



**High Speed Rail (London – West Midlands)
Act 2017**

HS2 Ltd

Buckinghamshire Council

Package 1 South Heath Cutting

Earthworks, Structures and Associated Works

**Schedule 17 Plans and Specifications Written
Statement for Information**

HS2 Consent Register Reference: BCL.PS.100023

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1 Introduction

1.1 Background Information

Table 1: Schedule 17 Address Details and Description of Works

Site	Details
Scheme	High Speed Two
Applicant	High Speed Two (HS2) Limited
Applicant Address	<i>c/o Agent:</i> EKFB, 5th Floor, Exchange House, 450 Midsummer Boulevard, Milton Keynes MK9 2EA
Site Address	<p>The site extends from the north of Frith Hill to the south of Leather Lane, between the settlements of South Heath and Great Missenden.</p> <p>The location of the works is centred on; X (Easting): 490186 and Y (Northing): 202316 and lies between HS2 line chainages 47+100 to 48+700.</p> <p>The South Heath Cutting Site Location Plan (Drawing No. 1MC06-CEK-TP-DLO-CS03_CL05-000004) identifies the extent of the Schedule 17 application site boundary in blue.</p>
Description	<p>Plans and Specifications submission under Schedule 17 to the High Speed Rail (London – West Midlands) Act 2017 for works comprising of:</p> <ul style="list-style-type: none"> • South Heath Cutting (Part of); • Havenfield Wood / Footpath GMI/2 Accommodation Overbridge; • Footpath GMI/12 Overbridge; • Earthworks associated with Havenfield Wood / Footpath GMI/2 Accommodation Access and associated maintenance access track; • Earthworks associated with GMI/2/1 footpath realignment; • Earthworks associated with Chiltern Tunnel North Portal and Compound and access track and realignment of footpath GMI/13/3 (U&A 1964); • Noise Barrier; • 4 No. Drainage ponds; • Drainage Ditches; • 2 No. Culverts (above ground elements only) <ul style="list-style-type: none"> ○ Havenfield Wood Drop Inlet Culvert; ○ South Heath Culvert; • Location of vehicle restraint barriers; and • Location of the permanent (security) fencing.

1.2 Terms of Reference

- 1.2.1 This Written Statement is compiled in accordance with the High Speed Two (HS2) Phase 1 Planning Memorandum and Planning Forum Notes (PFNs) as required by the planning regime established under Schedule 17 of the High Speed Rail (London – West Midlands) Act 2017 ([Link to Planning Forum Notes for Local Authorities](#)).
- 1.2.2 This statement provides Buckinghamshire Council (BC) with information to assist with the determination of the Plans and Specifications submission under Schedule 17, in relation to the above description of works.
- 1.2.3 The information in this Written Statement is provided for information to assist in determining the request for approval. It is not for approval.

1.3 Introduction to High Speed 2

- 1.3.1 HS2 is a new high speed railway network that will 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 and so provide opportunities to improve existing commuter, regional passenger and freight services.
- 1.3.2 Phase One of HS2 will provide a dedicated high speed rail service 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.
- 1.3.3 The application site (hereafter referred to as ‘the site’) lies entirely within the newly formed administrative area of Buckinghamshire Council (BC) Unitary Authority. The site was formerly mainly within the administrative area of Chiltern District Council (CDC).
- 1.3.4 Part of South Heath Cutting, which is included in this package for approval, falls outside this package and within the adjacent package area of AVDC Package 1 – South Heath to Wendover. The ‘other part of’ South Heath Cutting will be the subject of a separate Schedule 17 submission.
- 1.3.5 For further information on HS2 and the route through the CDC administrative area please refer to the Planning Context Report for CDC (May 2017), deposited with the Council by HS2 Ltd ([link to CDC Planning Context Report](#)).

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

- 1.4.1 The Act provides powers for the construction and operation of Phase 1 of High Speed Two. HS2 Ltd is the nominated undertaker in relation to the works subject to this Plans and Specifications submission ([Link to the Act](#)).
- 1.4.2 Section 20 to the Act grants deemed planning permission for the works authorised by it, subject to the conditions set out in Schedule 17. Schedule 17 includes conditions requiring the following matters to be approved or agreed by the relevant local planning authority (LPA):
- Construction arrangements (including large goods vehicle routes);

- Plans and Specifications;
- Bringing into use requests; and
- Site restoration schemes.

