



HS2 Planning Forum Highways Subgroup #13

February 2016

1. Introductions



2. Review of notes and actions from last meeting



3. Route-Wide Traffic Management feedback

4. Technical Standards Feedback –

- Highway and Access Drainage
- Errant Vehicle Protection

Technical Standard – Highway and Access Drainage

Of the 41 comments received the main points raised are:

Visibility of
Documents

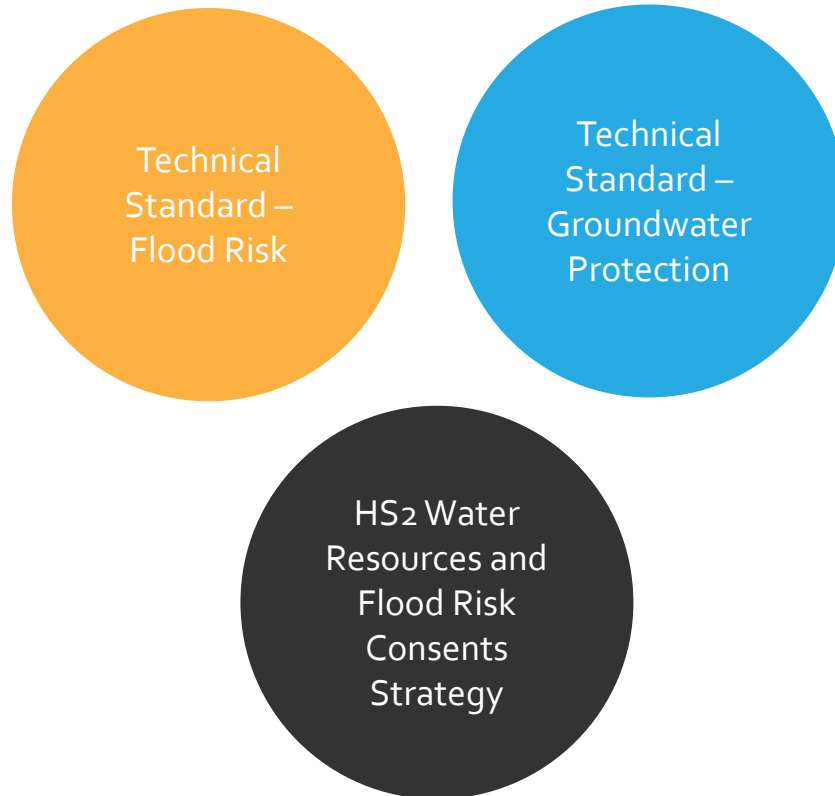
Consent and Approval
Strategy

Design
Considerations

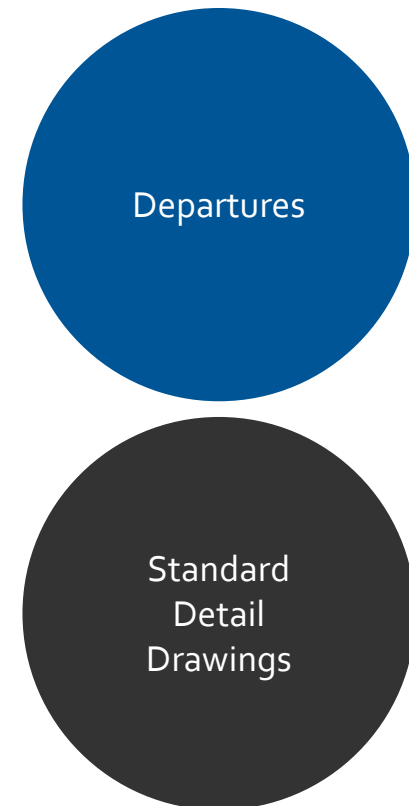
Maintenance
Responsibility

Technical Standard – Highway and Access Drainage

Answered in other docs



Future agenda items



Technical Standard – Highway and Access Drainage

- 2.3.1 Statutory undertakers
“There is no mention of LLFAs being statutory consultees in relation to surface water.” (Solihull)
- *HS2 response:* LLFAs are listed under stakeholders and regulatory bodies in clause 2.3.1.

Proposed revision: None.

NB – The 'HS2 Water Resources and Flood Risk Consents Strategy' is being discussed with the Water Resources and Flood Risk Sub-group.

Technical Standard – Highway and Access Drainage

- 4.1.10 Surface Drainage

“Surface drainage section - We would suggest that this section considers the use of SuDS, rather than the historically traditional kerbs and gullies approach. Whilst some reference is made to channels and ditches, we would like to see more reference to SuDS, eg. swales and less of a reliance on gullies and pipes.” (Solihull)

- *HS2 response:* The first preference for new systems is to discharge ‘into the ground’ as per the discharge hierarchy listed in section 5.1.1, but best use will also be made of existing systems (where appropriate – see 4.1.2).

Proposed revision: None.

Technical Standard – Highway and Access Drainage

- Maintenance

“We have concerns relating to the long term future maintenance of SuDS features, full details of who will be maintaining the features i.e. HS2, Maintenance Management Company, or adopted by LPA must be provided for the life time of the development.”
(Warwickshire)

- *HS2 response:* Refer to Information Paper E29 ‘Future Highway Maintenance Responsibilities’

Proposed revision: None.

Technical Standard – Highway and Access Drainage

- 4.1.13 Surface Drainage

“Consideration may be worth giving to the approach to earthworks drainage in the DMRB, eg capturing water at the top of cutting slopes.” (Highways England)

- HS2 response: Agree (as this was always intended to be case).

Proposed revision: The text will be updated to include perimeter drainage at the top of cuttings, where required.

Technical Standard – Highway and Access Drainage

- 4.1.21 Sub-surface Drainage
(Sub-surface drainage) “...may be dependent on prevailing ground water conditions,” (Highways England)
- *HS2 response: Agree.*
Proposed revision: The text will be updated to provide further guidance on groundwater conditions.

Technical Standard – Highway and Access Drainage

- 4.1.29 Highway balancing ponds

“Could [*clauses about size of vehicles*] be combined?
Seems a repeat? Will articulated vehicles be needed?
Seems excessive?” (Solihull)

- *HS2 response: Agree in part.*

Proposed revision: The text will be amended to avoid repetition.

NB – Articulated vehicles were used for space proofing, but actual requirements can be subject to pre-application discussions.

