A57 Link Roads
TR010034
7.2 Environmental Management Plan (First Iteration)

APFP Regulation 5(2)(q)

Planning Act 2008 Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

June 2021

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A57 Link Roads Scheme

Development Consent Order 202[x]

7.2 ENVIRONMENTAL MANAGEMENT PLAN (FIRST ITERATION)

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Author:	A57 Link Roads Scheme Project Team, Highways England

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1. Introduction and Background to Scheme

1.1 Purpose of the Report

1.1.1 This document is the Environmental Management Plan (EMP) (First iteration) for the A57 Link Roads Scheme (previously known as Trans Pennine Upgrade) (hereafter referred to as the 'Scheme'). This EMP (First iteration) has been produced during the Preliminary Design stage and provides the preliminary environmental guidance on how to manage the environmental effects of the Scheme.

1.1.2 An Environmental Impact Assessment (EIA) has been undertaken and an Environmental Statement (ES) (TR010034/APP/6.3) prepared to support the application for the Development Consent Order (DCO) , under the Planning Act 2008 (the 2008 Act), to authorise the construction, operation and maintenance of the Scheme. The purpose of the EMP is to manage the likely significant construction effects of the Scheme as identified within the ES) and to demonstrate compliance with environmental legislation.

1.1.3 The general process for the management of environmental effects on Highways England (hereafter referred to as the 'Applicant') Schemes is set out in the Design Manual for Roads and Bridges (DMRB) LA 104, Environment assessment and monitoring[1]. More specific advice is provided in the DMRB LA 120 Environment management plans[2]. The standards in DMRB LA 120 has been developed using:

- IEMA, July 2016. EIAG DQD, 'Environmental Impact Assessment Guide to: Delivering Quality Development'; and
- BSI Standards Publication. BS EN ISO 14001, 'Environmental management systems — Requirements with guidance for use'.

1.1.4 The EMP provides an overarching framework for the appointed Principal Designer and appointed Principal Contractor regarding environmental management during Detailed Design, Pre-Construction and Construction stages and ultimately Operation of the Scheme, and identifies the environmental risks associated with the implementation of the Scheme as identified at each stage. The EMP shall provide the following in line with DMRB LA 120:

- a clear audit trail outlining the modifications made from any previous iteration
- identify roles and responsibilities
- identify risks, their associated control measures, compliance and corrective actions
- establish procedures for communication, monitoring, audit mechanisms and reporting of control measures.

[1] DMRB LA 104 Environment assessment and monitoring, Revision 1 (August 2020) URL: https://www.standardsforhighways.co.uk/prod/attachments/0f6e0b6a-d08e-4673-8691-cab564d4a60a
[2] DMRB LA 120 Environment management plans, Revision 1 (March 2020) URL: https://www.standardsforhighways.co.uk/dmrb/search/a3a99422-41d4-4ca1-bd9e-eb89063c7134

1.1.5 The predicted environmental effects of the Scheme identified in the ES and the related actions and mitigation measures in the Register of Environmental Actions and Commitments (REAC) (TR010034/APP/7.3) have formed the basis for developing this EMP. Where it is confirmed that an enhancement can be delivered as part of the Scheme it will also be included within the REAC.

1.1.6 The EMP will be refined and updated when the design and construction plans are finalised and additional information comes to light, which will ensure any necessary changes to the proposed mitigation and management of environmental effects are captured.

1.1.7 Prior to the commencement of construction, the EMP will be made fully comprehensive to form the EMP (Second iteration), taking account of Detailed Design and construction planning and (in the case of the Scheme) the outcome of the DCO process. The EMP (Second iteration) will be maintained and revised during the construction period to take account of any changes in design or external factors such as regulations and standards, any unforeseen circumstances as they arise, such as new protected species, invasive species or new archaeological finds, and any failings in environmental performance identified from routine inspections and audits.

1.1.8 The EMP will be managed alongside the appointed Principal Contractor's generic and site-specific environmental management plan and systems, meeting ISO14001 requirements. The EMP (Second iteration) will be implemented during the Construction stage. It is a live document and must be maintained and updated throughout the Construction of the Scheme by the Principal Contractor. Environmental mitigation measures identified must be followed by all parties. At Construction, Commissioning and Handover stage, the EMP (Third iteration) builds on the construction EMP refined at the end of the construction stage to support future management and operation.

1.1.9 The preparation of the EMP (Second iteration) and EMP (Third iteration) will be secured through DCO Requirement 4.

Structure of the EMP (First iteration)

1.1.10 The structure of the EMP (First iteration) is as follows:

- Chapter 1: provides an overview of the purpose of the EMP, the Scheme and its objectives
- Chapter 2: describes the roles and responsibility of the Scheme team for environmental management
- Chapter 3 refers to the REAC. This is a document which demonstrates how the action is to be implemented/ achieved, including details of risk management and the responsible person for the specific actions. The full REAC is provided in a separate document (TR010034/APP/7.3)
- Chapter 4 provides the details of anticipated consents/permissions required to deliver the EMP

- Chapter 5 provides a confirmation regarding submission of environmental asset data and as-built drawings
- Chapter 6 provides details of maintenance and EMP monitoring activities
- Chapter 7 provides the induction, training and briefing procedures for staff
- Chapter 8 provides the references and glossary

1.1.11 The EMP (First iteration) should also be read alongside the REAC (TR010034/APP/7.3).

1.2 The Scheme

Need for the Scheme

1.2.1 The main Trans-Pennine road route between the Manchester and Sheffield City Regions is the trunk road route consisting of the A57, A628, A616 and A61. This route connects the M67 at Mottram-in-Longdendale towards the east of the Manchester City Region with the M1 in the north west of the Sheffield City Region.

1.2.2 The Trans-Pennine Upgrade (TPU) was made up of a series of measures announced in March 2015's Road Investment Strategy (RIS) for the 2015-2020[3] road period, published by the Department for Transport (DfT). A second RIS (RIS2) has since been published, which covers the 2020-2025 period. The TPU aimed to address longstanding issues of connectivity, congestion, reliability and safety with regard to the strategic Trans-Pennine routes between the M67 at Mottram and the M1 J36 and J35A north of Sheffield. The current Scheme (the A57 Link Roads) was part of this wider package of work.

1.2.3 The Scheme has been developed to improve journeys between Manchester and Sheffield. The current A57 around Mottram-in-Longdendale suffers from congestion which limits journey time reliability. This restricts economic growth due to the delays experienced by commuters and business users alike. This has a negative effect on local businesses and employment opportunities. The congestion also results in rat running through smaller towns and villages, as vehicles attempt to reduce queuing times. Much of this heavy traffic travels along local roads, which disrupts the lives of communities, and makes it difficult and potentially unsafe for pedestrians to cross the roads. It is likely that these issues would get worse with time, if significant improvements aren't made.

Scheme location

1.2.4 Most of the Scheme is located within Mottram-in-Longdendale, on the eastern edge of the Manchester conurbation adjacent to and within the settlements of Hattersley, Mottram-in-Longdendale, Hollingworth and Woolley Bridge. The Scheme connects the M67 at the west to the A57 Brookfield Road in the east and crosses through surrounding, predominately pasture, agricultural land within

[3] https://www.gov.uk/government/collections/road-investment-strategy

the Harrop Edge and Mottram Moor valley sides and within the River Etherow valley.

1.2.5 The Scheme lies mainly within the administrative boundaries of Tameside Metropolitan Borough Council (MBC), up until to the proposed River Etherow Bridge. To the east of this, the Scheme crosses over the boundary with High Peak Borough Council and Derbyshire County Council.

1.2.6 A plan showing the key environmental constraints is provided in Annex A of this EMP.

Scheme description

1.2.7 A full description of the Scheme can be found in Chapter 2 of the ES (TR010034/APP/6.3).

1.2.8 The Scheme includes the following components:

- A new offline bypass of 1.12 miles (1.8 km) of dual carriageway road connecting the M67 Junction 4 to A57(T) Mottram Moor Junction
- A new offline bypass of 0.81 miles (1.3 km) of single carriageway connecting the A57(T) Mottram Moor to the A57 Woolley Bridge
- Creation of two new junctions, Mottram Moor Junction and Woolley Bridge Junction and improvement works to the existing M67 Junction 4
- Creation of five new structures (Old Hall Farm Underpass, Roe Cross Road Overbridge, Mottram Underpass, Carrhouse Lane Underpass and River Etherow Bridge)
- One main temporary construction compound area, located on agricultural land to the east of the M67 Junction 4
- Detrunking, including safety measures from the M67 Junction 4 to Mottram Back Moor Junction, to be agreed with Tameside MBC.
- Safety measures and improvements to the A57 from Mottram Moor Junction to Gun Inn Junction and from Gun Inn Junction to Woolley Bridge Junction, to be agreed with Tameside MBC.

1.2.9 In addition to the components listed above, a number of buildings will require demolition in order to construct the Scheme. These are detailed within The Scheme chapter (Chapter 2) the ES and comprise a range of domestic and industrial structures.

Construction programme

1.2.10 The construction programme is based on a forecast start of works in autumn 2022, leading to the Scheme opening in spring 2025. The programme has been developed by a team of construction experts who have used past experience and industry benchmark data to both estimate durations and develop the logic for the programme. The construction activities and programme would be subject to modification during both the detailed design and the construction phases. The

timings indicated are a best- estimate, based on the present situation and a worst-case scenario. The construction programme for the main works will have a duration of approximately 28 months. At substantial completion, the works will be completed to a sufficient standard for the Scheme to be opened to live traffic. Some minor works may still be required following substantial completion (e.g. demobilisation and landscaping works), which has been considered in the assessment of the opening year.

1.2.11 The main construction works will be divided into 5 main phases. Pre-phases including early works, site mobilisation, utilities diversions and ecological mitigation and compensation works would also occur. A detailed construction programme will not be available until the Detailed Design stage to confirm the duration of the works.

1.2.12 The dates in this section reflect the assumed construction sequence for the assessment of effects.

Phase 1 – Autumn 2022 to Spring 2023

1.2.13 The first works to be undertaken for the construction of the Scheme include the following activities:

- Early works; including site clearance, site enabling work and environmental mitigation works, mobilisation of compound areas and temporary welfare facilities, as required
- Archaeology trial trenching and test pits
- Properties above Mottram Underpass to be demolished and clearance of any obstructions ready for underpass piling during the later stages of Phase 1
- Old Hall Lane would be closed, and Old Road would be diverted by approximately 50 m to Roe Cross Road just north of the Scheme
- Ground improvement to the land west of the River Etherow most likely using pre-cast concrete piles driven through the weak alluvium.

1.2.14 Based on this construction sequence, it is not expected that there would be any changes to traffic flow on the A57 as a result of the first phase of works.

Phase 2: Spring 2023 to Autumn 2023

- Works for the construction of Mottram Underpass would continue with piling and construction of the reinforced concrete slabs. Commencement of, excavation of the main cutting in the former Mottram Showground, east of Mottram Underpass
- The fill material from the cutting east of Mottram Underpass would be transported to the prepared ground, forming the embankment west of the River Etherow

- Carrhouse Lane Underpass would be constructed to enable the existing lane to be realigned to its new location and completion of the embankment on each side
- Old Mill Farm Underpass would be constructed in advance of the embankment fill material in Phase 4.

