Towards a High Speed Network – the Maps

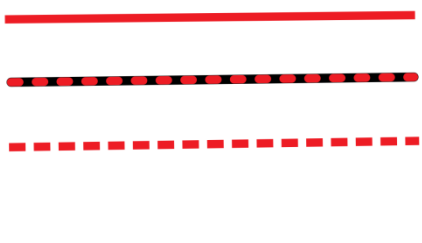
The following maps illustrate the proposed HS network at its fullest extent (as far into the future as these proposals care to look). They are all (with the single, obvious exception of the schematic map of the Cross-London, Inter-Regional Connections on p.5,) based on the Ordnance Survey OpenData product, specifically the Strategi Dataset. This is GIS (Geographical Information Systems) data, and the maps have been produced using the Open Source QGIS product. The graphics files output by QGIS have been further edited by pure graphics software (Microsoft Paint) to add text where appropriate.

The Strategi dataset includes, inter alia, all currently existing – at 2011 – railway lines. These contents have been significantly extended by adding a few new sections of line, opened since 2011 or unaccountably omitted, and all former sections of railway, now closed, together with all stations, open (2959) and closed (4765). This historical information has been extracted mainly from Ordnance Survey maps, 1"/1mile, of the 7th series (late 1940s onwards). Beyond that, the various proposed HS lines have been inserted, derived from the detailed maps produced for the route and service plan documents of the individual HS lines. These maps are also based on the OS OpenData product, but in this case on the 1:250,000 Scale Colour Raster Dataset, which consists of straight graphics files (not GIS), each corresponding to a 100km square of the National Grid, which can simply be edited using Microsoft Paint.

All the maps use the following colour scheme for the HS lines:

	standard colours	
HS1	yellow	R/G/B 255/242/0 255/242/0
HS2	dark red	R/G/B 136/0/21
HS3	red	R/G/B 237/28/36
HS4	brown	R/G/B 185/122/87
HS5	rose	R/G/B 255/174/201
HS6	indigo	R/G/B 63/72/204
HS7	green	R/G/B 34/177/76
HS8	turquoise	R/G/B 0/162/232
HS9	purple	R/G/B 163/73/164
HS10	lavender	R/G/B 200/191/231
HS11	orange	R/G/B 255/127/39
HS12	gray 50%	R/G/B 127/127/127
	custom colours	
HS13	true blue	R/G/B 0/0/255
HS14	light blue	R/G/B 0/192/255
HS13	pure green	R/G/B 0/255/0

In addition, the following route conventions are used (depicted here in HS3 colour):



HS Line (main line - new infrastructure)

HS-Classic (classic section incorporated within HS main line)

HS-Classic (HS services extending over classic lines beyond HS main line, in general as the final section of the journey, especially at the 'country end' - away from London).

The graphical maps are derived from QGIS, generally at a scale of either 1:2,500,000 (pp.4-6,11-14) or 1:1,000,000 (p.15 onwards). But in a few cases of the latter group, where the entire area of interest could be contained in one sheet, a somewhat higher scale has been possible. However, no assumptions should be made as to scale since, when the graphic is inserted into the document, it expands or contracts to fill or fit in the space available on the page (and there is no obvious reason to try to change this). All the maps contain the coastline and the existing railway lines (from Strategi) as background, and one or more HS lines. The 10km standard National Grid lines are also included, as fine and faint as possible while still being visible (otherwise they tend to be very obtrusive), and these give the measure of true distance.

The HS lines are shown as continuous, colour as above, with broken lines indicating Classic-Compatible services extending over the classic routes. All HS stations are shown as discs of the appropriate colour (including all those on classic lines served by the associated compatibles). Stations on the background, classic lines are not shown, because there are so many, and at these small scales they merely make the lines disagreeably fuzzy, without conveying useful information. However, there are three maps, of the traverses of London, Leeds and Glasgow (pp 7-9) at a much larger scale, which does show all the extra categories of railway data, (and also major roads, watercourses, lakes, woodland and built-up, urban areas,) which gives a lively impression of the wide variety and vast quantities of data available.

Although every section of HS line belongs to and is part of one particular HS route, and although every HS service, is likewise assigned to one particular HS route, very many HS services travel over sections of line of more than one HS route. (The record is held by the HS7 Swansea – Norwich via Birmingham service, which uses sections of HS4, HS7, HS3, HS8 and HS6, in that order.) Those maps depicting a single, complete HS route (or an associated pair of routes) also contain the relevant sections of all other routes which their services use. They are thus, more precisely, maps of the line sections used by the **group of services** associated with a particular HS route. This may appear a little confusing at first sight, but is perfectly logical and reasonable. It is, in fact, logically identical to the way in which HS-Classic services use sections of classic route. This is a tightly integrated network. It all hangs together in mutual support. There are ***no*** free-standing, isolated routes or services, anywhere. And the **interchanges** between services on the same or different HS routes, and between HS and classic routes, (and, of course, between the same or different classic routes,) are something else again, even more widespread and pervasive.

Although it is a convenient shorthand to refer to the HS network, it should always be remembered that in reality there is no such thing. There is only the **railway** network, some sections of which happen to be high speed.

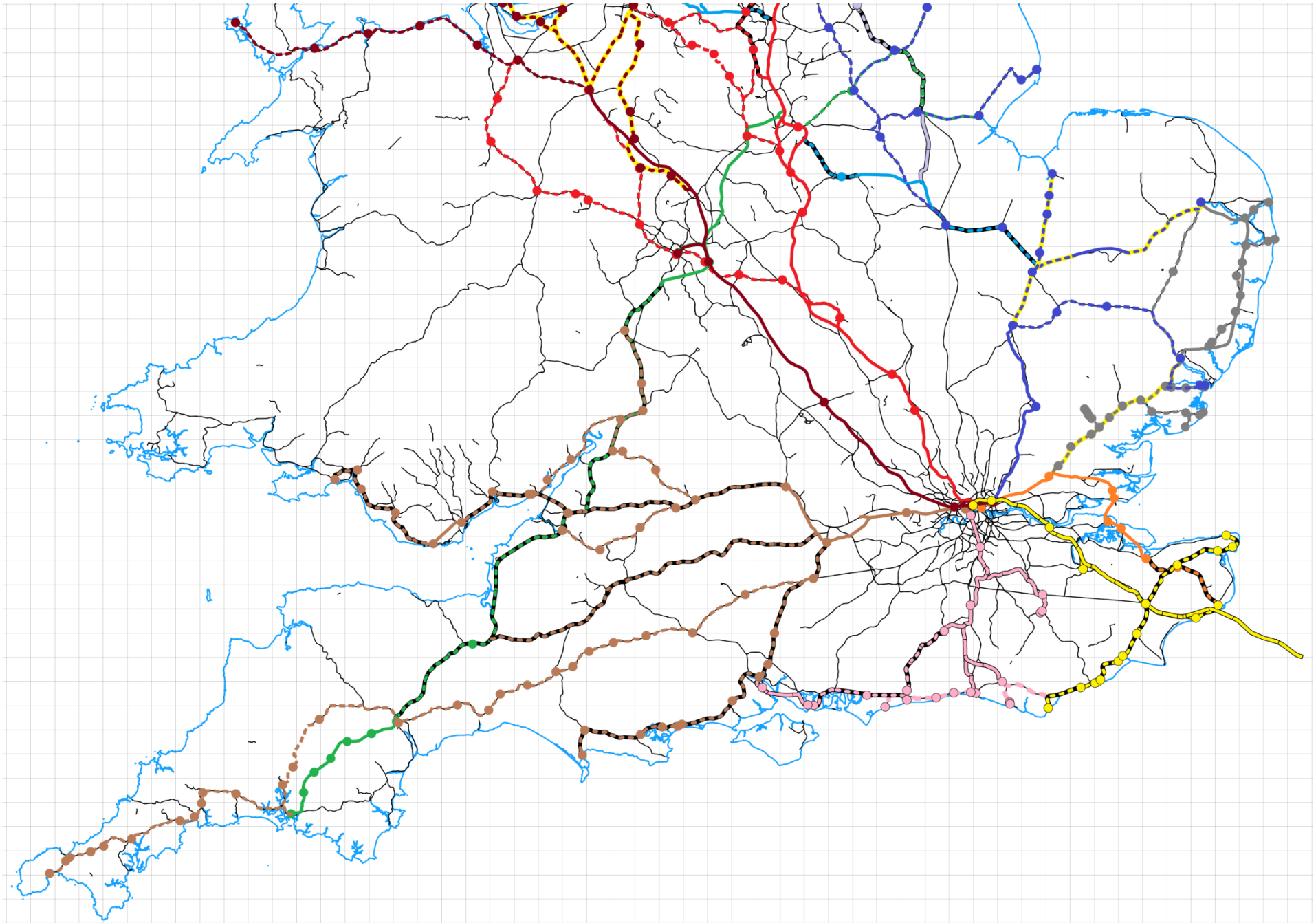
While the corresponding article, Towards a High Speed Network, which is campaigning and polemical, and all the Route and Service Plans articles, and many others, have undergone, over time, very many changes, the present article, dealing only with maps, has seen very few changes, and has not in fact been reissued since May 2015, it now sees many changes, consequent on the decision to abandon GC-gauge, and build all new infrastructure to UK loading gauge. Also, the number of maps has effectively doubled, since most of these now appear in basic form (unqualified in the namings, and corresponding essentially

to the initial, Mk1A versions of the routes), and extended form (so qualified, corresponding to Mk2 and possible even later developments).

The maps are:

- The complete (basic) HS Network, south, central and north sheets (pp.4-6)
- The complete (extended) HS Network, south, central and north sheets (pp.7-9)
- The Cross-London Inter-Regional connections, schematic (p.10)
- The Cross-London Inter-Regional connections, (basic) large-scale physical (p.11)
- The Cross-London Inter-Regional connections, (extended) large-scale physical (p.12)
- Cross-Leeds HS Interconnections (p.13)
- Cross-Glasgow HS Interconnections (p.14)
- Those (basic) HS routes serving Euston Cross, south and north sheets (pp.15,16)
- Those (extended) HS routes serving Euston Cross, south and north sheets (pp.17,18)
- Those (basic) HS routes serving Pancras Cross, south and north sheets (pp.19,20)
- Those (extended) HS routes serving Pancras Cross, south and north sheets (pp.21,22)
- HS1 (p.23)
- HS2 (basic) south, central and north sheets (pp.24-26)
- HS2 (Mk2) south, central and north sheets (pp.27-29)
- HS2 (Mk3) south, central and north sheets (pp.30-32)
- HS3 (basic) south and north sheets (pp.33,34)
- HS3 (extended) south and north sheets (pp.35,36)
- HS4 (basic) east, west and south west sheets (pp.37-39)
- HS4 (extended) east, west and south west sheets (pp.40-42)
- HS5 (basic) (p.43)
- HS5 (extended) (p.44)
- HS6 and HS10 (basic) south and north sheets (pp.45,46)
- HS6 and HS10 (extended) south and north sheets (pp.47,48)
- HS7 (basic) north east, south west and east sheets (pp.49-51)
- HS7 (extended) north east, south west and east sheets (pp.52-54)
- HS8 and HS9 (basic) north west and south east sheets (pp.55,56)
- HS8 and HS9 (extended) north west and south east sheets (pp.57,58)
- HS11 and HS12 (basic) (p.59)
- HS11 and HS12 (extended) (p.60)
- HS13 and HS14 (basic) south west, south east, north west and north east sheets (pp.61-64)
- HS13 and HS14 (extended) south west, south east, north west and north east sheets (pp.65-68)

(The extended network includes the even-more speculative Scottish extension of HS2 – the only changes are north of Preston, and the putative restoration of lines in Cornwall to give HS4 its alternative CC extension to Padstow.)



Complete HS Network, South Sheet

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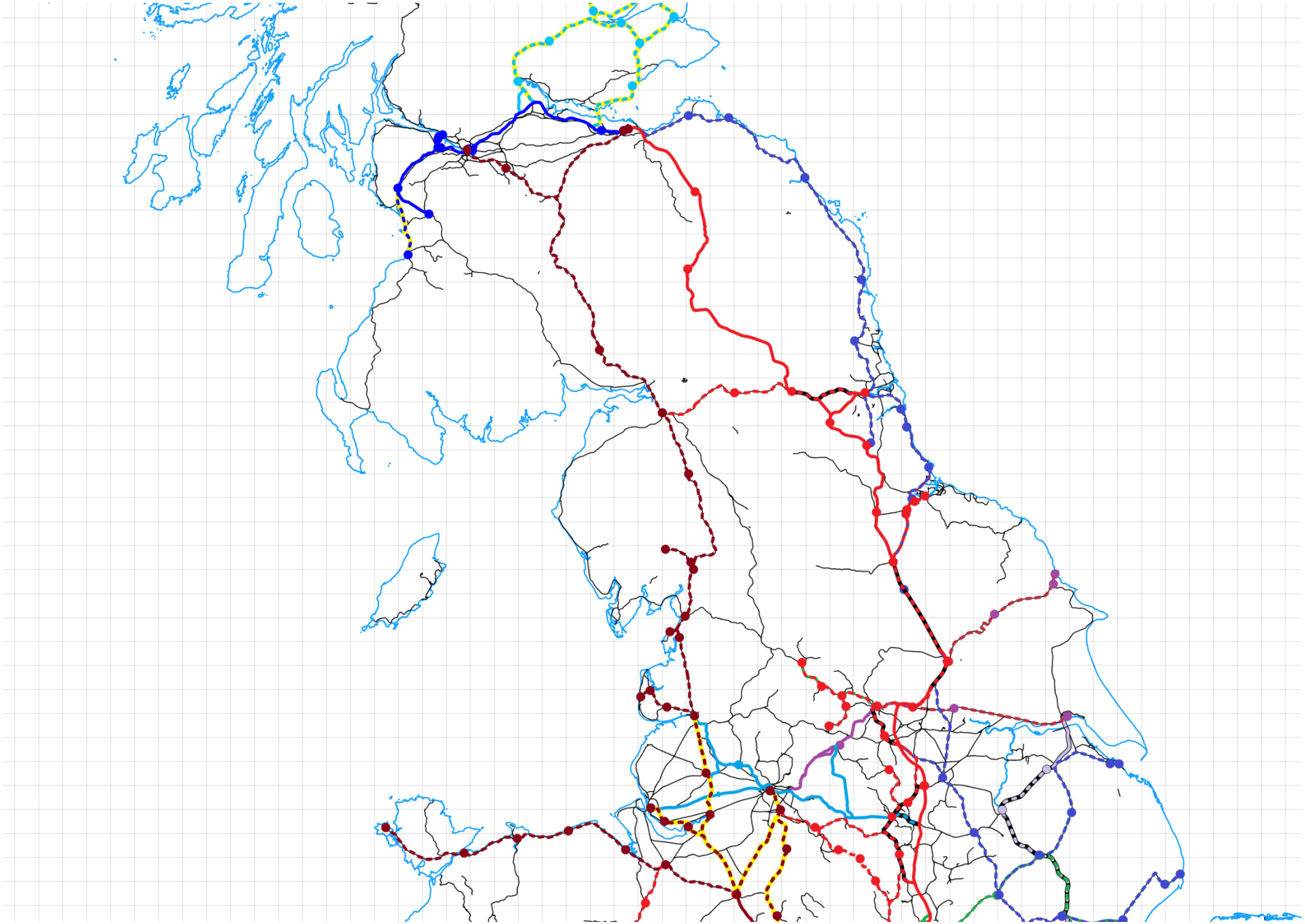

Complete HS Network, Central Sheet

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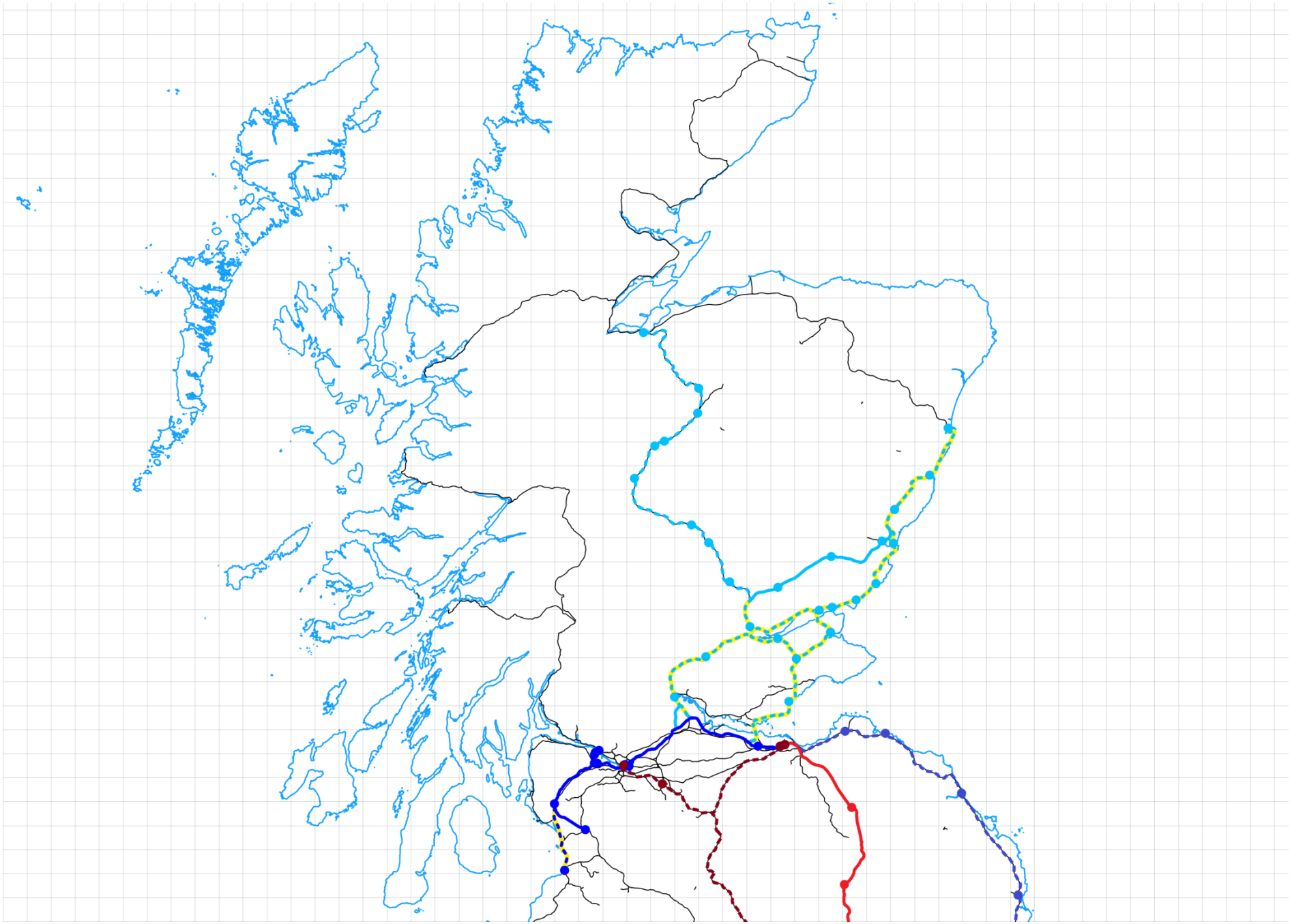

