



High Speed Rail (London - West Midlands) Act 2017

HS2 Ltd

London Borough of Hillingdon

Colne Valley Viaduct South Embankment Wetland Ecological Mitigation Site

**Schedule 17 Plans and Specifications
Written Statement for Information
Submission Ref: LBH.C111.PS.51**

Contents

1	Introduction	3
1.1	Background Information	3
1.2	Terms of reference.....	3
1.3	Introduction to High Speed 2	3
1.4	High Speed Rail (London-West Midlands) Act 2017	3
1.5	High Speed 2 Code of Construction Practice.....	4
1.6	Structure of Written Statement.....	4
2	Location and Characteristics of the Area	6
2.1	Description of the Site.....	6
2.2	Ecological Features	6
2.3	Heritage	7
2.4	Water and flood risk.....	7
2.5	Highway Network.....	7
3	Description of the Works.....	9
3.1	Introduction	9
3.2	Description of the works for approval of Plans and Specifications.....	9
4	Design Criteria and Rationale	11
4.1	Constraints and Design Drivers	11
4.2	Earthworks.....	11
4.3	Boundary Treatment	12
4.4	Access	12
4.5	Maintenance	13
5	Programme and Sequence of Works.....	14
6	Other Main Consents Associated with the Works.....	15
6.1	Planning.....	15
6.2	Highways	15
6.3	Environment.....	15
7	Plans and specifications	16
7.1	Plans for approval	16
7.2	Plans for information	16

1 Introduction

1.1 Background Information

Scheme	High Speed 2
Applicant	High Speed Two (HS2) Limited
Applicant Address	Two Snow Hill, Snow Hill Queensway, Birmingham, B4 6GA
Site Address	Land to the west of Harvil Road, Harefield
Description	Plans and specifications submission under Schedule 17 to the High Speed Rail (London-West Midlands) Act 2017 for Works associated with the creation of the Colne Valley Viaduct South Embankment Wetland Habitat Ecological Mitigation comprising earthworks (1 no. mitigation pond, 1 no. reptile basking bank, 2 no. hibernacula) and fencing.

1.2 Terms of reference

This written statement is compiled in accordance with the High Speed Two (HS2) Planning Memorandum and Forum Notes as required by the planning regime established under Schedule 17 of the High Speed Rail (London-West Midlands) Act (the Act).

This statement provides the London Borough of Hillingdon with information to assist with the determination of the plans and specifications submission in relation to the above description of works. This statement is for information only and not for approval.

1.3 Introduction to High Speed 2

Phase One of HS2 will provide dedicated high speed rail services between London, Birmingham and the West Midlands. It will extend for approximately 230km (143 miles). Just north of Lichfield, high speed trains will join the West Coast Main Line for journeys to and from Manchester, the North West and Scotland.

Phase One of HS2 is the first phase of a new high speed railway network proposed by the Government to connect major cities in Britain. It will bring significant benefits for inter-urban rail travellers through increased capacity and improved connectivity between London, the Midlands and the North. It will release capacity on the existing rail network between London, Birmingham and the West Midlands and so provide opportunities to improve existing commuter, regional passenger and freight services.

1.4 High Speed Rail (London-West Midlands) Act 2017

The Act provides powers for the construction and operation of Phase One of HS2. Schedule 1 of the Act describes the 'scheduled works' that the nominated undertaker will be authorised to carry out.

For the works, which are the subject of this plans and specifications application, HS2 Ltd is the nominated undertaker.

Section 20 of the Act deems planning permission to be granted for the development authorised by it, subject to the provisions of Section 20 and conditions set out in Schedule 17.

Schedule 17 includes conditions requiring various matters to be approved by the relevant local planning authority.

This is therefore a different planning regime to that which usually applies in England (i.e. the Town and Country Planning Act 1990) and is different in terms of the nature of submissions and the issues that the local planning authorities (LPAs) can have regard to in determining requests for approval.

The Planning Conditions set out in Schedule 17 of the Act requires the nominated undertaker to submit requests for approval to qualifying authorities for:

- Matters ancillary to development (referred to as construction arrangements);
- Plans and specifications;
- Bringing into use; and
- Site restoration schemes.

Schedule 17 of the Act sets out the grounds on which the qualifying authority may impose conditions on approvals, or refuse to approve the requests for approval.

