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Euston Overview

Prof Andrew McNaughton

Purpose of HS2

 'The new north-south railway is a long term solution to a long term problem'

Secretary of State for Transport, Foreword, Strategic Case for HS2, November 2013

- 'The aim of the HS2 project is to deliver hugely enhanced capacity and connectivity between our major conurbations'
- '... capacity will be freed up on the existing network, especially on the congested lines to the north of London, creating sufficient capacity for extra commuter and freight services'

High Speed Rail Investing in Britain's Future – Decisions and Next Steps, January 2012, p.11



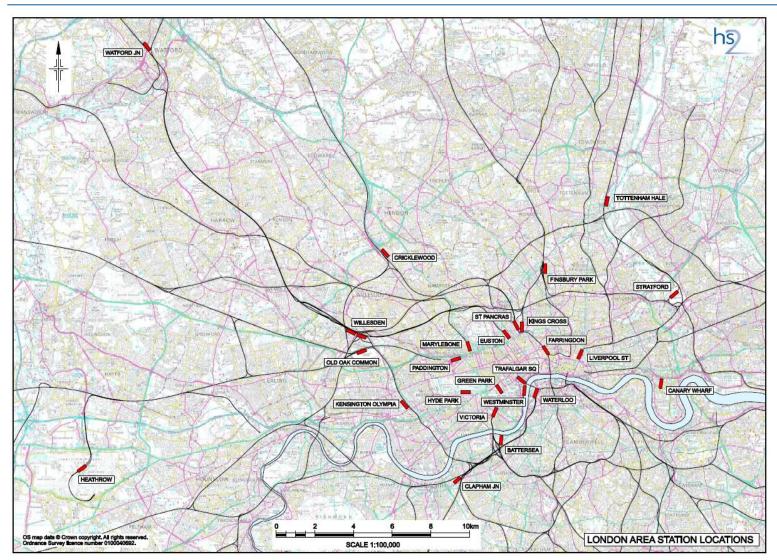
HS2 demand

On the trunk section of the HS2 network (south of the West Midlands);

- by 2037 circa 250,000 passengers will use HS2 each day
- 90% of those passengers will be travelling to, from or via central London



27 London station locations considered with TfL





Sift process for London terminus station (2009)

Stage 1

Battersea Power Station

Camden

Canary Wharf

Clapham Junction

Cricklewood

Euston

Farringdon

Heathrow Central Terminal Area

Heathrow Hub

Kensington Olympia

King's Cross

King's Cross Lands

Liverpool Street

Marylebone

Old Oak Common

Paddington

Beneath A Royal Park

St. Pancras

Stratford Beneath the Thames

Willesden Junction

Beneath Trafalgar Square

Victoria

Waterloo

Watford Junction

Tottenham Hale

Stage 2

Euston - all at the same level

Euston Double Deck - Classic above

Euston Double Deck – Classic below King's Cross Lands – Cavern

King's Cross Lands - Cut and Cover

Old Oak Common

Paddington

Beneath a Royal Park

St. Pancras

Willesden Junction

Preferred

Euston - all at the same level

Alternative?

Euston Double Deck

Alternative?

King's Cross Lands - Cut and Cover

Stage 3

Euston – all at the same level
Euston Double Deck – Classic above

Euston Double Deck - Classic below King's Cross Lands - Cut and Cover

Figure B1 - London Terminus sifting process



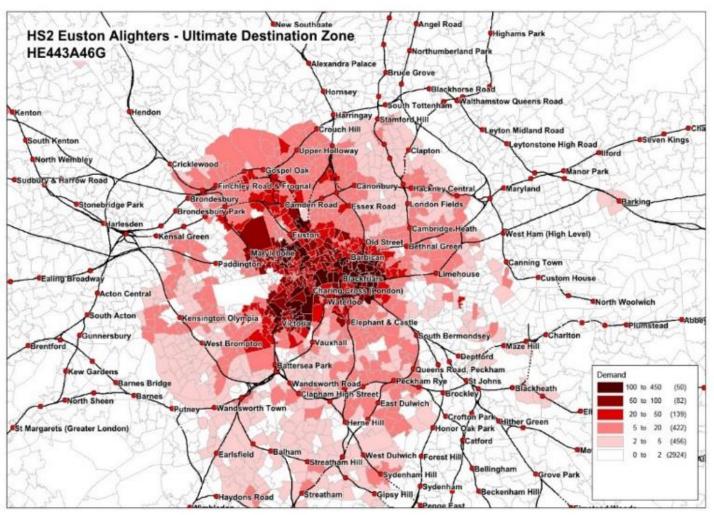
London terminus station selection process