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

1.4.4 Schedule 17 of the Act sets out the grounds on which the LPA may impose conditions on approvals or refuse requests for approval.

1.4.5 This Written Statement includes information supporting the Plans and Specifications submission in relation to the matters outlined in **Table 2** below.

Table 2: Schedule 17 Plans and Specifications Submission Details

Site	Details
Plans and Specifications (permanent works)	<ul style="list-style-type: none"> • South Heath Cutting (Part of); • Havenfield Wood / Footpath GMI/2 Accommodation Overbridge; • Footpath GMI/12 Overbridge; • Earthworks associated with Havenfield Wood / Footpath GMI/2 Accommodation Access and associated maintenance access track; • Earthworks associated with GMI/2/1 realignment; • Earthworks associated with Chiltern Tunnel North Portal and associated maintenance access track and realignment of footpath GMI/13/3(U&A 1964); • Noise Barrier; • 4 No. Drainage ponds; • Drainage Ditches; • Havenfield Wood Drop Inlet Culvert; • South Heath Culvert; • Location of vehicle restraint barriers; and • Location of the permanent (security) fencing.

1.4.6 The works to which this application relates, and the cumulative impact of the works in conjunction with other HS2 development, have been assessed and are compliant with paragraph 1.1.3 (bullet point 2) of the HS2 Phase 1 Environmental Minimum Requirements General Principles¹.

1.5 Code of Construction Practice

1.5.1 HS2 Ltd as the nominated undertaker is contractually bound to comply with the controls set out in the Environmental Minimum Requirements (EMRs). The EMRs include the High Speed Two Code of Construction Practice (CoCP) (London-West Midlands Environmental Statement - Environmental Minimum Requirements - Annex 1: Code of Construction Practice) (February 2017) ([Link to EMR CoCP](#)).

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618074/General_principles.pdf

- 1.5.2 The works subject to this request for approval of Plans and Specifications will be undertaken in accordance with the Code of Construction Practice, and with the Class Approval issued by the Secretary of State (March 2017)².

1.6 Schedule 17 Statutory Guidance

- 1.6.1 The Schedule 17 Statutory Guidance issued by the Secretary of State (April 2021)³ provides guidance to all planning authorities determining requests for approval under Schedule 17 to the Act. Paragraph 20 of the Statutory Guidance states that planning authorities should not through the exercise of Schedule 17 seek to modify controls already in place such as the Environmental Minimum Requirements, other controls in the Act such as those under Schedule 4 or 33, or existing legislation.
- 1.6.2 As set out in the Statutory Guidance, Local Planning Authorities may request additional information they consider necessary to make a decision on the application. Planning authorities must only address relevant considerations when making a determination under Schedule 17. Therefore, any information requested should be relevant to the limited specified grounds of refusal. Annex 1 to PFN 17, Information for Decision Making, sets out further guidance on what information could be required to make Schedule 17 decisions. The need for further information should be identified during the pre-application stage.
- 1.6.3 When making decisions, Local Planning Authorities should have regard to the grounds set out in paragraphs 2(5) and (6) of Schedule 17. LPAs should clearly identify both the planning matter and the specific ground if proposing a conditional approval, or refusal of an application. The planning authority should also explain and give reasons as to why and how the design or external appearance ought to be modified relevant to the grounds.

1.7 Structure of Written Statement

- 1.7.1 This Written Statement is structured as follows:
- A description of the location and main characteristics of the works area is provided in **Section 2**;
 - **Section 3** describes the main works being undertaken in the area, as set out in Schedule 1 of the Act, and those that are the subject of this Schedule 17 Plans and Specifications submission;
 - The design criteria and rationale for the works which are the subject of this Schedule 17 Plans and Specifications submission are described in **Section 4**;

² <https://www.gov.uk/government/publications/high-speed-rail-london-west-midlands-act-2017-class-approval>

³ <https://www.gov.uk/government/publications/high-speed-rail-london-to-west-midlands-act-2017-schedule-17-statutory-guidance/high-speed-rail-london-west-midlands-act-2017-schedule-17-statutory-guidance>

- **Section 5** summarises the pre-submission engagement that was undertaken, including a list of the consultees, dates, attendees at meetings and a brief summary of the outcome of these discussions;
- A high level programme for the works and how they fit into the wider programme for other works in the area, as set out in Schedule 1 of the Act, is provided in **Section 6**; and
- **Section 7** identifies any other main consents, or known forthcoming consents associated with the works.