Complete HS Network, North Sheet

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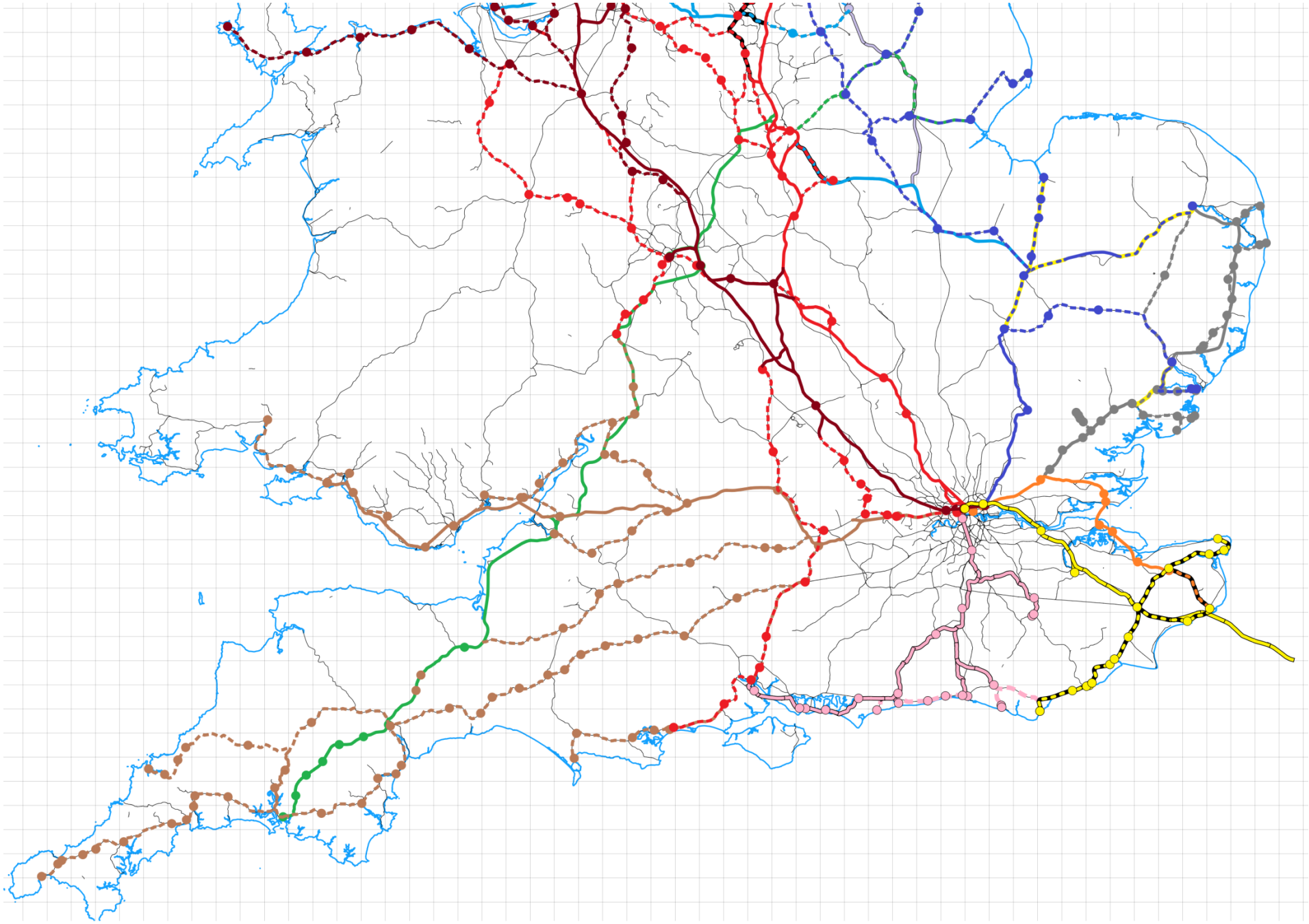

Extended HS Network, South Sheet

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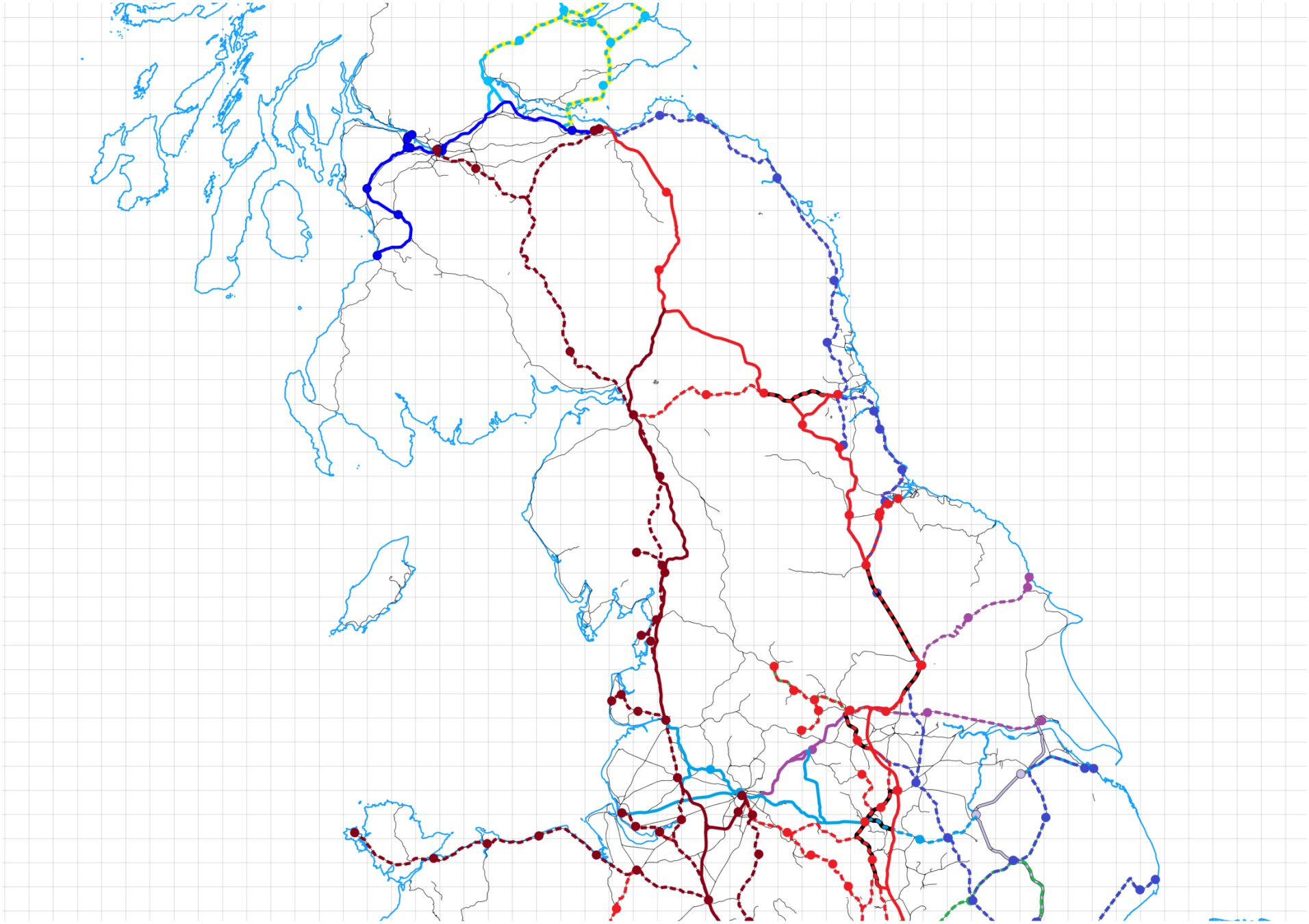

Extended HS Network, Central Sheet

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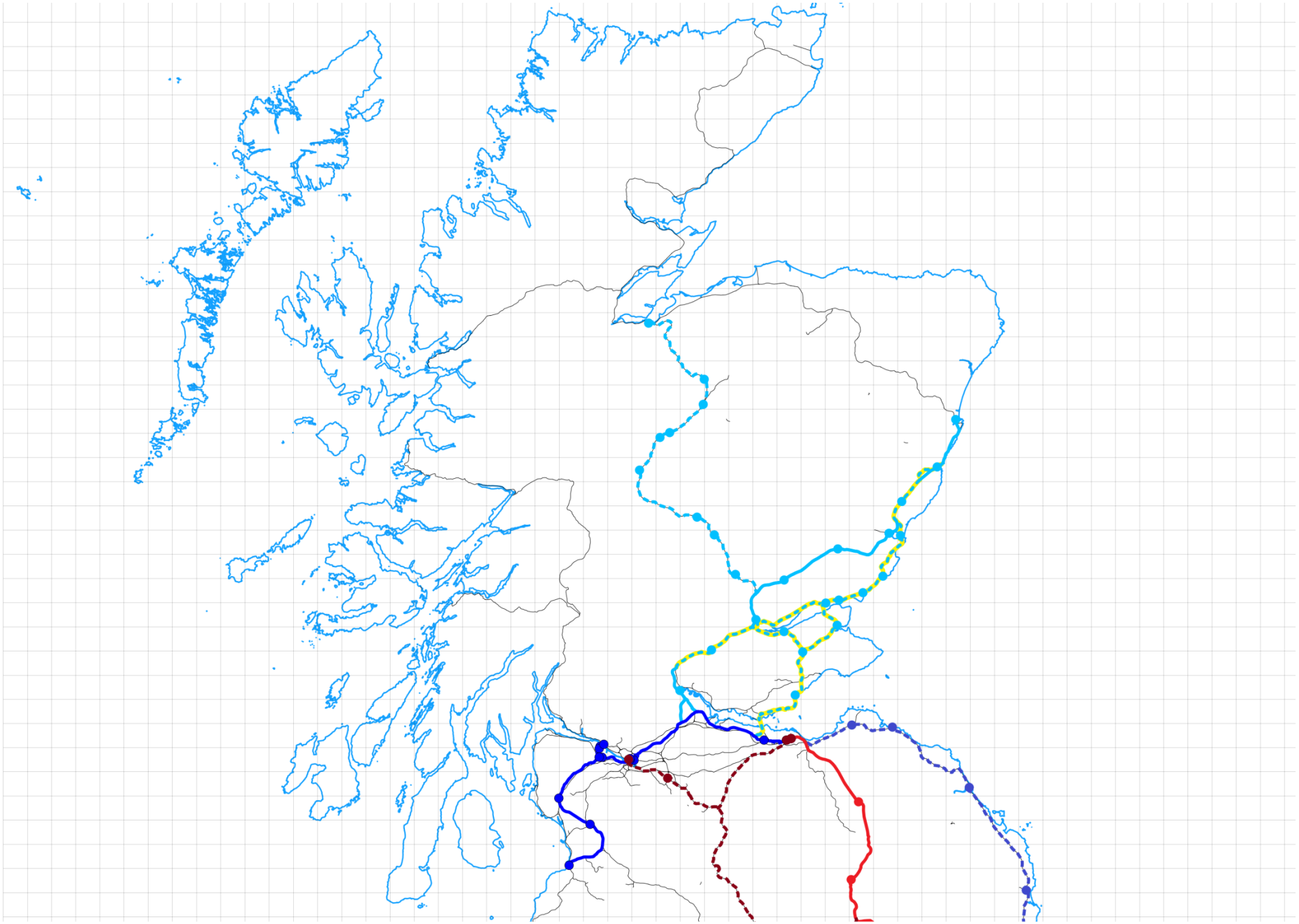

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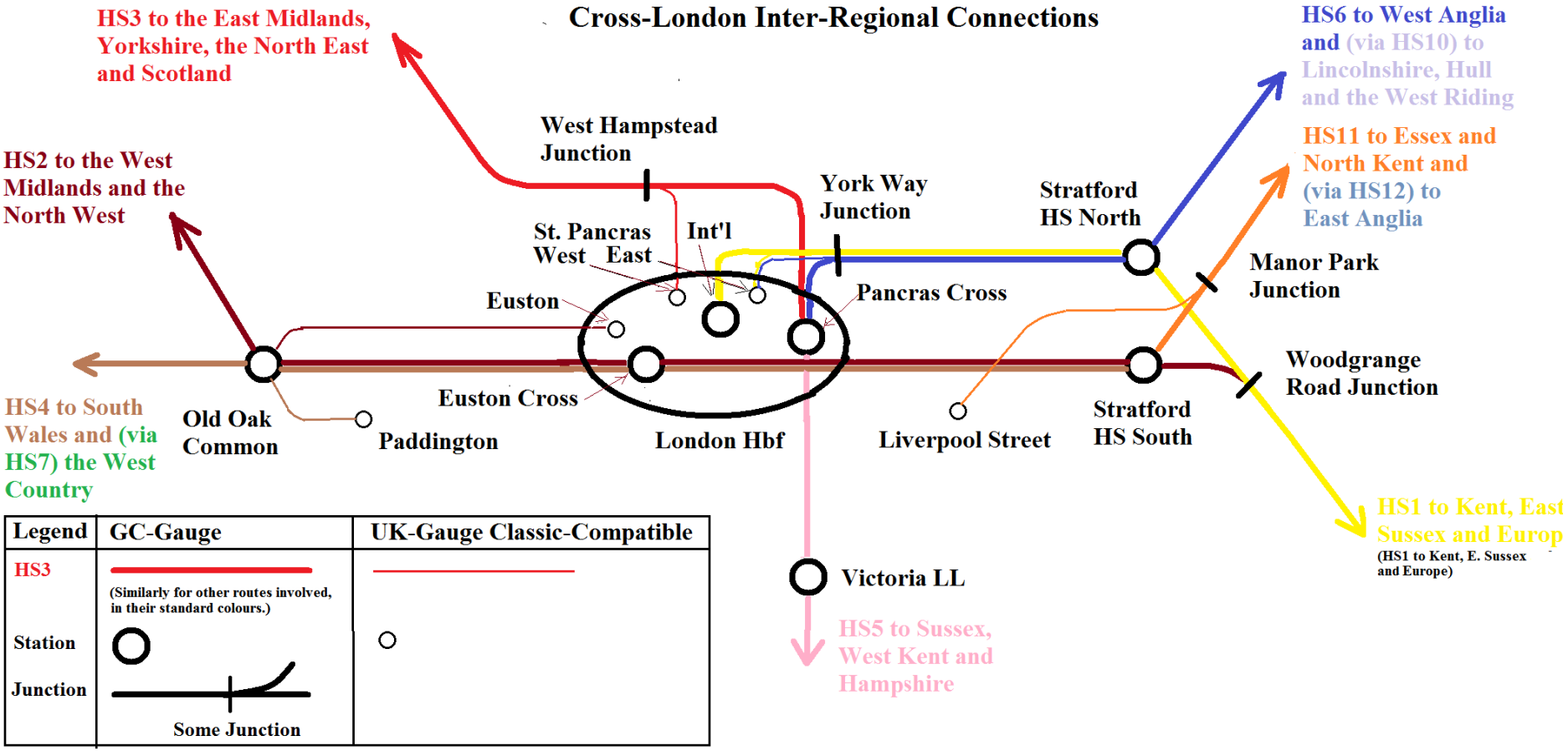
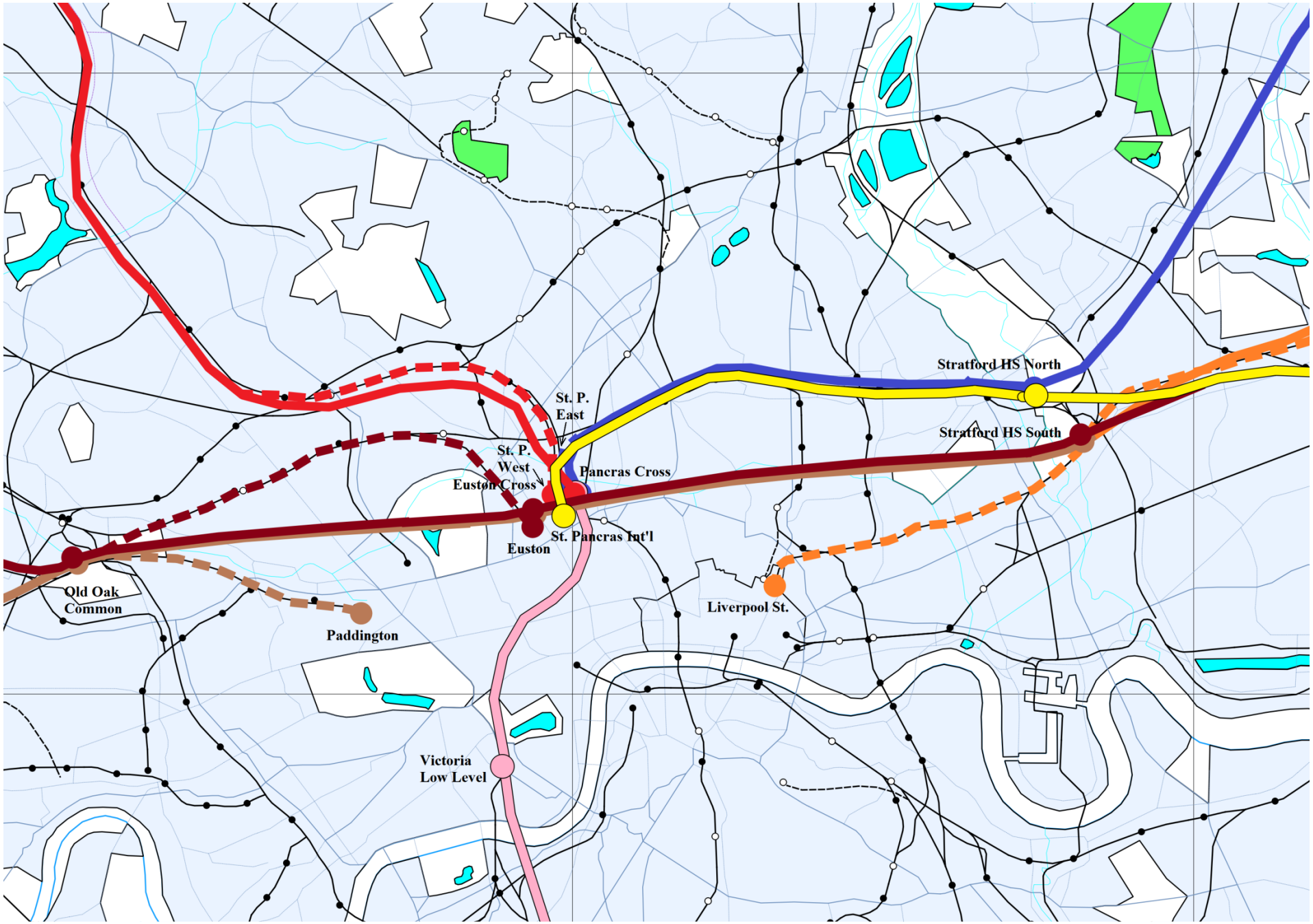


Cross-London Inter-Regional Connections – Schematic



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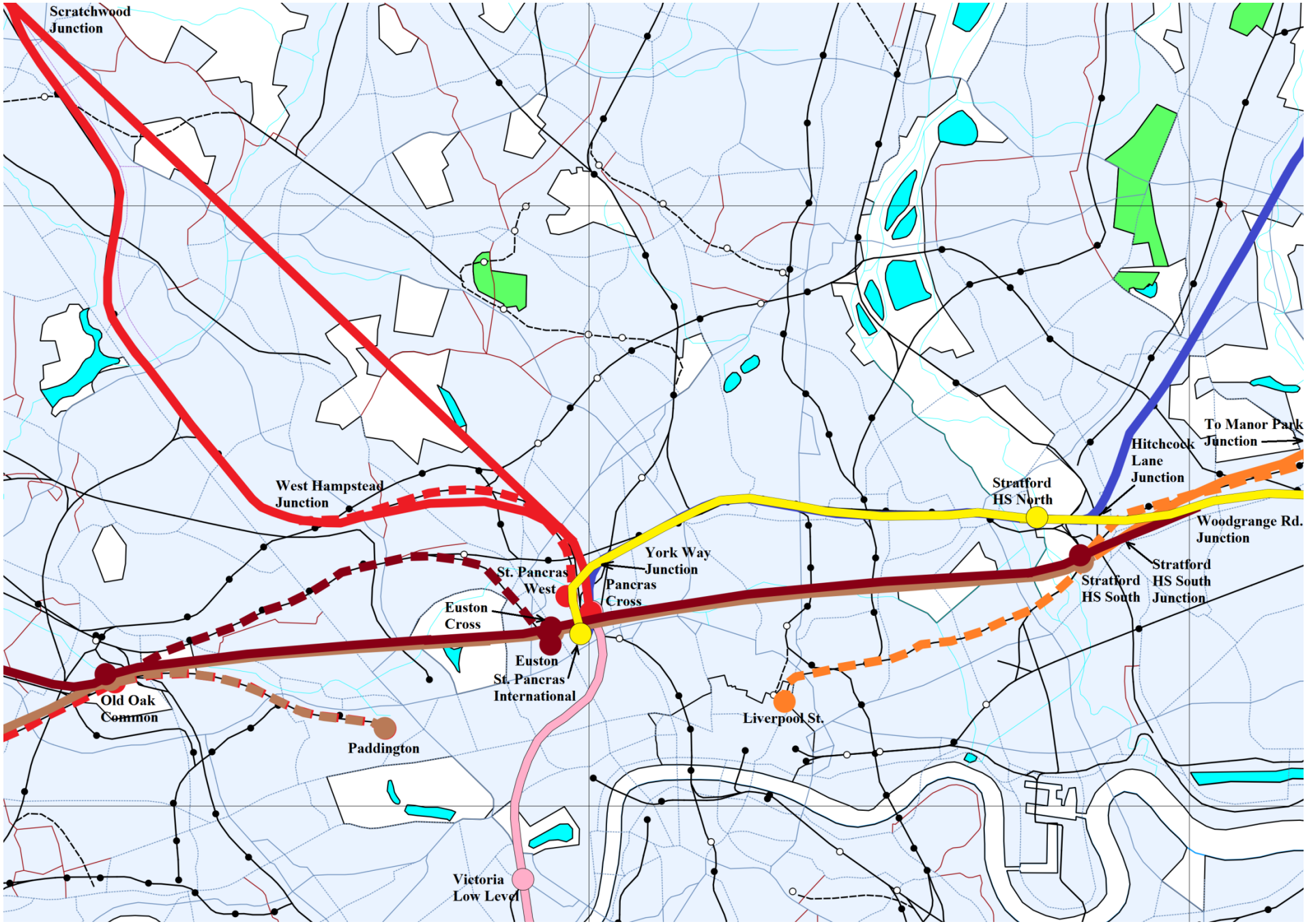

