

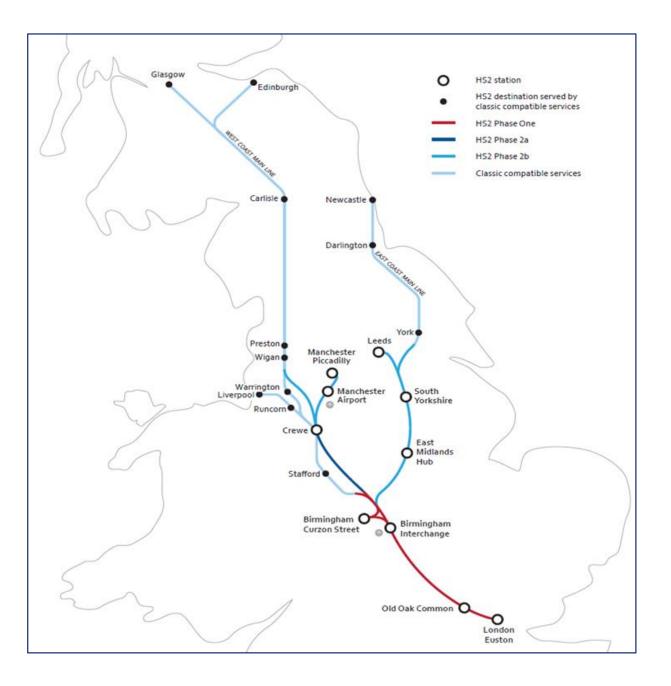
Phase 2a Route Overview for House of Commons Select Committee