2 Site Location and Characteristics

2.1 Site Location

- 2.1.1 The site extends from the north of Frith Hill to the south of Leather Lane, between the settlements of South Heath and Great Missenden. The site broadly follows the alignment of Potter Row to the east and the A413 London Road to the west.
- 2.1.2 The site is located to the north west of South Heath, approximately 4km to the south of Wendover and 1km to the west of the Lees. Wendover is the largest nearby settlement.
- 2.1.3 The site is centred on National Grid Reference X (Easting) 490186 and Y (Northing) 202316. and lies between HS2 line chainages 47+100 to 48+700. The South Heath Cutting Site Location Plan (Drawing No. 1MC06-CEK-TP-DLO-CS03_CL05-000004) identifies the extent of the Schedule 17 application site boundary in blue.
- 2.1.4 The nearest residential properties are the scattered farmsteads that surround the site and the residential properties located to the west of South Heath and along Aylesbury Road, Frith Hill and Potter Row. These include Bury Farm, Park Farm, Park Hill, and Hammonds Hall Farm.
- 2.1.5 The Development Plan for the site comprises of the adopted Chiltern District Council Local Plan (CDC LP 1997) and the Adopted Core Strategy (CDC CS 2011). These documents identify the site as falling within the Green Belt and the Chilterns Area of Outstanding Natural Beauty (AONB). A new plan for this area was being prepared but has subsequently been withdrawn as of October 2021. The CDC LP does not make any reference to HS2. The CDC CS does refer to HS2, highlighting concerns regarding damage to the quality and tranquillity of the AONB and potential for irreversible harm.
- 2.1.6 The site is predominantly within the Lee and Buckland Common Undulating Plateau Landscape Character Area (LCA), with a small area falling within the Misbourne Upper Chalk River Valley LCA. The LCAs are shown on the South Heath Cutting Landscape Context Plan (Drawing No. 1MC06-CEK-TP-DPL-CS03_CL05-000037).

2.2 Site Characteristics

Land Use

- 2.2.1 The site is predominantly rural in character, with agriculture being the main land use. The land mainly comprises of medium sized arable fields. The arable fields are well-defined by mature hedgerows that connect with occasional isolated tree clumps. The area outside of the site is similarly characterised as arable agricultural land, interspersed with isolated dwellings and farmsteads.

Ecological Assets

- 2.2.2 The main environmental features relevant to the site are shown on the environmental baseline map for the area (Map CT-10-018 in the Community Forum Area (CFA) 09 Map Book) ([Link to Vol 2 CFA 09 Map Book](#)).

- 2.2.3 There are no designated sites within or close to the site, but there are three areas of ancient semi-natural broadleaved to the west of South Heath, namely Jenkin's Wood, Stockings Wood and Havenfield Wood. These woodlands fall outside the site but are adjacent to it.

Heritage Assets

- 2.2.4 There are no designated and non-designated heritage assets located within the site, but there are several within 500m of the site. These are shown on the environmental baseline map for the area (Map CT-10-018 in the Community Forum Area (CFA) 09 Map Book) ([Link to Vol 2 CFA 09 Map Book](#)).
- 2.2.5 There are several Grade II Listed buildings within 500m of the site as follows:
- A group of four Grade II Listed Buildings approximately 50m to the east of the site at Bury Farm (The Granary at Bury Farm, Smaller Barn at Bury Farmhouse, Large Barn at Bury Farm and Bury Farmhouse).
 - Two Grade II Listed Buildings approximately 200m to the north of the site at Cottage Farm (Stable Block at Cottage Farm and Woodlands Park Residential Home for the Elderly).
 - One Grade II Listed Building approximately 50m to the east of the site at Hammondshall Farm (Hammondshall Farmhouse).
- 2.2.6 Non-designated heritage assets close to the site include Hunt's Green Farm and Jones' Hill Wood to the north.
- 2.2.7 Archaeological investigations have been undertaken by the Enabling Works Contractor (EWC) in advance of permanent works. Details of these investigations can be found in section 3.7 of this Written Statement.