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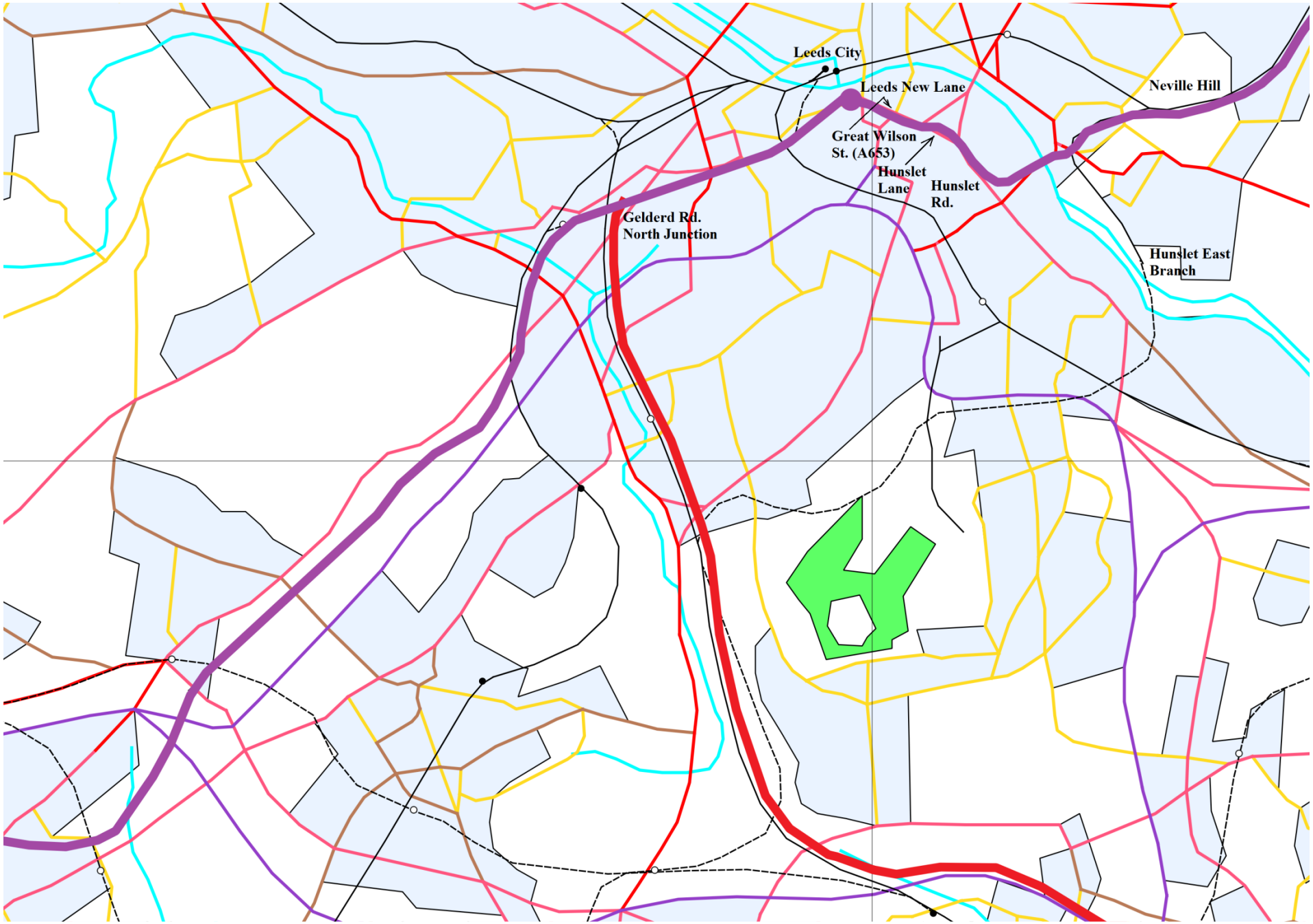

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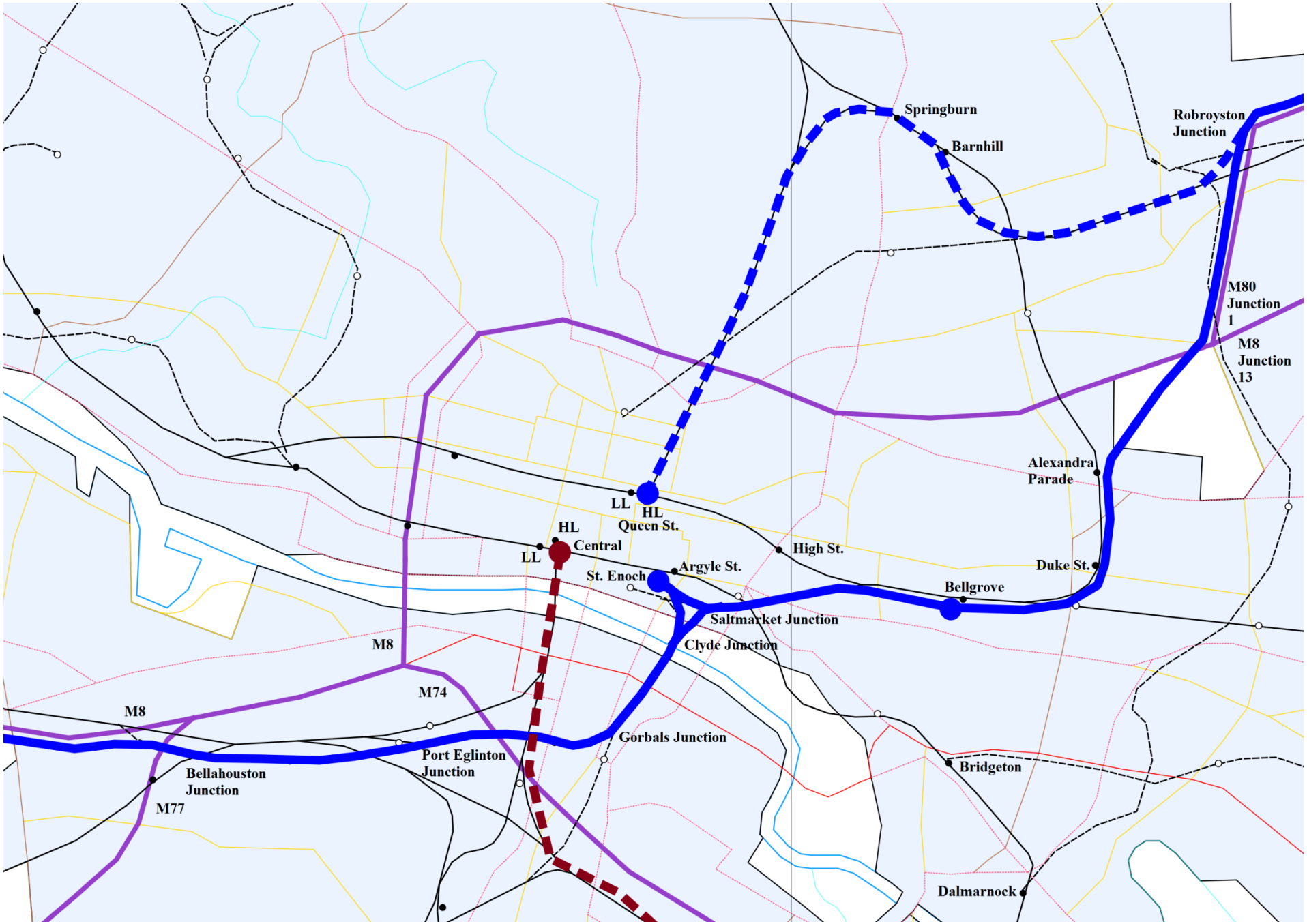

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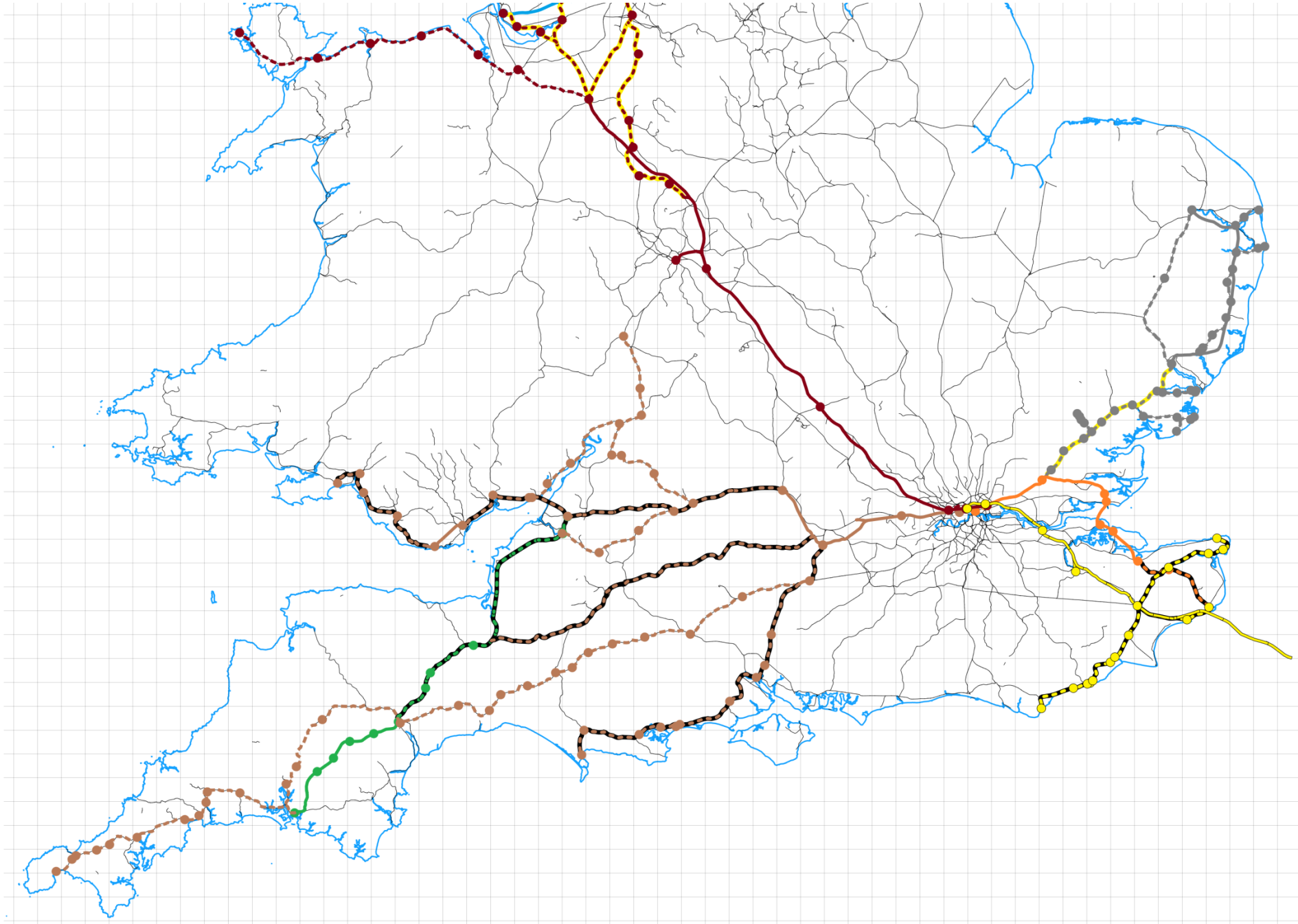

HS Routes Serving Euston Cross (plus CCs), South Sheet

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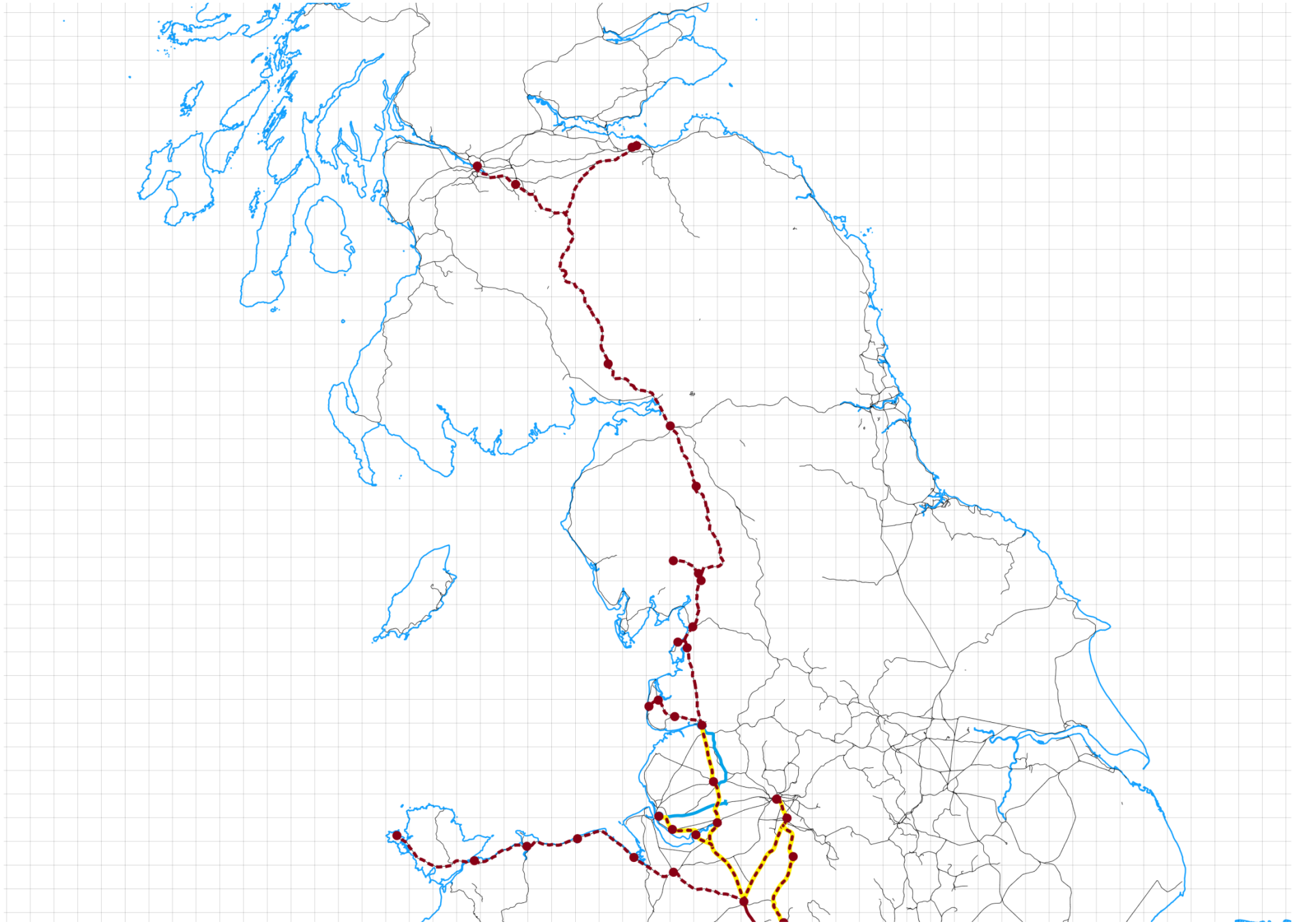

HS Routes Serving Euston Cross (plus CCs), North Sheet

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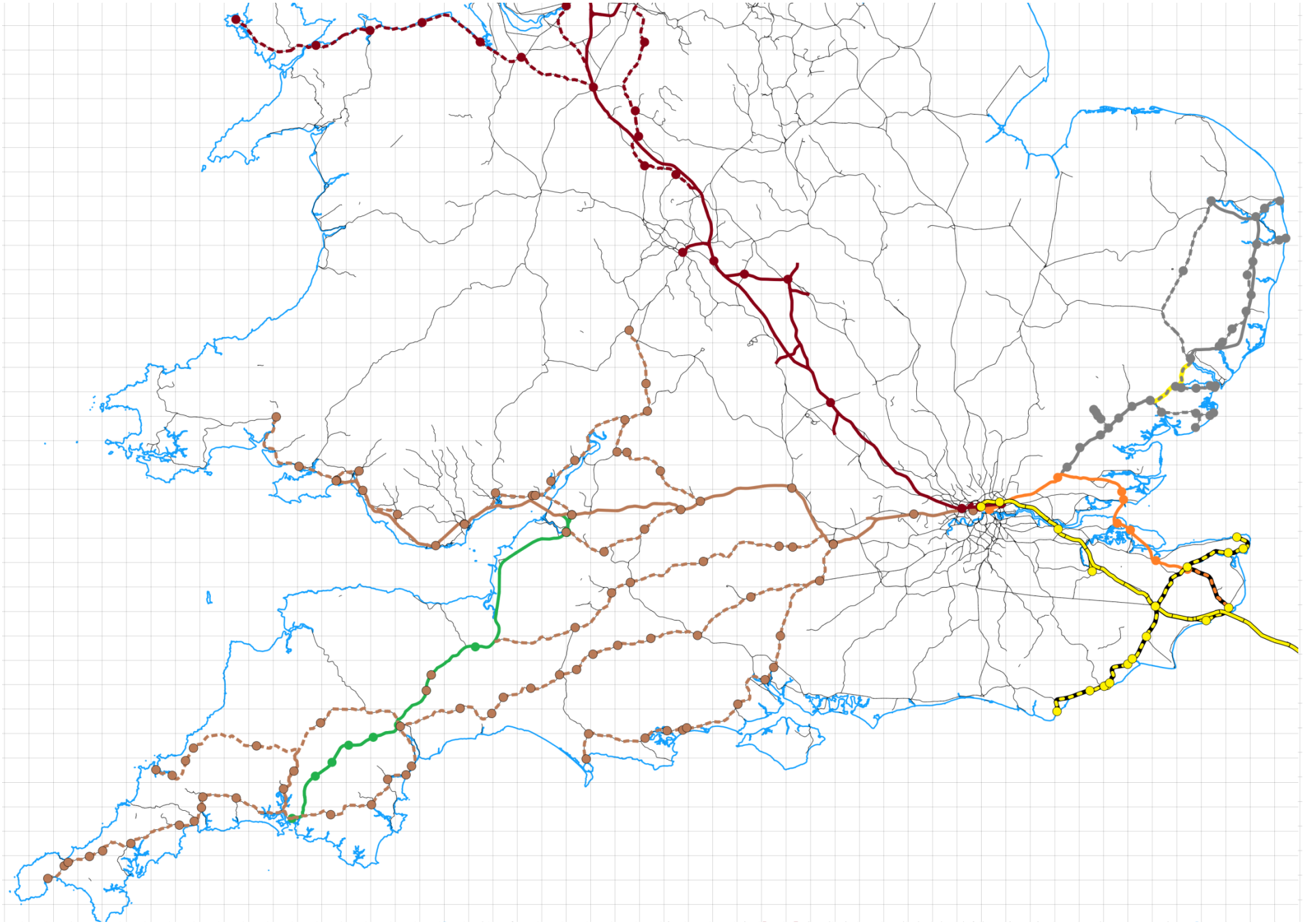

