

# HS2 Phase One Planning Forum – Highways Subgroup

Meeting #11 18 November 2015



# **Highway condition surveys**

What roads should be surveyed? How often surveyed? What defects should be rectified? Should road pavement be upgraded before works commence (potentially down to foundation)? How can the project avoid repairing "normal wear and tear"?

What legislation requirements are there?



Site access point – condition surveys – kerbs and verge by the principal contractor

- Routes to be consulted
- Approved lorry routes
- Exclude motorways, trunk roads
- Exclude A roads unless "extraordinary traffic loading" predicted
- Include diversion of traffic to a road of a lower standard (A to B etc)



#### **Route-wide TMP**

- Surveys before and after main construction use by works traffic
- Some pre-construction remedial works could be required – if so, no further surveys
- Surveys to be undertaken on non-lorry routes to act as a comparison to the level of deterioration



# Further work on methodology

Discussions have been held with TRL on best approach.

Subject to HS2 governance:

- Development of a methodology
- Testing the methodology on sample routes and maintenance algorithms and trailing
- Specification for surveys



# Further work on methodology

HS<sub>2</sub> to tender for an independent expert to perform:

- Route-wide monitoring.
- Calculation of reduction in residual pavement service life and to return the condition to the level had no HS<sub>2</sub> construction occurred.
- Calculation of additional maintenance required to accommodate the additional vehicles.
- Reporting





## Local TMP areas

## **Current proposals in the RTMP**

Proposed that LTMP areas align with the CFA areas:

Euston London Tunnels Colne Valley Langley Depot Buckinghamshire Three counties (three CFA areas) Warwickshire south *Birmingham Box Strategic* Birmingham Interchange Birmingham Junction Birmingham Central Staffordshire



# **Revised proposals**

LTMP areas align with highway authority areas:

Camden TMP Mini TMPs for London vent shafts Hammersmith and Fulham (OOC Station) TMP Hillingdon and Hertfordshire TMP Slough TMP Buckinghamshire and Oxfordshire TMP Northamptonshire TMP



## **Revised proposals in the RTMP**

But that around Birmingham, continue to have overlapping LTMPs:

Warwickshire South TMP

Birmingham Box Strategic TMP Birmingham Interchange area Birmingham Junction area Birmingham Central (Curzon Street Station)

Staffordshire TMP



## **Timetable for LTMPs**

Year	2015	2016				2017				2018
Quarter	Q4	Qı	Q2	Q3	Q4	Qı	Q2	Q3	Q4	Qı
Enabling works	Di 	rafts/consi 	ult/comple	ete 		Impler	nentation			
Main Civil Works	Birmir — —	igham Box S — — —	strategic		Draf	ts/consult/ 	complete			Implement
					Assumed start of Enabling Works	Assumed date of Royal Assent			hs	Assumed start of Main Civil Works engine for g

# **GA Designs**



# **Green Bridges**

### **Richard Adam**



## **Green bridges – introduction**

- The Phase One hybrid Bill scheme contained 16 'green bridges' of various kinds
- Green bridges are to be provided where necessary to help mitigate the potential environmental impacts of the scheme
- Green bridges are typically footbridges, road bridges or agricultural access bridges which have been adapted to allow wildlife to cross the railway safely
- Main difference between a standard bridge and a green bridge is increased width to allow vegetation, typically including a hedgerow, to be planted along the structure on one or both sides of the bridge



## **Green bridges – Additional Provisions (APs)**

- The July 2015 Additional Provision (AP2) included the following changes:
  - Footpath AX15 Overbridge relocated slightly and became 'green' following updated survey results
  - 'Green' functionality of Banbury Road Overbridge switched to Stoneton Lane Green Overbridge
  - 'Green' functionality of former Hints Footpath 14 Overbridge switched to Brockhurst Lane Green Overbridge
  - 'Green' functionality of Footpath M214 Overbridge removed following updated survey results
- The October 2015 Additional Provision (AP4) included the following change:
  - FCC accommodation access function of Calvert Green Overbridge switched to separate structure
- Net result: there remain 16 green bridges in the scheme



## **Green bridges – Different types**

Three main types of green bridge:

- **Type 1:** *purpose is to maintain populations of rare and vulnerable bat species* (6 examples)
- **Type 2:** purpose is to maintain habitat connectivity for bats and other species (9)
  - **Type 2a:** features hedge on one side (5)
  - **Type 2b:** features hedges on both sides (4)
- **Type 3:** *other purpose* (1)
  - Turweston Green Bridge, provided to mitigate community effects in village

# **Paved Verges on Bridges**

Andrew Savage (*Warwickshire CC*)



## Paved verges on bridges - WCC proposal

Road Type – and any specific bridge	Speed	User profile	Verge width and other comments
Dual carriageway	70 mph	Cars and HGVs	3 m both sides
Rural –7.3m wide carriageway	60 mph	Potential equestrian use	3 m both sides
Rural –Structures 25-50 m long	50 mph	Potential equestrian use	2 m and 3 m verges
Rural –Structures 50-75 m long	50-60 mph	Potential equestrian use	3 m verges both sides to reduce risk of large animal vehicle impacts on 60 mph roads
Roads with combined cycle and footways created	30-70 mph	Pedestrians, cyclists and equestrians	3 m verge width and 2 m
Overbridge with pronounced vertical curve	40-7 0mph	All road users	A hard strip is to be created on the crest approach of at least 0.5 m

NB – HS2 Ltd has yet to respond to this proposal.