Water and Flood Risk

- 2.2.8 The site is within Flood Zone 1 according to the Environment Agency's Flood Map for Planning. Areas deemed to be in Flood Zone 1 have a low probability of flooding (land having a less than 1 in 1,000 annual probability of river or sea flooding).
- 2.2.9 The site is also located within a Groundwater Source Protection Zone (SPZ) Level 3. SPZs are defined around large and public potable groundwater abstraction sites. Sites within SPZ 3 are defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction.
- 2.2.10 A Drainage Demonstration Report (DDR) (Document Ref. 1MC06-CEK-TP-REP-CS03_CL05-000006) has been submitted as part of this package which provides further detail on the water and flood risk and the basis for the drainage design. The DDR is submitted for information only.

2.3 Surrounding Highway Network

Highways

- 2.3.1 The site extends from the north of Frith Hill to the south of Leather Lane and is located adjacent to the A413 London Road. The A413 London Road runs on a north – south alignment and connects Aylesbury in the north to Great Missenden in the south and provides access to the M40 Motorway.
- 2.3.2 A network of minor roads surrounds the site. These roads provide connections to the strategic road network, surrounding small villages and isolated farmsteads.

Public Rights of Ways

- 2.3.3 There are four Public Rights of Ways (PRoWs) that bisect the site. These are GMI/2/1, GMI/12/1, GMI/13/3 and GMI/32/1. The PRoWS are shown on the South Heath Cutting Site Location Plan (Drawing No. 1MC06-CEK-TP-DLO-CS03_CL05-000004).

3 Description of the Works

3.1 Introduction

- 3.1.1 This Written Statement supports the Schedule 17 submission for approval of Plans and Specifications for CDC Package 1 - South Heath, as outlined in Tables 1 and 2 of this Written Statement.
- 3.1.2 References to the Proposed Scheme refer to all the works within the site unless otherwise specified.
- 3.1.3 The Plans and Specifications submitted for approval and for information are listed in the Proforma accompanying this application (Document Ref. 1MC06-CEK-TP-APP-CS03_CL05-000005).
- 3.1.4 The Scheduled Works under the Act associated with this submission are set out in Section 3.2. A description of the proposed works for approval are set out in Section 3.3.
- 3.1.5 Section 3.4 summarises the indicative mitigation relevant to the works being submitted in accordance with paragraph 7.5.2 of the Planning Memorandum. The information in Section 3.4 is not for approval under Schedule 17 Plans and Specifications.
- 3.1.6 Sections 3.5 - 3.7 provide information on other aspects of the works to assist in understanding the context of the works being submitted for approval. The information in Sections 3.5 - 3.7 is not for approval under Schedule 17 Plans and Specifications.
- 3.1.7 Information on the design rationale and justification for this submission is set out in Section 4.

3.2 Works for Approval

- 3.2.1 The relevant Scheduled Works as set out under Schedule 1 of the Act, to which this Schedule 17 submission relates to are:
- *Work No. 2/14 - A railway (8.3 kilometres in length) partly in tunnel and partly on viaduct commencing by a junction with Work No. 2/1, at its termination, continuing north-westwards, and terminating at a point 240 metres north-west of the roundabout joining the A413 London Road with Small Dean Lane; Work No. 2/14 includes a viaduct over the A413 London Road, the Marylebone to Aylesbury Line and Small Dean Lane.*
 - *Work No. 2/19 - An accommodation access road, commencing on the access road to Havenfield Lodge, at a point 618 metres south-west of the junction of that road with Potter Row and terminating on that road at a point 137 metres south-west of that junction. Work No. 2/19 includes a bridge over Work No. 2/14.*