Extended Routes Serving Euston Cross (plus CCs), South Sheet

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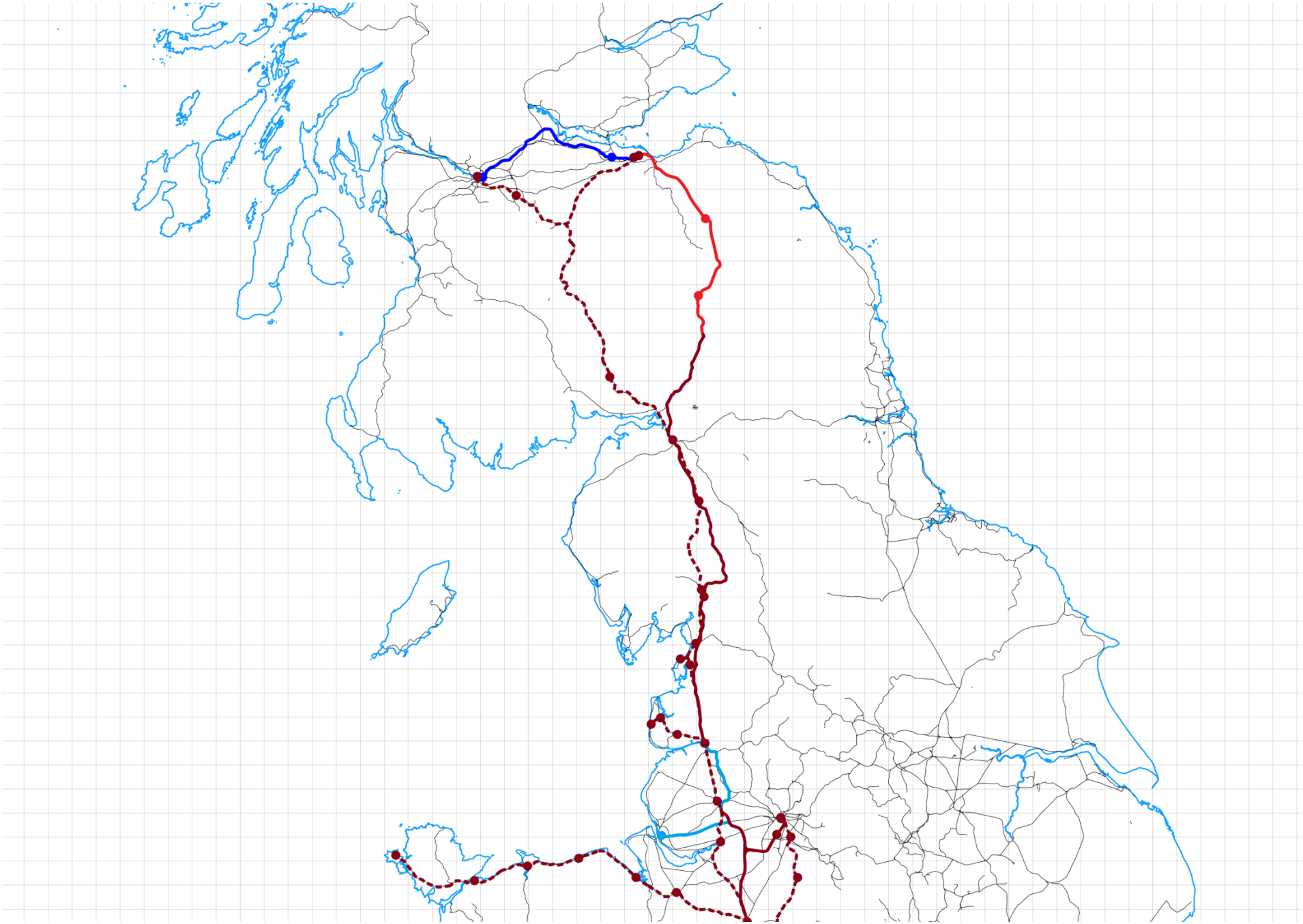

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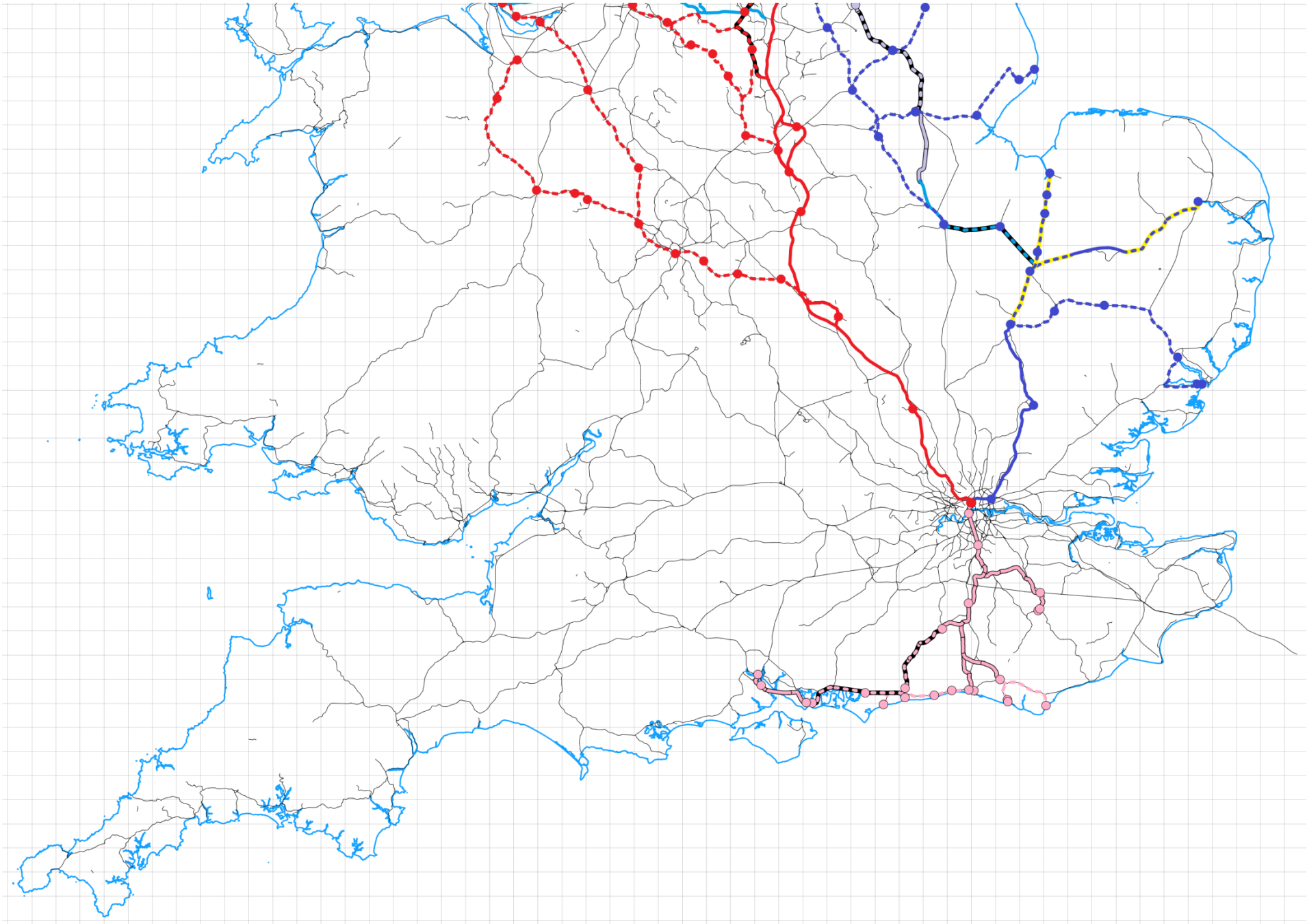

HS Routes Serving Pancras Cross (plus CCs), South Sheet

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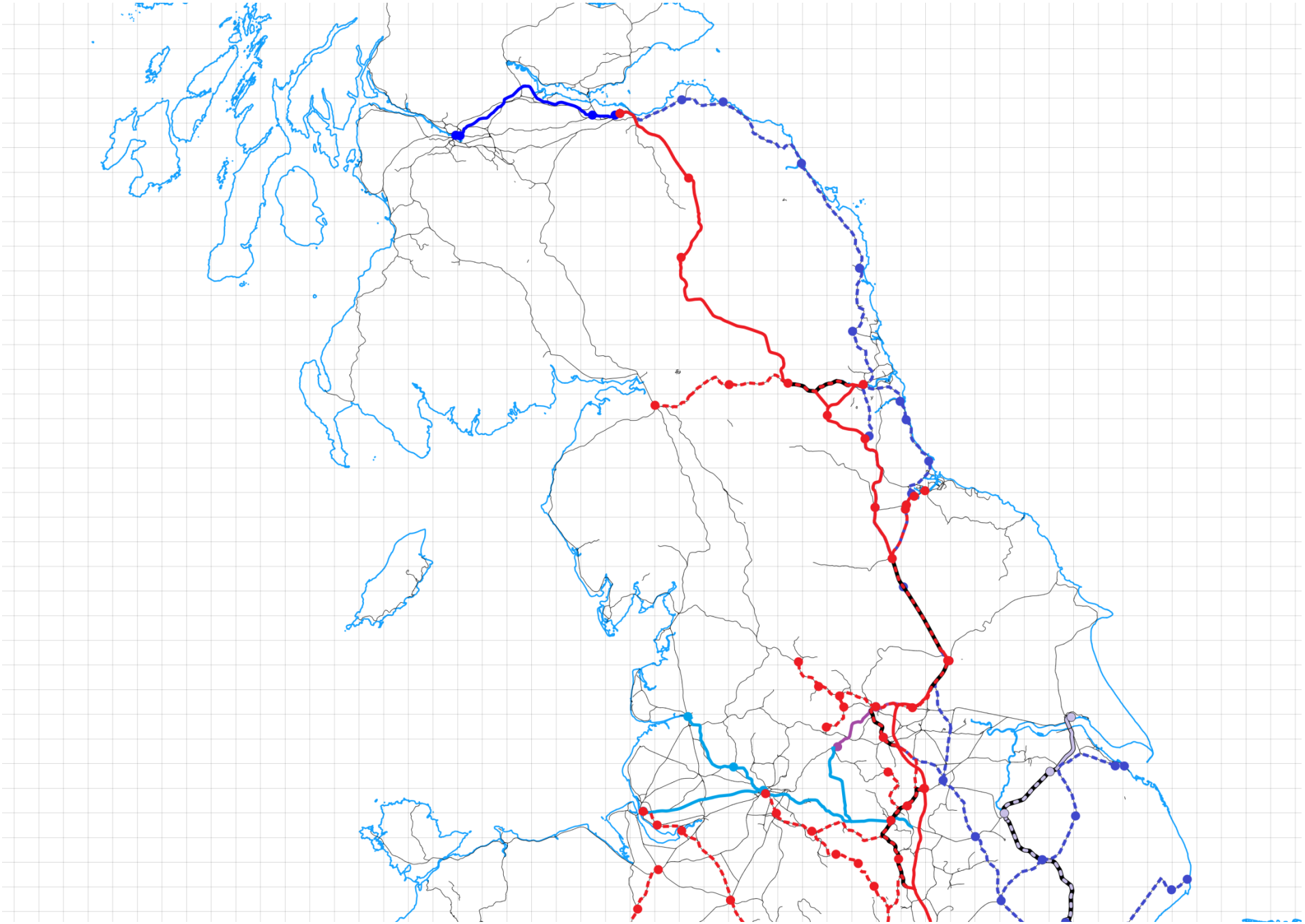

HS Routes Serving Pancras Cross (plus CCs), North Sheet

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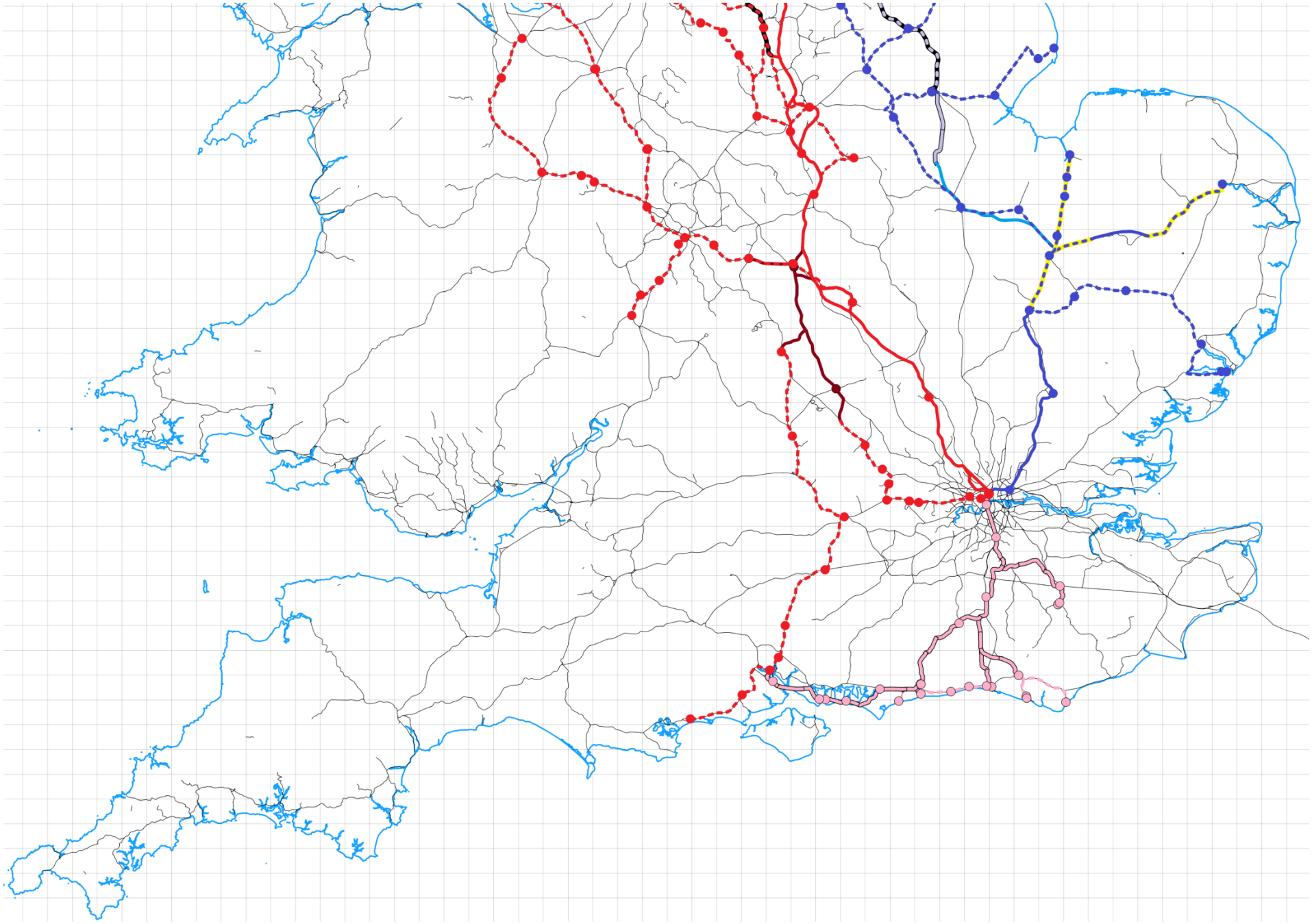

Extended Routes Serving Pancras Cross (plus CCs), South Sheet

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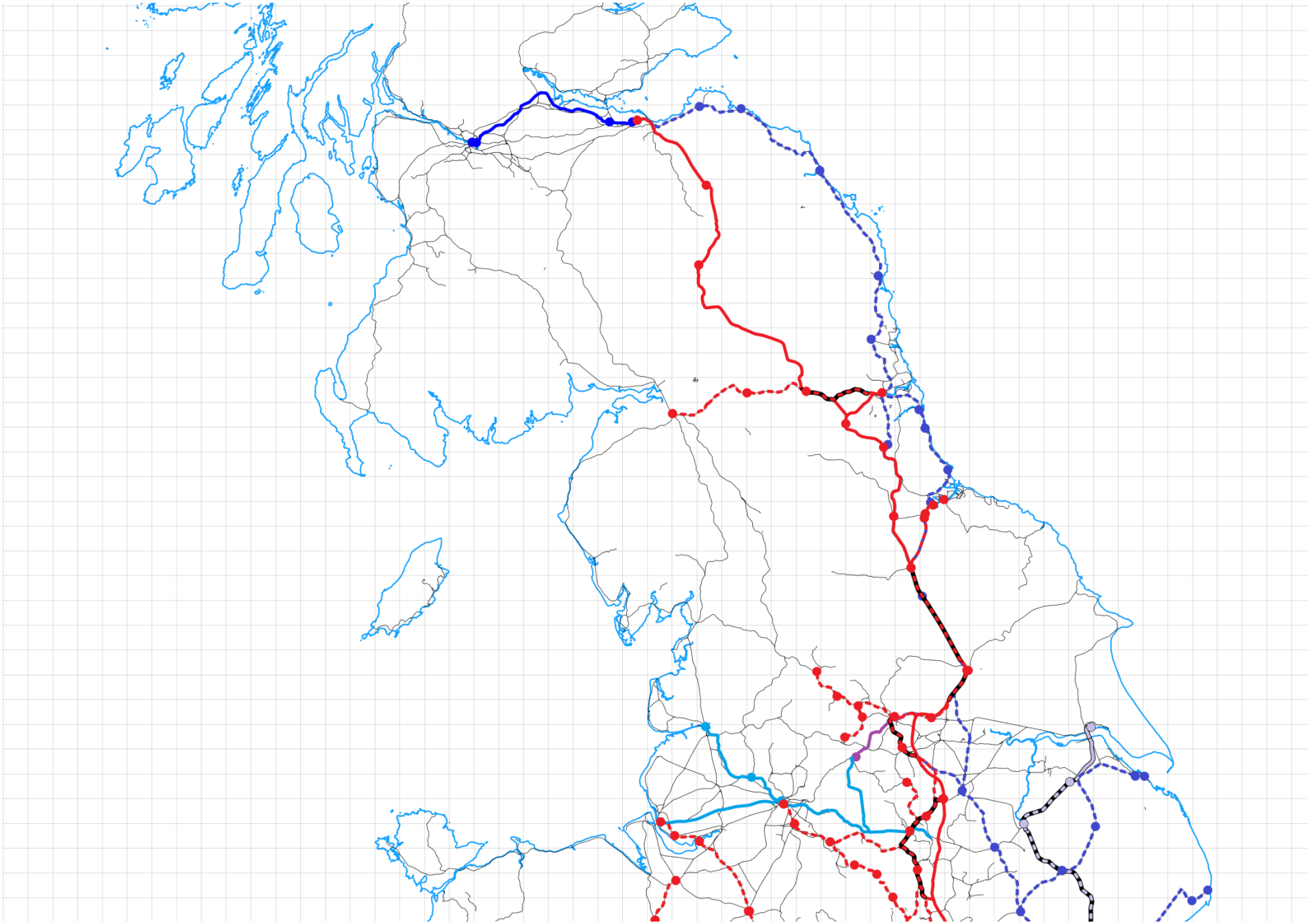