Professor Andrew McNaughton

19 March 2018



High Speed Rail Network



HOC/10001/0003

High Speed Rail is 53 Years Old



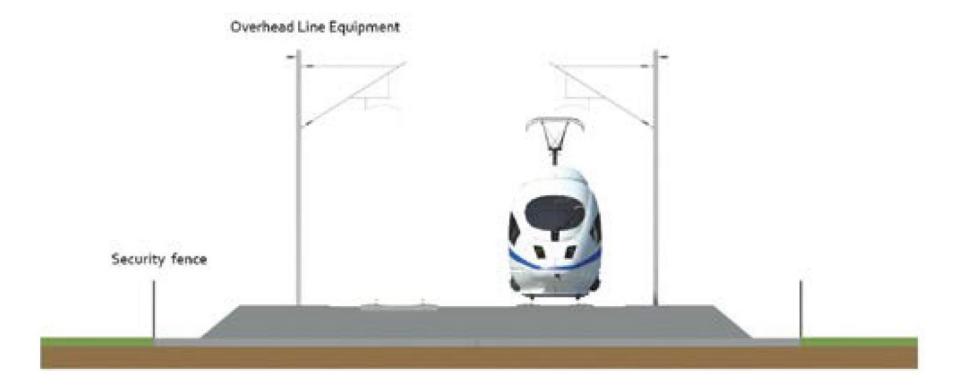


International Technical Standards





Indicative Rail Corridor





HS1 Two Track Railway



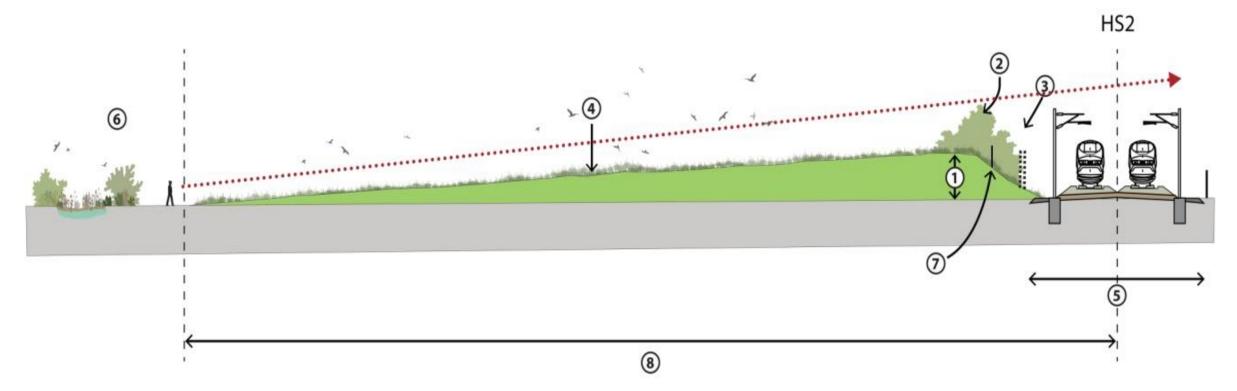


200m long trains which can be coupled to run in pairs 400m long



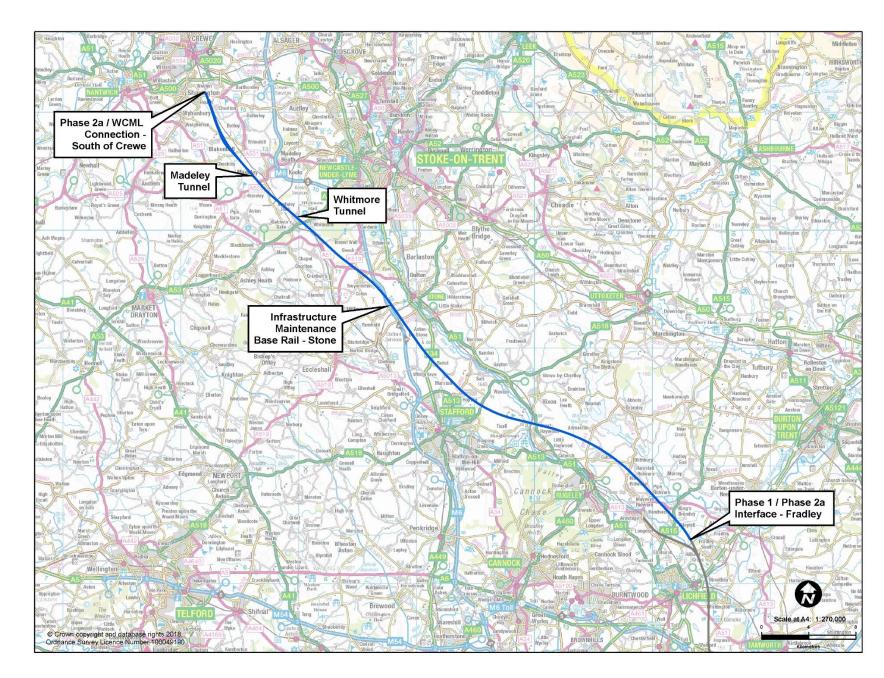


HS2 Design Principles

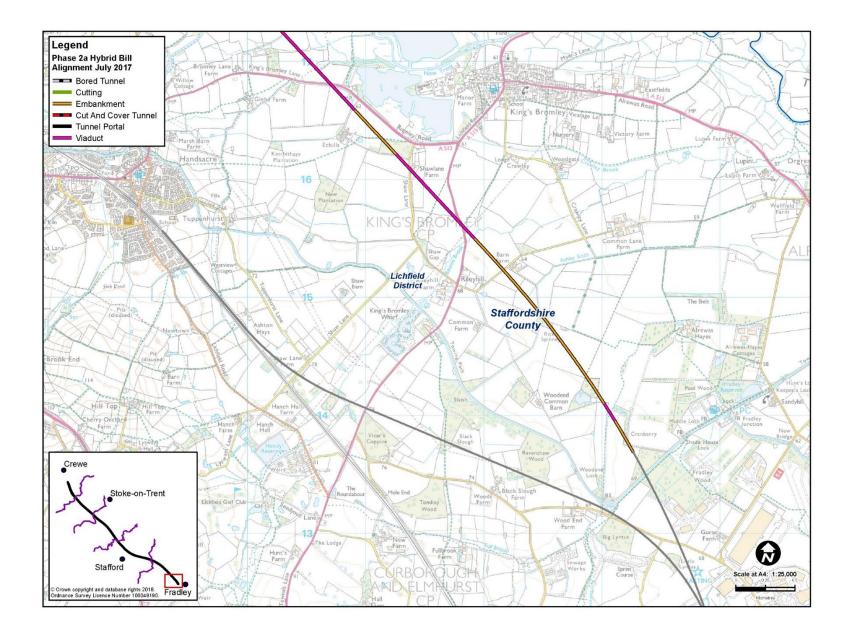


- 1. Integrated noise protection and visual screening
- 2. Further screen planting to supplement earthworks and fit with local landscape
- 3. An earthworks solution removes the need for a fence type noise barrier *(cutting costs + maintenance burden)*
- 4. Land returned to agriculture up to the railway (opportunity to improve agricultural land)
- 5. This earthworks solution minimises the width of the rail corridor
- 6. Protection of environmental features (e.g. ecology, heritage, landscape)
- 7. Boundary fence visually concealed behind the earthworks
- 8. The majority of the original land take is handed back for productive use