3.3 Description of the Proposed Works For Approval

- 3.3.1 Through the site, the HS2 line will continue to run in a south-east to north-west direction in South Heath Cutting. South Heath Cutting is approximately 3km in length in total, of which 1.7km falls within this submission. The earthworks associated with the Cutting require approval.
- 3.3.2 South Heath Cutting is required to set the HS2 line below existing ground levels and therefore several overbridges are required to maintain existing accommodation access to the local farms and to ensure PRowS are retained. These overbridges, comprise of the Havenfield Wood/Footpath GMI/2Accommodation Overbridge and Footpath GMI/12 Overbridge. The Overbridges require approval, as well as their associated earthworks,
- 3.3.3 Other matters for approval include earthworks associated with the Havenfield Wood / Footpath GMI/2 Accommodation Overbridge and associated maintenance access track, earthworks associated with the GMI/2/1 footpath realignment, earthworks associated with the Chiltern Tunnel North Portal and Compound and access track and realignment of footpath GMI/13/3 (U&A 1964), Noise Barriers, 4 No. drainage ponds, drainage ditches, 2 No. Culverts, the location of the vehicle restraint barriers and the location of the permanent (security) fencing. With regards to the culverts only those works above ground are submitted for approval.
- 3.3.4 Chiltern Tunnel North Portal does not form part of this submission. This application only seeks approval for the compound where the North Portal will be located and the access track to the compound.
- 3.3.5 All of the works for approval are described below and are shown on the South Heath Cutting General Arrangement Plan – For Approval Sheets 1 and 2 (Drawing Nos. 1MC06-CEK-TP-DGA-CS03_CL05-000016 and 1MC06-CEK-TP-DGA-CS03_CL05-000017).
- 3.3.6 The Proposed Scheme accords with the HS2 Phase 1 Environmental Statement (ES) (London-West Midlands ES Volume 2 Community Forum Area Report, CFA9 Central Chilterns, November 2013) as described in paragraphs 2.214 and 2.2.16. ([Link to Vol 2 CFA 09 Map Book](#)).

The Proposed Scheme assessed in the HS2 Phase 1 ES is shown on the maps for the area (Map CT-06-033 and CT-06-034a in the Community Forum Area 9 Map Book) ([Link to Community Forum Area 9 Map Book](#)).

Proposed Structures For Approval

- 3.3.7 The location and appearance of the structures for approval are shown on the following drawings for approval:
- South Heath Cutting General Arrangement Plan – For Approval (Sheet 1 of 2) - 1MC06-CEK-TP-DGA-CS03_CL05-000016
 - South Heath Cutting General Arrangement Plan – For Approval (Sheet 2 of 2) - 1MC06-CEK-TP-DGA-CS03_CL05-000017
 - South Heath Cutting Footpath GMI/2 Accommodation Overbridge – Cross Section and Parapet Detail – For Approval - 1MC06-CEK-TP-DDE-CS03_CL05-000024

- South Heath Cutting GMI/2 Accommodation Overbridge – Parapet Module Details – 1MC06-CEK-TP-DDE-CS03_CL05-000052.
- South Heath Cutting Footpath GMI/2 Accommodation Overbridge – Plan on Deck – For Approval - 1MC06-CEK-TP-DPL-CS03_CL05-000093
- South Heath Cutting Footpath GMI/2 Accommodation Overbridge – Longitudinal Section and Elevation – For Approval - 1MC06-CEK-TP-DSE-CS03_CL05-000052
- South Heath Cutting Footpath GMI/12 Overbridge – Cross Section and Parapet Detail – For Approval - 1MC06-CEK-TP-DDE-CS03_CL05-000035
- South Heath Cutting Footpath GMI/12 Overbridge – Plan on Deck – For Approval - 1MC06-CEK-TP-DPL-CS03_CL05-000105
- South Heath Cutting Footpath GMI/12 Overbridge – Longitudinal Section and Elevation – For Approval - 1MC06-CEK-TP-DSE-CS03_CL05-000060
- South Heath Cutting Footpath GMI/12 Overbridge – Elevation Details - 1MC06-CEK-TP-DSE-CS03_CL05-000060
- South Heath Cutting Havenfield Drop Inlet Culvert – Culvert Plans and Section – For Approval - 1MC06-CEK-TP-DPL-CS03_CL05-000107
- South Heath Cutting South Heath Culvert – Culvert Plan and Section – For Approval - 1MC06-CEK-TP-DPL-CS03_CL05-000101
- South Heath Cutting – Noise Barrier Transition Details - 1MC06-CEK-TP-DDE-CS03_CL05-000053.

3.3.8 A description of each structure within the site is provided below. These should be read in conjunction with the plans being submitted for approval.

Overbridges and Common Design Elements

3.3.9 The Overbridges have been designed in accordance with the HS2 Design Vision Principles and other relevant HS2 standards.

3.3.10 The HS2 Design Vision Principles demand elegant, site specific and durable structures that will continue to perform and look good over the long term. These requirements are further detailed by the HS2 Design Handbook and HS2 Bridge Design Guide.