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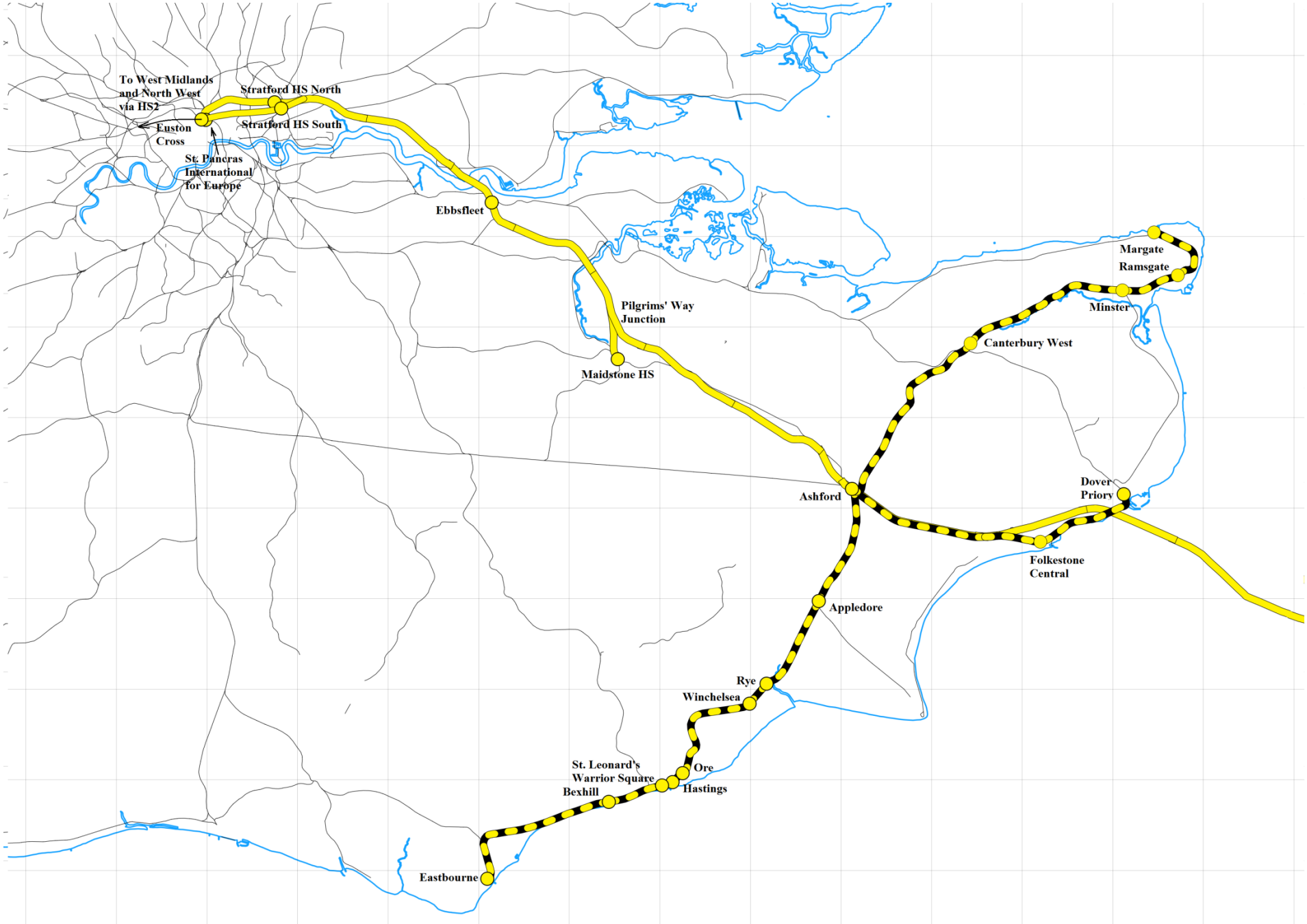

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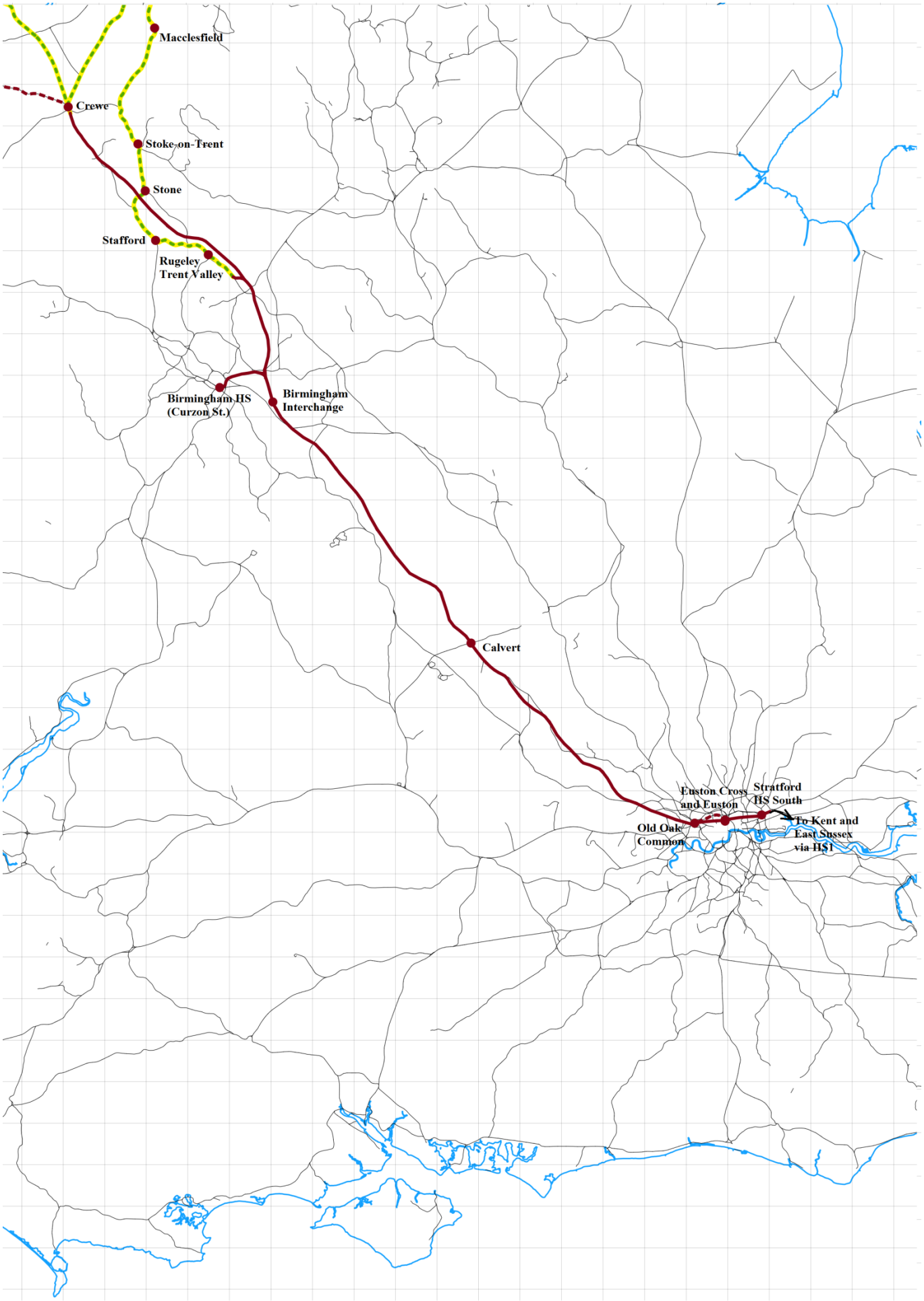

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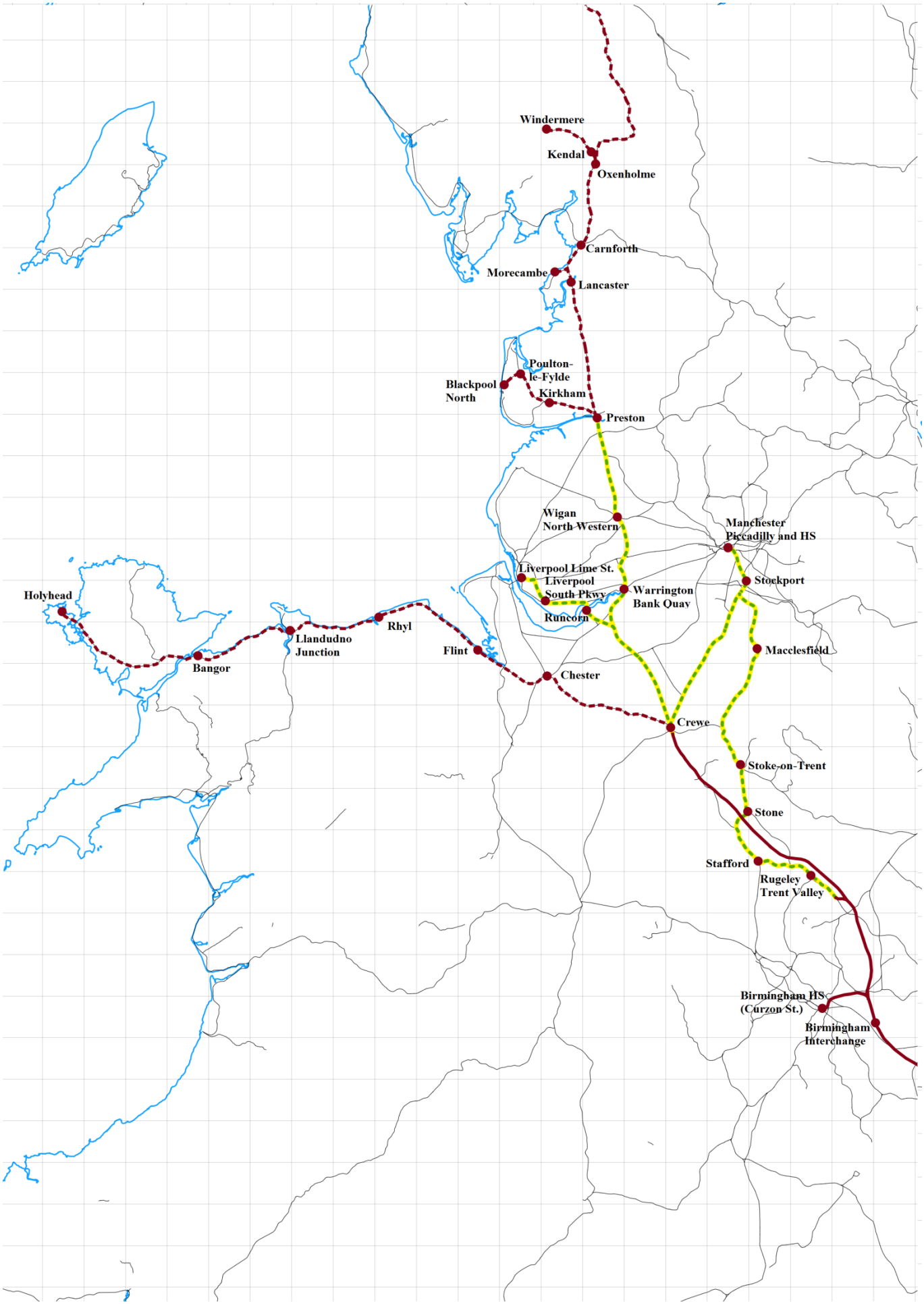

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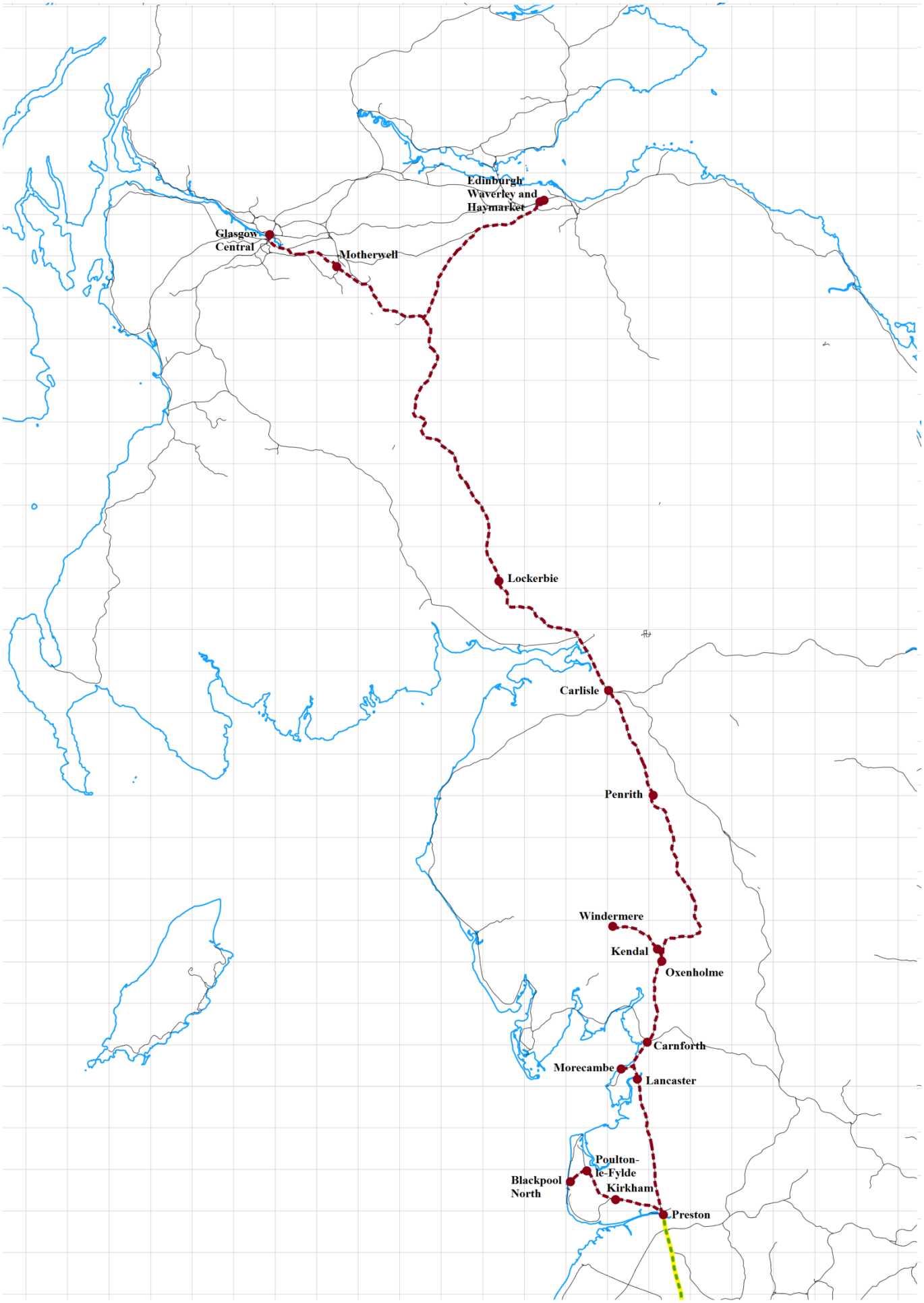

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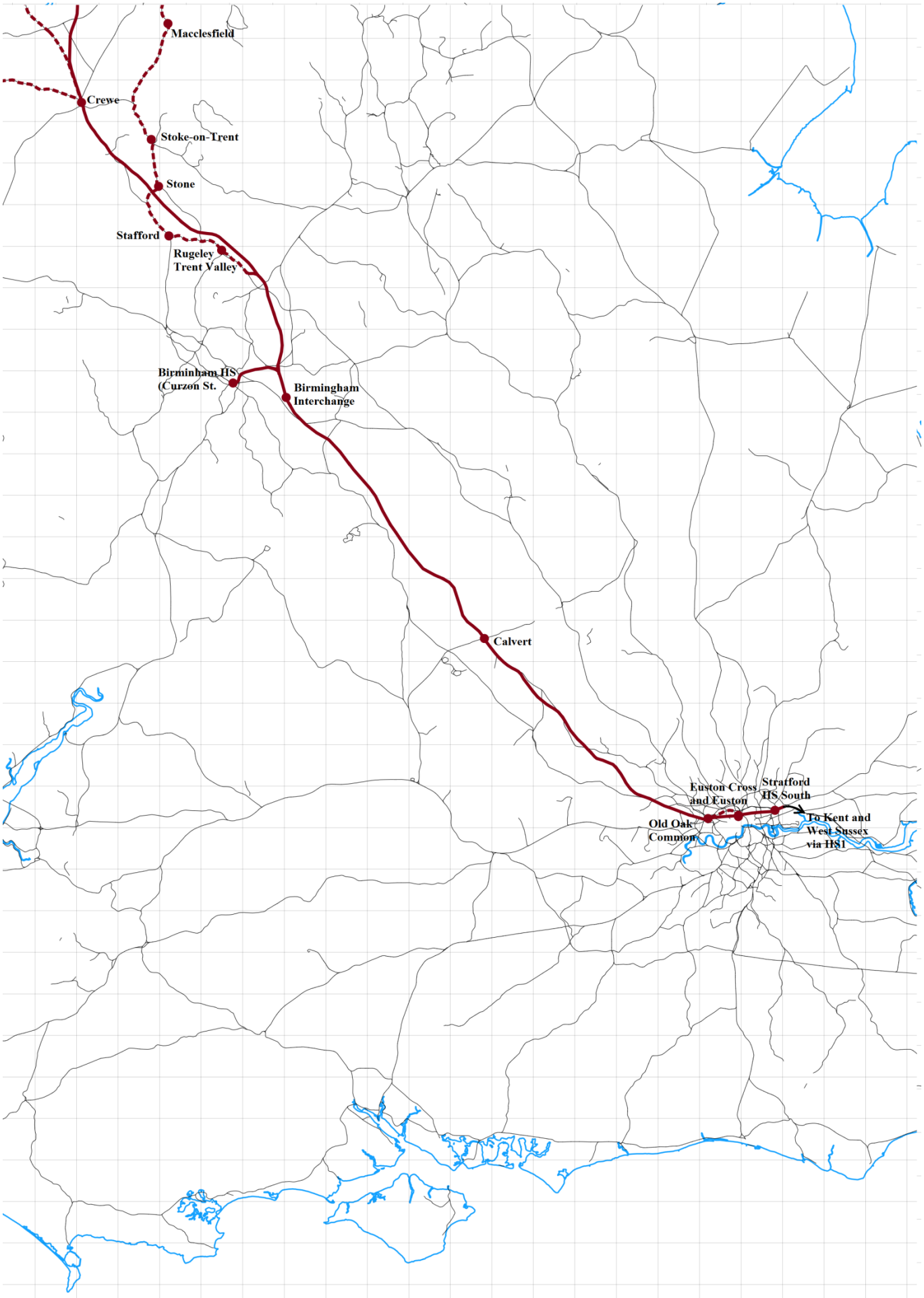

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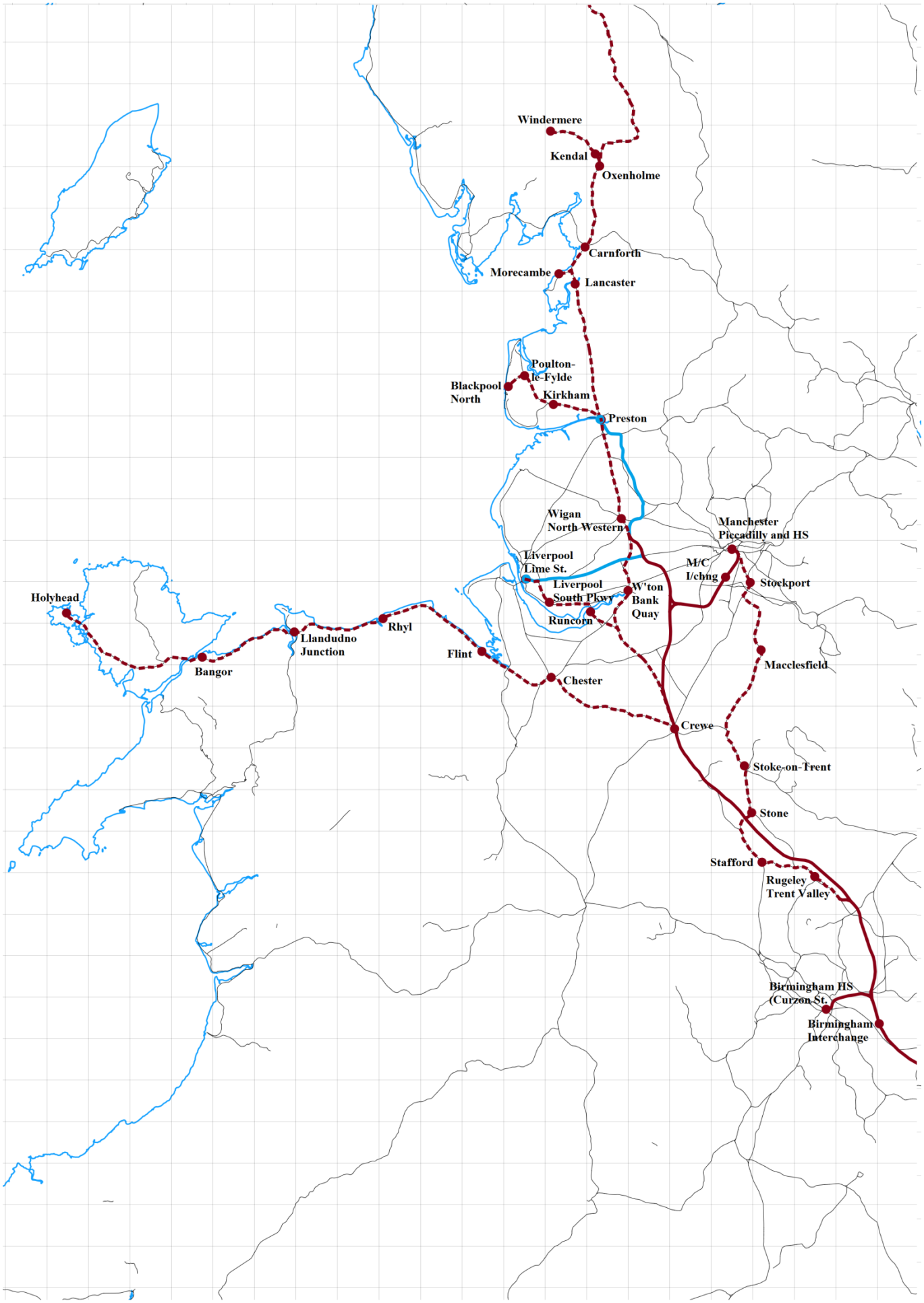