Key stages

- High Speed Rail London to the West Midlands and Beyond (Hs2 Ltd, December 2009)
- High Speed Rail Command Paper (DfT, March 2010)
- High Speed Rail: investing in Britain's future public consultation (DfT, 2011)
- High Speed Rail: investing in Britain's future decisions and next steps (DfT, 2012)
- Volume 1 Introduction to the Environmental Statement and the Proposed Scheme | Strategic and route-wide alternatives – Alternatives Report (2013)



Euston destinations - am peak



Rail passengers arriving in Euston (am peak):

- 2012 24,680
- 2041 (without HS2) –
 42,000
- 2041 (with HS2) 61,000

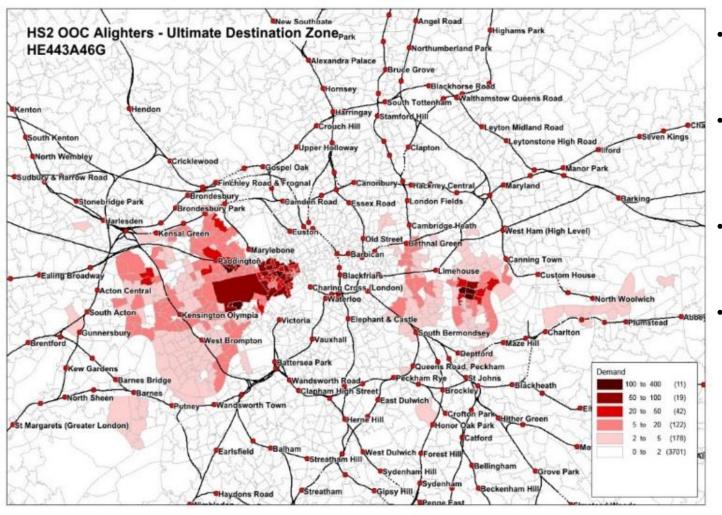


Euston connections

- Victoria Line
- Two Northern Line branches
- Metropolitan, Hammersmith & City and Circle
- Close proximity to St Pancras and Kings Cross
- 13 bus routes
- Central London taxi
- Rental bikes
- Walking



Old Oak Common destinations



- Access to Heathrow, Thames Valley and West London
- Convenient access via Crossrail towards City of London and Docklands
- Relieves pressure on HS2 Central London terminus
- Serve future major employment and regeneration development opportunities around Park Royal

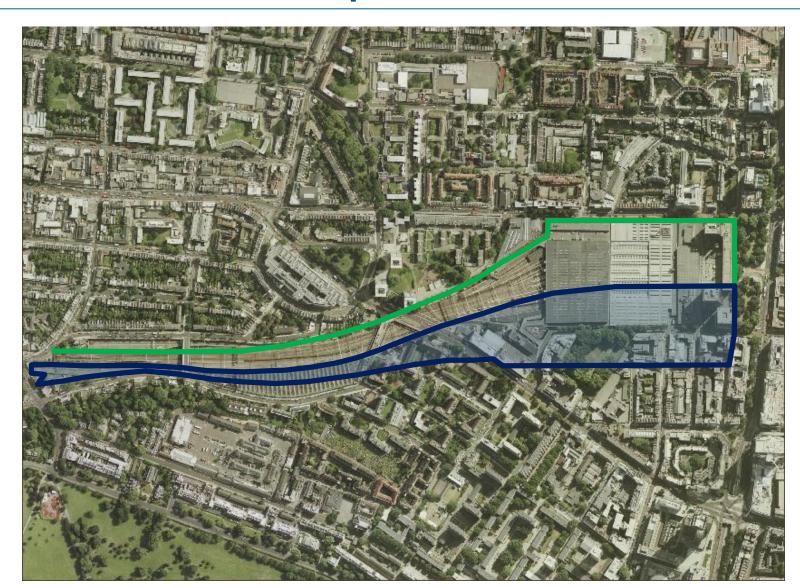


What HS2 releases from WCML

- The HS2 Phase 1 services replace most long distance nonstop services to or from areas served by HS2
- At least 10 new services can operate into Euston
- Each new commuter train is c700 seats
- Each new long distance train is c500-600 seats