1.2.15 To permit these works, traffic would be restricted on Mottram Moor; eastbound traffic would be reduced to one lane but westbound would continue with two lanes. An at-grade plant crossing would be used to move fill from west to east of the Scheme.

Phase 3: Autumn 2023 to Spring 2024

- The construction of Mottram Underpass would be completed during this phase, which would require the temporary realignment of Roe Cross Road
- The junction modifications to M67 Junction 4 would commence. Two lanes of traffic would be maintained during peak hours on the roundabout whilst these works go ahead
- The offline sections of Mottram Moor Junction would be constructed
- The tie-in of the Scheme to Woolley Lane would be completed. There would be no restrictions to the existing road network during peak hours and a single lane maintained during off-peak, with the use of traffic light control to complete these works
- Landscape tree planting would be undertaken in selected areas.

Phase 4: Spring 2024 to Autumn 2024

- The Mottram Underpass main excavation would commence with the material moving west to complete the mainline from the M67 Junction 4 to Mottram Underpass
- Road surfacing and street furniture would be installed along the length of the Scheme
- Mottram Moor Junction completed with diversion of the traffic onto the new junction, with conversion of the existing carriageway into access to the local properties
- Landscaping would continue across the whole Scheme, with final topsoil placed, temporary storage areas removed and attenuation ponds completed, ready for opening.

1.2.16 It is not expected that there would be any restrictions to the existing road network during this phase.

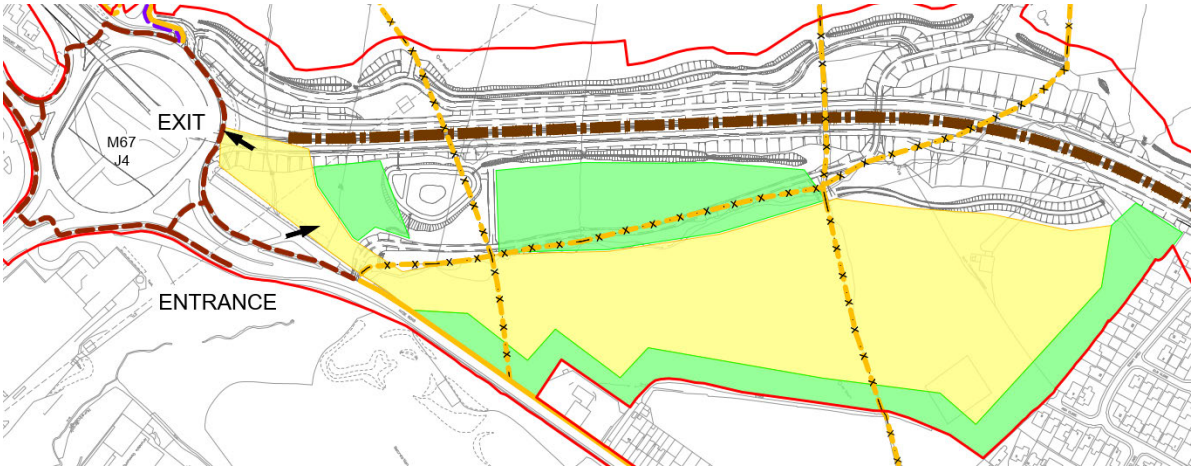
Phase 5: Autumn 2024 to Spring 2025

- The de-trunking works to the existing A57 would be completed
- Over winter planting of replacement trees would take place and planting of other bare root stock, as required.

Construction compound

1.2.17 One main compound (Insert 1) would be required for the construction of the Scheme. Access into the compound will be through the existing layby just to the east of the M67 Junction 4 interchange and exit from the compound will be onto the M67 Junction 4 interchange. This will allow the majority of deliveries to and from the office and stores to be made without increasing traffic through the village.

1.2.18 The construction compound is expected to accommodate office and welfare facilities, plant and machinery parking, storage facilities, maintenance areas and workshops. The site compound will be constructed, as the demonstrated by the yellow shaded area The top soil bund is shaded green in Insert 1 and present to shield the compound from the village. Topsoil from the compound area to make a 3 m high bund around the compound area would be used to separate the compound from the back gardens of the residential properties on Hyde Road, Littlefields, Meadowcroft, Ash Close and Four Lanes. The 3 m bund would be made up of 1 m fill material, with 2 m of topsoil on top to ensure the compound office building is sufficiently screened.



Insert 1 Site Compound (extract from Temporary Works Plan (TR010034/APP/2.8))

1.2.19 Temporary welfare facilities would also be required adjacent to the two structures, Mottram Underpass and River Etherow Bridge, as shown on the Temporary Works Plans (TR010034/APP/2.8).

1.2.20 Following pre-construction species surveys and site clearance, in accordance with the EMP, the establishment of the main construction compound would involve the following activities:

- Defining the boundary using fencing
- Soil stripping and storing this material in a 3 m high bund around the perimeter of the compound to screen the residential properties and placing and compacting stone for compound base
- Setting up drainage as required, including perimeter drainage

- Creating access tracks with bound material surfacing if required
- Setting up power requirements including generators
- Setting up offices, welfare facilities and wheel washing
- Installation of security/access gates.

1.2.21 The compound area is classified as temporary land take and would therefore be returned to the previous land use after decommissioning and restored to a condition equivalent to its original (i.e. for use for farming activities), in agreement with landowners.

1.3 Scheme Objectives

1.3.1 The objectives of the Scheme are as follows:

- **Connectivity** – by reducing congestion and improving the reliability of people's journeys through Mottram-in-Longdendale, Hollingworth and Tintwistle and also between the Manchester and Sheffield city regions
- **Environmental** – by improving air quality and reducing noise levels in certain areas, through reduced congestion and removal of traffic from residential areas. The Scheme is also being designed to avoid unacceptable impacts on the natural environment and landscape in the Peak District National Park
- **Societal** – by re-connecting local communities along the Trans-Pennine route
- **Capacity** – by reducing delays and queues that occur during busy periods and improving the performance of junctions on the route.

1.3.2 The following targets have also been set for the Scheme by the appointed Principal Designer and Contractor

- All arisings from site clearance activities during construction (e.g. vegetation clearance) are to be recycled and used on site elsewhere
- For procurement the of sub-contractors during the construction phase, the following targets will be set
  - Use of Small Medium Enterprises, where possible with a focus on social and minority enterprises
  - Use of Local supply chains within the region local to the Scheme, where possible
- Target a cut/ fill balance to avoid the import and export of materials and prevent the number of vehicles travelling to and from site.
- Ensure all timber, concrete and steel products sourced for the Scheme is certified as legally and responsibly sourced.
- Reduce primary material use through a commitment to achieve the 30% recycled content target for the region, which supports responsible material procurement.

- To support the recycling and recovery aspect of the waste hierarchy, the Principal Contractor has committed to recycle or recover 95% of wastes that leave site, therefore diverting them from landfill. This commitment will be supported through a clearly laid out waste storage area in the site compound with containers for segregated waste types. When wastes are removed they will be managed as closed as possible to site to support the proximity principle.
- Support reductions in carbon emission by adhering to the principles of the certification PAS 2080:2016[4]. This will help the Scheme reduce its carbon emissions across the whole value chain through effective and innovative design, construction and use. It would also ensure that carbon is consistently and transparently quantified at the key stages of the design process.

Highways England objectives

1.3.3 Alongside the Scheme objectives, Highways England's Biodiversity Plan, published[5] in June 2015, details the aims and obligations it has to deliver as part of the Government's RIS, in terms of biodiversity. The Applicant is expected to ensure the design of its road schemes reduces impacts on the environment by delivering a reduction in habitat fragmentation and enhancing biodiversity value. Habitats should be actively managed to ensure broad species diversity and reduced fragmentation.

1.3.4 Furthermore, Highways England's Biodiversity Plan, published[6] in June 2015, details the aims and obligations it has to deliver as part of the Government's RIS, in terms of biodiversity. The Applicant is expected to ensure the design of its road schemes reduces impacts on the environment by delivering a reduction in habitat fragmentation and enhancing biodiversity value. Habitats should be actively managed to ensure broad species diversity and reduced fragmentation.

1.3.5 This is further supported by Highways England's Licence (April 2015)[7] which sets out both statutory directions and statutory guidance issued by the Secretary of State for the Applicant to follow when undertaking their duties when managing the strategic road network. The Applicant is required to act in a manner which has due regard to the environment (paragraphs 4.2g, 4.2h and 5.23) and sustainable development and design (paragraph 5.25). This Licence includes requirements for the Applicant to promote sustainable development through the design and seek to minimise carbon emissions and other greenhouse gases during operation.

1.3.6 In accordance with Highways England's Biodiversity Plan 2015, all schemes included within the RIS must demonstrate through core design how biodiversity delivery has been maximised across the Applicant's activities and continue to

[4] https://www.carbontrust.com/what-we-do/assurance-and-certification/pas-2080-carbon-management-in-infrastructure
[5] https://www.gov.uk/government/publications/biodiversity-plan
[6] https://www.gov.uk/government/publications/biodiversity-plan
[7] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/431389/strategic-highways-licence.pdf

progress towards the Applicant's target of delivering a net gain in biodiversity, by 2040.

1.3.7 In addition, the Highways England Delivery Plan 2015-2020 sets out its own approach to meeting the key performance indicators identified within RIS of reducing net loss of biodiversity and more recently in the Highways England Delivery Plan 2020-2025[8] (RIS2) having a longer- term ambition of ensuring no net loss across the Applicant's activities.

1.3.8 The following performance targets are also identified:

- To mitigate noise in at least 7,500 households in mitigated Noise Important Areas (NIAs), defined by Defra, using funding from the Environment and Wellbeing Fund during the second road period
- Bring links agreed with the Department for Transport and based on their Pollution Climate Mapping model, into compliance with legal NO_2 limits in the shortest timescales possible
- Reduce Highways England's carbon emissions as a result of electricity consumption, fuel use and other day to day operational activities during the second road period, to levels defined by baselining and target setting activities in 2020-21.
- Address flooding and pollution from highway runoff through measures to attenuate and improve flood resilience on the strategic road network and to improve water quality

1.3.9 Finally, Highways England published 'The Road to Good Design'[9] in January 2018, which sets out design principles for delivering projects with the aspiration to *'deliver safer, better, beautiful roads which connect people and connect our country'*, which have been considered within the development of the Scheme design. The design has also been developed to respond to the design principles set out in the Road to Good Design published by Highways England in 2018 and DMRB GG 103 'Introduction and general requirements for sustainable development and design'.