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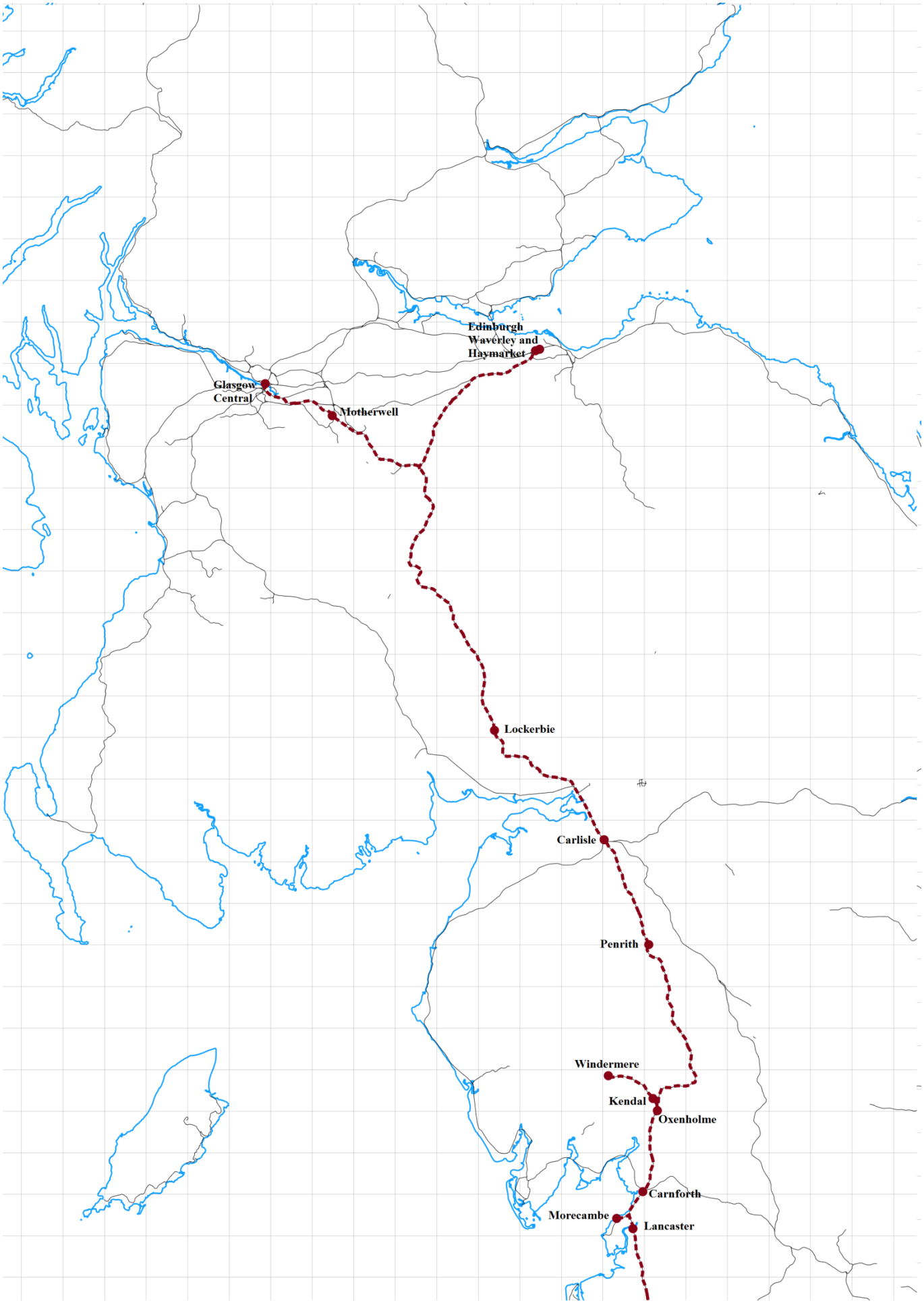

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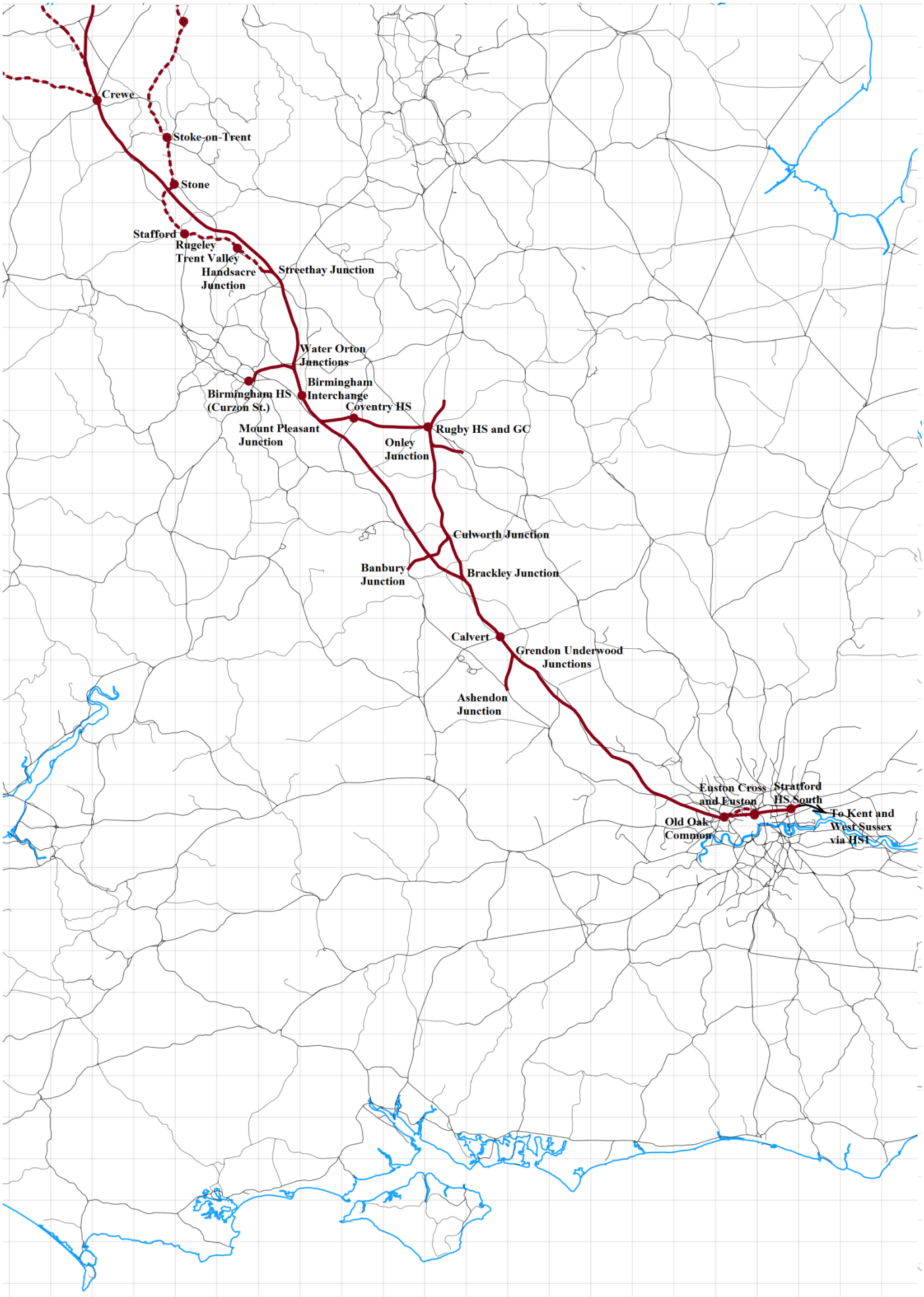

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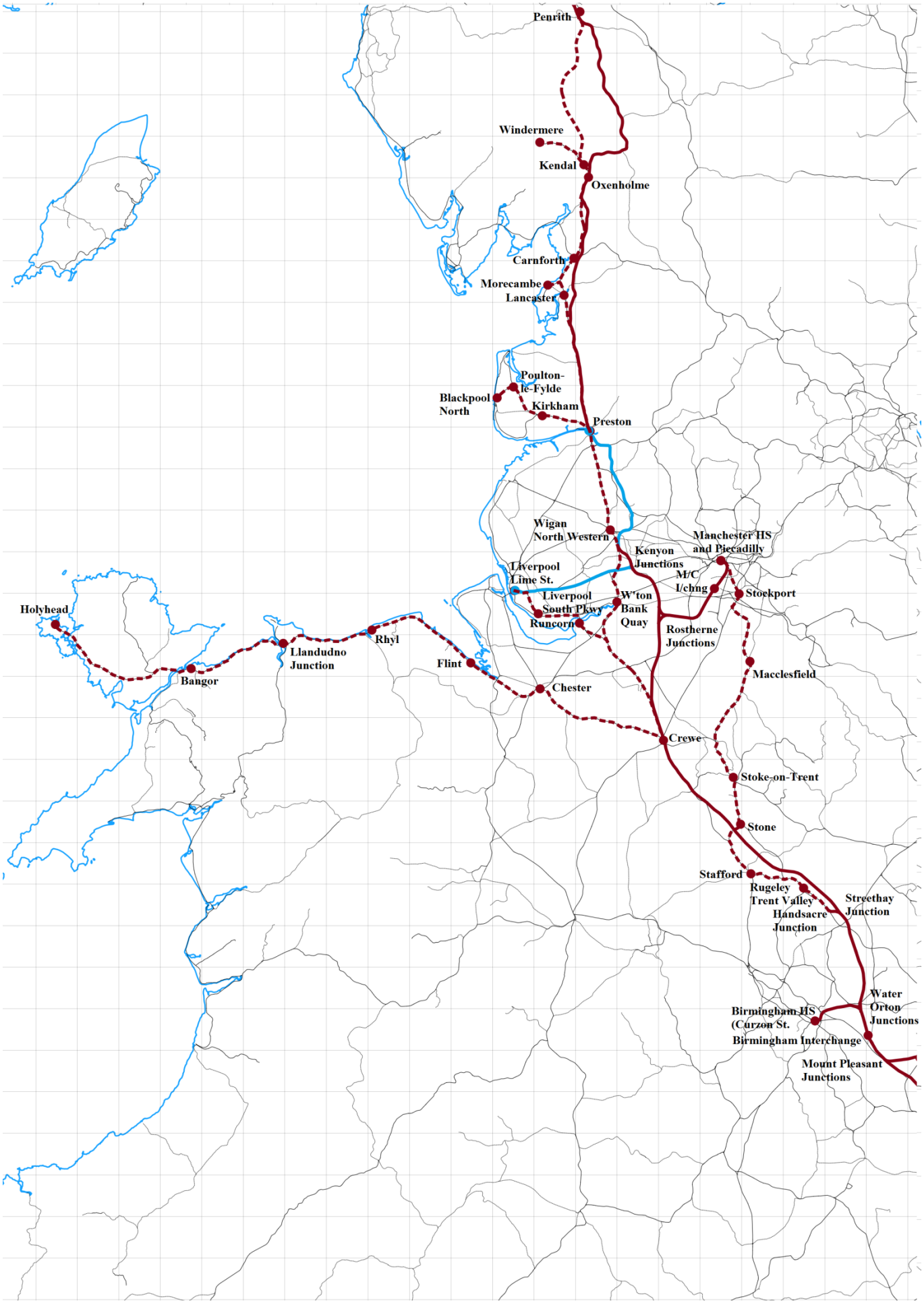

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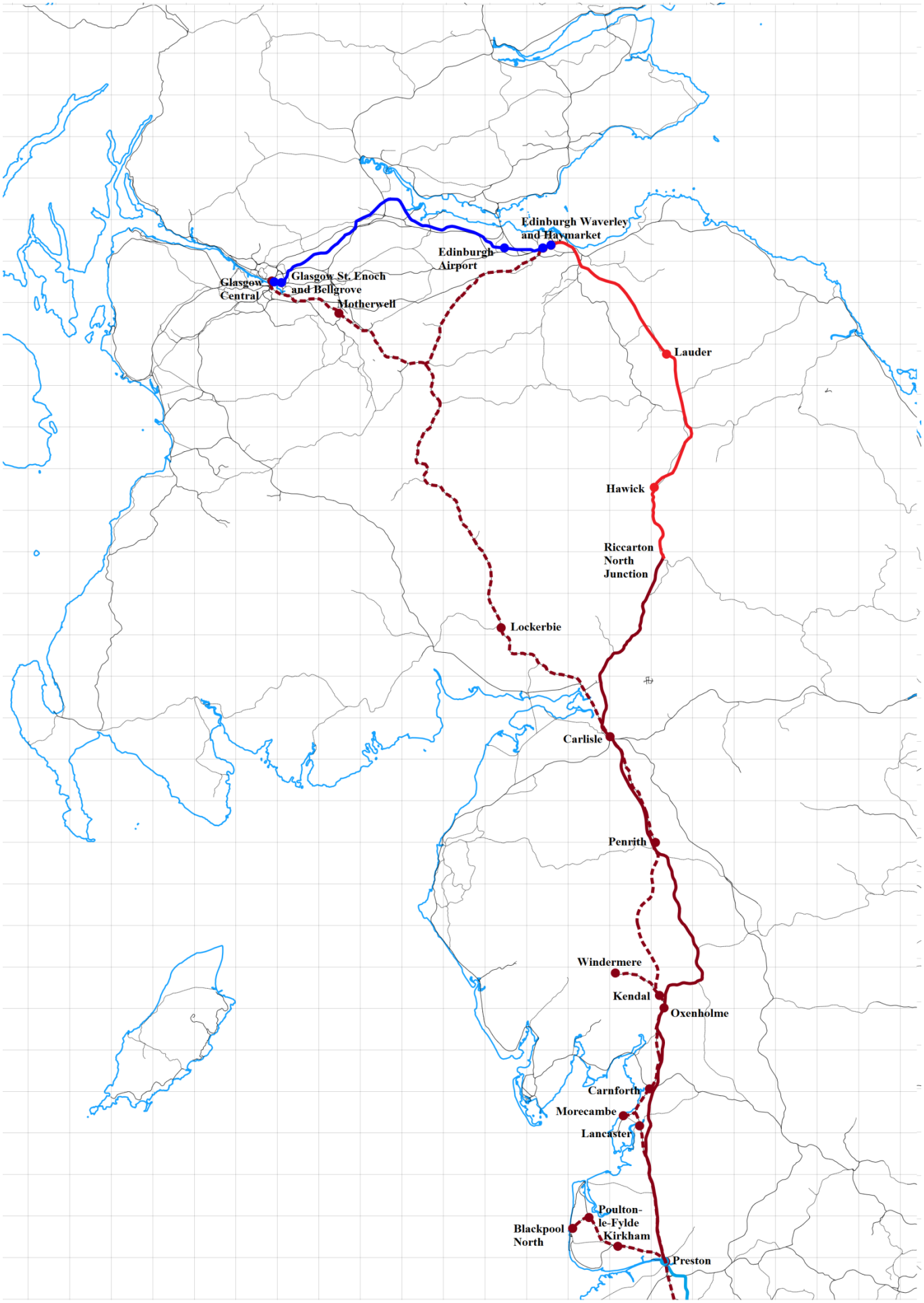

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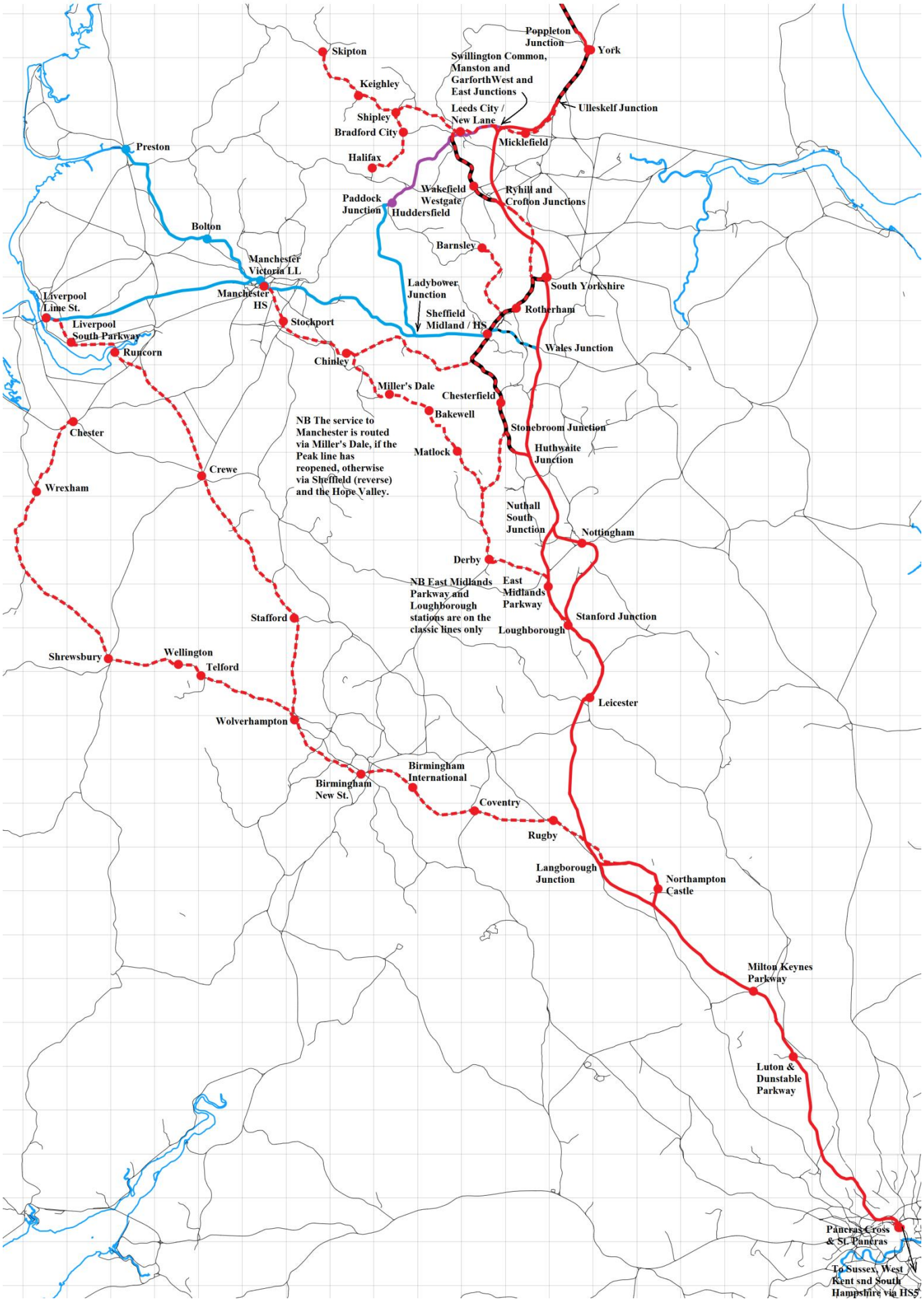