Euston Station Footprint

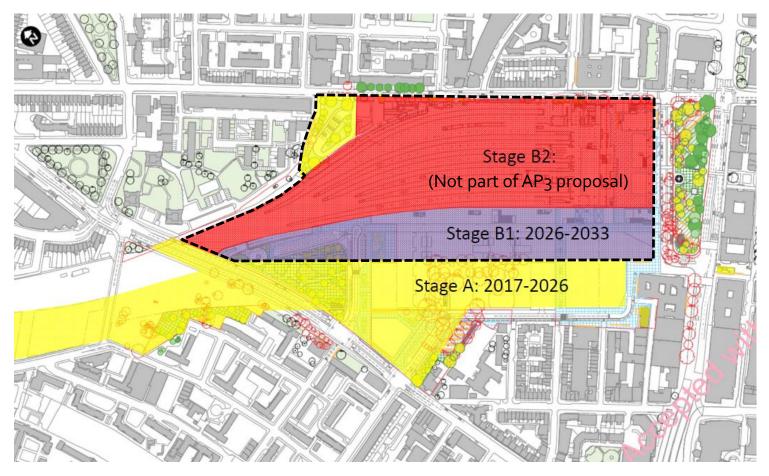


Why are we changing to the AP3 design?

- Create an effective station within budgetary and programme constraints
- 2. Support the wider development vision for the Euston area
- 3. Reduce the impact on existing rail services against a background of continuing growth of over 5% p.a. on longer distance commuting services