Phase 2a Route Overview

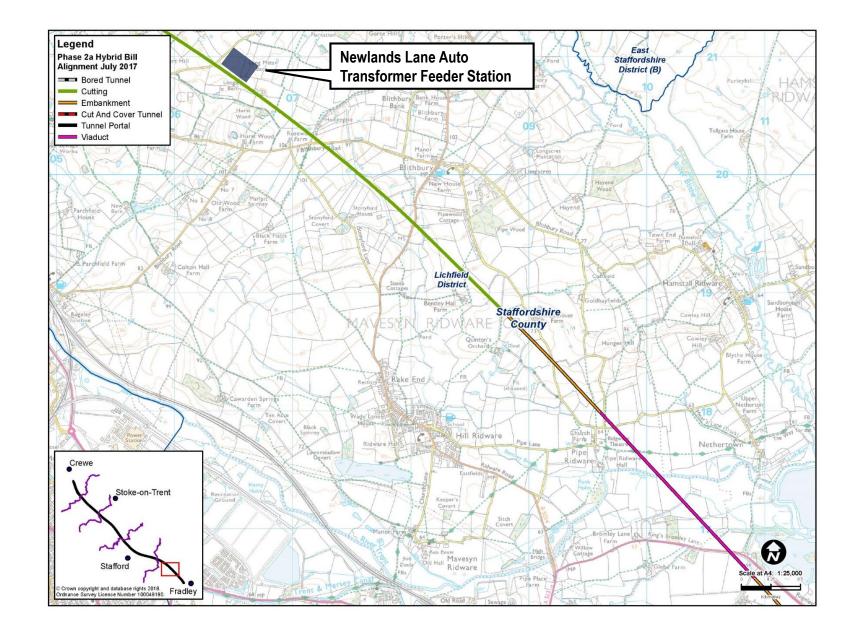


1. Fradley to Kings Bromley





2. Kings Bromley to Blithbury

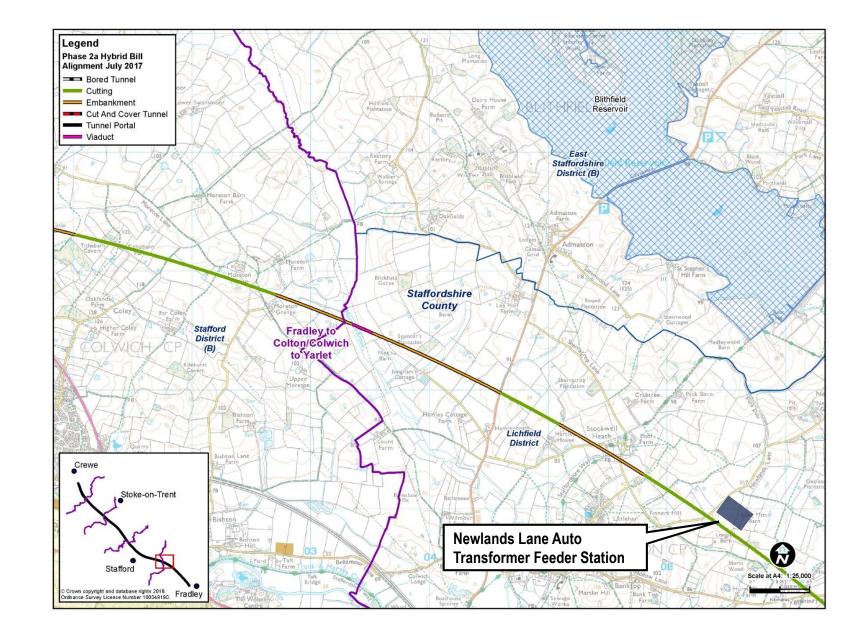