3.3.11 Furthermore, the bridges align with the design rationale for the Common Design Elements (CDEs) which has been developed and reviewed with the main works contractors and the Independent Design Panel and in discussion with the LPA. The Design Panel's remit is to ensure that the design decisions deliver against the Design Vision. The CDEs include frequently used structures, such as viaduct piers and rail overbridge parapets. The rail overbridge parapets form part of this submission. The piers for the overbridges are not CDEs, however the approach to their design [across all packages] has been consistent.

- 3.3.12 The CDEs have been the subject of a thorough engagement process in terms of their appearance and comply with HS2's goal of ensuring the HS2 infrastructure is easily recognisable as a brand and has a standardised appearance. The parapets have now been formally approved by the Planning Forum. The design for the CDEs follows what has been discussed as the CDE design approach.
- 3.3.13 The CDE structures are the normal starting point for determining the design of HS2 works as they support efficiencies in design and construction. In accordance with the Planning Memorandum, paragraph 4.4, there is a presumption in favour of the approval of the CDEs when submitted for Schedule 17 consent.
- 3.3.14 The parapets include a 'crease' a third of the way up the parapet. The bottom third is gently angled to face the ground and the top two thirds are angled towards the sky. The horizontal crease a third of the way up of the parapet is to provide a subtle contrast of light and shadow while the bottom edge of the parapet extends below the deck level to partially conceal the structural depth and throw the beams that support the deck into shadow. The parapets will also act as a noise barrier.
- 3.3.15 The parapet joints are consistent along the entire length of an individual structure and will be formed in pre-cast concrete. The external parapet face will be plain concrete.
- 3.3.16 The bridge piers, abutments and wingwalls will be formed using reinforced concrete and these in turn will be supported on reinforced concrete piles.
- 3.3.17 Pre-cast concrete elements of the structure will be finished to a high standard with single point sourcing for each like element on the structure. For example, all parapets will be sourced from the same pre-casting yard with the same aggregate and cement mix. This is to ensure a high visual quality across the structure with no mismatched elements or colour and finish. Unless otherwise noted on the Drawings For Approval all precast and in situ elements will be plain finished.
- 3.3.18 Those visible parts of the structures constructed of in situ concrete will be accurately aligned with an even surface and neatly set out shuttering. Care will be taken during detailed design in the provision of drip edges and specification of concrete finish to ensure that the 'freshness' of the concrete components during construction will weather and mellow in a controlled fashion over time.

Havenfield Wood / Footpath GMI/2 Accommodation Overbridge

- 3.3.19 Havenfield Wood / Footpath GMI/2 Accommodation Overbridge is required to carry Footpath GMI/2 over the HS2 line to the north of Havenfield Wood. It will provide access to Havenfield Wood. Havenfield Wood / Footpath GMI/2 Accommodation Overbridge crosses the HS2 line at chainage 48+420.
- 3.3.20 The location of the Havenfield Wood/Footpath GMI/2 Accommodation Overbridge is shown on the South Heath Cutting General Arrangement Plan For Approval Sheet 2 (Drawing No. 1MC06-CEK-TP-DGA- CS03_CL05-000017).

- 3.3.21 The Overbridge will carry a single carriageway road and will be approximately 54m long, 5.9m wide and up to 5m above existing ground level. The existing ground level ranges from approximately 188m to 194m AOD. The carriageway will be approximately 3.5m wide, with a green verge on one side whilst the narrower verge has an asphalt surface.
- 3.3.22 The construction of the Overbridge will involve land clearance and the construction of approach embankments. The approach embankments either side of the bridge will provide a ramp from existing ground level to deck level.
- 3.3.23 Details of the Havenfield Wood/Footpath GMI/2 Accommodation Overbridge is shown on the following Drawings:
- South Heath Cutting General Arrangement Plan – For Approval (Sheet 1 of 2) - 1MC06-CEK-TP-DGA-CS03_CL05-000016
 - South Heath Cutting Footpath GMI/2 Accommodation Overbridge – Cross Section and Parapet Detail – For Approval - 1MC06-CEK-TP-DDE-CS03_CL05-000024
 - South Heath Cutting GMI/2 Accommodation Overbridge – Parapet Module Details – 1MC06-CEK-TP-DDE-CS03_CL05-000052
 - South Heath Cutting Footpath GMI/2 Accommodation Overbridge – Plan on Deck – For Approval - 1MC06-CEK-TP-DPL-CS03_CL05-000093
 - South Heath Cutting Footpath GMI/2 Accommodation Overbridge – Longitudinal Section and Elevation – For Approval - 1MC06-CEK-TP-DSE-CS03_CL05-000052