Technical Standard – Highway and Access Drainage

- 4.2.1 Design for Climate Change allowance

“ We note that HS2 proposes a Climate Change Factor of 30%. Highways England uses 20% for 60 year design life, although 30% seems reasonable for a greater design life.”
(Highways England)

- *HS2 response: Noted.*

- *Proposed revision: None.*

NB – The requirements for motorways and trunk roads are as given by in the DMRB. Elsewhere, the 30% value is for peak rainfall intensity given in the DCLG’s ‘Technical Guidance to the National Planning Policy Framework’ has been adopted.



4. Technical Standards feedback – Errant Vehicle Protection

Technical Standard – Errant Vehicle Protection

Of the 49 comments received:

20 – no action /
suggestion not
incorporated

19 – propose to
update 'Technical
Standard – Errant
Vehicle Protection'

7 – comments
answered in other
documents

3 – proposed to be
covered in future
agenda item

Technical Standard – Errant Vehicle Protection

Answered in other docs

Consents and Approvals Strategy – Permanent Highway Works

Information Paper E29

Technical Standard – Overbridges

Future agenda items

Parapets

Additional highway standard detail drawings

Technical Standard – Errant Vehicle Protection

- 19 proposed updates to the 'Technical Standard – Errant Vehicle Protection'
 - 12 – correction of typos and minor modifications to wording
 - 7 – revised or additional text

Technical Standard – Errant Vehicle Protection

- 3.1.5 Risk assessment and protection systems (General)

“On tight radius bends, whilst the speed may be less, the likely angle of impact may be higher” (Highways England)
- *HS2 response: Agreed*

Proposed revision: The wording will be extended along this line suggested.

Technical Standard – Errant Vehicle Protection

- 3.2 Risk assessment and protection systems (Risk assessments)
“The technical standard states: “a risk assessment shall be carried out in accordance with... (the great heck protocol)...as modified by this standard”. The basis of the modifications to the risk assessment is not provided. Further, the Great Heck Protocol was created to enable the relative risk ranking of existing sites. It is not clear in this technical standard on what basis the ‘great heck’ approach is being employed on HS2 as a new site (rather than TD 19). Highways and Railways have different duties and obligations at road-over-rail interfaces. This standard needs to set out how the chosen risk assessment approach fulfils the duties of both highway and railway. ” (Hertfordshire)
- *HS2 response:* The proposed changes to the existing Department for Transport (DfT) risk assessment methodology described in Section 3.2 of the technical standard were developed following a combined railway / highway stakeholder workshop held with the DfT, Network Rail (NR), Highways England (HE) and the Office of Rail and Road (ORR).
Proposed revision: A note to this effect will be added to Section 3.2 for clarity.

Technical Standard – Errant Vehicle Protection

- 4.1.3 Overbridges and approaches (Vehicular overbridge parapets)
“To whom?” i.e. in respect of the requirement that a departure application “must be submitted” (Highways England)
- *HS2 response: To HS2’s Technical Directorate (along with “evidence of agreement from the asset owner and highway authority”).*
Proposed revision: The wording will be expanded for clarity.
NB – Departures are also a future agenda item for the Highways Sub-group.

Technical Standard – Errant Vehicle Protection

- 4.1.6 Overbridges and approaches (Vehicular overbridge parapets)

“Could any guidance on a value be given?” (*i.e. in respect of “the width of any discontinuity in a parapet being “restricted”*) (Highways England)

- *HS2 response:* The intention is that the width of any discontinuity would be the minimum required for the particular purpose.

Proposed revision: The wording will be expanded for clarity.

Technical Standard – Errant Vehicle Protection

- 4.5.2 Overbridges and approaches
(Non-vehicular overbridge approaches)
“And signage? (i.e. in respect of the “the arrangements” for each site)” (Highways England)
- *HS2 response: Agreed.*
Proposed revision: The wording will be expanded for clarity.

Technical Standard – Errant Vehicle Protection

- 7.1.2 Road geometry considerations
“The maximum speed in EN1317 varies according to the impacting vehicle, and can go up to 110km/h for a car.” (Highways England)
- *HS2 response: Agreed.*
Proposed revision: The wording will be extended along the line suggested.

Technical Standard – Errant Vehicle Protection

- C.1 Appendix C – Typical cross sections (Zone A)
“In the top Drawing the H4a parapet is shown with some of its base exposed....which would be an unacceptable arrangement.” (Highways England)
- *HS2 response:* Noted, and it is already planned to enhance these sketches in a future revision of this document.

Proposed revision: None at this stage (but address when the sketches are updated).



5. Consents and Approvals feedback

Consents and Approvals Strategy – Permanent Highway Works

Of the 104 comments received:

57 – no action /
suggestion not
incorporated

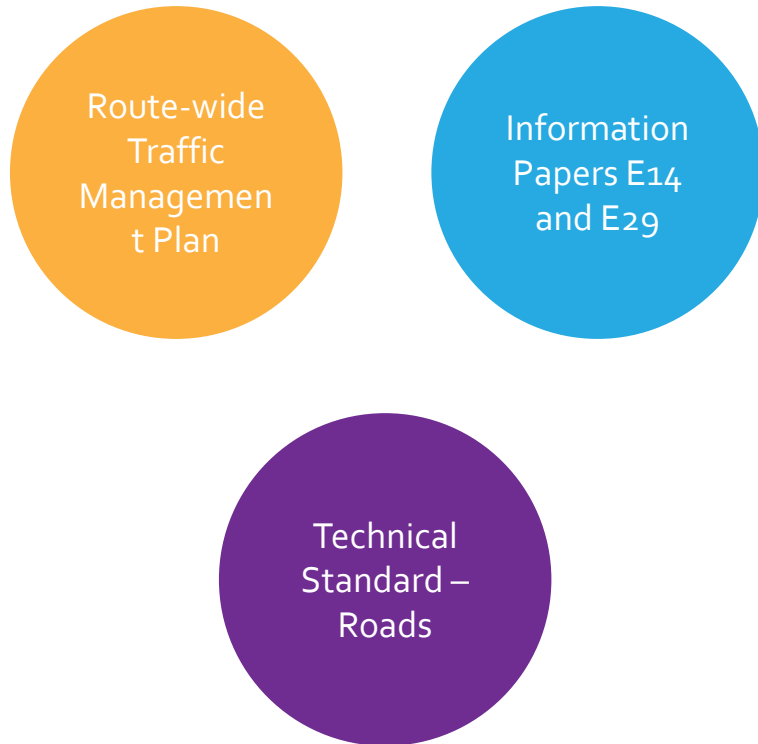
23 – propose to
update 'Consents and
Approvals Strategy –
Permanent Highway
Works'