Newlands Lane Auto Transformer Feeder Station

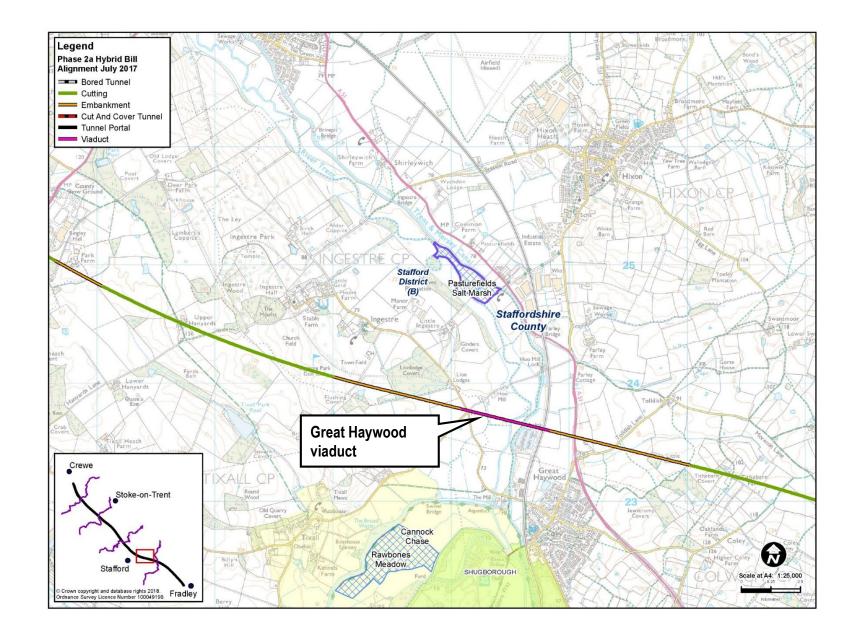
View from North looking South



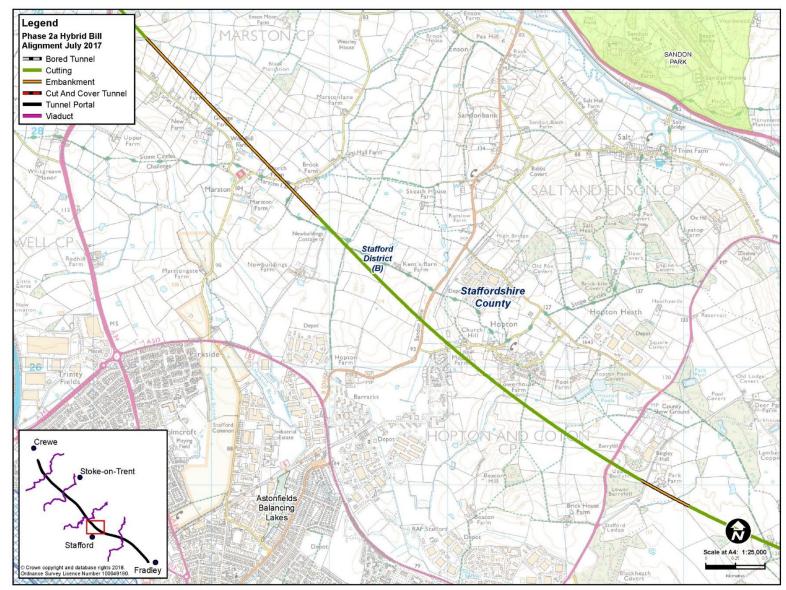
3. Colton to Colwich



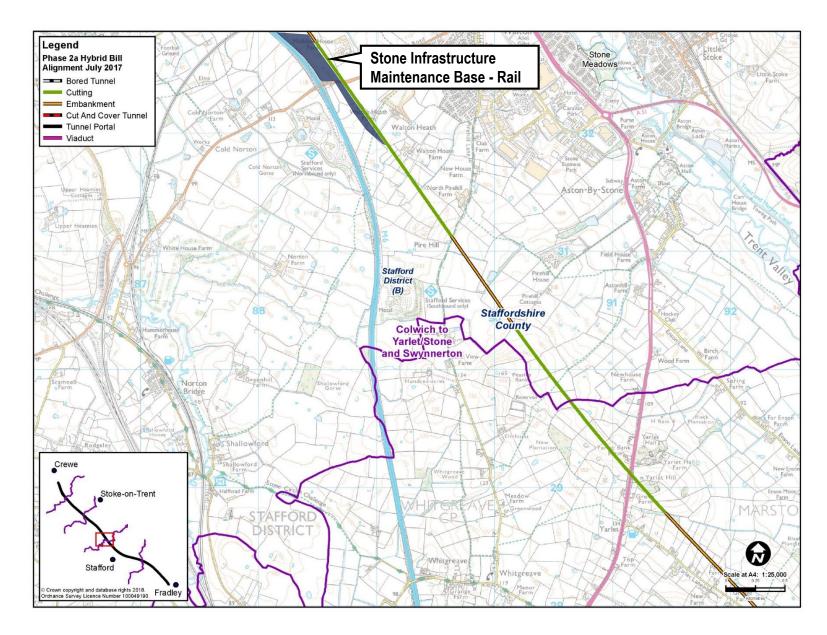