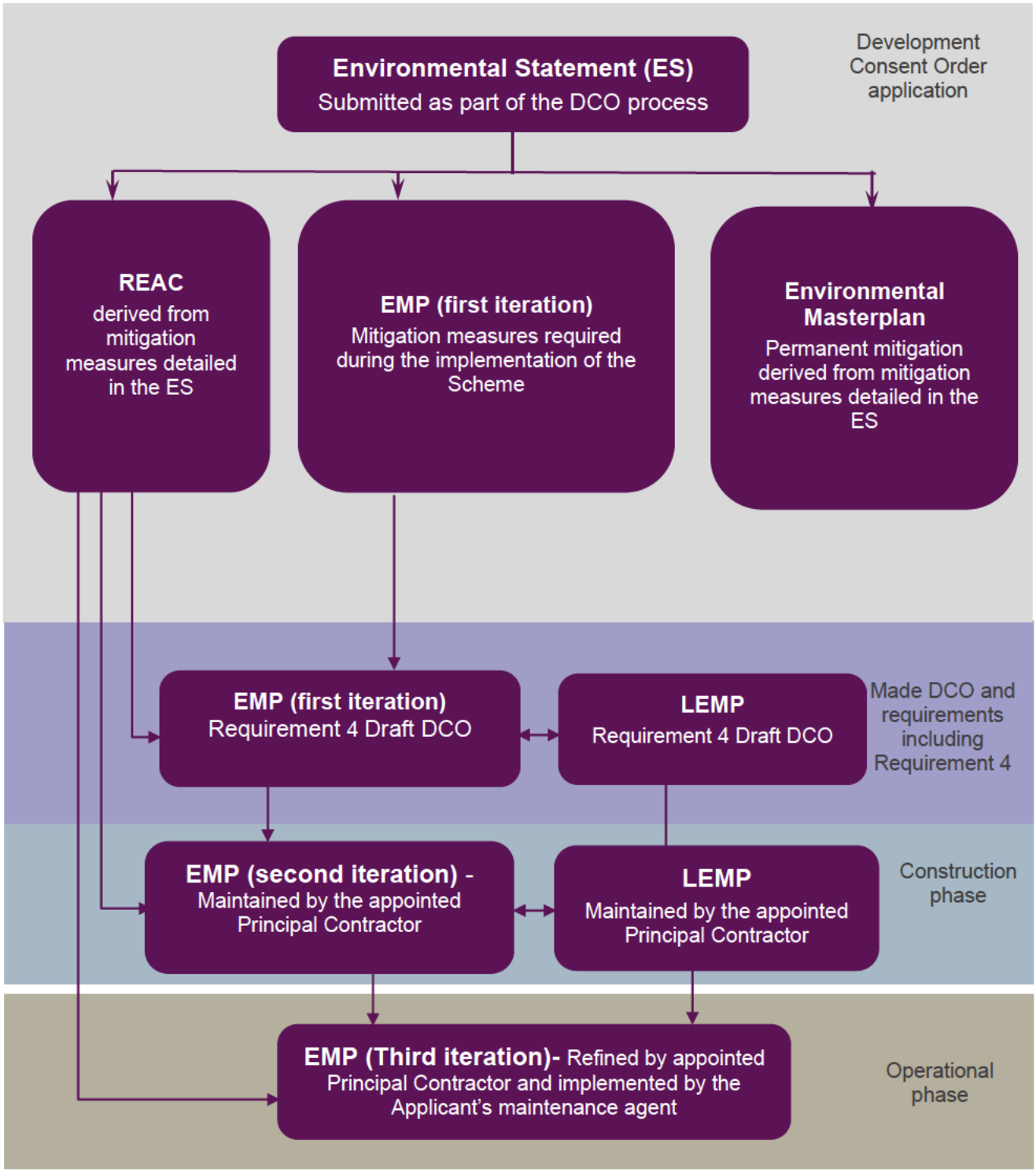
1.4 Environmental Management Approach

1.4.1 To fulfil the aims of the EMP and meet all environmental commitments, it is important to have a clear approach and structure for environmental management that outlines roles and responsibilities, required communication, appropriate hold points and all the mitigation, conditions, consents, licences and good working practices that need to be implemented. To this end, the EMP should set out a clear process whereby all these commitments are properly documented, agreed and implemented throughout the lifespan of the Scheme. This process is outlined in Figure 1.2

[8] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/910866/5-year_Delivery_Plan_2020-2025_FINAL.pdf
[9] Good_road_design_Jan_18.pdf (publishing.service.gov.uk)

1.4.2 The process of environmental management for the Scheme is outlined below.

Figure 1.1: Environmental Management Process



1.4.3 Information on required environmental actions and mitigation commitments contained within the ES, are captured in the REAC (TR010034/APP/7.3) to ensure such items are adequately communicated and addressed during Detailed Design and construction. Where appropriate, such aspects will also be added to design information (e.g. landscape specifications) to highlight issues/protection areas where necessary.

1.4.4 This EMP draws together all relevant environmental information relating to the new works. These include, but are not necessarily limited to:

- The actions and both essential and embedded mitigation measures set out in the ES and REAC
- Any further mitigation measures agreed during the Detailed Design stage
- Any other requirements relating to licences, permits and consents not included as part of the planning consent
- Environmental best practice measures.

1.4.5 The approach to environmental design and management will be in accordance with the approach and principles provided by the following DMRB standards:

- LD 117 Landscape design
- LD 118 Biodiversity design
- LD 119 Roadside environmental mitigation and enhancement
- LD 120 Environmental management plans

1.4.6 The EMP approved in accordance with Requirement 4 of the DCO will draw together all relevant environmental information relating to the Scheme, including, but not limited to:

- Actions and mitigation measures set out in the ES and REAC.
- Relevant Requirements set out in Schedule 2 of the DCO as granted.
- Any additional mitigation measures agreed post publication of the DCO.
- Any other commitments agreed between Highways England and specific landowners or occupiers.
- Any other requirements relating to licences, permits and consents not included as part of the DCO.
- Environmental best practice measures including those set out by statutory agencies

Environmental Management Plans and Method Statements

1.4.7 Environmental Method Statements and Management Plans are key documents which ensure that the construction-related mitigation measures and actions set out in the REAC (TR010034/APP/7.3) are successfully implemented on site. Environmental Method Statements and Management Plans inform the works and the development of associated task-specific Risk Assessments.

1.4.8 It is expected that some or all of the following Environmental Method Statements and Management Plans will be prepared / finalised, as appropriate, for the Scheme as part of the EMP (Second iteration):

- Soil Resource Plan – sets out the areas and type of soil to be stripped, haul routes, the methods to be used, and the location, type and management of each soil stockpile to help protect and enhance soil resources on site.
- Noise and Vibration Management Plan (NVMP) – outlines how construction noise and vibration will be managed throughout the construction of the Scheme including any noise limits agreed with High Peak Borough Council and Tameside Metropolitan Borough Council.
- Pollution Prevention Plan (PPP) – sets out best practice pollution prevention guidelines and appropriate control measures to protect from pollution events. The plan will include for activities such as excavation and dewatering, storage of fuels, chemicals and oils, vehicle washing, pollution control and emergency contingency.
- Emergency Spillage Response Plan – sets out the procedures for dealing with emergency situations involving loss of containment.
- Emergency Flood Response Plan – sets out the principles of a response to a significant flood during construction to ensure a coordinated response in the event of an emergency situation.
- Dewatering Management Plan – sets out the approach / method for the removal of water below the existing water table during construction of the Scheme. This plan will be prepared in agreement with the Environment Agency.
- Construction Water Management Plan – outlines how water will be managed during construction. It also identifies arrangements and methods for dealing with surface water arising during construction.
- Site Waste Management Plan (SWMP) – provides a structured approach to minimising waste production on site and good practice waste management during the construction of the Scheme.
- Materials Management Plan (MMP) – sets out the relevant regulations and approach for dealing with excavated ground materials as a result of the Scheme.
- Asbestos Management Plan – sets out the measures in place to manage asbestos that may potentially be present on site to prevent persons being exposed.
- Arboricultural Method Statement – details how construction works will be carried out close to trees without causing damage to the crown or the root system.
- Community Engagement Plan – outlines the methods in which the local and surrounding community will be engaged during construction of the Scheme including contact details for key site management.
- Nuisance Management Plan – sets out how nuisances during construction such as fugitive dust and noise will be dealt with.
- Ecological Management Plans – sets out how protected species will be managed during construction should they be present.

- Biosecurity Management Plan – prevent the spread of invasive species during the constructional stage through ensuring best practice principles are adhered to
- Invasive Non-Native Species Management Plan - ensure that these species will either be eradicated prior to any works commencing, or fully avoided during the duration of the works.

1.4.9 Note: the Appointed Principal Contractor is to prepare / finalise and include Environmental Method Statements and Management Plans in Annex B, C and D of the EMP (Second iteration) as required.

1.4.10 The REAC identifies the environmental commitments made when undertaking the environmental assessment to address the potential environmental effects of the Scheme. The EMP (First iteration) document will be refined at the Detailed Design stage and included in Section 3 of the EMP (Second iteration) by the appointed Principal Contractor. As the Scheme progresses, all dates and signatures for completed action / commitments shall be completed.

1.4.11 Unless otherwise stated, the above documents will be produced by the appointed Principal Designer and / or appointed Principal Contractor during the Detailed Design stage, and each shall be in place prior to the Construction stage commencing. The REAC will clearly state who is responsible for each Environmental Method Statement or Management Plan at each stage. All Environmental Method Statements and Management Plans will be developed to their full detail for the approved EMP (Second iteration) during the Detailed Design and Construction stages in accordance with Requirement 4 of the DCO

1.4.12 All Environmental Method Statements and Management Plans will be further developed to their full detail for the EMP (Third iteration) during the Detailed Design and Construction stages.

1.4.13 Environmental Method Statements and Management Plans are live documents that are subject to updating and refinement as required changing needs of the works during construction.

1.4.14 In addition, the following Environmental Method Statements and Management Plans will be prepared for the Scheme as standalone documents:

- Archaeological Fieldwork Strategy (which will inform a Written Scheme of Investigation secured under Requirement 4 of DCO)
- Landscape and Ecological Management and Monitoring Plan (LEMP) (secured under Requirement 4 of the Draft Development Consent Order (TR010034/APP/3.1))

2. Scheme Team Roles and Responsibilities

2.1 Competent Expert Statement

2.1.1 The environmental specialists who have authored this report are committed environmental professionals who are appropriately qualified and have a demonstrable knowledge, experience and competence in the environmental management field. They have worked in close collaboration with designers and engineers through the various stages of the Scheme's development to maximise the opportunity to avoid or reduce adverse environmental effects early in the design process and identified mitigation measures to address those effects that cannot be avoided or reduced at source. The production of this EMP (First iteration) report has been overseen by the Environmental Lead for the Applicant, who is a full member of the Institute of Environmental Management and Assessment (IEMA) and a Chartered Environmentalist (CEnv).

2.2 Roles and responsibilities involved in the delivery of the EMP

2.2.1 The site-based roles and responsibilities in relation to environmental management are summarised in Table 2.1 and Table 2.2. The appointed Principal Contractor will be required to delegate responsibilities to experienced onsite personnel within the key areas of the site. The delegation of responsibilities will be clearly identified within relevant Scheme documents and site files.

Project Management Organisation

2.2.2 The Applicant, or the Project Management Consultant appointed by the Applicant, will be responsible for overseeing management of the Scheme. Some of the site supervision roles such as the Engineering Clerk of Works and procurement specialist consultants to supervise, monitor or check the appointed Principal Contractor's Method Statements including sensitive activities, will be delegated where required by the Applicant.

2.2.3 The appointed Principal Contractor has control over the Construction stage of the Scheme however, they have also been involved in the Preliminary Design stage of the Scheme. The appointed Principal Contractor will be required to delegate responsibilities to experienced onsite personnel within the key areas of the site. The delegation of responsibilities will be clearly identified within relevant Scheme documents and site files.

2.2.4 A management structure that includes an organisational chart encompassing all staff responsible for environmental work is to be included within the EMP (Second iteration). This will set out the respective roles and responsibilities with regard to the environment and identify the nominated Construction

Environmental Manager. Illustrative key roles and responsibilities are set out in Table 2.1, below.