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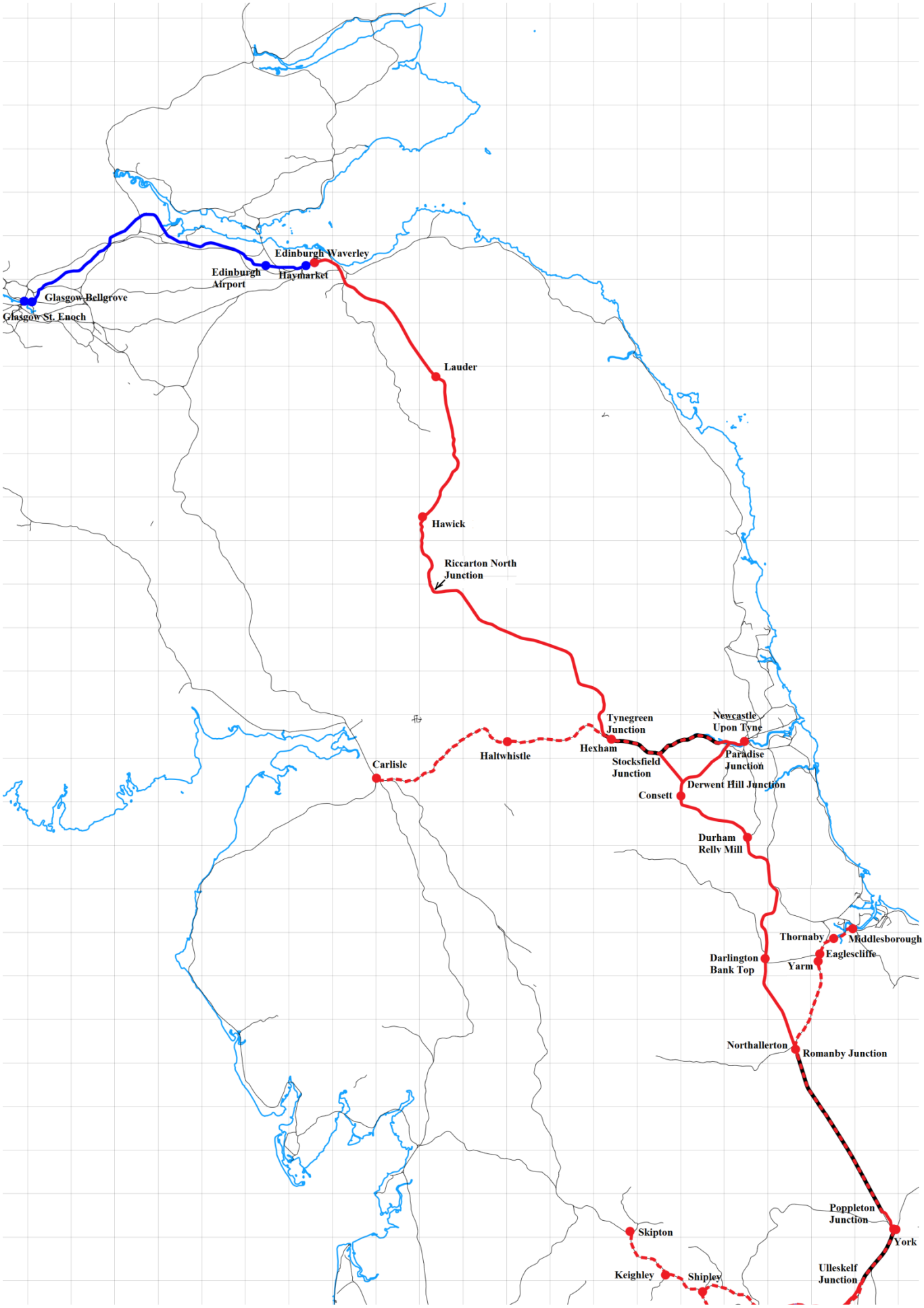

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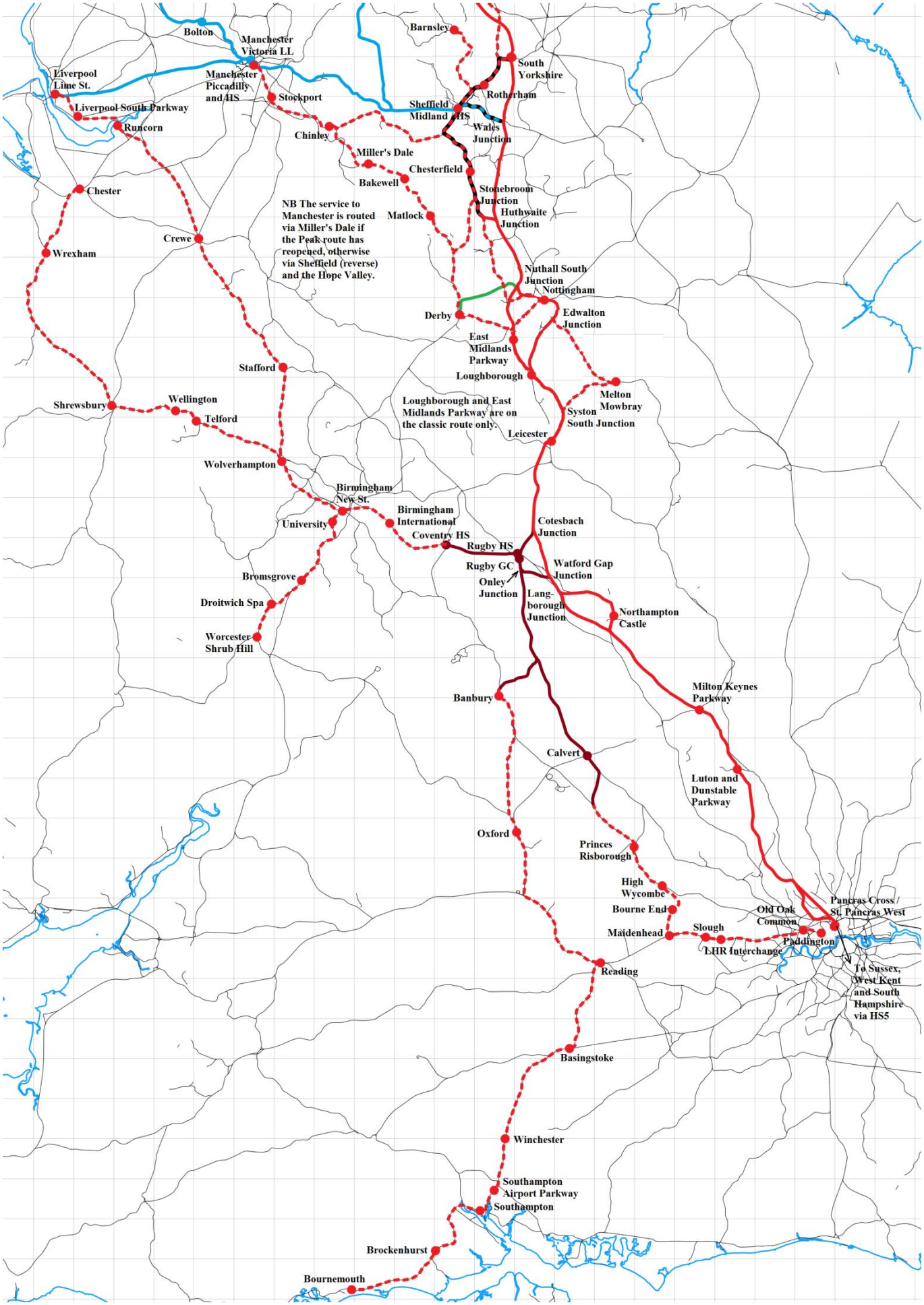

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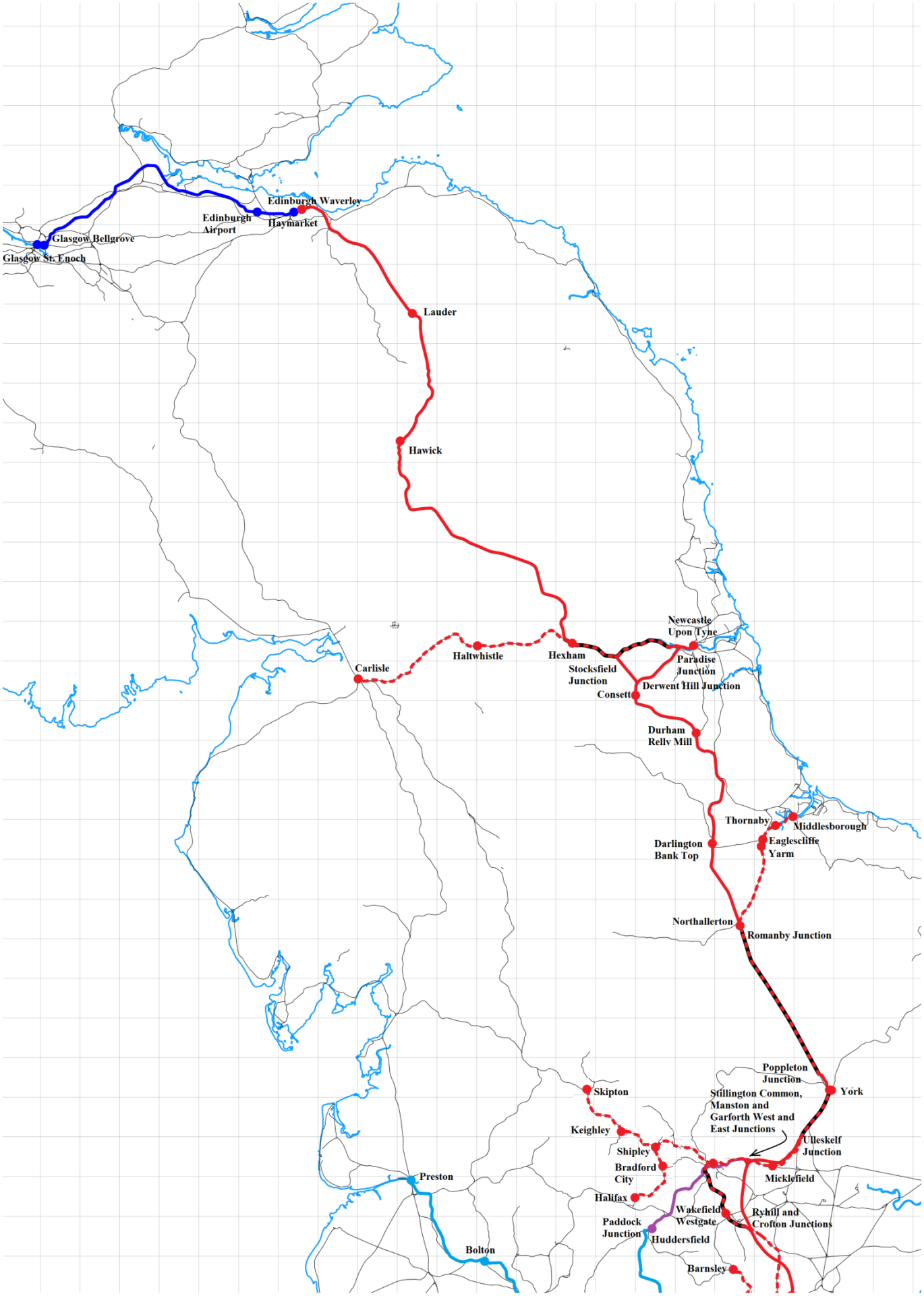

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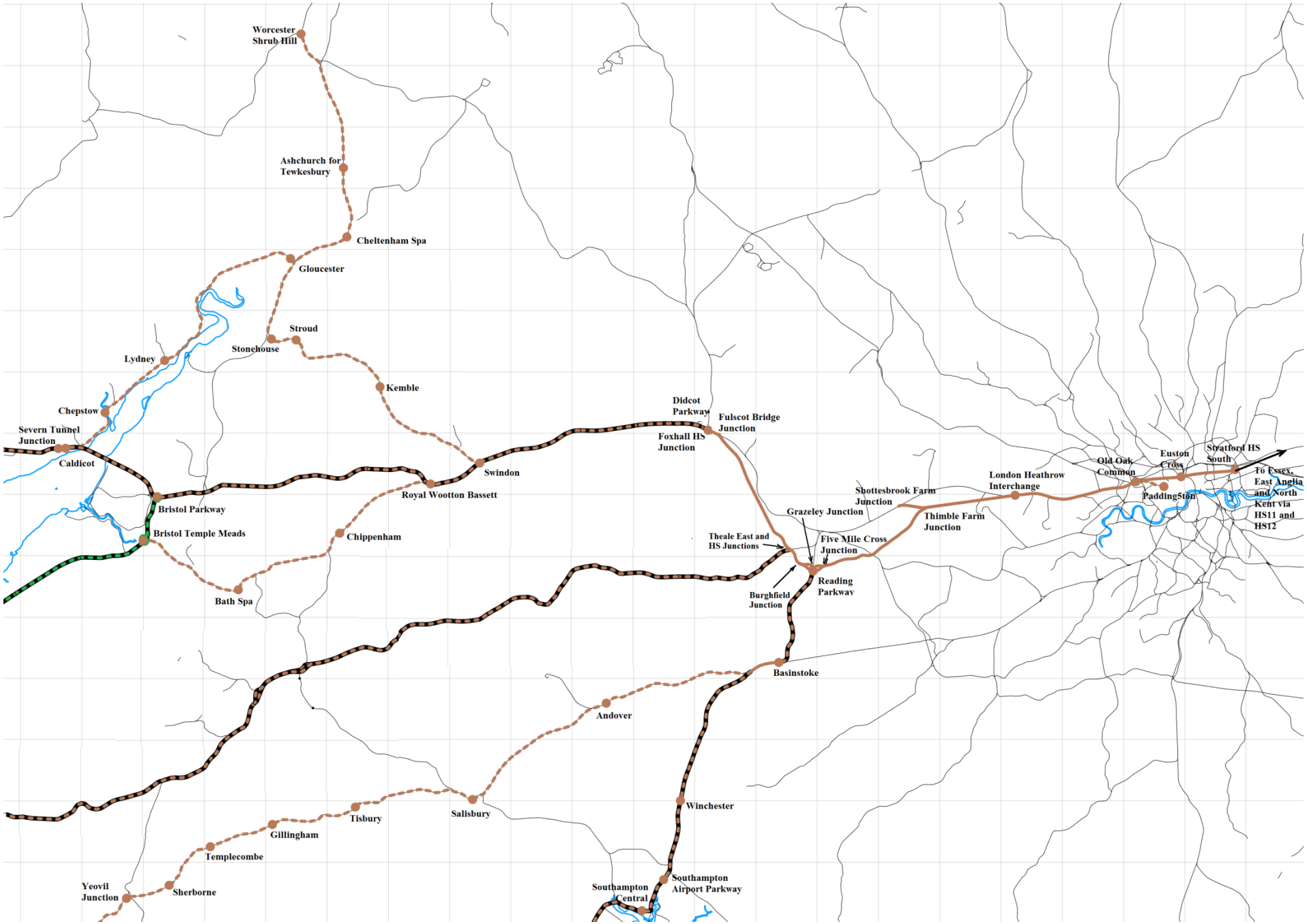

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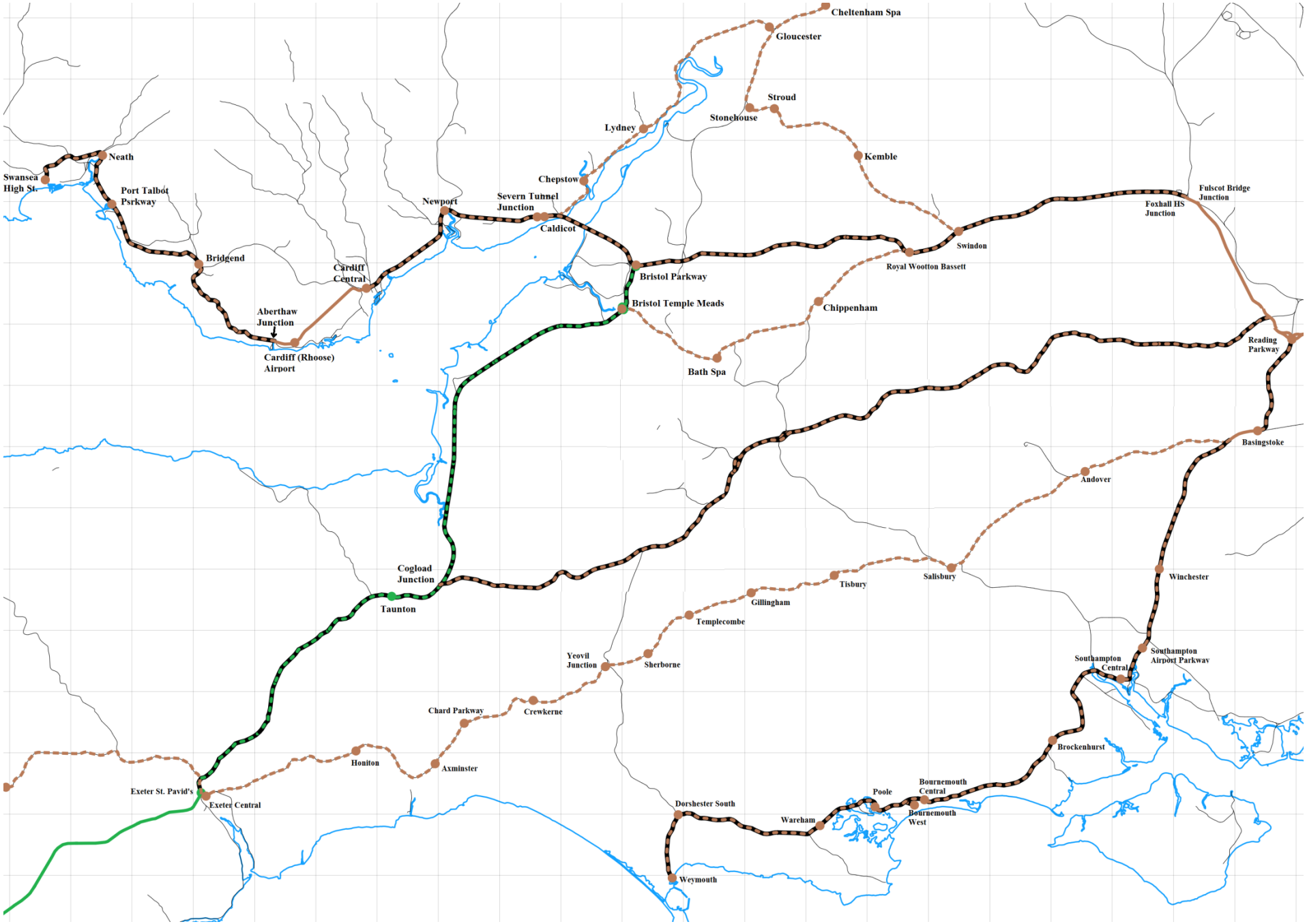

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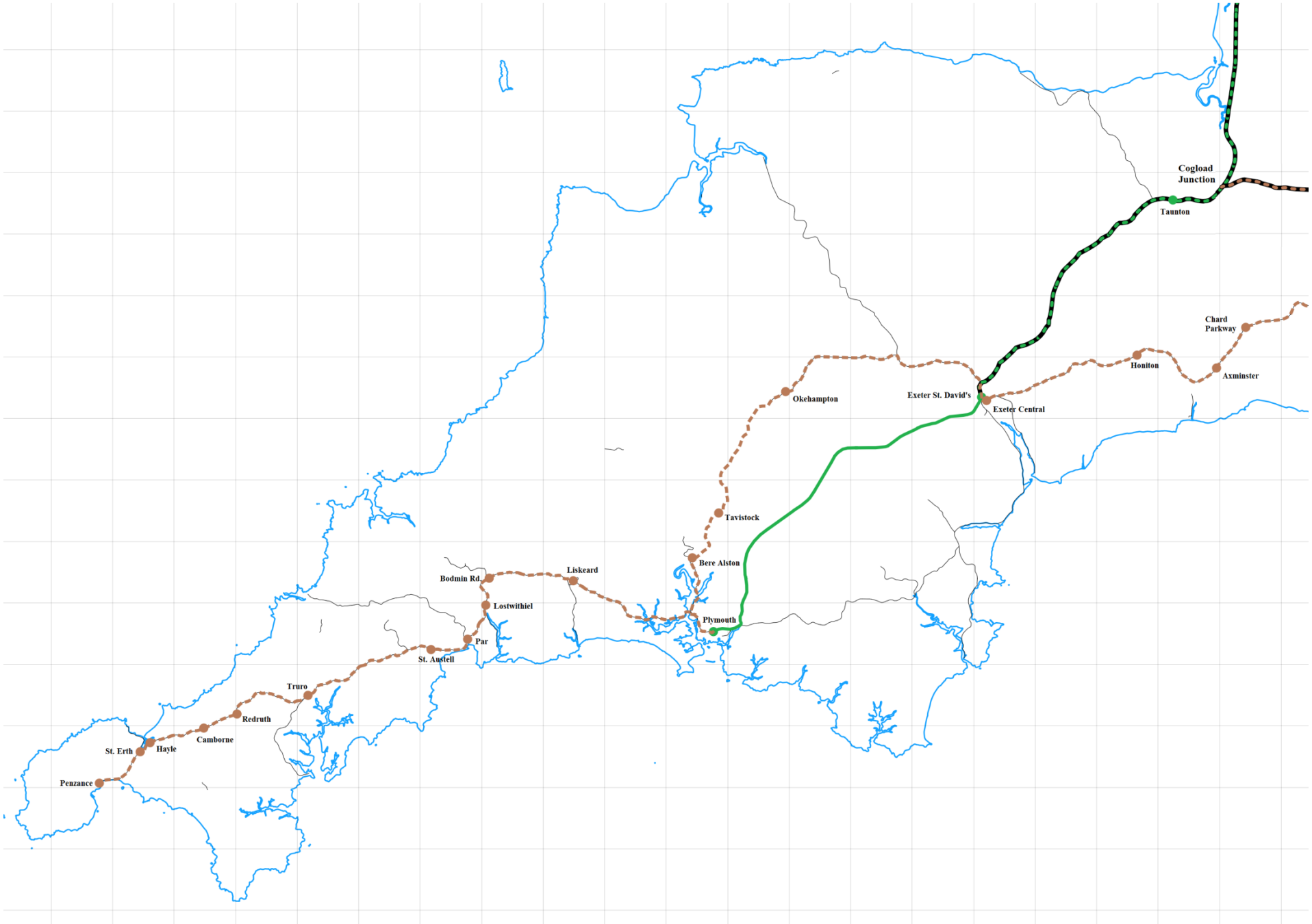