This document includes information supporting the plans and specifications submission in relation to the matters outlined in the table below:

Plans and specifications (permanent works)	Earthworks and fencing.
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1.5 High Speed 2 Code of Construction Practice

The nominated undertaker is contractually bound to comply with the controls set out in the Environmental Minimum Requirements (EMR). The scope of the EMR encompasses the High Speed 2 Code of Construction Practice (CoCP)¹.

1.6 Structure of Written Statement

This Statement is structured as follows:

- Section 2 describes the location and characteristics of the works area;

¹ Department for Transport (DfT) and HS2 Limited (February 2017) High Speed Rail (London-West Midlands) Environmental Minimum Requirements Annex 1: Code of Construction Practice

- Section 3 describes the works that are for approval under this submission;
- Section 4 describes the design criteria and rationale for the proposed works;
- Section 5 describes a high level programme for the works;
- Section 6 identifies the other main consents associated with the work; and
- Section 7 sets out the plans and specifications, which accompany this submission.

2 Location and Characteristics of the Area

2.1 Description of the Site

The Colne Valley Viaduct South Embankment Wetland habitat creation site is located approximately 290m to the south-east of Hillingdon Outdoor Activity Centre and approximately 1.1km to the south of South Harefield. It is located immediately north of the Chiltern Main Line railway. The site is approximately 0.5ha in extent and lies to the south-west of the HS2 railway line (see site location plan ref. 1EW03-AEC-PL-DGA-CS01_CL01-011050). After the construction phase, the site will be located approximately 90m southwest of the Colne Valley Viaduct.

2.2 Ecological Features

Habitats

The site is located within an agricultural field (cultivated/disturbed land – arable), which is bordered by established hedgerows and mature trees. The site is bordered by mature trees and scrub to the west and south², whilst there is currently no physical delineation to the north and east. Beyond the trees to the west of the site is Hillingdon Outdoor Activity Centre. This area is also classified as a Site of Metropolitan Importance for Nature Conservation (SMI). The Chiltern Main Line railway is located immediately south of the site, whilst further agricultural land is located to the north and east.

The southern boundary, which separates the site from the Chiltern Main Line railway is classified as broad-leaved semi-natural woodland, whilst the western boundary is classified as dense / continuous scrub. The hedgerows forming the northern and eastern boundary of the agricultural field are classified as native, species rich hedgerows with trees³.

The site is located approximately 260m north-east of the Frays Valley Local Nature Reserve (LNR)⁴. Dews Dell Site of Borough Importance (SBI) (Grade I) is located approximately 330m north-east of the site⁵.

Species

Three ponds in the area are yet to be surveyed. The site has low potential for bat roosts. The site is located within an area described as suitable terrestrial habitat for otters⁶.

² ES 3.5.1.5.7 Volume 5 (November 2013) Map Books: Ecology CFA7 Colne Valley, Map Reference EC-02-011.

³ ES 3.5.1.5.7 Volume 5 (November 2013) Map Books: Ecology CFA7 Colne Valley, Map Reference EC-02-011.

⁴ Defra (2017) Magic Map [online] <http://www.magic.gov.uk/home.htm> [Accessed March 2017]

⁵ ES 3.5.1.5.7 Volume 5 (November 2013) Map Books: Ecology CFA7 Colne Valley, Map Reference EC-01-011.

⁶ ES 3.5.1.5.7 Volume 5 (November 2013) Map Books: Ecology CFA7 Colne Valley, Map Reference EC-11-023.

Non-native invasive species

No non-native invasive plant species have been noted within the site. Should any be discovered during construction they will be managed in accordance with measures set out in the Code of Construction Practice.

2.3 Heritage

Dews Farm (CVA022) is a locally listed building located approximately 280m to the north of the site.

The site is located within the Colne Valley Archaeological Protection Zone (APZ) an area of acknowledged archaeological potential. The site has potential for Palaeolithic remains within Thames Terrace gravels associated with CVA044 and lies within the extent of CVA021, an area of Mesolithic activity at Dews Farm evidenced by finds of transept axes, cores and flakes, animal bones and teeth. Previous archaeological investigations in the surrounding area have also identified organic sediments of possible Mesolithic date.

A cropmark indicative of a possible ring ditch is recorded to the northeast of the site. However, it is considered that the cropmark identified is quite small (at approximately 5m diameter) for a ring ditch and somewhat elongated. It is therefore possible that this is instead a small quarry.

The find spot of an early Saxon spearhead has been recorded within the proximity of Dews Farm, which could indicate the previous existence of a Saxon burial ground within proximity of the site.