2.2.5 [Note: appointed Principal Contractor to produce and include method statements in Annex C]

Table 2.1 Environmental Management Responsibilities

Role	Main Environmental Responsibilities
The Applicant's Project Manager	Overseeing implementation of whole Scheme and the individuals undertaking specific roles and duties. To be reported to as per contract requirements and internal organisation Environmental Management Systems
Principal Contractor's Construction Project Manager	Responsible for management of the construction phase of the Scheme. Has overall responsibility for the environmental performance of the Scheme. Communication with the Applicant and the relevant statutory environmental bodies on all environmental matters (as they arise).
Principal Contractor DCO Manager	Responsible for overseeing and maintaining the commitments register. Reporting and liaison to the local authorities. Produce and agree a process for implementing the requirements of the DCO with the local authorities. Assessing requirements of changes to the design approved by the DCO. Act as the focal contact for all DCO related queries and requests for information. Provide training and briefings to relevant staff on the implementation of the DCO. Monitor compliance with the DCO requirements. Assist in the review of design and construction methodology changes. Monitor compliances with the DCO. Liaise with the Principal Contractor Planner to enable the efficient running of the construction programme Work with the Principal Contractor Community Liaison Manager to respond to complaints, community liaison, and stakeholder consultations as outlined in DCO.
Principal Contractor's Construction Environmental Manager	Ensuring compliance with environmental legislation, consents, objectives, targets and other environmental commitments, including those arising from the ES Maintaining and updating of all environmental documentation, including refining the EMP and progressing it through the required iterations in accordance with DMRB LA 120 Management of environmental specialists and monitoring compliance of construction activities in line with the Environmental Method Statements and Management Plans and the relevant environmental legislation / licences, reviewing and developing the Environmental Method Statements and Management Plans throughout the construction period, and acting as the focal point of contact for all environmental issues on site Liaison with relevant consultees / stakeholders

Role	Main Environmental Responsibilities
	Accompany statutory authorities on site visits (with Environmental Clerk of Works (ECoW) if necessary) Compiling applications for unexpected authorisations with assistance of ECoW if necessary Identification of key environmental concerns on site as Scheme develops Instruction and confirmation of key requirements of each section on site as job progresses to site personnel Assisting with the delivery of environmental training to the workforce Assisting in review of method statements Investigation of environmental incidents Assessing and checking survey results and updating databases, Environmental Method Statements and Management Plans etc. with any new information Identification of cost savings and best practice activities Ongoing liaison with the appointed Principal Contractor site supervisors, site management team, and general construction workers
Principal Contractor's Environmental Clerk of Works	Supporting the Scheme team in delivering the environmental components of the works during the construction phase Recording the progress of the environmental works Delivering environmental training to the workforce Monitoring and supervising construction activities in relation to environmental aspects Walkover of all activities on the site and ongoing monitoring of works area to ensure compliance with key environmental legislation compliance and control plans Assisting in review of method statements Identification of key environmental concerns on site as Scheme develops Instruction and confirmation of key requirements of each section on site as job progresses to site personnel Monitoring and updating Environmental Manager on the progress of pre-construction surveys Assisting in monthly formal audits with Environmental Manager Assessing and checking survey results and updating databases, Environmental Method Statements and Management Plans etc. with any new information Identification of cost savings and best practice activities Immediate reporting of environmental incidents to the appointed Principal Contractor's Safety Health and Environment (SHE) department Ongoing liaison with the appointed Principal Contractor's site supervisors, site manager, and general construction workers Providing daily updates to Environmental Manager on site progress, compliance, issues, problems, threats, opportunities, successes, etc Accompanying statutory authorities on site visits (with Environmental Manager if necessary)
Environmental Specialists	As required, archaeologists, ecologists, geotechnical engineers, hydrologists, waste management, arboriculturist, noise and vibration, and others as required will be responsible for undertaking pre-

Role	Main Environmental Responsibilities
	construction surveys and watching briefs, as well as providing advice on specific issues (as they arise) throughout the construction phase. Landscape Manager to supervise planting and aftercare.
Principal Contractor Community Liaison Manager	Communications with the public and interested parties, outreach and education, where appropriate. Key liaison with all of the above and the Applicant's Public Liaison Officer: • Maintain and develop Community Relations Strategy. • Maintain comment and enquiries log, disseminate identified comments for response and implementation of action.

2.3 Key Scheme Environmental Contacts

2.3.1 Overseeing management of the Scheme will be directed by the Applicant. The Applicant may delegate some site supervision roles and procure specialist consultants to supervise, monitor or check the appointed Principal Contractor's procedures for sensitive activities where required.

2.3.2 Individual names and contact details for the Applicant and appointed Principal Contractor will be included in the EMP (Second iteration) by the appointed Principal Contractor for the construction stage.

2.3.3 The key Scheme contacts and responsibilities for the Applicant and the appointed Principal Contractor are listed in Table 2.2.

[Note: The details will need to be confirmed and inserted by the Applicant and the appointed Principal Contractor into Table 2.2 prior to commencement of the Construction stage.]

Table 2.2 General site contacts and responsibilities

Role	Scheme Stage requirement	Contact and organisation	Phone and email	Competent Expert Statement
The Applicant's Project Manager	TBC	TBC	TBC	TBC
Principal Contractor Construction Project Manager	TBC	TBC	TBC	TBC
Principal Contractor DCO Manager	TBC	TBC	TBC	TBC
Principal Contractor Environmental Manager	TBC	TBC	TBC	TBC
Principal Contractor	TBC	TBC	TBC	TBC

Role	Scheme Stage requirement	Contact and organisation	Phone and email	Competent Expert Statement
Environmental Clerk of Works				
Principal Contractor Environmental Specialist(s)	TBC	TBC	TBC	TBC
Principal Contractor Community Liaison Officer	TBC	TBC	TBC	TBC

2.4 Lines of Communication

2.4.1 The appointed Principal Contractor will direct all queries regarding the EMP and actions within it through the Applicant prior to initial contact with statutory consultees (e.g. the Environment Agency, Natural England, Greater Manchester Archaeology Advisory Service (GMAAS), Historic England and relevant Local Planning Authorities). The appointed Principal Contractor will typically then act as the primary contact with statutory consultees leading up to and during the construction phase.

2.4.2 The appointed Principal Contractor will establish and maintain procedures for internal communications between the various levels and functions of the team during construction. Internal communications include:

- Advising of non-conformances to relevant managers
- Communicating environmental commitments to the construction team
- Communicating the environmental policy to the construction team
- Raising awareness of environmental issues to the construction team
- Reporting incidents to relevant managers

2.4.3 The appointed Principal Contractor's Community Liaison Officer will document and respond to any relevant communications from external interested parties during construction. External communications may include, but will not necessarily be limited to:

- Dealing with complaints from members of the public
- Dealing with the media

2.5 Pre-construction detailed Principal Contractor responsibilities

2.5.1 The appointed Principal Contractor is responsible for approving the appointment of the site Environmental Manager, ECoW and any environmental specialists prior to any work starting on site.

2.5.2 The appointed Principal Contractor is responsible for the following prior to construction commencement:

- Developing this EMP
- Defining roles and responsibilities for their own and their key sub-contractors' personnel relating to environmental issues
- Developing and communicating an environmental training plan covering all personnel
- Developing a programme of internal and sub-contractor inspections/monitoring
- Developing Scheme-specific emergency procedures for environmental incidents
- Finalising and implementing a programme for works to allow all preconstruction surveys to be arranged and completed within the required timeframe
- Agreeing a non-compliance reporting procedure with the Applicant to manage any environmental incidents or non-compliance events for the Scheme
- Ensuring all personnel are made aware of all relevant risks and plans
- Developing the required Environmental Method Statements and Management Plans. These will be updated as required up to construction commencement to reflect any new, relevant information provided by the Applicant or other statutory consultees (e.g. further consent conditions, landowner agreements) or through design development, construction planning, preconstruction surveys, etc.

2.5.3 Immediately prior to construction, the Applicant's Employer's Agent (or equivalent) and the appointed Principal Contractor nominated person will undertake a site condition survey of each section of the Scheme. The condition survey will include a photographic record. This will be used to ensure effective reinstatement following completion of the works and provide a 'baseline' to assess any compensation claims with landowners.

2.6 Construction detailed Principal Contractor responsibilities

2.6.1 The appointed Principal Contractor is responsible on site for delivering the construction phase commitments in the ES and REAC, as described within the Scheme design construction models, drawings and specifications, and controlled by this EMP.

2.6.2 The appointed Principal Contractor will implement the procedures set out in this EMP with technical advice from competent environmental specialists.

2.6.3 The appointed Principal Contractor are responsible for all their subcontractors on site and for ensuring these sub-contractors comply with the requirements of the EMP. All sub-contractors are bound to the requirements set out within this EMP and will be given a site induction prior to entering the site.

2.6.4 The appointed Principal Contractor are responsible for ensuring that there are no breaches in legislation and that good practice is followed throughout the duration of the construction.

2.6.5 The appointed Principal Contractor must ensure that all on-site works are adequately monitored.

2.6.6 The Risk Assessments & Method Statements (RAMS) and Environmental Method Statements and Management Plans will be used to ensure all environmental commitments are delivered on site. The success of implementing the requirements of the RAMS, Environmental Method Statements and Management Plans and delivery of mitigation measures relating to the Scheme will be the responsibility of the appointed Principal Contractor.

2.6.7 Any improvements or deviations relating to environmental matters required to the RAMS and/or Environmental Method Statements and Management Plans shall be approved by the Environmental Manager and will be subject to the Applicant's consents, where required. These changes will be communicated to relevant personnel at the first available opportunity. The appointed Principal Contractor will provide feedback and information to the Applicant Project Manager and Environmental Advisor on the progress and success in delivering all mitigation and commitments on site. Time intervals for this will be agreed between all parties and shall be either monthly or fortnightly as a minimum depending on the project stage.

2.6.8 The REAC will be updated to demonstrate progress and will be kept by the Scheme for environmental auditing purposes, with updates periodically sent to the relevant management personnel representing the Applicant.

2.6.9 All site personnel have the responsibility and authority to halt works in any activity where environmental commitments are not being successfully delivered or where legal requirements are being breached.

2.6.10 All site personnel will be encouraged to draw attention to any environmental risk or potential environmental risk arising on site (for example, refuelling being carried out too close to a watercourse or working outside the agreed limits of deviation for any aspect of the works). This approach will be promoted in all site inductions and training.

2.6.11 Any incidents or non-compliance with commitments will be recorded using the management processes as per the appointed Principal Contractor's Business Management System (BMS) requirements.

2.6.12 The appointed Principal Contractor will also:

- Maintain responsibility for pollution prevention measures being successfully implemented although subcontractors are bound to the requirements set out within this EMP

- Take all reasonable precautions and undertake all reasonable measures within their control to ensure that all legal requirements are complied with and that there is no unnecessary disturbance from undertaking the works
- Be available for environmental audits on a monthly basis.

2.6.13 The appointed Principal Contractor is responsible for delivering the Scheme environmental training programme, including toolbox talks, throughout the construction works, ensuring all staff are adequately trained to the agreed level prior to starting work on site.

2.6.14 The environmental aspects of the works shall be inspected routinely at intervals outlined in the relevant Management Plans and Method Statements as per the processes outlined in the BMS documents.