4. Moreton to Ingestre



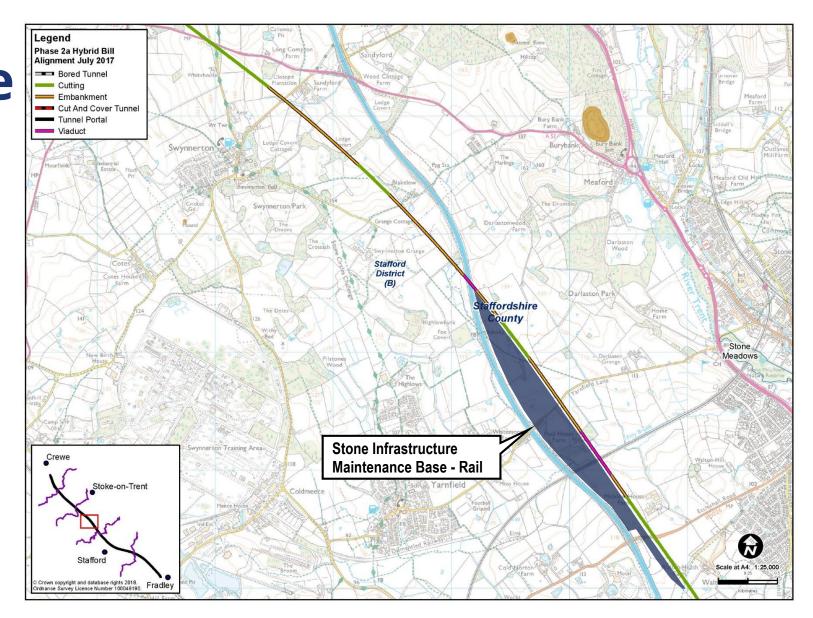
5. Staffordshire Show Ground to Marston



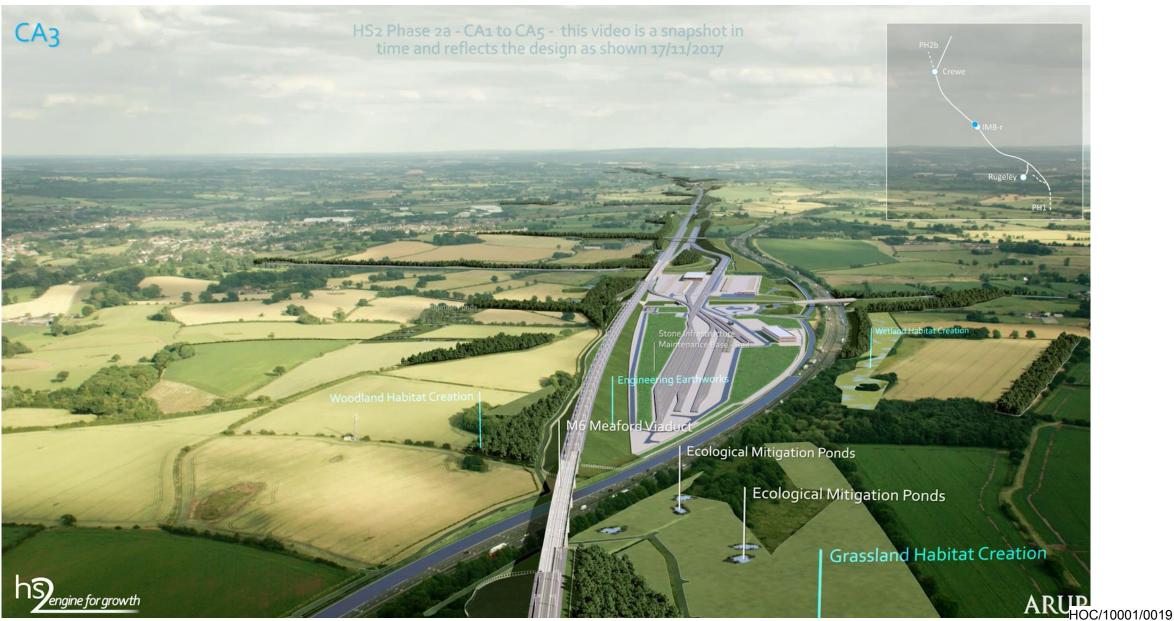
6. Marston to Stone