9 – comments
answered in other
documents

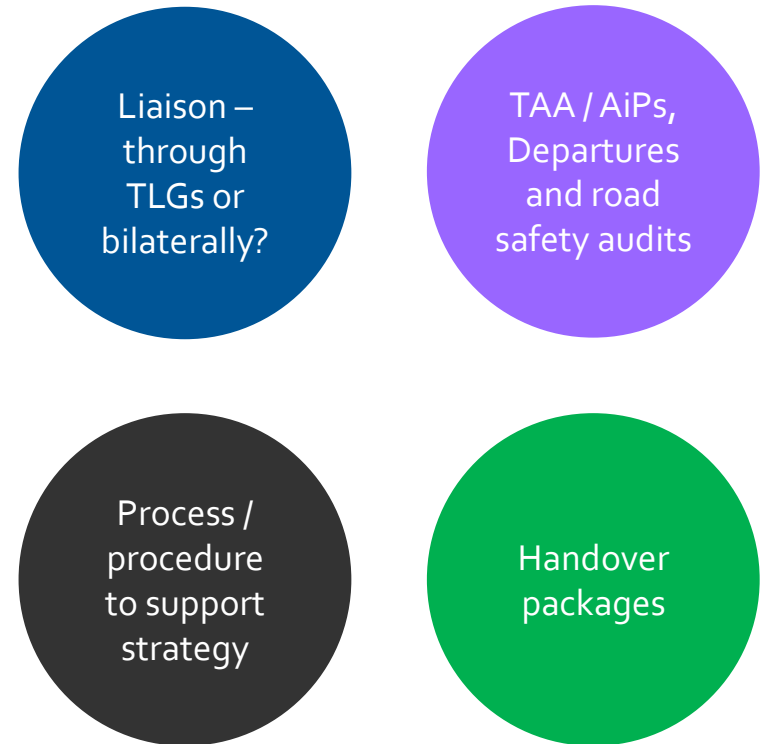
15 – proposed to be
covered in future
agenda item

Consents and Approvals Strategy – Permanent Highway Works

Answered in other docs



Future agenda items



Consents and Approvals Strategy – Permanent Highway Works

- 23 proposed updates to the 'Consents and Approvals Strategy – Permanent Highway Works'
 - 13 – correction of typos and minor modifications to wording
 - 10 – revised or additional text

Consents and Approvals Strategy – Permanent Highway Works

- 3.1.2 Objectives (Objective 1 – Appropriate design criteria)
“Unclear who this is required by, must include Highway Authorities and not just HS2.” (LB Camden)
- HS2 response: Agreed that this is two-way engagement.

Proposed revision: Revised text

Where appropriate, HS2 Ltd ~~will engage with~~ and individual highway authorities ~~will engage...~~

Consents and Approvals Strategy – Permanent Highway Works

- 3.3 Objectives (Objective 3 – streamlined process)
- 7.3 Roles and responsibilities (Highway authorities)

“Consider addition of paragraph to encourage and promote collaboration between neighbouring highway authorities.” (Hertfordshire)

- **HS2 response: Agreed.**

Proposed revision: Additional text:

- A commitment by neighbouring highway authorities to work collaboratively (3.3)
- Working collaboratively with neighbouring highway authorities (7.3)

Consents and Approvals Strategy – Permanent Highway Works

- 3.4.1 Objectives (Objective 4 – timely delivery)
“By engaging with the various highway authorities collectively through the Highways Subgroup of the Planning Forum and directly with the relevant individual highway authorities themselves,” (LB Camden)
- HS2 response: Agreed (but with phraseology to align with that used elsewhere).
Proposed revision: Revised text:
...and bilaterally with individual highway authorities,...

Consents and Approvals Strategy – Permanent Highway Works

- 4.4.2 Benefits (Benefits to other stakeholders and the general public)
“Additional bullet: Ensuring adequate account is taken of highway authority comments in the preparation and processing of applications which has knowledge of local transport issues and the needs of the local community relevant to consideration of such applications.” (LB Camden)
- **HS2 response: Agreed in part.**
Proposed revision: Additional text:
 - To the extent that they are within the scope of HS2, due regard can be given during the design process to local transport issues and the needs of the local community

Consents and Approvals Strategy – Permanent Highway Works

- 5.5.1 Principles (Forward planning)
“This will enable the necessary resource needs to be identified, decisions to be made regarding provision of resources and consideration as to how they can be deployed in the most effective way during the preparation for, and determination of, the numerous consents and approvals required for the permanent highway works.” (LB Camden)
- HS2 response: Agreed in part.
Proposed revision: Revised text:
This will enable the necessary resources to be identified, arranged and deployed...

Consents and Approvals Strategy – Permanent Highway Works

- 6.4.3 Strategies (Stage 3 – hybrid Bill)
“Both approaches form part of the pre-application discussions intended to improve the standard of applications, resolve disputes ahead of submission where possible and expedite the consent and approval process.”
(LB Camden)
- HS2 response: Agreed in part.
Proposed revision: Revised text:
... intended to ensure that planned submissions contain all the necessary information; identify and, where possible, resolve any outstanding issues ahead of submission; and expedite the consent and approval process.

Consents and Approvals Strategy – Permanent Highway Works

- 6.4.5 Strategies (Stage 4 – scheme and detailed design)

“Suggest add: ‘If safety auditor’s recommendations are not accepted, full explanation/justification shall also be submitted for consent/approval.’” (Highways England)

- **HS2 response: Agreed in part.**

Proposed revision: Additional text:

If the safety auditor’s recommendations are not accepted, an Exception Report will be submitted as part of the application for consent / approval.

Consents and Approvals Strategy – Permanent Highway Works

- 6.6.3 Strategies (Stage 6 – certification)
“This point is considered to be poorly worded. Suggest it is changed to reflect Information Paper.” (Staffordshire)
- HS2 response: Not accepted, but it is agreed that reference to the information papers would be helpful.

Proposed revision: Additional text:

Refer to HS2 Information Papers E14 'Highways and Traffic during Construction - Legislative Provisions' and E29 'Future Highway Maintenance Responsibilities' for further details.

Consents and Approvals Strategy – Permanent Highway Works

- 7.6.1 Roles and responsibilities (Secretary of State for Transport)
“3rd bullet: Since Highways England became a Government Company such orders are authorised by Highways England. Wording needs to be revised to reflect this: ‘Highways England Company Limited is responsible for making Orders to cover the extension to, realignment of, trunk roads and special roads; the Secretary of State remains responsible for making Orders covering the M6Toll motorway’.” (Highways England)
- **HS2 response: Agreed.**
Proposed revision: The wording of 7.6.1 will be revised to cover the final point, with a new Section 7.x added to cover Highways England's specific responsibility.