2.7 Post construction detailed Principal Contractor Responsibilities

2.7.1 The appointed Principal Contractor is responsible for correcting defects (as defined under the main construction contract) for 52-weeks following substantial completion. This is known as the 'defects period'.

2.7.2 The defects period applies to relevant works following completion of the main construction works and completion of a subsequent 5-year period where the appointed Principal Contractor has responsibility for the correction of any defects for all assets constructed or modified and management of environmental landscaping and planting. This does not include maintenance of the infrastructure; this will be handed back over to the local management team at the end of the scheme.

2.7.3 Once the commissioning activities have taken place, the Scheme will be open to traffic. The appointed Principal Contractor will be responsible for any construction defects that arise for a period of 52 weeks substantial completion. After this period the Scheme will be handed over to various asset owners who operate the road network (Highways England, Tameside MBC and Derbyshire County Council, please refer to section 6.3 and Table 6.1). The Applicant proposes that side roads and other rights of way will be handed over to the asset owner after opening, who will be responsible for ongoing maintenance.

2.7.4 Following this the Applicant will continue to monitor the effectiveness of the landscape establishment of the environmental works in line with the REAC.

2.7.5 Environmental works will be maintained by the Applicant for the 52-week aftercare period, following construction to ensure that they become appropriately established and maintained. This maintenance will then be handed over and carried out by the asset owner. These are outlined in the REAC (TR010034/APP/7.3). Following this the Applicant will continue to monitor the effectiveness of the landscape establishment of the environmental works in line with the REAC.

2.7.6 The EMP will be refined to become the Third iteration by the appointed Principal Contractor. The Third iteration of the EMP will contain environmental information needed to support the future maintenance and operation of the Scheme.

2.8 Communication

2.8.1 The appointed Principal Contractor will direct all queries regarding the EMP and actions within it through the Applicant, prior to initial contact with statutory consultees.

2.8.2 The appointed Principal Contractor will act as the primary contact with statutory consultees leading up to and during the construction phase.

2.8.3 The appointed Principal Contractor will establish and maintain procedures for internal communications between the various levels and functions of the team during construction. Internal communications include:

- Advising of non-conformances to relevant managers
- Communicating environmental commitments to the construction team
- Communicating the environmental policy to the construction team
- Raising awareness of environmental issues to the construction team
- Reporting incidents to relevant managers.

2.8.4 Through this process, the appointed Principal Contractor will be responsible for capturing the following within the EMP:

- a description of the main difficulties encountered in delivery of measures to mitigate and manage the environmental effects
- the main uncertainties involved in the forecasting of measures to mitigate and manage the environmental effects

2.8.5 The appointed Principal Contractor will also document and respond to any relevant communications from external interested parties during construction. External communications may include, but will not necessarily be limited to:

- Dealing with complaints from members of the public; and
- Dealing with the media.

2.8.6 The appointed Principal Contractor will maintain an ongoing liaison with the statutory/regulatory bodies during the construction phase. Table 2.2 outlines the proposed communication framework and should be used as an example when defining the communication processes within the detailed Environmental Method Statements and Management Plans.

Table 2.3: Outline Communication Processes

Stakeholder	Outline Communication Processes
The Applicant's Project Manager	The appointed Principal Contractor Project Director will be responsible for involving the Applicant in any safety and / or environmental meetings (as required). The minutes of the meetings will be issued to the Applicant where appropriate and a copy will be retained on site.
Statutory and Non-Statutory Bodies	Consultation with the statutory and non-statutory bodies will be undertaken as required. This will ensure that all the relevant parties have an opportunity to input to the operation of the site in order to minimise adverse environmental impacts.
The Public	The public shall be kept informed of any operations and developments that may influence them. This may include temporary loss of amenities, changes to pedestrian or vehicle access routes or vegetation clearance. Any such notification will set out the nature of the operations and the times at which they are to be carried out through the Applicant's Public Liaison Officer or the appointed Principal Contractor's Community Liaison Officer. Social media, letter drops and newsletters may be used to keep local residents informed of progress on construction and any new operations that are to be carried out. The Applicant's Scheme web-page provides up-to-date project progress and community liaison information. Before and during construction, the web-page would continue to provide updates regarding the pre-construction and construction activities, details of areas affected by construction, and mitigation in place to reduce adverse effects. The information provided will also include details of contacts within the Scheme team (should any issues arise).
Construction Staff	Construction staff shall be kept up to date on all operational matters that may have an impact on the safety and environmental factors on site. The site induction will form the basis for all relevant information provided to construction staff and will be supported at regular intervals by toolbox talks, especially where new or particularly sensitive operations are about to commence. Briefings to staff will be provided to update them on any changes in working methods and procedure. Audits and reviews of the effectiveness of the method statements will highlight any corrective measures and subsequent feedback to construction staff will serve as a means of regulating and ensuring best working practice.

2.8.7 Weekly construction team meetings will be held where environmental issues will be discussed and reported, as necessary.

2.8.8 Internal communications will be carried out through the use of toolbox talks with the site and site meetings, which will include sub-contractors.

2.9 Reporting

2.9.1 The following reports will be provided to the Applicant on the agreed basis as part of the monthly contract Progress Report:

- Monthly environmental reports of key issues
- Waste management volumes and recycling figures
- Carbon calculator submitted using the Applicant's template
- Environmental incidents and near misses.

2.9.2 These will form part of the agenda at formal monthly contract Progress Meetings between the Applicant and the appointed Principal Contractor.

3. Record of Environmental Actions and Commitments

3.1 Introduction

3.1.1 The REAC refers to sections of the ES (TR010034/APP/6.3) which contain detailed information on the assessment and mitigation of impacts and sets out the mitigation committed for the Scheme as part of the ES.

3.1.2 A REAC (TR010034/APP/7.3) has been submitted as a standalone document with the DCO application. This identifies the environmental mitigation commitments (both embedded and essential), to address potential environmental effects of the Scheme which are identified in each topic chapter of the ES. In accordance with the DMRB LA 120, the REAC forms part of this EMP (First iteration), and therefore the two documents should be read in conjunction with each other.

3.1.3 When the EMP (Second iteration) is prepared by the Principal Contractor in advance of construction, the REAC table will be incorporated into this section (Section 3) of the document. It will reflect the all mitigation for the consented Scheme.

3.1.4 Any remaining items from the REAC which relate to the post construction and operational stage of the Scheme will be part of the EMP (Third iteration). The REAC acts in part as a connection between the ES and the EMP in all its forms, i.e. iterations 1 - 3 through the lifecycle of the project.

3.1.5 The REAC is a live document and as such will be updated as the Scheme progresses and will be finalised at the end of construction on completion of the Scheme, where it will inform the development of, and be included within, the EMP (Third iteration) to support the future management and operation of the Scheme.

3.2 REAC requirements

3.2.1 In accordance with DMRB LA 120 the REAC will include:

- Clear and specific description of the action
- The objective of the action
- How the action is to be implemented/achieved
- The source of the action, including references for source documentation e.g. environmental statement
- Naming of the person responsible for the action
- Achievement criteria and reporting requirements
- The project stage, date or implementation and achievement
- Details of any monitoring required and corrective action.

3.2.2 The REAC is a working document and will be updated by the Environmental Manager as the Scheme progresses. It will be finalised at the end of construction on completion of the Scheme, as Section 3 of the EMP (Third iteration). This will be the main vehicle for passing essential environmental information to the Applicant's Maintenance Agent, Tameside MBC and Derbyshire County Council (CC), who will be responsible for the future maintenance and operation of the Scheme.

4. Consents and Permissions

4.1 Introduction

4.1.1 The appointed Principal Contractor will be required to obtain and implement all permits, consents and licences necessary before and during the construction phase. The appointed Principal Contractor will need to manage the submission and approval of those required prior to the commencement of any site works. Table 4.1 provides an anticipated list which will need to be reviewed and updated prior to construction commencing and, as required, as the Scheme progresses.

4.2 Consents and Agreements Position Statement

4.2.1 The Consents and Agreements Position Statement (TR010034/APP/5.5) sets out the Applicant's intended strategy for obtaining consents and associated agreements needed to implement the Scheme. It identifies at a high-level what consents are expected to be needed for the Scheme, together with how those consents will be obtained.

4.2.2 The principal consent for the Scheme will be a DCO itself, a draft version is submitted as part of this application (TR010034/APP.3.1). The DCO process provides development consent for the works and enables land acquisition and temporary possession, along with many consents and powers to be dealt with at the same time. However, the DCO application may need to be supplemented by other applications because:

a. A specific consent cannot be contained in the DCO

b. A consenting authority declines to allow a consent to be contained within the DCO

c. It is not desirable, or it is inappropriate, to include a consent within a DCO due to the stage of design development meaning the detail required is unavailable.

4.2.3 Table 4.1 provides details of the anticipated consents / permissions required to deliver the EMP. The table will be refined for the EMP (Second iteration) to confirm permissions required and / or obtained. At the completion of the Scheme it will be refined further for the EMP (Third iteration) to cover developments through the Detailed Design and construction planning phase, and throughout the construction phase, in order to capture all relevant items.

Table 4.1: Anticipated consents and permissions required for the Scheme

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
Flood Risk Activity Permit (FRAP) – Environment Agency	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	Required for: Erecting any temporary or permanent structure in, over or under a Main River. Any activity within 8m of the bank of a main river, or 16m if it is a tidal main river. Any activity within 8m of any flood defence structure or culvert on a Main River, or 16m on a tidal river. FRAPs will be required for the River Etherow	Consent applications need to be supported by Detailed Design drawings, construction method statements, and an environmental risk assessment.
Ordinary Watercourse Consent – Tameside Metropolitan and High Peak Borough Councils	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	Required for works with the potential to impeded flow in any ordinary watercourse. Consent will be required for the proposed new culverts on 10 ditches.	Consent applications need to be supported by Detailed Design drawings and a construction method statement.
License for temporary dewatering (small scale dewatering in the course of building or engineering works) – Environment Agency	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	An abstraction license is required unless exempted. Exempted if: • Lasting less than 6 consecutive months from commencement of first abstraction • Has no potential to cause impact at any conservation site • Has no potential to cause damage to protected species • Is immediately discharge to a soakaway • Is less than 100 m^3/day • If within 500 m of a conservation site, 250 m of a spring, well or borehole used to supply water for a lawful use, the volume restriction is reduced to 50 m^3/d from 100 m^3/day.	This permit will be applied for by the appointed Principal Contractor.