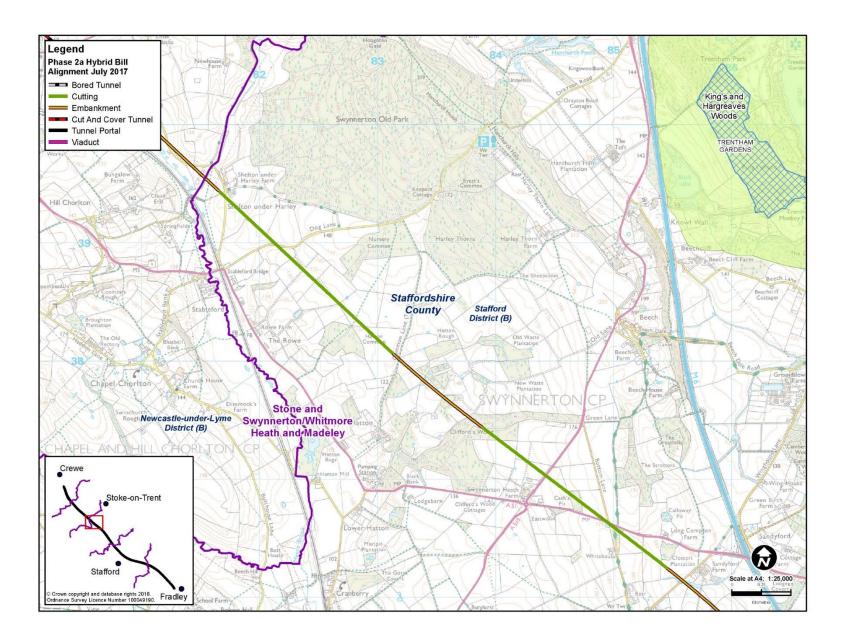
7. Stone Infrastructure Maintenance Base to Swynnerton



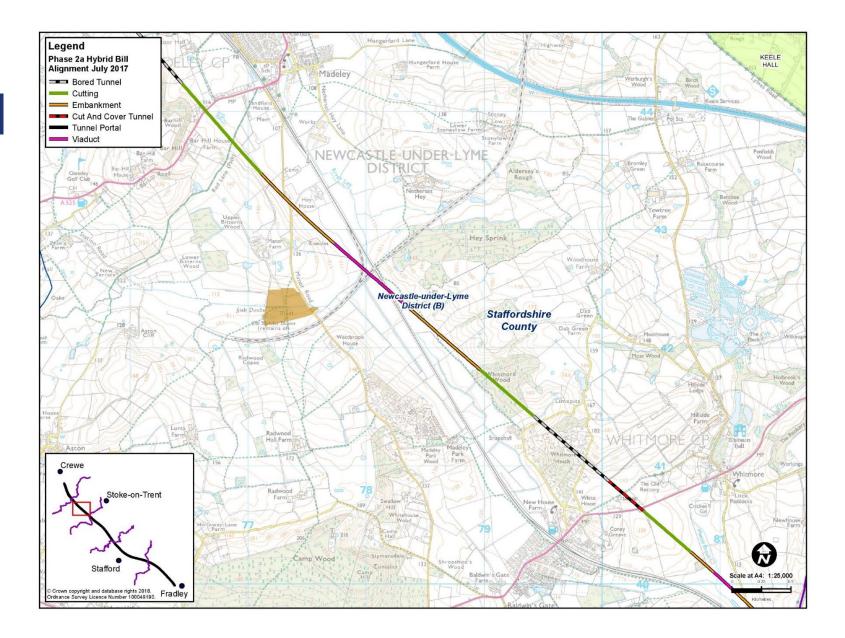
Stone Infrastructure Maintenance Base - Rail