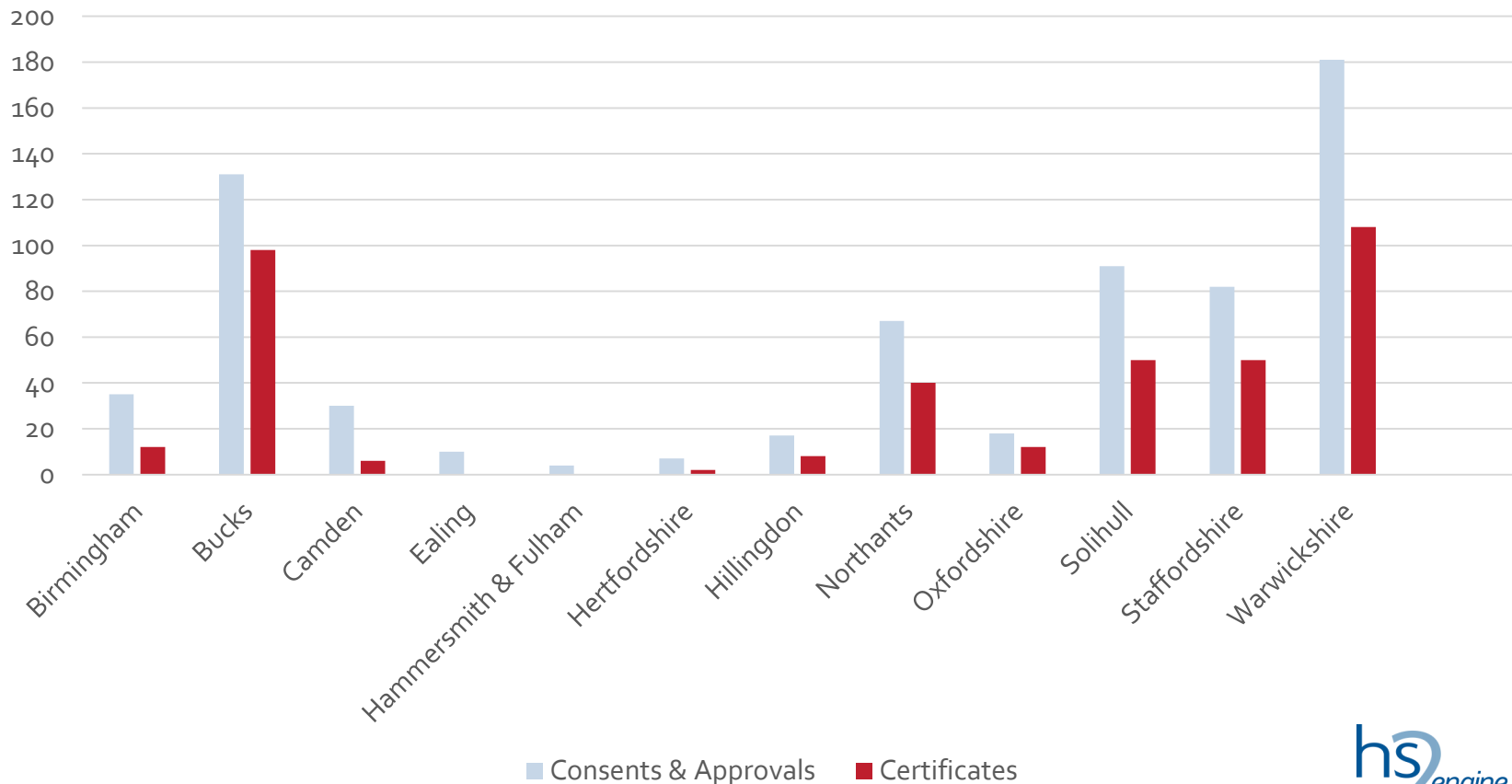
Consents and Approvals Strategy – Permanent Highway Works

To summarise, the headline messages about the strategy are:

- The strategy is written in the spirit of all parties acting reasonably
- Pre-application discussion, at the right time(s), will be the key to success for all parties

Consents and Approvals Strategy – Permanent Highway Works

Initial quantification: approx. 700 consents/approvals, 400 certificates



Consents and Approvals Strategy – Permanent Highway Works

Highway authority	Consents & Approvals	Certificates
Birmingham	35	12
Bucks	131	98
Camden	30	6
Ealing	10	0
Hammersmith & Fulham	4	0
Hertfordshire	7	2
Hillingdon	17	8
Northants	67	40
Oxfordshire	18	12
Solihull	91	50
Staffordshire	82	50
Warwickshire	181	108