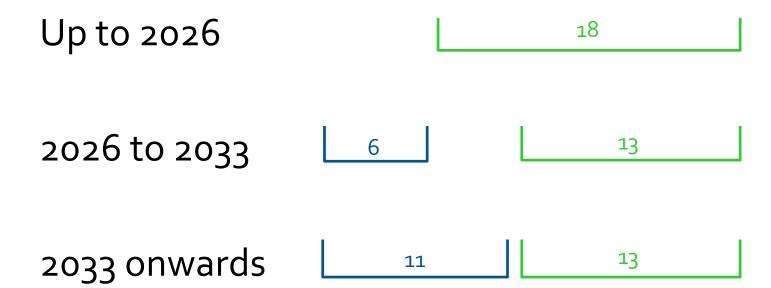
The 'staged' delivery approach



--- Approximate boundary of existing station



Platform sequencing



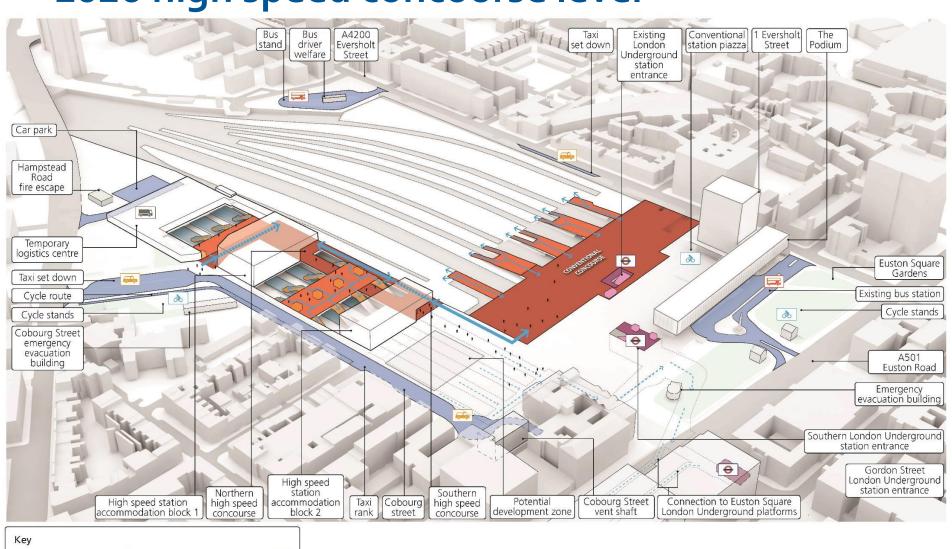


2026 high speed concourse level

Paid/Unpaid concourse

Central street LU concourse Surface transport

Main pedestrian routes



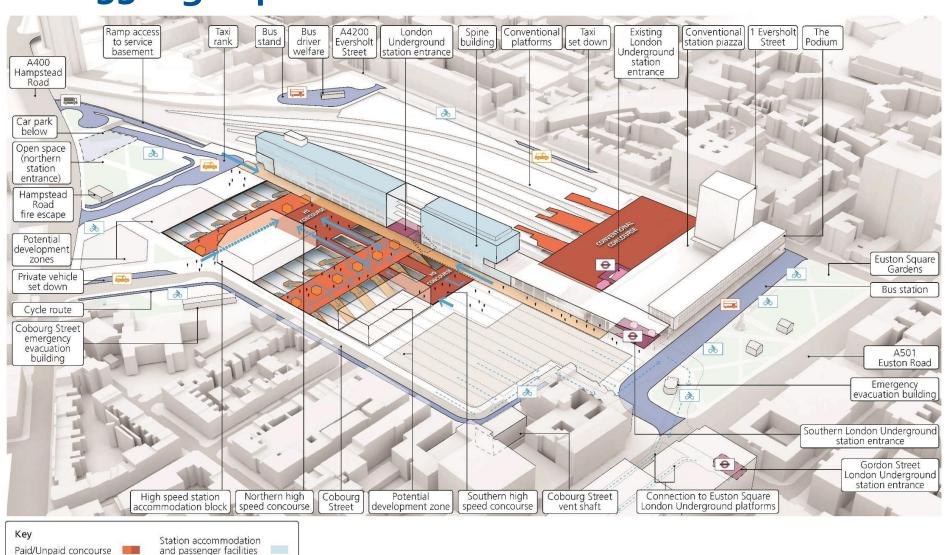
2033 high speed concourse level

Central street

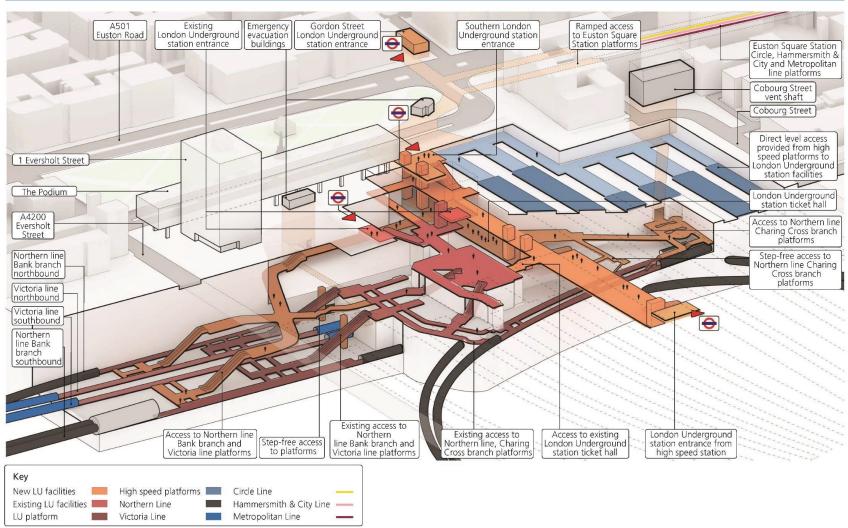
LU concourse

Surface transport

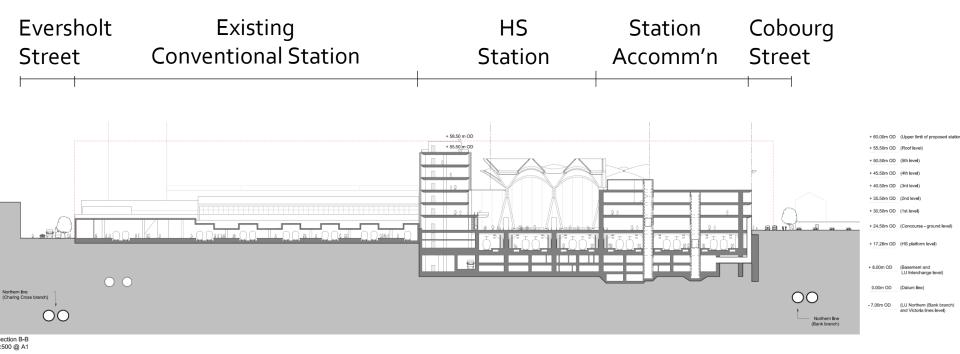
Main pedestrian routes



London Underground connections

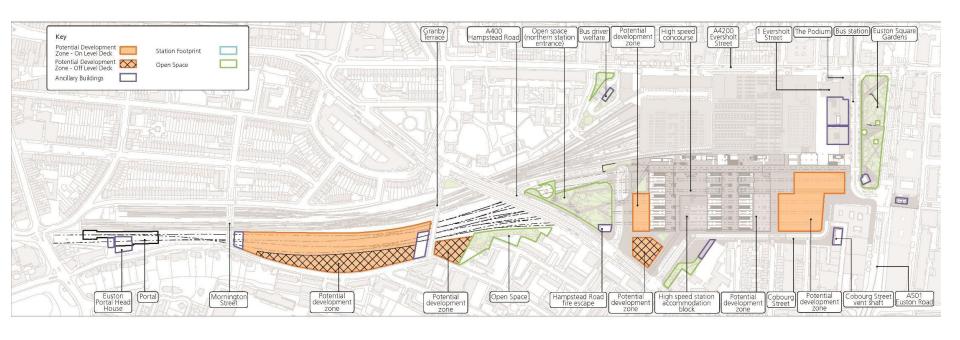


Station cross section looking South



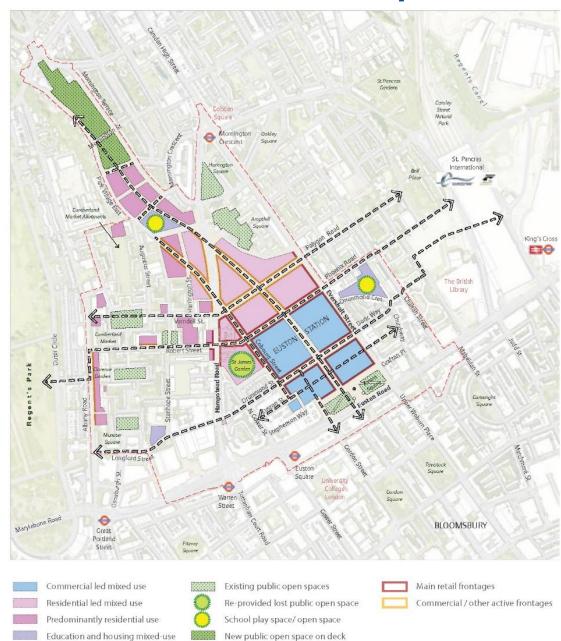


Potential development zones