8. Swynnerton to Stableford



9. Whitmore Heath Tunnel to Madeley Tunnel



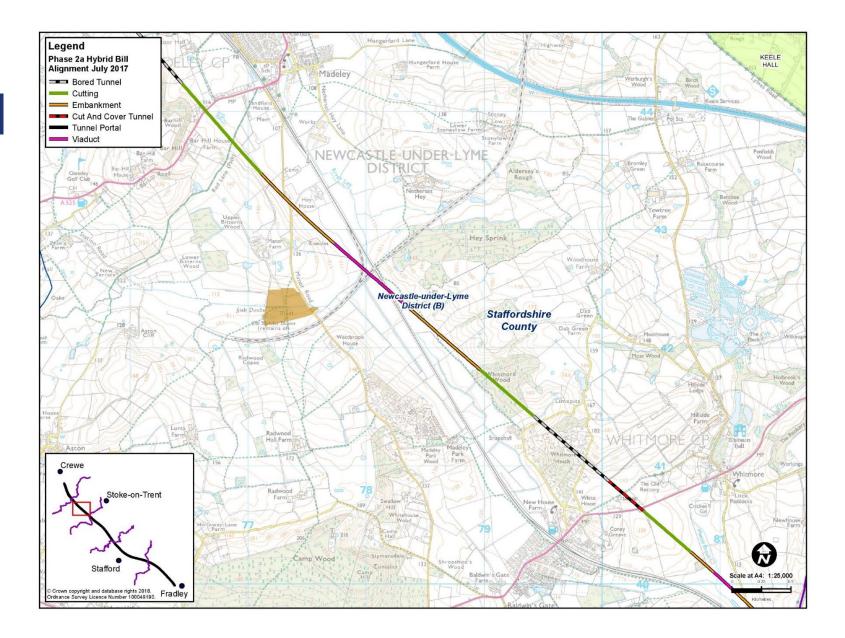


High Speed Porous Tunnel Portal



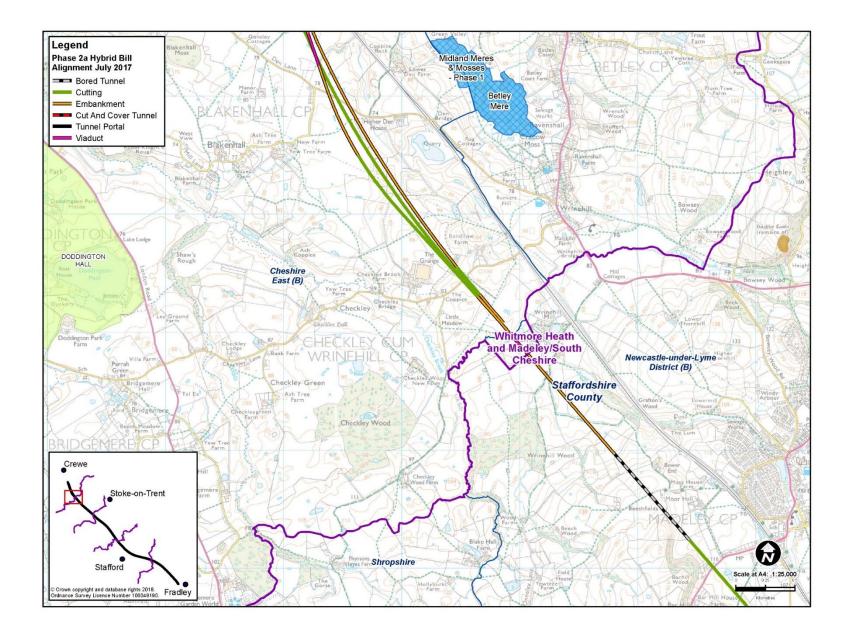


9. Whitmore Heath Tunnel to Madeley Tunnel



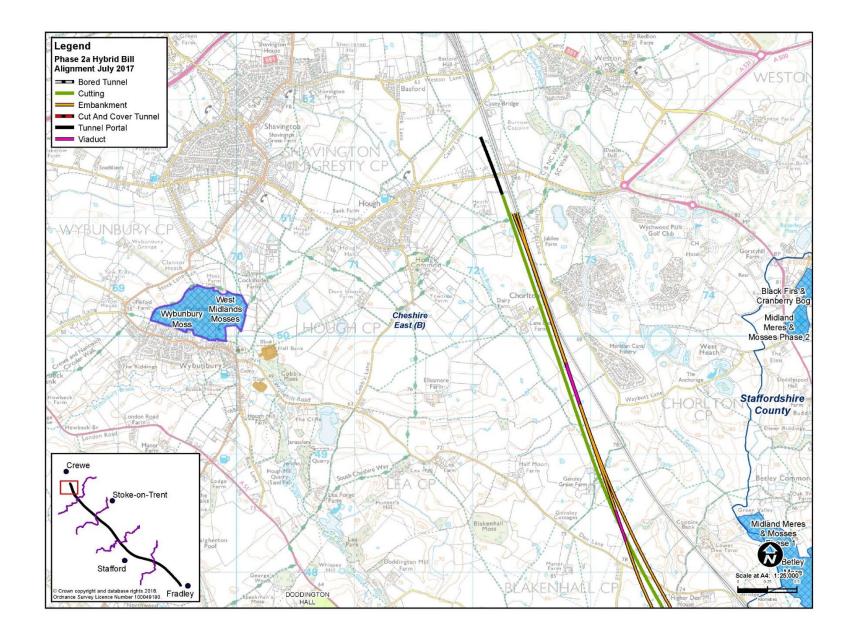


10. Madeley Tunnel to Blakenhall

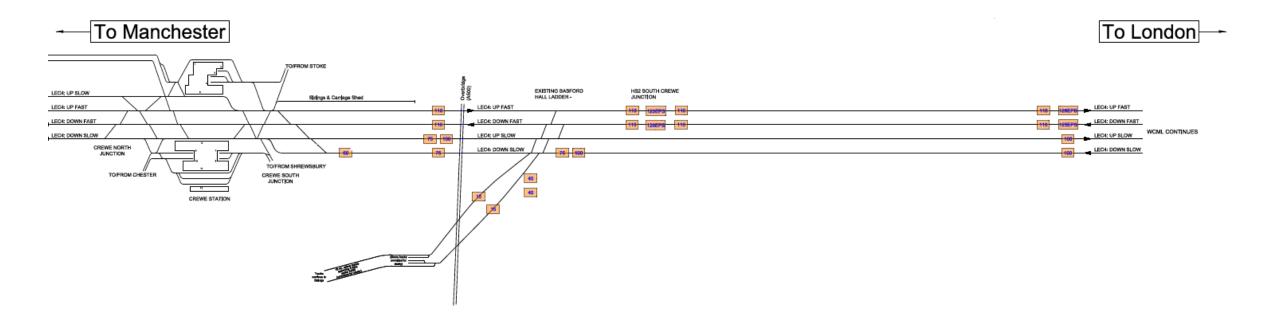