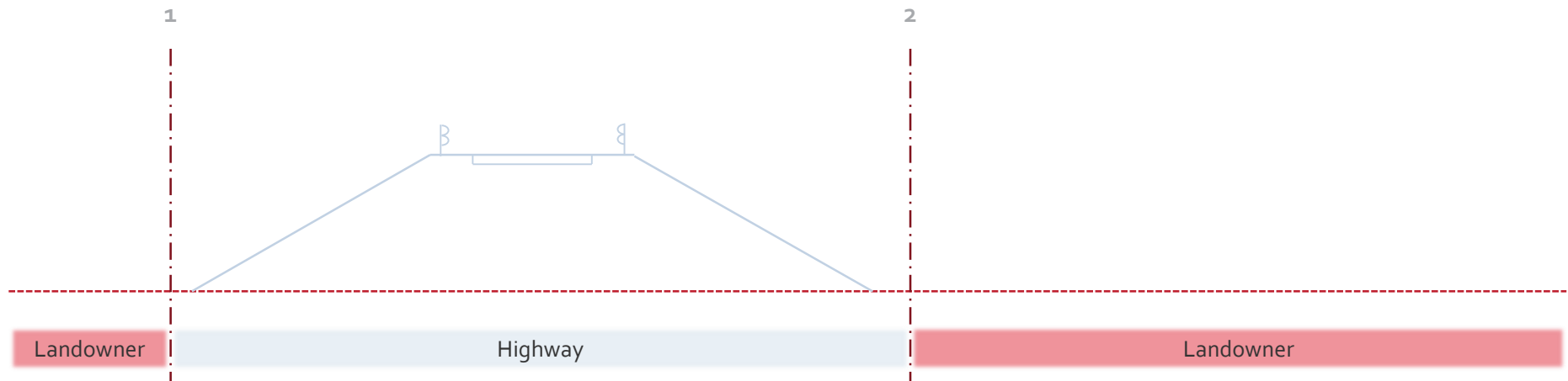
6. Highway boundary and earthworks

James Fearnley – 2 February 2016

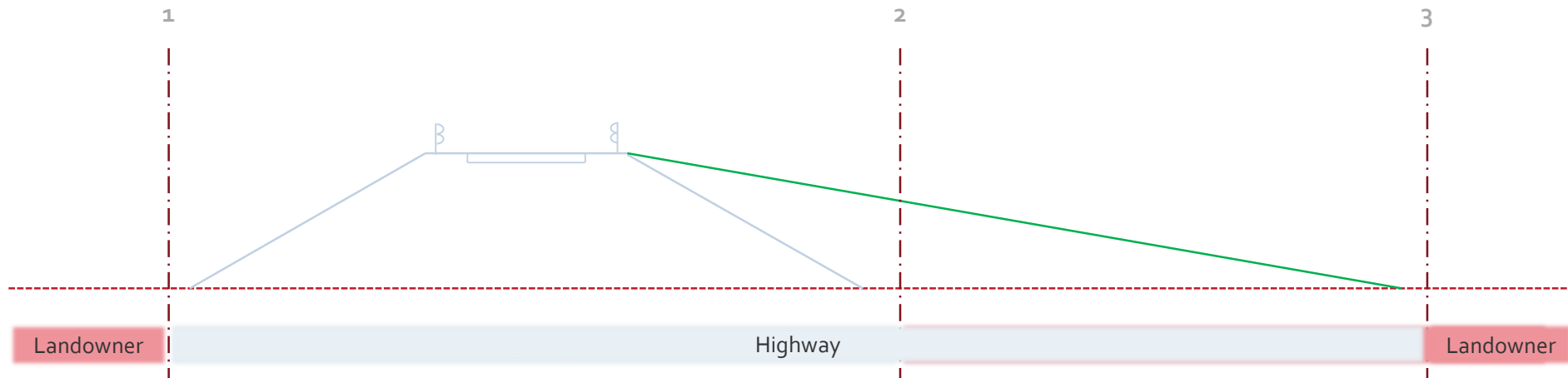
Highway boundary and earthworks

- Information Paper E14 describes how maintenance responsibility of the highway transfers to the highway authority after the 12 month maintenance period.
- There will be a need to agree the extents of the new / realigned highway on a case-by-case basis.
 - Note – this also includes other land that may not necessarily be 'highway' but owned by the highway authority, e.g.
 - Balancing ponds
 - Drainage outfalls

