including bus and rail timetables, cycle route maps and car share information;
- Secure cycle parking facilities will be included within the main construction compound;
- Limited workforce car parking will be provided within the main construction compound, to reduce parking on local roads;
- Welfare facilities provided at each site location, to reduce need for additional trips between sites and/or town centre during the day;
- Temporary barriers will be provided to separate pedestrian routes and construction traffic as required;
- Use of a banksman to walk any plant or material delivery along National Cycle Route 4 to railway wall site;
- Track mats or similar will be utilised within compounds and on access routes where required to protect services, landscaping and tree roots; and
- Remediation/reinstatement of landscaping to be completed on all temporary access routes as required.

# 4.8 Implementing, Monitoring and Updating the Plan

The Principal Contractor appointed for delivering the proposed flood defence scheme through the construction phase of the project will be responsible for implementing, monitoring and updating this CTMP.

A record of deliveries will be held at the point of delivery. Delivery notes for all deliveries will be held on site (these will include the points of origin of the material). The above information will be used to identify any improvements required to the plan in addition to any deviations from that proposed.

Workforce travel will be monitored through staff surveys, and sustainable transport measures can be promoted during inductions.

# 5 Summary

This CTMP has been produced in support of the planning application for the Stephenson Street Flood Alleviation Scheme. The proposed scheme comprises construction of 1.7km of new flood defences, 450m of new highway and a floodgate to reduce flood risk from the River Usk for the residents, businesses and infrastructure on the Spytty area of Newport.

The purpose of this document is to provide sufficient information to NCC planning officers of the likely impacts of the construction of the scheme, and to demonstrate that the impacts of the construction works have been considered and will be mitigated wherever possible. It will remain a live document to be carried through to the construction phase of the project for implementation.

Pre-construction advice required to develop this CTMP has been provided by Walters, who have been engaged by NRW under an Early Contractor Involvement (ECI) contract for detailed design, and as the Principal Contractor responsible for delivering the construction phase. The Principal Contractor will be responsible for implementing and updating this CTMP during the construction phase.

Construction will be undertaken concurrently across several locations, over an estimated period of one-year. Working hours will be from 08:00 - 18:00 weekdays only for the majority of construction, with occasional Saturday and night-time working during time-sensitive or disruptive activities (e.g. concrete pouring, highway tie-ins etc).

The primary construction compound is proposed to be located within Coronation Park for the duration of works. Works areas will be secured through the installation of hoarding/heras fencing, with satellite compounds to be provided for additional material/equipment storage and welfare facilities where these cannot be accommodated within the works area.

The construction of the individual defences will require some pedestrian and cycle route diversions for the duration of the works, including to the South Wales Coast Path Public Right of Way, with diversionary routes to be clearly signed.

Construction traffic is estimated to peak at an additional 80 two-way trips on the road network on an average working day. The vast majority of these trips would be outside of the peak highway hours, with larger vehicle trips spread throughout the day. In the context of the existing levels of traffic on the public highway in the vicinity of the site, this volume of traffic is expected to have a negligible impact on the operation of the road network (circa 0.5% increase in daily traffic on A48).

Defined vehicle routes will be utilised for access to the site that are suitable for HGVs, and road cleanliness measures will be implemented. Further considerations have also been given to reduce the impacts of construction traffic on the local community, and to reduce the total level of construction traffic.