Remote sensing surveys undertaken to inform the HS2 Phase 1 Environmental Statement have identified a curvilinear /ditched enclosure (G02) and field boundary / bank (G13) features immediately east of the site.

Geophysical surveys will be carried out at this site to inform the presence/ absence, extent and significance of the potential archaeological resource and to identify the requirement for further archaeological investigation. If archaeological remains are identified, trial trench evaluation may be undertaken prior to construction of the habitat creation site. All archaeological works will be carried out by specialist contractors, focusing on the location of the pond and associated earthworks.

2.4 Water and flood risk

The site is located within Flood Zone 1 and has a minimal risk from fluvial flooding.

2.5 Highway Network

The site access from the highway is from Harvil Road to the east of the site using the existing field access/ footway crossing. Public Right of Way (PRoW) U34 runs along the northern boundary of the field, running from Harvil Road, approximately 340m

east of the site, to Hillingdon Outdoor Activity Centre, approximately 290m to the northwest of the site.

A network of minor roads surrounds the site which, in turn, provides connections to the strategic road network including the A40, A412 and subsequently the M40 and M25.

3 Description of the Works

3.1 Introduction

This Written Statement is a supporting document relating to the request for approval of plans and specifications submission LBH.C111.PS.51 relating to earthworks and fencing pursuant to Schedule 17 of the Act. The plans and specifications for approval are listed in Section 7 of this Statement.

These works form part of a habitat creation scheme related to the HS2 Colne Valley South Embankment. The mitigation works, which are the subject of this Schedule 17 plans and specifications submission are set out in Section 3.2 below.

The site will be located south of the HS2 Colne Valley Viaduct and a balancing pond and west of the Ickenham Auto-Transformer Feeder Station. The relationship between the proposed works and other future HS2 works can be seen on drawing ref. S17-OP-019b within the in the London Borough of Hillingdon Context Report at the following link:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/623012/hillingdon_planning_context_report.pdf

In addition to the works for which approval of plans and specifications is required, the overall mitigation scheme in this location also includes habitat creation planting. The mitigation planting does not require approval of plans and specifications under paragraphs 2 or 3 to Schedule 17 to the Act and does not form part of this request for approval.

However, the mitigation planting will comprise part of the overall mitigation scheme in relation to scheduled works, which will be submitted prior to the request to bring into use the relevant scheduled work, in accordance with paragraph 9(4)(b) to Schedule 17.

Details of the mitigation planting (which does not require approval under Schedule 17 submission) are shown on drawing ref 1EW03-AEC-PL-DGA-CS01_CL01-011200 and are subject to a separate (but simultaneous) consultation.

3.2 Description of the works for approval of Plans and Specifications

The works for approval under Schedule 17 are shown on drawing ref 1EW03-AEC-PL-DGA-CS01_CL01-011100 and include the following:

- Earthworks totalling 360m², including:
 - o One mitigation pond, with a total surface area of 150m²;
 - o Two hibernacula suitable for Great crested newts, each with a surface area of 30m² (6m x 5m); and
 - o One reptile bank suitable for basking reptiles, with a surface area of 150m² (20m x 7.5m).

- Permanent fencing will be erected around the boundary of the site (location only for approval). This fencing will be post-and-wire, unless otherwise specified by the landowner; and
- One field gate in the north-eastern corner for agricultural/ maintenance access (location only for approval).

Given the small dimensions of the hibernacula, they are considered de *minimis* (i.e. of insufficient scale to comprise development and therefore require an approval of detail under Schedule 17). However, recognising that this is a judgement for the local planning authority to make, the hibernacula have been included in the earthworks for approval.

4 Design Criteria and Rationale

4.1 Constraints and Design Drivers

The general constraints and drivers, which have informed the design of the mitigation site, include:

- Accordance with HS2 requirements;
- Taking into account the proposed mitigation in the HS2 Environmental Statement and the Environmental Minimum Requirements;
- To ensure that the mitigation works are located within the HS2 Limits of Land to be Acquired or Used (LLAU);
- To ensure compliance with all terms and conditions set out in the route wide great crested newt licence, granted by Natural England and held by HS2 Ltd;
- To retain and protect mature trees, where possible, using appropriate root protection zones;
- To retain and protect hedgerows, where possible, to reduce any potential negative impacts for navigating bats;
- Retaining access for PRoW in the habitat creation design and consideration of access during construction and when completed; and
- Providing safe access to the site for construction traffic.