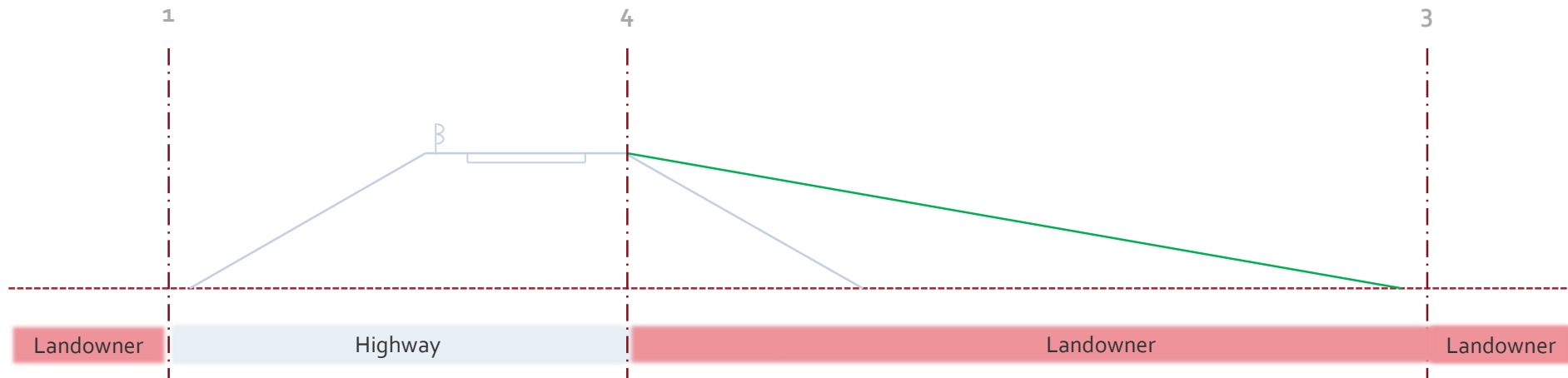
Extent of highways - embankments



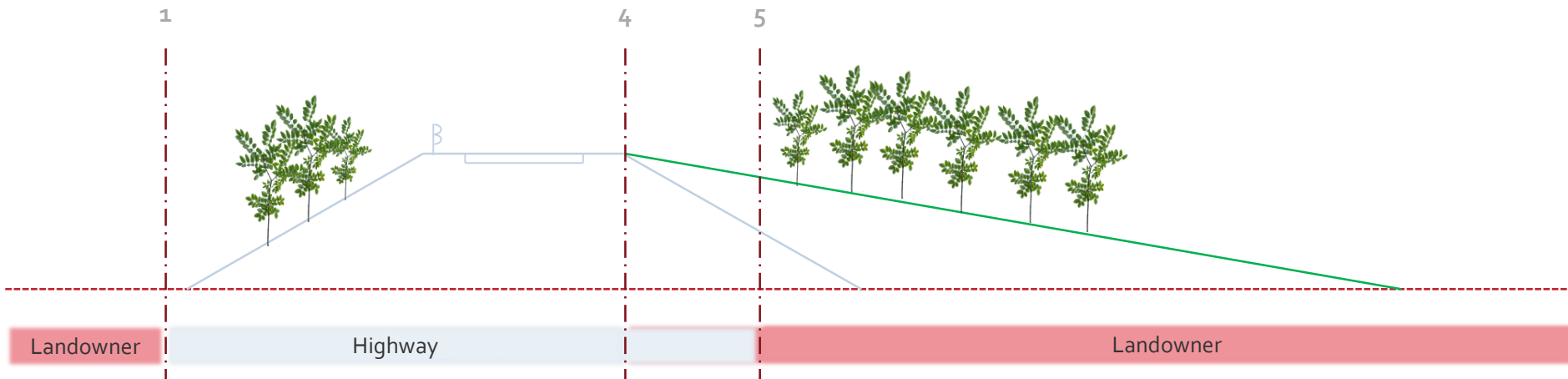
Extent of highways - embankments



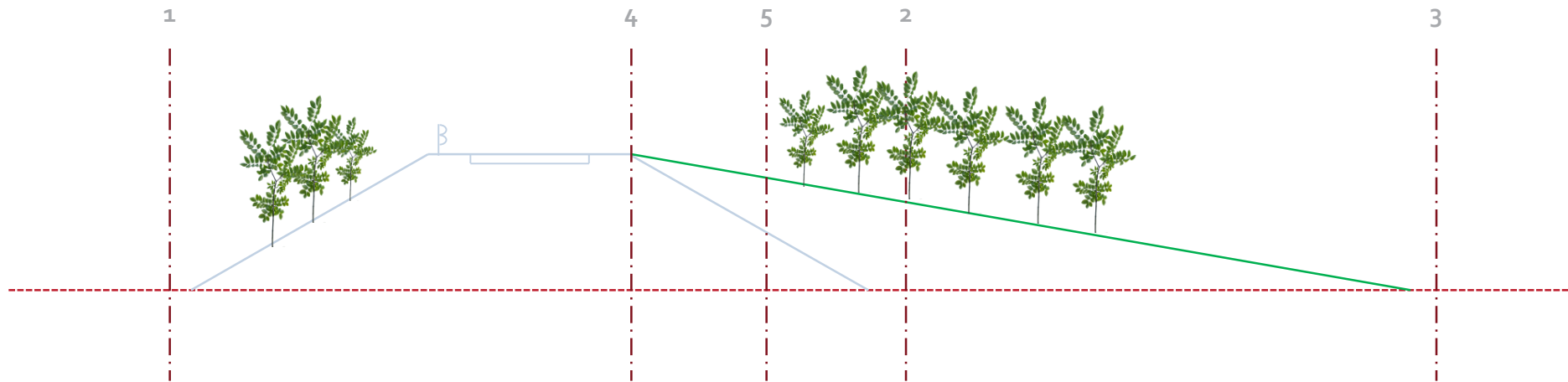
Extent of highways - embankments



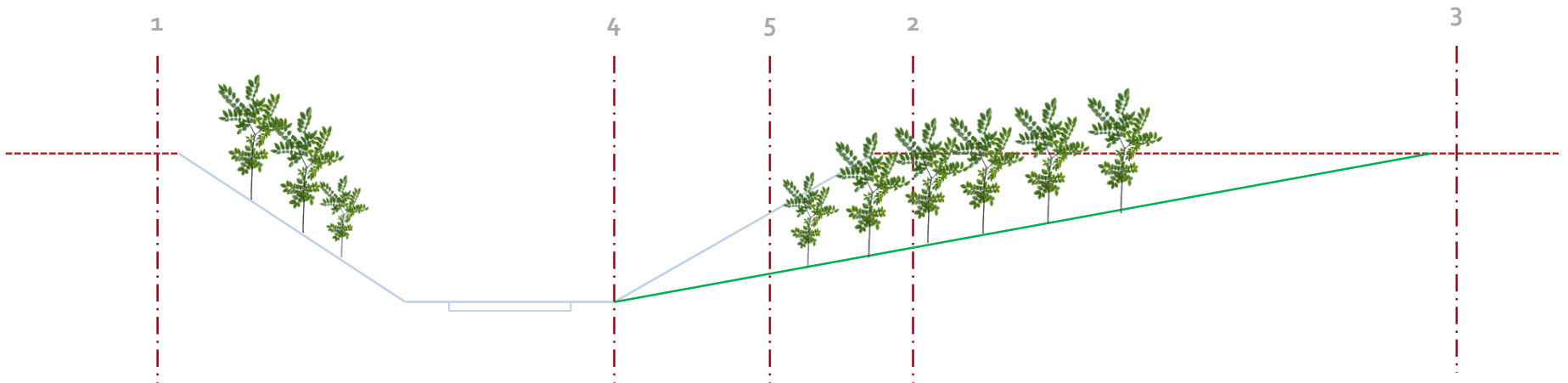
Extent of highways - embankments



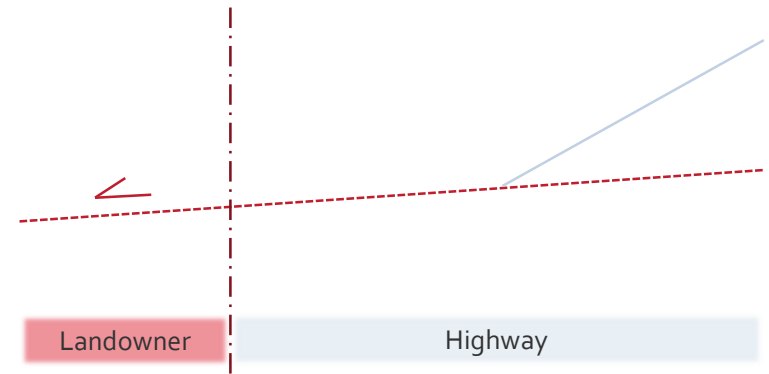
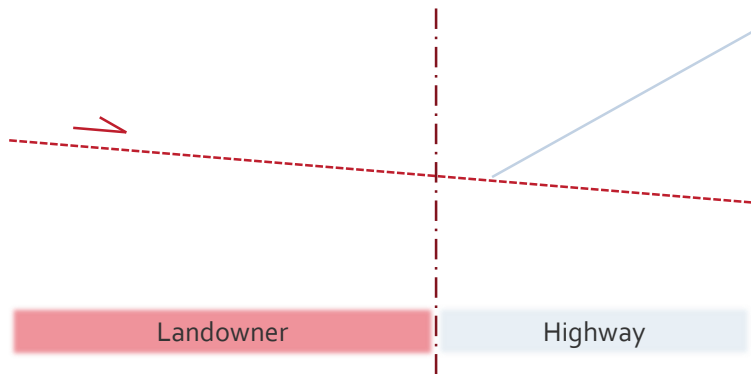
Extent of highways - embankments