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
Permit for discharge from excavations – Environment Agency or Water Company	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	A permit to discharge is not required from the Environment Agency if the discharge is to foul sewer, however the discharge conditions must be agreed by the water company. However, a discharge permit is usually needed if the discharge is from an excavation to surface water. The permit is made to the Environment Agency if the discharge is to a main river and to the lead local flood authority if into a non-main river. A site can be exempted if the following is true: • have a short term, temporary discharge of uncontaminated water which is wholly or mainly rainwater, from an excavation to surface water (such as pumping water out of excavations on a building site) • complies with all the conditions listed in the relevant guidance document (*https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water/temporary- dewatering-from-excavations-to-surface-water*)	This permit will be applied for by the appointed Principal Contractor.
Permit for discharge – Environment Agency/ Lead Local Flood Authority	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	New outfall structures as part of the highway drainage may require Environmental Permit or a Land Drainage Consent if connecting into a Main River or Ordinary Watercourse respectively. Consent will be required for both the temporary works and the permanent outfall structure. The requirements for the permit or consent will be agreed in full consultation with the Environment Agency and/or Lead Local Flood Authority at the detailed design stage of the scheme.	This permit will be applied for by the appointed Principal Contractor.
Section 61 – Noise (Control of Pollution Act 1974)	Environmental Statement, Chapter 11: Noise and vibration (TR010034/APP/6.3)	If required, details to be included in the EMP (Second iteration) by the appointed Principal Contractor.	The requirement for (and details of if required) a s61 is to be agreed with relevant LPA by the appointed Principal Contractor prior to the start of the construction phase

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
Removal of trees	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Removal of trees will be permitted under the DCO with exclusion of vegetation noted as being retained on the Environmental Masterplan (TR010034/APP/6.4).	
Removal of hedgerows	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Removal of hedgerows will be permitted under the DCO with exclusion of vegetation noted as being retained on the Environmental Masterplan (TR010034/APP/6.4).	Two hedgerows within the study area were assessed to meet the criteria of 'important hedgerow' in accordance with the Hedgerows Regulations 1997 (H18 and H24). Approximately 42 m of hedgerow H24 falls within the DCO boundary of the Scheme; hedgerow H18 is situated immediately north-east of the DCO boundary.
Temporary footpath closures	Environmental Statement, Chapter 12: Population and Human Health (TR010034/APP/6.3)	Temporary closure orders under the Road Traffic Regulations Act from Tameside Metropolitan Borough Council/Derbyshire County Council – closures will be required for PRoW LON/35/10,PRoW LON/50/10, PRoW LON/51/10, PRoW LON/52/10, PRoW LON/88/60, and PRoW LON/90/10.	Temporary closures will be authorised by the DCO but notification of works is required. Temporary footpath closures are identified on 2.4 Streets, Rights of Way and Access Plans (TR010034/APP/2.4).
Licence to carry out works affecting bats under Wildlife and Countryside Act 1981 (as amended) – Natural England	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Consent will be required for any works with potential to damage or disturb bats or their roosts. A 'letter of no impediment' will be submitted to Natural England prior to the DCO application being determined to agree acceptance of the licence in principal. An application for the final licence being submitted to Natural England after the DCO application has been approved.	Demolition of structures with confirmed bat roosts will required license to be in place prior to demolition. Details of the structures proposed for demolition can be found in Chapter 2: Description of the Scheme of the ES (TR010034/APP/6.5).
Licence to carry out works affecting badgers under Wildlife and Countryside Act 1981	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Consent will be required for any works with potential to damage or disturb badgers or their setts. A 'letter of no impediment' will be submitted to Natural England prior to the DCO application being determined to agree acceptance of the licence in principal.	The permanent closure and destruction of eight setts is required as these setts are located within the DCO boundary and cannot be avoided.

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
(as amended) – Natural England		An application for the final licence being submitted to Natural England after the DCO application has been approved.	Details can be found in Appendix 8.2 of the ES, Confidential Badger Survey report (TR010034/APP/6.4) Note: The locations of these setts are confidential and details of the locations of these setts should only be shared with the necessary parties involved with the consenting and construction of the Scheme.

4.3 Recording

4.3.1 A register of environmental permits and a record of all consents, licences, etc. relating to construction activities will be maintained by the appointed Principal Contractor and made available for audit by the Applicant.

4.3.2 Any conditions related to each consent, permission or agreement can be found within the REAC (TR010034/APP/7.3) where appropriate.

5. Environmental Asset Data and As Built Drawings

5.1 The Applicant's Environmental Information System

5.1.1 The Applicant's Environmental Information System (EnvIS) consists of specific environmental data supplied by service providers, the Applicant and other bodies which is collated and displayed in the Highways Agency Geographic Information System (HAGIS). This data is used to assist in managing the environment, within and surrounding the strategic road network, and in the review and reporting of the environmental performance of both service providers and the Applicant.

5.1.2 The aim of EnvIS is to assist the Applicant and service providers, in designing and managing the strategic road network in an accurate, consistent and environmentally sound manner. Specifically, it aims to achieve the following key strategic and operational objectives:

- enable consistent and accurate recording and retrieving of specific environmental data about the strategic road network
- assist in the review and reporting of environmental performance of both the Applicant and service providers
- improve understanding of the environmental issues and opportunities that must be considered at different stages of trunk road and motorway management
- in line with ensuring a value for money approach, assist in the prioritisation of environmental management actions based on an understanding of the condition of the Element and environmental objectives
- assist in the handover of environmental data from designers to network management agents (and vice versa) and the transfer of environmental data from an outgoing network management agent to its successor
- assist designers and network management agents in the collection of environmental data and use this information to develop specific environmental management programmes and strategies, including EMPs

5.1.3 Further to the adherence to the Applicant's EnvIS, the appointed Principal Contractor will adhere to the Highways England Asset Management Development Group – Asset Data Management Manual Part 2 – Requirements and Additional Information which sets out the Applicant's asset data requirements to achieve both its corporate objectives as well as its asset management objectives.

5.2 Collection and submission of EnvIS data

5.2.1 The appointed Principal Contractor is responsible for identifying, recording, updating and auditing the EnvIS data on an ongoing basis. This should be stored in the appointed Principal Contractor's own system, as-and-when elements are identified, removed, or implemented as part of the Scheme improvements.

5.3 Submission of EnvIS data

5.3.1 EnvIS data is submitted in accordance with the interface file specifications set out in the environment data section within the Asset Data Management Manual. The appointed Principal Contractor shall ensure that the data is in a compatible format to enable supply of data to the maintenance contractor.

5.3.2 For designers, the frequency of EnvIS data submission (to the Applicant), shall be in line with the end point of the following milestones:

- Development phase (Preliminary Design) – Environmental Statement Publication - environmental data resulting from statutory or non-statutory assessment of the environmental implication of a proposed project. Designers collect and submit EnvIS data for all Elements that have influenced or are influenced by the Preferred Route
- Development phase (Construction Preparation) – Detailed Design drawings - environmental data detailing the final specification of the Scheme. Designers collect and submit EnvIS data detailing all Elements associated with the planning and design of the Scheme and planned environmental management actions that will be undertaken during the construction period and of the existing Elements likely to be affected.
- Construction phase (Construction) – As Built Drawings – environmental data detailing the completion of the Scheme prior to handover. Designers collect and submit EnvIS data detailing all Elements associated with the construction of the Scheme and planning environmental management actions that are required to be undertaken by the network managing agent as part of operating and maintaining the network area.

5.3.3 For the EMP (first iteration), EnvIS data has been submitted through the publication of the ES. This included the submission of all species surveys results undertaken to inform the ES.

5.3.4 EnvIS data for the Detailed Design stage will be submitted for all elements associated with the planning and design of the Scheme. This will have updated previous data arising from the Preliminary Design including any survey information / data that has already been provided e.g. species surveys.

5.3.5 Towards the end of the construction phase of the Scheme and prior to handover, EnvIS data detailing the completion of the Scheme will be collected by the appointed Principal Contractor and submitted. The data will detail all elements associated with the construction of the Scheme and planned environmental management actions that are required to be undertaken by the Network Management Agent as part of operating and maintaining the Network Area.

5.3.6 Consultation will be held with the Managing Agents to ensure that the agreed data in the correct format forms part of the handover package of information. The Managing Agents will then ‘upload’ this additional information as part of their standard submission to the Applicant.

5.3.7 The Evaluation of Change Register, identifying changes to the design as part of the change control process, will be provided by the appointed Principal Contractor in Annex E of the EMP (Second iteration) and submitted as part of the EnvIS process prior to handover.

[Note: This section should be updated at the next milestone stage (Development phase (Construction Preparation)) to detail the submission arrangements for the future EnvIS data]

5.4 As built drawings

5.4.1 In line with the Construction (Design and Management) Regulations a health and safety file will be produced for handover at the end of the Scheme. This will include pre-construction information, construction process details and Scheme plans including as built drawings.

5.4.2 As built drawings produced at the Preliminary Design stage by the appointed Principal Contractor and will be issued to the Applicant by the appointed Principal Contractor via Business Collaborator.

5.4.3 The following relevant engineering and environmental plans have been provided as follows:

- DCO boundary for the Scheme (Figure 2.1, TR010034/APP/6.4)
- Scheme General Arrangement (Figure 2.2, TR010034/APP/6.4)
- Environmental Constraints (Figure 2.3, TR010034/APP/6.4)
- Environmental Masterplan (Figure 2.4, TR010034/APP/6.4)
- Location Plan (TR010034/APP/2.1)
- Land Plans (TR010034/APP/2.2)
- Works Plans and DCO Schedule 1: Work Plan Schedule (TR010034/APP/2.3 and 3.1)
- Streets, Rights of Way and Access Plans (TR010034/APP/2.4)
- Scheme Layout Plans (TR010034/APP/2.6)
- Engineering Drawings and Sections (TR010034/APP/2.7)
- Temporary Works Plans (TR010034/APP/2.8)
- Culverts and Drainage Plans (TR010034/APP/2.12)

5.4.4 In addition, the following relevant DCO plans have been submitted:

- Nature Conservation Sites and Features Plan (TR010034/APP/2.9)
- Historic Environment Sites and Features Plan (TR010034/APP/2.10)
- TPOs and Hedgerows Regulations 5 (2)(o) (TR010034/APP/2.13)

5.5 Species survey drawings

5.5.1 During the Preliminary Design stage, Extended Phase 1 Habitat surveys have been undertaken for the whole site. In addition, the following ecological surveys have been undertaken

Table 5.1: Ecological Surveys undertaken to date

Survey	Date undertaken
NVC survey	July 2017
Biodiversity metric condition assessments	August and September 2020.
Hedgerow survey	October 2020
Watercourse and standing water body (ponds and lakes) walkover survey	March 2020
River Corridor Survey	May and June 2018
River condition survey	2020
Aquatic macroinvertebrate survey	October 2020
Predictive System for Multimetrics pond survey	August 2020
Great crested newt survey	April, May, and June 2017
Breeding bird surveys	March to July 2020
Reptile surveys	May to September 2017
Kingfisher survey	March 2020
Barn owl surveys	June and October 2020
Bat roost inspection survey	Throughout 2017 and 2018
Bat emergence surveys	Throughout 2017 and 2018
Bat activity surveys	Carried out in October 2019 and between March and September 2020
Bat tree surveys	Carried out between July and September 2020 and between January and February 2021 (for hibernation) by Ecus Ltd on behalf of the Applicant
Otter surveys	April and September 2020
Water vole surveys	April and September 2020
Badger walkover survey	February 2020 (updated walkovers throughout 2020 and 2021)
Badger camera survey	October-November 2020
Badger bait marking survey	Throughout March 2020
Arboricultural survey	September and October 2020

5.5.2 Reports and plans for these surveys are contained in the Figures and Appendix sections of the ES (TR010034/APP/6.4 – 6.5).

6. Details of maintenance and EMP monitoring activities

6.1 General requirements

6.1.1 The ES and REAC propose certain requirements for environmental monitoring to ensure the identified mitigation measures and actions can be tracked and closed out when completed. Some of these are specific, e.g. noise monitoring, others are more general, e.g. covered by routine inspection/audit or confirmation by the construction team that an element of the Scheme design has been completed as outline in the relevant Management Plans and Method Statements.