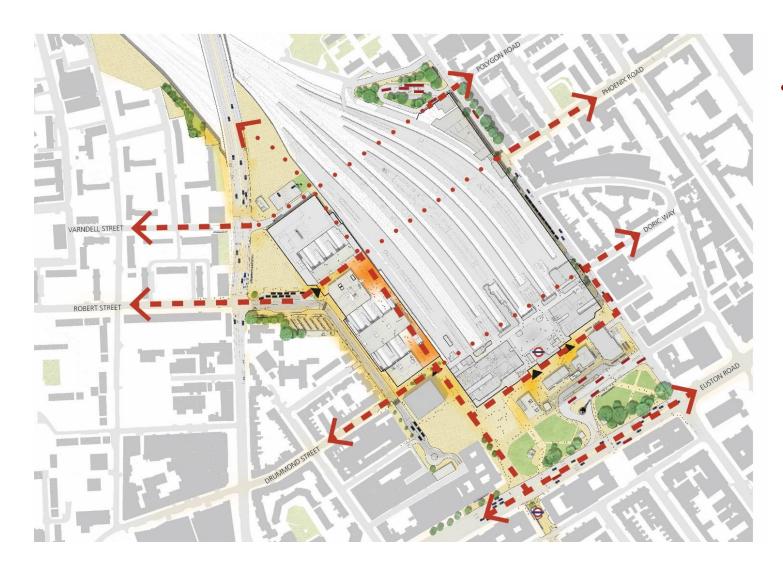
Euston Area Plan Permeability



above railway tracks



AP3 2026 permeability



- Key
 Potential future
 connectivity provision
- Connectivity provision



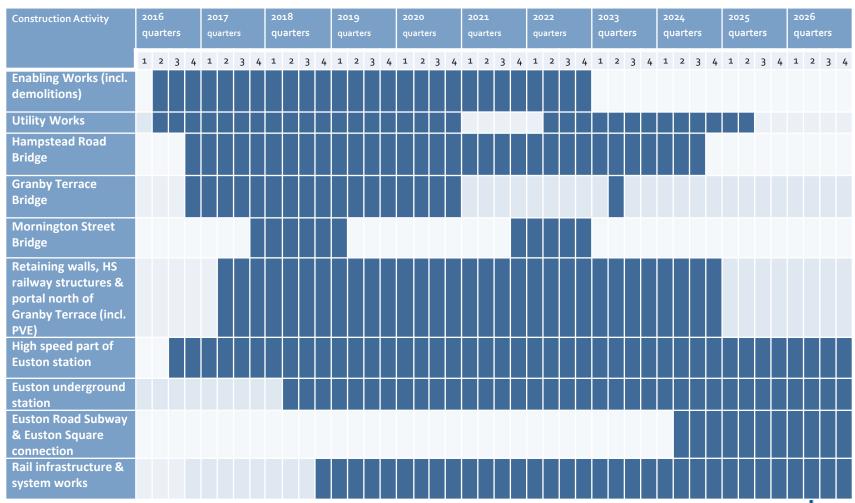
AP₃ 20₃₃ permeability



- Key
 Potential future
 connectivity provision
- Connectivity provision



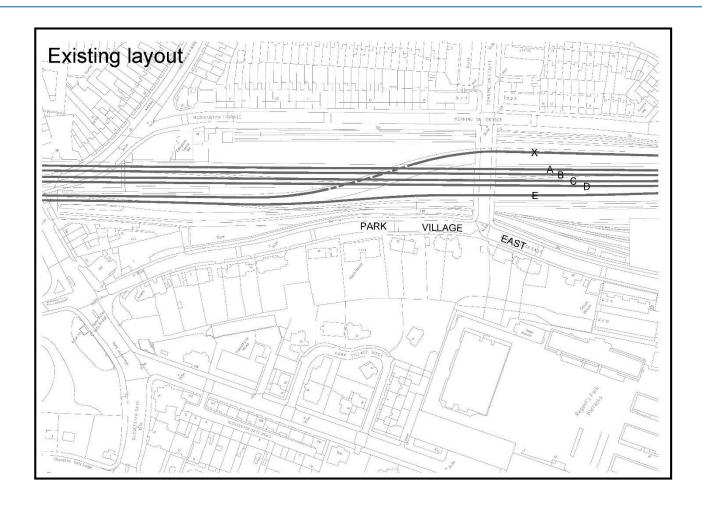
Stage A programme (2016 – 2026)



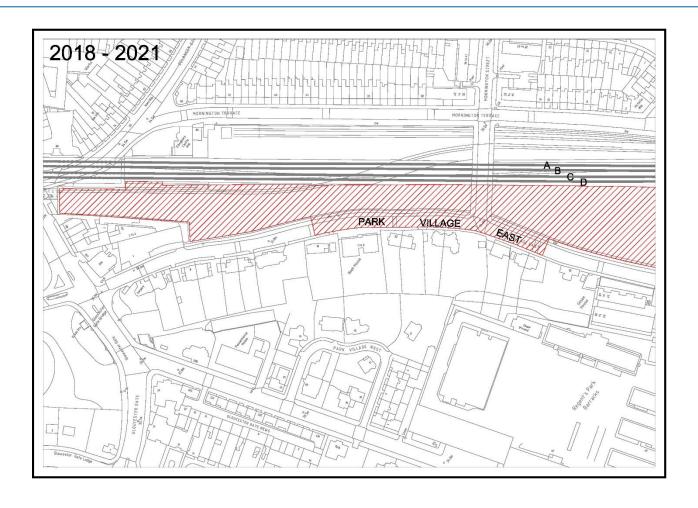
Stage B1 programme (2027 – 2033)

| Construction Activity | 2027 quarters | | | | 2028 quarters | | | | 2029 quarters | | | | 2030 quarters | | | | 2031 quarters | | | | 2032 quarters | | | | 2033 quarters | | | |
|--|---------------|---|---|---|---------------|---|---|---|---------------|---|---|---|---------------|---|---|---|---------------|---|---|---|---------------|---|---|---|---------------|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| High speed part of Euston Station | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Part of Euston Station | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Euston Underground Station | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bus Station | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Final reinstatement of Euston Square Gardens | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction Northern taxi facility, car park & open space | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rail Infrastructure and systems works | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