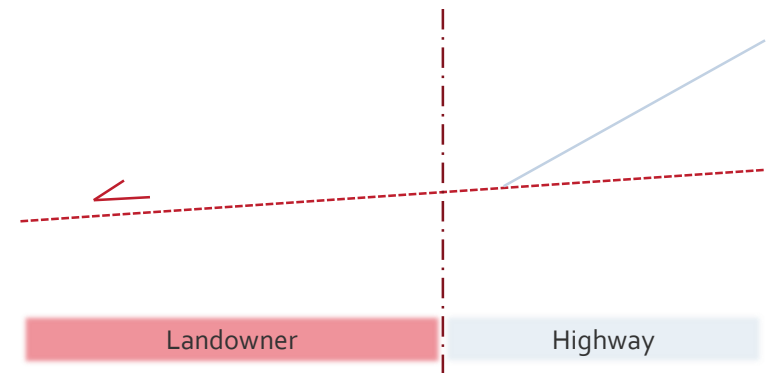
Extent of highways - cuttings



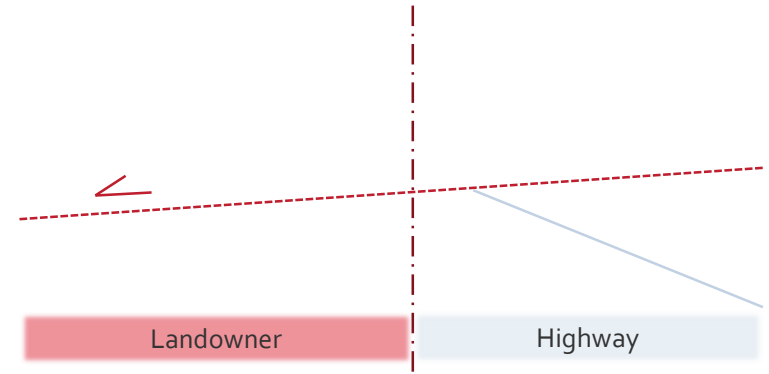
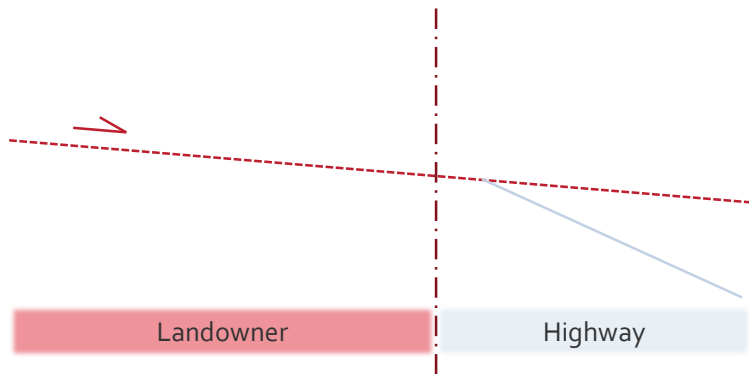
Drainage - embankments



OR



Drainage - cuttings



9. Local authority funded public transport

Home to School 'client' transport

- Meeting held 5th Jan 2016.
- Draft assurances presented by WCC/BCC
 - Use RTMP/LTMP to mitigate effects.
 - Discussion with NU at TLG meetings if impacts occurring – Also note Info Paper E5.
 - If impacts still occur – reimbursement after capped value (to be agreed).
- HS2 Ltd and DfT considering assurances.
- Should be specific to client transport.

9. AOB

AOB

HS2 -

- Section 100 Highways Act 1980
- Green bridges (update)

Section 100 Highways Act 1980

- All highway drainage outfalls and discharges will have received consent from the relevant drainage authority under the protective provisions of Schedule 31 Part 5
- Section 100 of the Highways Act 1980 applies to any new or altered highways, but drainage discharges do not rely on this provision since they will be built under hybrid Bill powers (as enacted)
- Highway authorities become responsible for the maintenance of highway drainage systems after the end of the 12-month maintenance period
- Section 100 would apply in the normal way to any new or altered drainage works and/or discharges undertaken by the highway authority at a latter date

Green bridges (update) 1

- Updated Information Paper E15 has now been published
- This describes four main types of green bridge, rather than the three mentioned at the last Highways Sub-group meeting
- This was changed to provide greater clarity about the variations required for different bat species

Green bridges (update) 2

Type 1 – Green bridges for Bechstein's bats (*5 examples*)

Type 2 – Green bridges for important populations of scarce bat species (other than Bechstein's bats) and high value assemblages of bats (*2 examples*)

Type 3 – Green bridges for landscape and habitat connectivity and/or the dispersal and passage of wildlife

- **Type 3A** - with a single vegetated zone (*5 examples*)
- **Type 3B** –with a double vegetated zone (*3 examples*)

Type 4 – Other types of green bridge with site-specific functionality (*1 example*)




Forward Plan

Planning Forum Document Route Map – Jan 2016

Title	Engagement	1 st Draft	2 nd Draft	3 rd Draft	4 th Draft	Final
Environmental Minimum Requirements						
General principles	NEF, Planning Forum	Autumn 2013	Nov 2013	May 2015	End of HoC	Royal Assent
Environmental Memorandum	NEF, Planning Forum	Autumn 2013	Nov 2013	May 2015	End of HoC	Royal Assent
Planning Memorandum	Planning Forum	Sept 2013	Nov 2013	April 2015	End of HoC	End of HoL Select Committee
Heritage Memorandum	EH and Planning Forum	Autumn 2013	Nov 2013	April 2015	End of HoC	Royal Assent
CoCP	NEF, Planning Forum	Autumn 2012/ May 2013	Bill deposit	July 2015	End of HoC	Royal Assent
U&As register	TBC	During parliamentary process				Royal Assent
Other						
Planning Regime (Principles)	Planning Forum	April 2013	Sch 16 of the Bill subject to petitions and Select Committee. Discussion on common issues – Planning Forum			Royal Assent
Statutory Guidance	Planning Forum	April 2013	October 2015		End of HoC	Post Royal Assent
Construction arrangements class approval	Planning Forum	July 2014	July 2015		End of HoC	Post Royal Assent
Pre-submission funding	Planning Forum	Agreement in principle -April 2014	Discussion on funding and mechanisms - Planning Forum			End of HoL Select Committee
Fee Regulation	TBC	TBC				Post Royal Assent*

*This does not preclude earlier discussion on additional funding, eg during the Bill process