6.1.2 A summary of the monitoring requirements for the Scheme for those aspects where a monitoring requirement is identified will be set out in the EMP (Second iteration), based on recommendations and commitments that are outlined in the ES.

6.2 Detailed requirements

6.2.1 The details of specific monitoring and reporting requirements for the Scheme are still to be developed. These details will be confirmed during Detailed Design with the delivery arrangements included in this section of the EMP (Second iteration).

6.3 General asset maintenance requirements

6.3.1 The Applicant's Maintenance Agent, Tameside MBC and Derbyshire County Council (CC) will be responsible for the maintenance of the Scheme once operational. New assets shall be assessed, and maintenance requirements determined in accordance with requirements of the respective contract documents. Table 6.1, below, sets out high-level maintenance responsibilities for each asset.

Table 6.1: Existing and new assets including responsibility

Asset type	Description	New or Existing	Owner
Highways	Road restraint system (RRS) on the dual carriageway	New	Highways England
Highways	Traffic Signs	New/existing	Highways England Tameside MBC Derbyshire CC
CCTV	CCTV for the underpass	New	Highways England

Asset type	Description	New or Existing	Owner
CCTV	CCTV for Mottram Bypass and the Gun Inn interchange	New	Highways England
CCTV	Woolley Bridge junction traffic signals CCTV	New	Derbyshire CC
Drainage	Chamber	New/existing	Highways England Tameside MBC Derbyshire CC
Drainage	Headwall	New/existing	Highways England Tameside MBC Derbyshire CC
Drainage	Flow controller	New/existing	Highways England Tameside MBC Derbyshire CC
Drainage	Ponds	New	Highways England (pond 1 and 2) Tameside (pond 3)
Lighting	Chamber	New/existing	Highways England Tameside MBC Derbyshire CC
Lighting	Throughout	New/existing	Highways England Tameside MBC Derbyshire CC
Traffic signals and associated technology	Traffic signals and detectors (loops or radar, tbc10) at Mottram Moor, M67 J4 and the Gun Inn interchange	New	Highways England owned though Transport for Greater Manchester (TfGM) will maintain and operate
Traffic signals and associated technology	Traffic signals and detector loops at Woolley Bridge junction	New	Derbyshire CC
Geotechnical assets	Earthworks	New/Existing	Highways England Tameside MBC

[10] From a maintenance perspective the aspiration is radar based to avoid carriageway maintenance

Asset type	Description	New or Existing	Owner
			Derbyshire CC
Underpass	Underpass on the A57	New	Highways England
Underpass	Section above the underpass – flora	New	Tameside
De-trunked A57	The old section of the A57	Existing	Tameside
Carrhouse Lane underpass	Underpass that serves Carrhouse farm	New	Tameside
Old Mill farm underpass	Underpass that serves Old Mill farm	New	Highways England
River Etherow Bridge	Bridge	New	Tameside
Access track	Track used for access to maintain pylons and other assets adjacent to the A57 dual carriageway	New	Highways England
M67 through-link	The through-link of M67 J4	New	Highways England

6.3.2 Further details regarding maintenance responsibilities and requirements will be included in the EMP (Third iteration) prior to the Scheme opening.

6.4 Inspections and monitoring processes

6.4.1 The inspection and monitoring process will be detailed in full in Annex F of the EMP (Second iteration) by the Appointed Principal Contractor, ahead of the construction phase. Typical requirements are summarised below:

- The appointed Principal Contractor will carry out formal Health Safety Environment and Quality (HSEQ) inspections of all work areas at least every 7 days.
- The appointed Principal Contractor will implement a protocol for identification of near miss/good practice reporting.
- Inspections and Observations shall be categorised and distributed. The Inspections and Observations will detail realistic timescales for actions, and these will be monitored by the site team. Action Leaders will be appointed to discharge any corrective actions.
- Data from inspections shall be used for trend analysis purposes to allow pin-point targeting of recurring issues.

6.4.2 As a minimum, the following inspections will be completed:

- Weekly Inspections by a nominated employee from the appointed Principal Contractor

- Weekly Inspections carried out by appointed sub-contractor(s)
- Site Set Up Audit by the Environmental Manager
- Monthly HSEQ scored inspection by internal independent inspector or appointed senior member of the Principal Contractor's project management team

6.4.3 The appointed Principal Contractor will ensure that competent persons undertake all other statutory inspections at required intervals. Guidance and forms for other statutory inspections, e.g. Provision and Use of Work Equipment Regulations 1998, Lifting Operations and Lifting Equipment Regulations 1998, copies of which the appointed Principal Contractor should make available.

6.4.4 In addition to the above, the appointed Principal Contractor shall monitor health, safety and environmental standards and performance as follows:

- The appointed Principal Contractor's Supervisors will monitor their work area environmental conditions and performance daily.
- Monthly reviews of risk assessments/method statements will be undertaken to ensure compliance, monitored through the Applicant's Business Collaborator.
- Sample checks of compliance with method statements, work package plans, work briefings and Permits to Work will be undertaken.
- Sample checks of sub-contractors/ appointed Principal Contractor's briefing of own team on method statements will be completed through the use of stop shift audits.
- Sample checks will be performed on the training of staff by sub-contractors/ appointed Principal Contractor.
- Spot checks and environmental audits of sub contractors' inspections and documentation (including registers) verifying compliance will be undertaken.
- Periodic audits checks and inspections will be completed by the HSEQ Team.

6.4.5 Each sub-contractor must ensure their line managers, Supervisors or Health, Safety and Environmental Advisors monitor the health, safety and environmental standards of their activities as a normal part of their duties. In addition, each contractor should ensure that a formal and recorded safety and environmental inspection is carried out every week. Inspection records should include confirmation that previous remedial actions have been carried out. These reports will be copied to the Scheme Document Controller and will be reviewed at the monthly safety meeting.

6.4.6 The works areas will be registered with the Environment Agency Floodline Warnings Direct Scheme which will provide constant monitoring of flood risk.

6.5 Auditing

6.5.1 The appointed Principal Contractor's HSEQ Manager accompanied by the appointed Environmental Manager and internal independent ISO Auditor, will conduct an audit to examine Health, Safety and Environmental systems and performance standards following mobilisation of the site. This will be undertaken on a 6-monthly basis.

6.6 Additional inspection and monitoring

6.6.1 Any consent/licence/permit monitoring inspection requirements shall be added into this section and the appropriate Environmental Method Statements and Management Plans within the annex.

6.7 Procedures in the event of failure to comply with the EMP

6.7.1 Any persons who disregard the safety, health or environmental rules and arrangements detailed in this plan will, in the first instance, receive a written warning from the appointed Principal Contractor or nominated person; subsequent misdemeanours will provoke the removal of the person from site. The appointed Principal Contractor reserves the right to remove from site instantly any person whose acts, or omissions, in his/her opinion constitute serious danger to people or property.

6.7.2 The appointed Principal Contractor may give reasonable directions to any contractor sharing the site for the purposes of construction (regardless of contractual arrangements) in order for them to comply with duties under Regulation 15(3)(a) of CDM 2015 to issue reasonable directions to contractors.

6.7.3 The relevant emergency procedures will be outlined by the appointed Principal Contractor and contained in Annex D of the EMP (Second iteration).

6.8 Review and close out reporting

6.8.1 The EMP can be reviewed as often as is necessary to include the significant changes in equipment, risk, and scope of works, circumstances, people or other organisational change.

6.8.2 Suitability and performance against the EMP will be reviewed to ensure that it remains valid and reflects the arrangements for managing current activities on site.

6.8.3 Sustainability and Environmental performance will be reviewed throughout the contract and discussed as appropriate at the following meetings:

- Scheme Board meetings
- Construction Management Team meetings
- HSEQ Co-ordination meetings

- HSEQ Workforce Committee meetings

6.8.4 Performance reviews shall identify trends in accidents and incidents highlighting areas that will be targeted for improvement.

6.8.5 The appointed Principal Contractor will complete sub-contractor's performance reviews at least every 3 months using the appointed Principal Contractor's commercial management system. Relevant members of the construction team should be consulted during each review. Close out reports will be prepared in accordance with the appointed Principal Contractor's Management System requirements.

6.8.6 All archiving will be carried out in accordance with the appointed Principal Contractor's archiving requirements.

7. Induction, training and briefing procedures for staff

7.1 General management

7.1.1 The process for the induction, training and briefing procedures for staff will be detailed in full in the EMP (Second iteration), ahead of the Construction stage. Typical requirements are summarised in this Chapter.

7.1.2 All personnel on site will be made aware of the company Environmental Policy by the appointed Principal Contractor, the relevant Environmental Legislation, the REAC and the relevant Environmental Method Statements and Management Plans included in the EMP. The team will be briefed on the following topics as a minimum / as appropriate:

- Company Environmental Policy
- General environmental awareness
- Waste management
- Working in or near watercourses
- Surface water pollution and control
- Ecology/European Protected Species
- Spills and emergency response procedures
- Dust management
- Vibration management
- Noise management

7.1.3 Specific training needs will be identified and provided for all personnel involved in work activities that have the potential to result in an adverse impact on the environment. The training will include reference to the importance of adhering to the contents of the EMP and the potential consequences of departure from specified method statements. Environmental training in the form of toolbox talks will also be undertaken on site, evidence of which (along with all other training) will be maintained on record as part of the appointed Principal Contractor's management system.

7.2 Site inductions

7.2.1 Prior to commencing work on site, all personnel will undergo a site induction, where the appointed Principal Contractor will communicate the environmental objectives, requirements and responsibilities to the workforce.

7.2.2 The appointed Principal Contractor will compile and communicate Environmental Site Rules which will detail site personnel's obligations while on site. This will help introduce accountability for personnel working on the Scheme.

7.2.3 The site induction and training will cover relevant parts of the following areas to a level of sufficient detail for the workforce:

- Environmental site rules
- Spill kit use and locations
- Emergency spill procedures
- Energy management
- Invasive species
- Asbestos
- Waste management
- Biodiversity protection
- Biodiversity enhancement
- Public interface
- Sustainability procedures

7.2.4 In addition, the site induction will include other beneficial advice and procedures to support all site workers, promoting a safe and healthy working environment, such as:

- First aid and accident procedures
- Fire and emergency procedures
- Mental health and wellbeing provisions (e.g. monthly communications and events on health, details of 'mental health first aiders' and wellbeing issues)
- Occupational health provision

7.2.5 All site personnel will be encouraged to report all unsafe events, practices and conditions as well as any exemplar site practices.