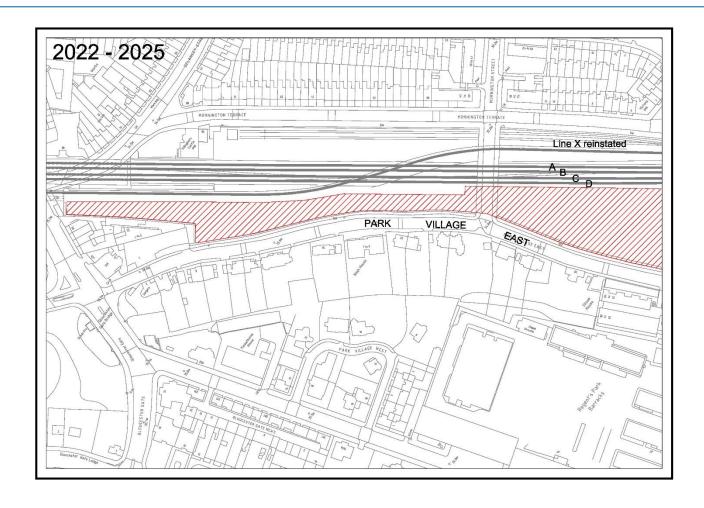




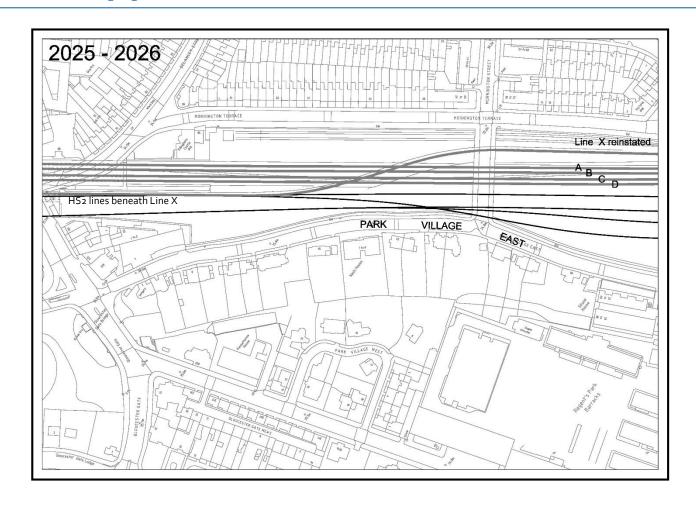










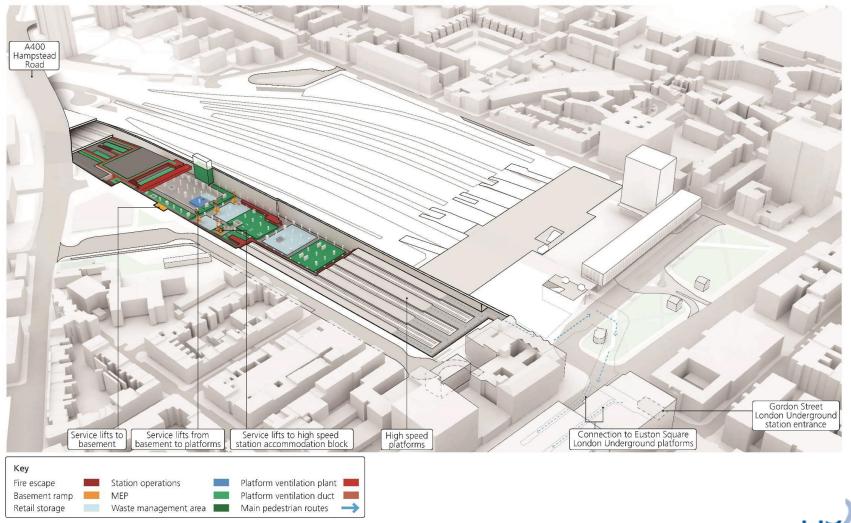




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END

2026 servicing arrangements



2033 servicing arrangements