 Action with LPAs

 Action with HS2/DfT

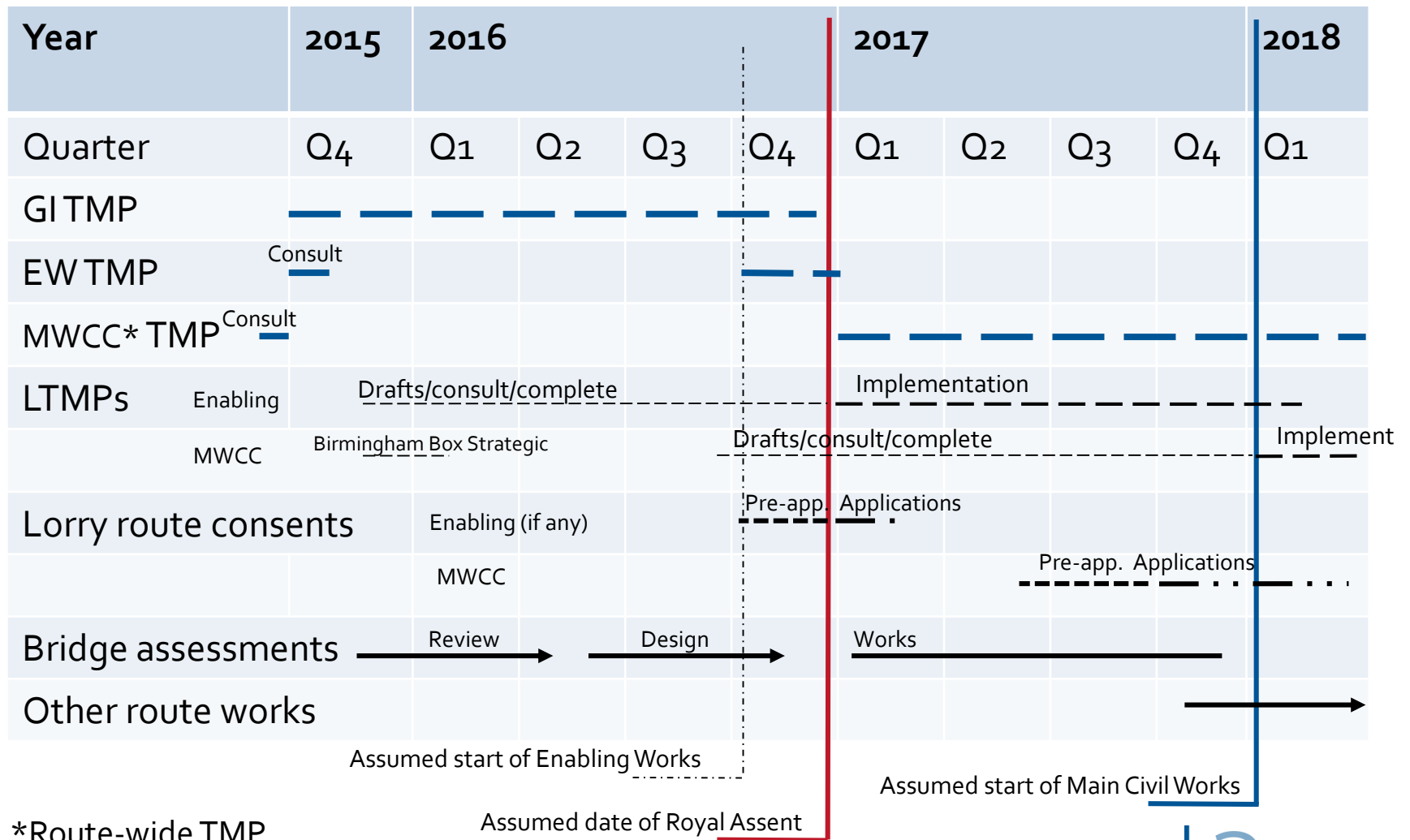
Forward Programme – Jan 2016

2016/17	HS2 Phase One Planning Forum
	27th / 28th
January	<ul style="list-style-type: none"> • Code of Construction Practice • Planning Forum Note – Standard Conditions • Design approaches – stations • Service Level Agreements
	9th/10th
March	<ul style="list-style-type: none"> • Construction programme • Planning Forum Note – Content of Sch. 16 submission • Design approaches – Headhouses and ventshafts • Draft CoCP Update • Community Engagement Strategy
	TBC
May	<ul style="list-style-type: none"> • Planning Forum Notes • Design approaches – Bridges • Fee Regs and Appeal Regs • Statutory Guidance
	TBC
July	<ul style="list-style-type: none"> • Construction programme • Planning Forum Notes • Design approaches – Depots

Forward Programme – Jan 2016

2015	Subgroup: Environmental Health	Subgroup: Highways	Subgroup: Heritage	Subgroup: Flood Risk and Drainage
Jan 16	22nd London <ul style="list-style-type: none"> • Construction update • Special cases • COCP / LEPMs • Crossrail Lessons Learnt 			15th Birmingham <ul style="list-style-type: none"> • Consents workshop
Feb 16		2rd Warwick <ul style="list-style-type: none"> • Technical standards feedback Pt2 • Consents and approvals • RTMP comments feedback • Local authority funded transport 		TBC <ul style="list-style-type: none"> • Feedback on consents workshop • Other technical standards
Mar 16	17th	16th Euston <ul style="list-style-type: none"> • Schedule 16 – lorry route approvals • Technical Standards Bridges • Bridge strengthening • Signals works agreements • Consents and approvals • Highways maintenance agreement 	17th <ul style="list-style-type: none"> • Schedule 16 – briefing • HERD's update • Select committee update • Enabling works contract ITT 	
Apr 16				
May	12th	4th Warwick TBC <ul style="list-style-type: none"> • LTMP's for enabling works • Methodology for condition surveys • Winter maintenance • Technical Standards Bridges • Departures 		
Future		TBC <ul style="list-style-type: none"> • Specification for Highway Works • Road safety audits • Technical approval of highways structures • Highways standard detail drawings • Consents proformas (temp and permanent) • Governance and undertakings and assurances • Handover pack • Process for consents and approvals 		

Draft Traffic management programme



*Route-wide TMP

HS2 Indicative Programme (Feb 2016)

ACTIVITY	2013				2014				2015				2016				2017				2018	2019-2026	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Phase One																							
Bill programme																							
Hybrid Bill preparation																							
Bill submission to Parliament																							
Formal ES publication																							
Hybrid Bill Parliamentary process																							
Royal Assent																							
Documents																							
EMR general principles																							
Planning Memorandum																							
Environment Memorandum																							
Heritage Memorandum																							
Code of Construction Practice																							
Undertakings & Assurance register																							
Statutory Guidance																							
Con. arrangements class approval																							
Fee regulations																							
Delivery																							
NU established																							
Procurement																							
Design Development																							
Planning submissions																							
Construction																							

NB: Subject to change. Delivery dates dependent on Royal Assent