7.3 Evaluation of training effectiveness

7.3.1 As part of the appointed Principal Contractor's procedures, the Scheme shall appoint specific Management Environmental Representatives and Leaders to drive improvement in a number of areas and evaluate training effectiveness. These champions shall be appointed in the following areas:

- Resource Efficiency Leader
- Waste Reduction and Recycling Leader
- Health and Wellbeing Leader
- Mental Health First-Aiders
- Occupational Health

7.4 Internal training

7.4.1 The appointed Principal Contractor will develop an internal expert knowledge transfer scheme with environmental awareness sessions. All members of staff

employed on the scheme shall attend. The session shall cover topics including but not limited to:

- Setting in the environment
- Legislation relevant to the scheme
- Ecological impacts
- Environmental risks
- Archaeological awareness and risks (although it is understood that there is low archaeological potential within the site)

8. References and glossary

8.1 References

8.1.1 BSI (1996, as amended) BS EN ISO 14001: Environmental Management

8.1.2 Highways Agency (2020) DMRB LA 104 Environmental assessment and monitoring

8.1.3 Highways Agency (2010) Interim Advice Note ("IAN") 84/10 Environmental Design and Management Section 10 Environmental Information System –EnvIS (IAN 84/10)

8.1.4 Highways Agency (2020) LA 120 Environmental management plans

8.1.5 IEMA (2008) Environmental Management Plans: Practitioner Best Practice Series, Volume 12

8.1.6 Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

8.2 Glossary and abbreviations

Term	Meaning
BMS	Business Management System
BSI	British Standards Institution
CDM	Construction Design and Management
EMP	Environmental Management Plan
DCO	Development Consent Order
DMRB	The Design Manual for Roads and Bridges
ECoW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
EnvIS	Environmental Information System
ES	Environmental Statement
FRAP	Flood Risk Activity Permit
HSEQ	Health Safety Environment and Quality
IEMA	Institute of Environmental Management and Assessment
LEMP	Landscape and Ecological Management Plan
MMP	Materials Management Plan
PPP	Pollution Prevention Plan
RAMS	Risk Assessment and Method Statement
REAC	Register of Environmental Actions and Commitments
SHE	Safety, Health and Environment
SWMP	Site Waste Management Plan
TBC	To Be Confirmed

Annexes

ANNEX A: CONSTRAINTS MAP

BRUSHES VALLEY LNR
COPLEY CONSERVATION AREA
HUDDERSFIELD NARROW CANAL SSSI
SOUTH PENNINE MOORS SAC
PEAK DISTRICT MOORS (SOUTH PENNINE MOORS PHASE 1) SPA
DARK PEAK SSSI
PADFIELD CONSERVATION AREA
HADFIELD CONSERVATION AREA
MOTTRAM-IN-LONGDENDALE CONSERVATION AREA
GLOSSOP HOWARD PARK CONSERVATION AREA
OLD GLOSSOP CONSERVATION AREA
OLD GLOSSOP CONSERVATION AREA
HURST CLOUGH LNR
GLOSSOP WREN NEST CONSERVATION AREA
GLOSSOP ST JAMES CONSERVATION AREA
GREAT WOOD LNR
WERNETH LOW LNR
SIMMONDLEY CONSERVATION AREA
CHARLESWORTH CONSERVATION AREA
ETHEROW COUNTRY PARK LNR
0
Kilometres

LEGEND

- DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
- 2KM STUDY AREA
- SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- SPECIAL PROTECTION AREAS (SPA)
- SPECIAL AREAS OF CONSERVATION (SAC)
- LOCAL NATURE RESERVES (LNR)
- LOCAL WILDLIFE SITES
- SCHEDULED MONUMENTS
- REGISTERED PARKS AND GARDENS
- HERITAGE AT RISK
- CONSERVATION AREAS
- AIR QUALITY MANAGEMENT AREAS
- NOISE IMPORTANT AREAS
- RIVER NETWORK

LISTED BUILDINGS

- GRADE I
- GRADE II*
- GRADE II

Description		
Status	Revision	Issue Date
Description		
Status	Revision	Issue Date
Description		
Status	Revision	Issue Date
Description	DCO SUBMISSION	
Status: A4	Revision: P02	Issue Date: 24/05/21
Drawn: SD	Checked: BT	Reviewed: LY	Authorised: MR
Drawing Suitability: DCO SUBMISSION		Status: A4

Client: highways england

Scheme Name: A57 LINK ROADS

Drawing Title: FIGURE 2.3 ENVIRONMENTAL CONSTRAINTS

PINS Ref. No: TR010034/APP/6.4

Drawing Number

Scheme	Originator	Volume
HE551473 -	BBA -	EGN -
A57_AL_SCHEME -	DR -	LE - 020300
Location	Type	Role	Number

Scale	Original Size	Rev
1:25,000	A3	P02

ANNEX B: RELEVANT MANAGEMENT PLANS

All Environmental Method Statements and Management Plans will be produced in response to the statutory process by the appointed Principal Contractor for the Scheme as part of the EMP (Second iteration)

ANNEX C: ENVIRONMENTAL METHOD STATEMENTS

To be produced in response to the statutory process by the appointed Principal Contractor for the Scheme as part of the EMP (Second iteration)

ANNEX D: EMERGENCY PROCEDURES AND RECORD OF ANY ENVIRONMENTAL INCIDENTS

To be produced prior to construction by the appointed Principal Contractor. This section should include:

• Confirmation of procedures in the event of an environmental emergency. A record of environmental incidents (in table format) if occurred to include the following information:

• Date and location of the incident

• Details of the reporting procedure followed

• Description of the incident and relevant legislation

• Remedial actions

• Lessons learnt

• Details of any contact with enforcing bodies.

This form should only be completed by a manager or supervisor. All personal information will be treated in the strictest confidence. Once completed, this report is subject to a management review before being distributed accordingly to the relevant recipients. ***Italic* – Refer to HSES-RM-0005i Category Selection Guidance***

Event Type (✓)	Injury / Illness	Near Miss	Asset Damage (above or below ground)	Loss / Damage	Road Traffic Collision	Environmental

1. General Information (to be completed for all reports)

Summary of incident. What happened?

Immediate actions taken after the incident:

Reported by;	Incident / Event Date	Incident / Event Time
Name:		
Job Title:	Date reported	Time reported
Tel: Email:		

Location description of incident	Contract/Project/Depot/Office/Organisation Name
Address incl. Post Code	**Contract/Project/Depot/Office Contact Phone No.**

Strategic Business Unit SBU		Business Unit	
Contract/Project No.		iSMS Number	

iSMS **Actual** Severity Ratings (select one only from the relevant row(s) and circle)					
Safety	1	2	3	4	5
Health	1	2	3	4	5
Environment	1	2	3	4	5

2. Information relating to the individual(s) involved in the incident (to be completed for all relevant/applicable reports)

Employee Type (√)	BB Employee		Contractor		Visitor	
	Member of the Public		Third Party		Other	
Trade/Craft*						

Name of Individual(s) involved	How is the person involved? (E.g. injured party, utility damage / RTC cable strike)	Role

Name of any Witnesses		

3. Injury / Illness Details (to be completed in Injury or Illness reports)			✓ if N/A	
Was Medical Treatment beyond First Aid received? (Y/N)				
Number of Injured Persons		*A separate form (HSES-SF-0005a-e) must be completed per injured person.*		
Is this a lost time event? (Y/N)		How many lost days in total?		
Date of first day away from work		Date returned to work		
Description of Injury /harm / illness				
Treatment Given, By whom?				
Emergency Services called? (Y/N?) If Y, provide details.				
Hospital visit required? (Y/N) (If yes provide location details)				
Accident Type*				
List all injuries received (More than one injury can be selected)				
Injury Type*		***Body Part****		
Injury Type*		***Body Part****		
Injury Classification*		***Type of Incident****		
Immediate action(s) taken after the incident				
Has a drug/alcohol test been conducted (Y/N)				
Work Activity in Progress*		***Equipment / Plant / Vehicle Involved****		

4. Road Traffic Collision/Loss/Damage (Complete only where applicable)			✓ if N/A	
Drivers Name		Vehicle Reg. no.		
Was the driver found to be at fault? (Y/N)		***Incident On/Off Road?****		
Description of vehicle / item of plant involved – Please provide Driving Licence Type / Number (Vehicle Make and Model) and any Third Party details (where applicable)				

5. Asset Damage (Above or below Ground) (Complete only where applicable)			✓ if N/A	
Asset Type*		***Asset Position****		
Asset Location*				
Damage Caused By*		***Asset Status****		
Name of individual who damaged the asset				
Were Utility Plans on site? (Y/N)		Did the utility plans show the damaged asset? (Y/N)		
Was the damaged asset marked up? (Y/N)		Was the asset located with a Cat & Genny? (Y/N)		

6. Environmental Incident Details (Complete only where applicable)			✓ if N/A	
Environmental Incident Type*				
Environment Category (Sub Hazards)*				
Detail the substance involved e.g. oil/fuel/chemical/foul water)		Approx. Lt/Kg.		

What receptor did the substance enter (E.g. air/soft or hard ground/ surface or ground water/drainage system?			
Surface/Ground condition			
How was it contained? (E.g. Spill kits used?)			
Type of waste involved (i.e. inert or hazardous)			
Amount of waste in tonnes		Cost of disposal	
The habitat, area structure, species, or part of community involved			
Type of non-native species or biosecurity type			
EA/SEPA/NRW/NIEA notified? (Y/N)		Ref/Contact	

7. Other information			
Weather Conditions*		***Hazard Category****	
Emergency or planned work?			
Any property damage? (detail)		Value £	
Another BB Group Company involved (Y/N)		If yes, please state details	
Who were we working for?			
Was a subcontractor involved (Y/N)		If yes, please state details	
Was a third party involved (Y/N)		If yes, please state details	
Is there any CCTV/Photo evidence available? (Y/N)		If yes, please provide contact details below	
Is there any evidence of fatigue? (Y/N)		If yes, please state details	

8. Incident Investigation Facts
Using sub-headings as appropriate include brief project description, organisations involved & inter-relationships. Outline the work being done on the day of the incident and the people, plant, and equipment involved. Using the timeline, describe what happened, when, and where including how the task was planned and communicated in relation to construction methods, plant selection, control measures, systems of work, competencies and how people were set to work. Insert relevant diagrams, plans, photographs, and cross reference any supporting documents appended to this report e.g. witness accounts, RAMS etc.

9. Incident Investigation Findings and Analysis	
Causes	List all relevant findings
Immediate Cause (the most obvious reason why the incident happens)	
Underlying causes (the less obvious contributing factors)	
Root Cause(s) Failings in the organisation, planning and management systems	

10. Corrective and Preventative Actions / Recommendations			
Action Required	Responsible Person to action	Target Date	Completion Date

11. Event Review						
iSMS **Potential** Severity Ratings (circle one only from the relevant row(s))						
Safety	1	2	3	4	5	
Health	1	2	3	4	5	
Environment	1	2	3	4	5	
Name of Lead Investigator			Signature			
Job Title			Date of Investigation			
To be reviewed and signed off by an Operational, Construction, or HSES Manager						
Name of Manager			Approval Signature			
Comments			Date			

ANNEX E: COPY OF EVALUATION OF CHANGE REGISTER

Table E-1 - Evaluation of Change Register

Change reference	Confirmation of the design/assumption change	List of Actions affected	Evaluation of the change	Nature of the change (material/non-material)	Actions required	Person responsible	Objective/outcome and reporting requirements	Detail of any monitoring required	Date and signature for completion of Action

Note: Table provided to show description of Evaluation of Change Register. To be refined for the Second iteration EMP, as applicable, in response to the statutory process stage and changes in actions

ANNEX F: FINAL ENVIRONMENTAL INVESTIGATION AND MONITORING REPORTS

To be produced prior to construction by the appointed Principal Contractor. This section should include:

• Copies of relevant reports (relating to protected species/ habitats and cultural heritage investigations, and any environmental monitoring reports) or cross reference to the locations of these easily if accessible elsewhere.

Printed on paper from well-managed forests and other controlled sources.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
Highways England Company Limited registered in England and Wales number 09346363