4.2 Earthworks

Mitigation Pond

The design and construction of the mitigation pond will be based on the guidance set out in Section 8.3.1 of the Great Crested Newt Mitigation Guidelines (English Nature, 2001) and will follow the range of guidance documents provided from the Freshwater Habitats Trust website.

The new pond will total a maximum of 150m² in surface area and have a minimum depth of 1.5m. The pond will be located within an area of wetland.

The pond will be designed to permanently hold some water to provide a wetland habitat all year round, although there will be 'drawdown' of water in the summer months. The use of a geosynthetic liner may be required if determined to be necessary for the pond to provide standing water for the entire year. This will be confirmed following further survey of ground conditions, which will include a trial pit or auger survey to determine the drainage characteristics of the soil.

Reptile Basking Bank

One reptile bank suitable for basking reptiles will be created within the site. The reptile basking bank will be located towards the north-east of the site and orientated to provide a southern face.

Hibernacula

The two new hibernacula will be created using the spoil from the pond excavations mixed with hardcore, brick, rubble, logs etc. to create mounds. Both of the hibernacula will be located in the south-western part of the site.

Excavated Material

The topsoil from the mitigation pond will be used to create the reptile basking bank and hibernacula for which approval under Schedule 17 is sought.

The subsoil will be thinly spread across the area identified for the creation of wetland to reduce the nutrient levels from those associated with agricultural use to help the establishment of the wetland. The change in levels will be slight and have a negligible effect on levels across the site, thereby not constituting an earthwork.

Therefore, it is not anticipated that there will be any residual spoil, which would need to be transported away from the site.

4.3 Boundary Treatment

Although details of the types of fencing and gates has been provided in Section 3.2, only their location requires approval under Schedule 17.

A new post-and-rail fence is proposed around the entire perimeter of the site, with a new gate in the north-eastern corner of the site.

A new hedgerow will be planted along the whole boundary of the site.

4.4 Access

Access to the site is via an existing field gate off Harvil Road, just south of Lower Lodge, and then directly through the field running to the north of the line of the existing overhead power line.

It is anticipated that the construction vehicle movements will broadly comprise the following:

- Underground utility survey – one vehicle for two days
- Fencing – one vehicle for one day
- Construction – one beavertail truck offloading a 13 tonne excavator and a side tipping dumper which will remain on site for the duration of the works then be removed following completion.
- Landscaping team -two cars per day for up to 8 weeks

Access to the site for operational maintenance is anticipated to be through the agricultural access points and will be relatively infrequent.

4.5 Maintenance

The approach to the maintenance of the site will follow the approach set out in HS2 Information Paper E16 – Maintenance of Landscaped Areas⁷.

⁷ [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/593569/E16 -
_Maintenance_of_Landscaped_Areas_v1.3.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/593569/E16_-_Maintenance_of_Landscaped_Areas_v1.3.pdf)

5 Programme and Sequence of Works

The London Borough of Hillingdon shall have regard to the submitted Programme required under paragraph 16 of the Planning Conditions Schedule 17.

The high level construction programme is set out below:

<i>Activity</i>	<i>Indicative Timescale</i>
Site access, surveys and mobilisation	April to December 2017
Construction of ecological habitat creation works	January to February 2018

6 Other Main Consents Associated with the Works

In addition to the plans and specifications approval discussed in this statement, a number of other approvals will be required and sought by the nominated undertaker under the appropriate statutory and legal framework. Works will be undertaken in accordance with these approvals.

6.1 Planning

- Schedule 17 Plans and Specifications for the Colne Valley Viaduct, balancing pond and Ickenham Auto-Transformer Feeder Station; LB Hillingdon; and
- Schedule 17 Bringing Into Use for Scheduled Works; LB Hillingdon.

6.2 Highways

- Schedule 4 Highways for access improvements/ vegetation clearance and gate renewal (if required); LB Hillingdon

6.3 Environment

- Great Crested Newt License; HS2 Routewide Licence

7 Plans and specifications

7.1 Plans for approval

The following plan is submitted for approval:.

<i>Drawing Ref:</i>	<i>Title:</i>
1EW03-AEC-PL-DGA-CS01_CL01-011100	General Arrangement and Sections for approval

7.2 Plans for information

The following plans are submitted for information:

<i>Drawing Ref:</i>	<i>Title:</i>
1EW03-AEC-PL-DGA-CS01_CL01-011050	Site Location Plan
1EW03-AEC-PL-DGA-CS01_CL01-011200	General Arrangement for information