11. Crewe Approaches

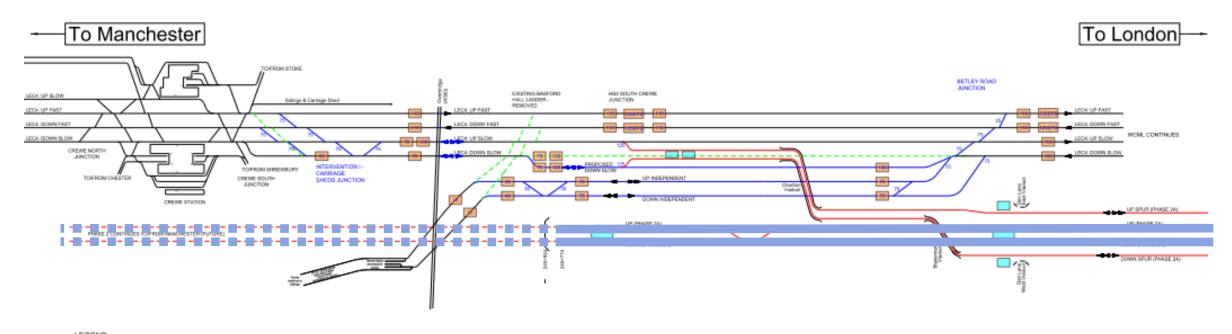


Crewe Existing Layout





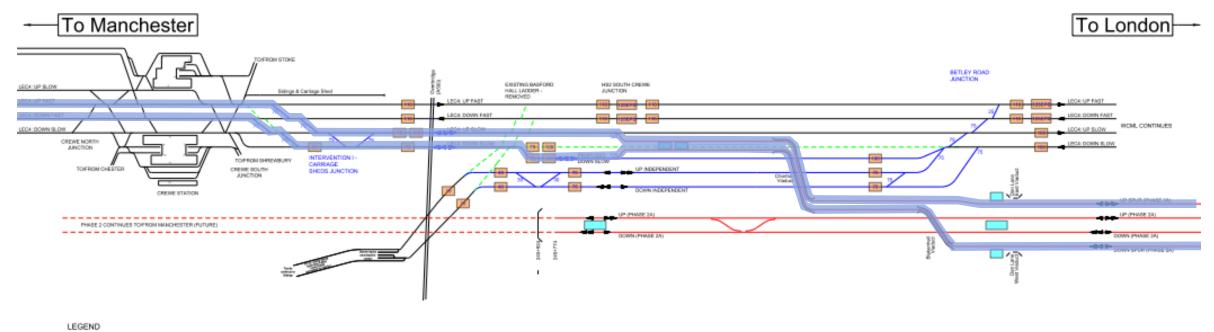
Crewe Proposed Layout HS2 Trains Passing Crewe Highlighted







Crewe Proposed Layout HS2 to WCML Highlighted





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High Speed Rail Network