Footpath GMI/12 Overbridge

- 3.3.24 Footpath GMI/12 Overbridge will carry Footpath GMI/12 over the HS2 line to the north of Park Farm. Footpath GMI/12 Accommodation Overbridge crosses the HS2 line at chainage 47+830. Footpath GMI/12 Overbridge is not a Scheduled Work.
- 3.3.25 The location of the Footpath GMI/12 Overbridge is shown on the South Heath Cutting General Arrangement Plan - For Approval Sheet 2 (Drawing No. 1MC06-CEK-TP-DGA- CS03_CL05-000017).
- 3.3.26 The Overbridge will carry a pedestrian only footway and will be 103m long, 3.9m wide and ties in with existing ground level at either abutment. The existing ground level ranges from approximately 192m to 194m AOD.
- 3.3.27 The footpath will be 2.5m wide. The bridge will be constructed on concrete piers that will be clad in exposed steel. The internal face of the bridge parapets will be oak lined with mesh panels and the outer bays of the bridge will be partially enclosed.
- 3.3.28 The exposed steel will weather over time to the characteristic dark russet finish of exposed weathering steel. Alongside the installation and maintenance benefits of weathering steel, the colouration; and in time progressively duller finish; provides an earthy and appropriately rural undertone to the bridge architecture. When viewed from a distance the matt finish of the steel will also appear similar in tone to the background landscape.

- 3.3.29 The construction of the Overbridge will involve land clearance and the construction of approach embankments. The approach embankments either side of the bridge will provide a ramp from existing ground level to deck level.
- 3.3.30 Details of the Footpath GMI/12 Overbridge is shown on the following Drawings:
- South Heath Cutting General Arrangement Plan – For Approval (Sheet 2 of 2) - 1MC06-CEK-TP-DGA-CS03_CL05-000017
 - South Heath Cutting Footpath GMI/12 Overbridge – Cross Section and Parapet Detail – For Approval - 1MC06-CEK-TP-DDE-CS03_CL05-000035
 - South Heath Cutting Footpath GMI/12 Overbridge – Plan on Deck – For Approval - 1MC06-CEK-TP-DPL-CS03_CL05-000105
 - South Heath Cutting Footpath GMI/12 Overbridge – Longitudinal Section and Elevation – For Approval - 1MC06-CEK-TP-DSE-CS03_CL05-000060
 - South Heath Cutting Footpath GMI/12 Overbridge – Elevation Details - 1MC06-CEK-TP-DSE-CS03_CL05-000060

Culverts

- 3.3.31 Two culverts are proposed within the site: Havenfield Wood Drop Inlet Culvert and South Heath Culvert. The location of these Culverts is shown on the South Heath Cutting General Arrangement Plan for Approval Sheet 1 (Drawing No. 1MC06-CEK-TP-DGA-CS03_CL05-000016).
- 3.3.32 Only those works above ground associated with the Culverts require Schedule 17 approval. The only works that will be visible above ground are headwalls and the inspection chamber access hatches.

Havenfield Wood Drop Inlet Culvert

- 3.3.33 Havenfield Wood Drop Inlet Culvert is located at chainage 48+400 and will provide a connection under the HS2 line from the eastern side of the HS2 line, discharging into the existing dry valley to the west of HS2.
- 3.3.34 Details of the Havenfield Wood Drop Inlet Culvert are shown on Drawing 1MC06-CEK-TP-DPL-CS03_CL05-000107.

South Heath Culvert

- 3.3.35 South Heath Culvert is located at chainage 47+560 and will provide a connection from the western side of the HS2 line at the Chiltern Tunnel North Portal, dropping into the proposed drainage pond further west, adjacent to the A413.
- 3.3.36 Details of the South Heath Culvert are shown on Drawing 1MC06-CEK-TP-DPL-CS03_CL05-000101.

Noise Barrier

- 3.3.37. A noise barrier is proposed within the site as detailed in **Table 3** below and as detailed in the Noise Demonstration Report submitted as part of the package (Document Reference: 1MC06-CEK-TP-REP-CS03_CL05-000003).