## **Highways Maintenance Agreement**

- HS<sub>2</sub> Version 9 now provided to WCC with track changes.
- Some text from Kent Agreement re-inserted
- Tables now align with IP E29.
- Some protective clauses (to match council protective clauses) added in.
- WCC have reviewed and marked up document. Version 10 has been circulated.
- Separate off-line meeting with leads in late Nov.



# Matters Directed to the Sub-Group

- Strengthening of roads prior to construction traffic use.
- Clause 11(3) of Schedule 31 Part 1.
- Condition Surveys (Covered in meeting).





# **Forward Plan**

#### Planning Forum Document Route Map – Nov 2015

Title	Engagement	1 <sup>st</sup> Draft	2 <sup>nd</sup> Draft	3 <sup>rd</sup> Draft	4 <sup>th</sup> 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	
СоСР	NEF, Planning Forum	Autumn 2012/ May 2013	Bill deposit	July 2015	End of HoC	Royal Assent	
U&As register	ТВС	During parliamentary	Royal Assent				
<u>Other</u>							
Planning Regime (Principles)	Planning Forum	April 2013	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 2014			End of HoL Select Committee	
Fee Regulation	ТВС	ТВС				Post Royal Assent*	
*This does not preclude earlier discussion on additional funding, eg during the Bill process Action with LPAs Action with HS2/DfT							

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#### Highways Subgroup Route Map – Nov 2015

Title	July	Sept	Oct	Nov	Dec	Future	
Permanent Works							
Highways Maintenance Agreement		Feedback on proposed draft agreement	Draft agreement review issued			For implementation post royal assent	
Technical Standards		Presentation and issue of draft	Feedback from authorities		HS2 Feedback Pt 1	Finalised by royal assent	
New Burdens Assessment – Highways Maintenance	Presentation on Initial findings	Feedback on discussion with sample authorities				Detailed work after royal assent when programme available	
Consents and Approvals			Draft approach		Authorities Provide Feedback	Finalised by royal assent	
Temporary Works							
Route-wide Traffic Management Plan	Presentation and first draft Issue	Presentation on Vehicle flow management and vehicle / driver safety management	Feedback from authorities		Final Draft		
Local Traffic Management Plan					Agenda item	Consult summer next year. Implemented post royal assent (ECI Contactor input)	
Signals Works Agreements	Feedback on progress		Authorities Contacted by HS2			Agreement before royal assent	
Methodology for Conditions Surveys				Agenda item		Agreement sought and implemented pre- construction	
Enabling Works TMP		Draft issued		Feedback from authorities	Likely Agenda Item		
Action with Highways Authorities Action with HS2/DfT							

### Forward Programme – Nov 2015

2015	HS2 Phase One Planning Forum
Oct	28 <sup>th</sup> One meeting in London to introduce: • Design Panel Chair • Residents Commissioner • Construction Director • HS2/DfT feedback on LPA response to General Principles 3 <sup>rd</sup> Draft and Environmental Memorandum 3 <sup>rd</sup> Draft • HS2/DfT Schedule 16 Statutory Guidance 2nd Draft
Νον	
Dec	<ul> <li>9<sup>th</sup> / 10<sup>th</sup></li> <li>LPA feedback on Schedule 16 Statutory Guidance 2<sup>nd</sup> Draft</li> <li>HS2 Ltd/DfT approach to community engagement in design development</li> </ul>
Jan 16	<ul> <li>27<sup>th</sup> / 28<sup>th</sup> TBC</li> <li>Planning Forum Notes – Standard Conditions</li> </ul>
March 16	<b>Date TBC</b> <ul> <li>Construction programme</li> <li>Planning Forum Notes – Content of Sch. 16 submission</li> </ul>
May 16	DateTBC



#### Forward Programme – Nov 2015

2015	Subgroup: Environmental Health	Subgroup: Highways	Subgroup: Heritage	Subgroup: Flood Risk and Drainage
Oct		<ul> <li>14<sup>th</sup> Euston</li> <li>Route Wide Transport Management Plan feedback</li> <li>Consents and approvals</li> </ul>		7 <sup>th</sup> • Technical Standards • Water Consenting Strategy • Terms of Reference
Νον		18 <sup>th</sup> Warwick Condition surveys LTMP areas Green Bridges Paved Verges on Bridges Highways maintenance		
Dec		<ul> <li>16<sup>th</sup> Euston</li> <li>Local Traffic Management Plans</li> <li>Technical Standards feedback Pt1</li> <li>Enabling works</li> <li>Enabling works TMP feedback</li> </ul>	<ul> <li>10<sup>th</sup></li> <li>HERDS Update</li> <li>External speaker</li> <li>Project updates</li> </ul>	Date TBC <ul> <li>Consents workshop</li> </ul>
Jan 16	22 <sup>nd</sup> • Agenda TBC			
Feb 16		Date TBC <ul> <li>Technical standards feedback Pt2</li> <li>Schedule 16 – lorry route approvals</li> <li>Consents and approvals</li> </ul>		Date TBC <ul> <li>Feedback on consents workshop</li> <li>Feedback on technical standards</li> </ul>