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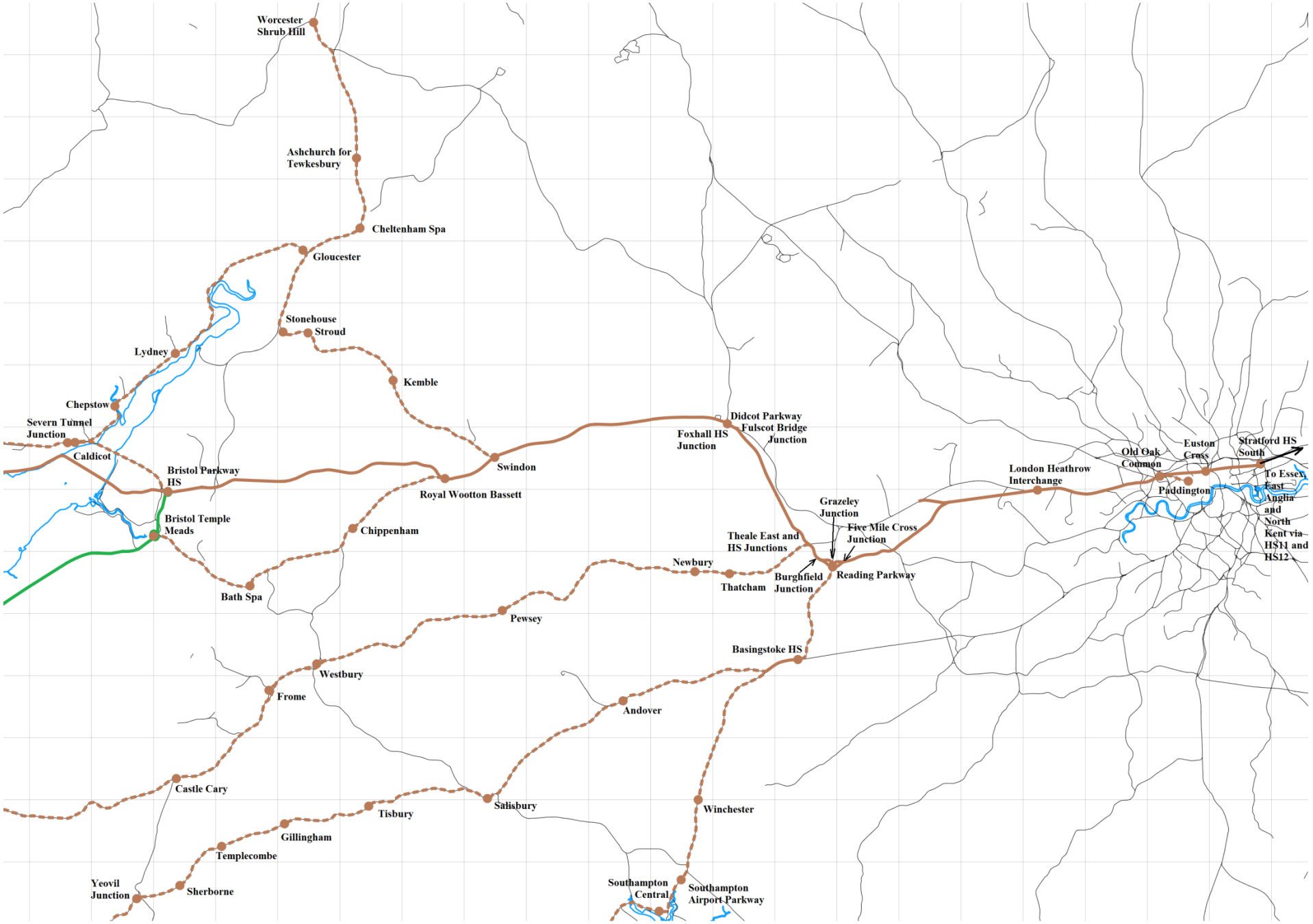

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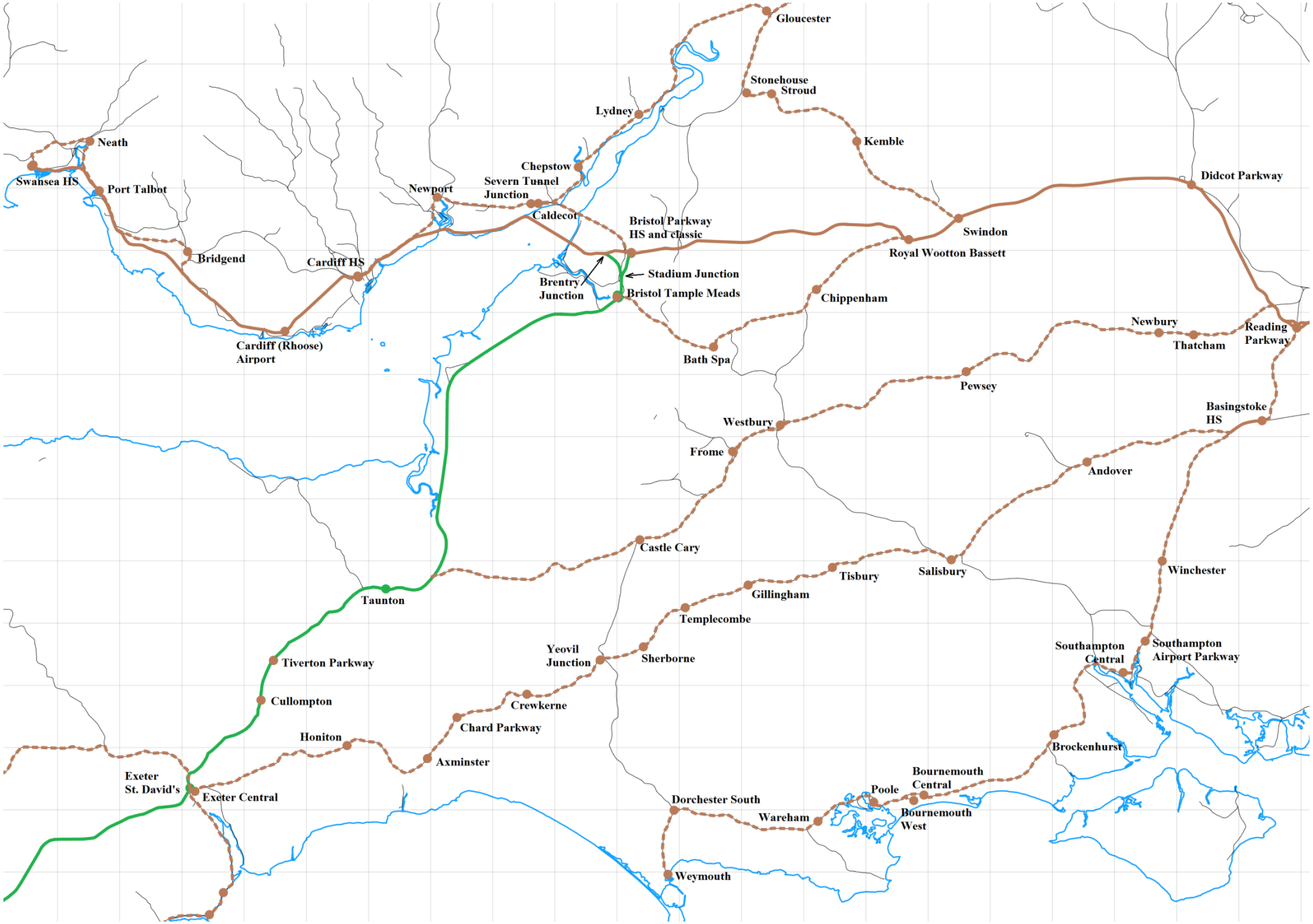

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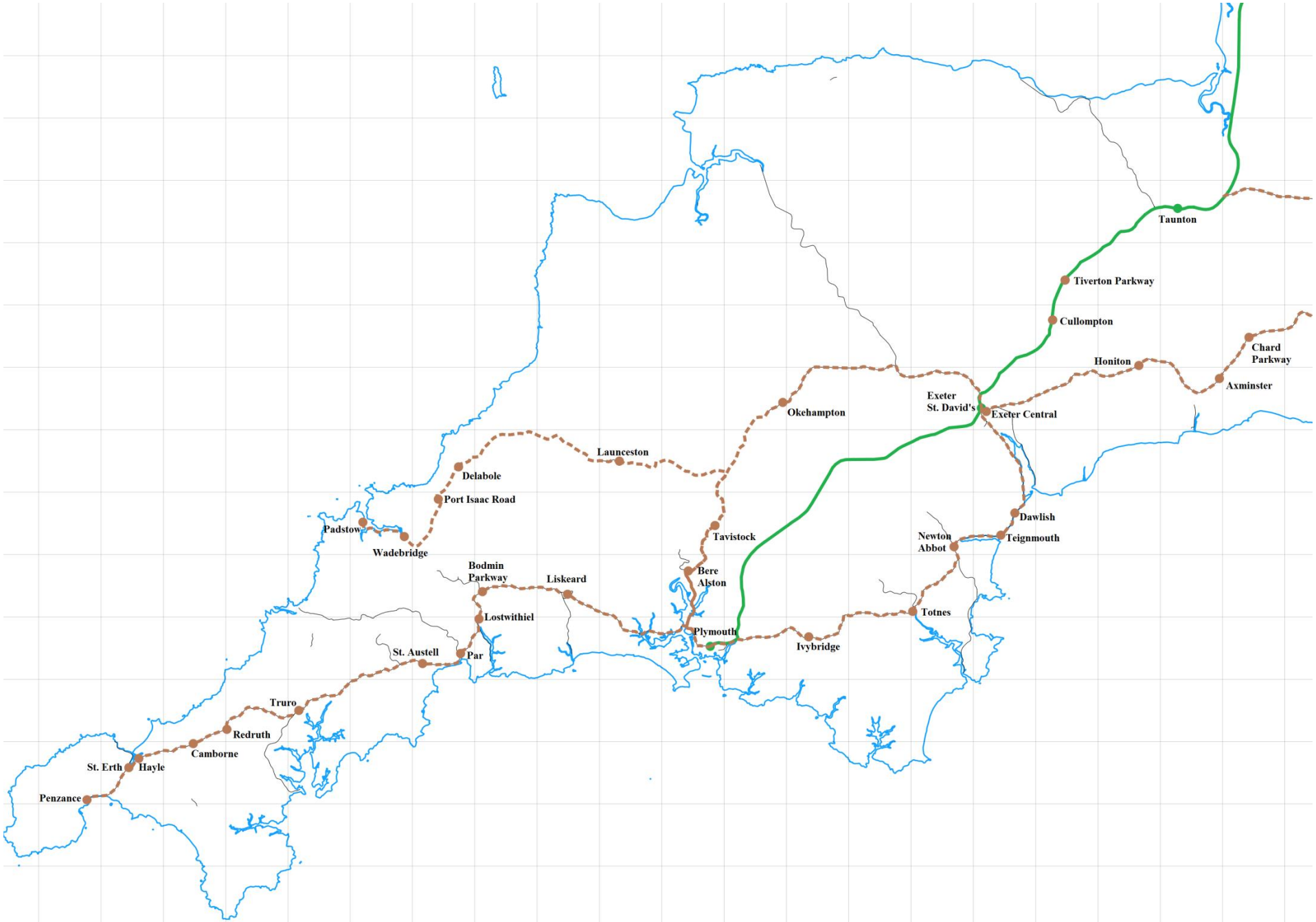

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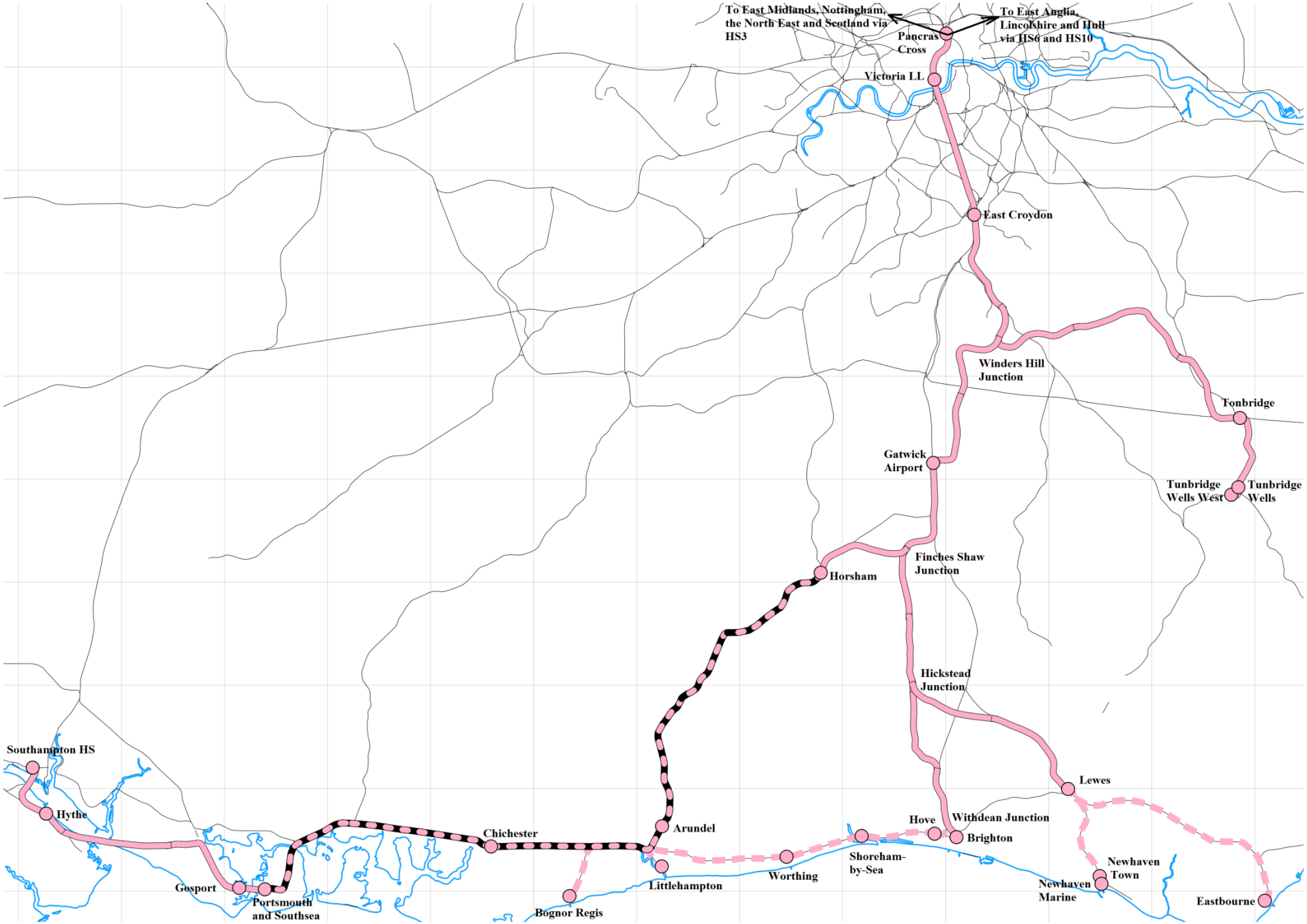

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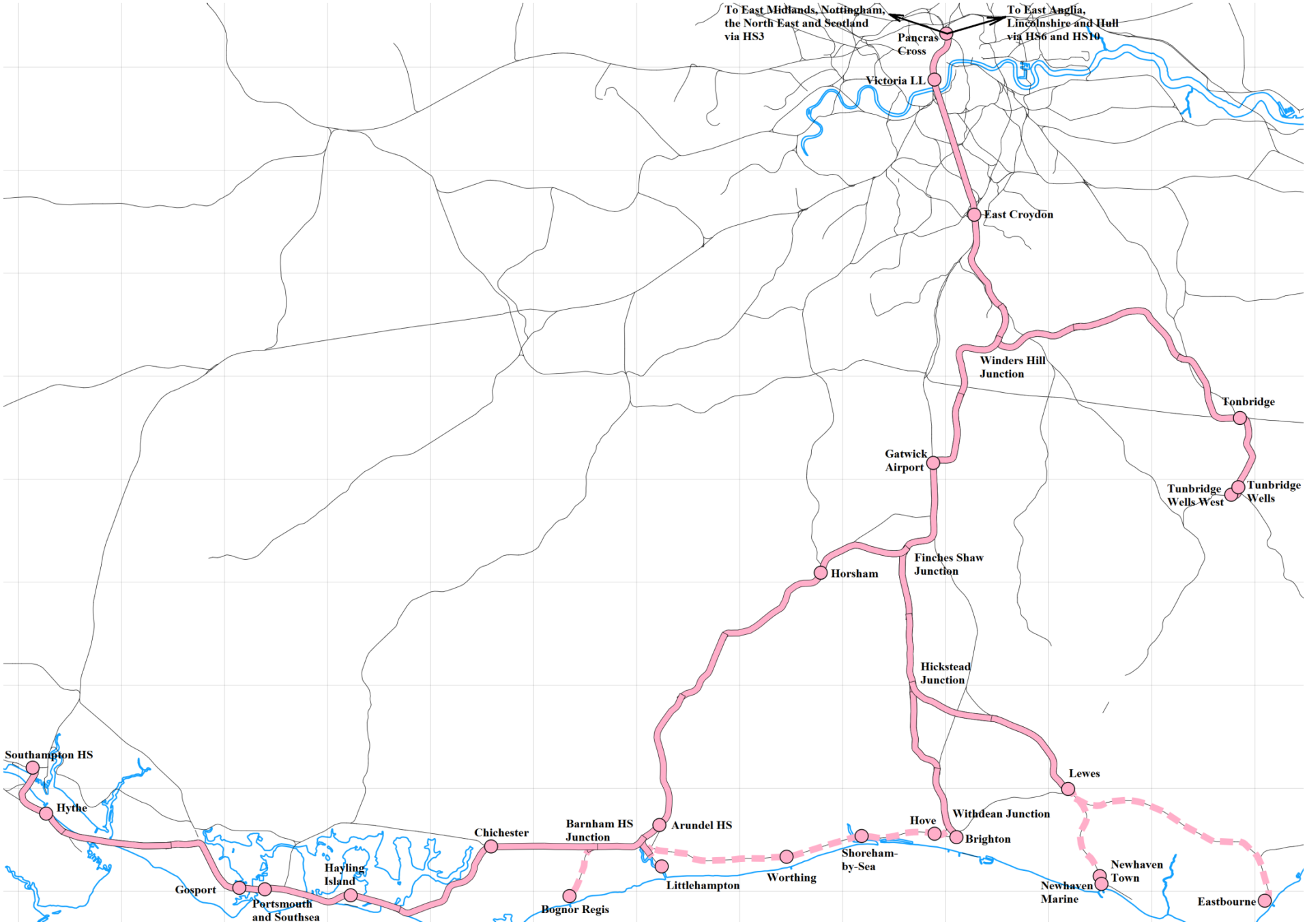

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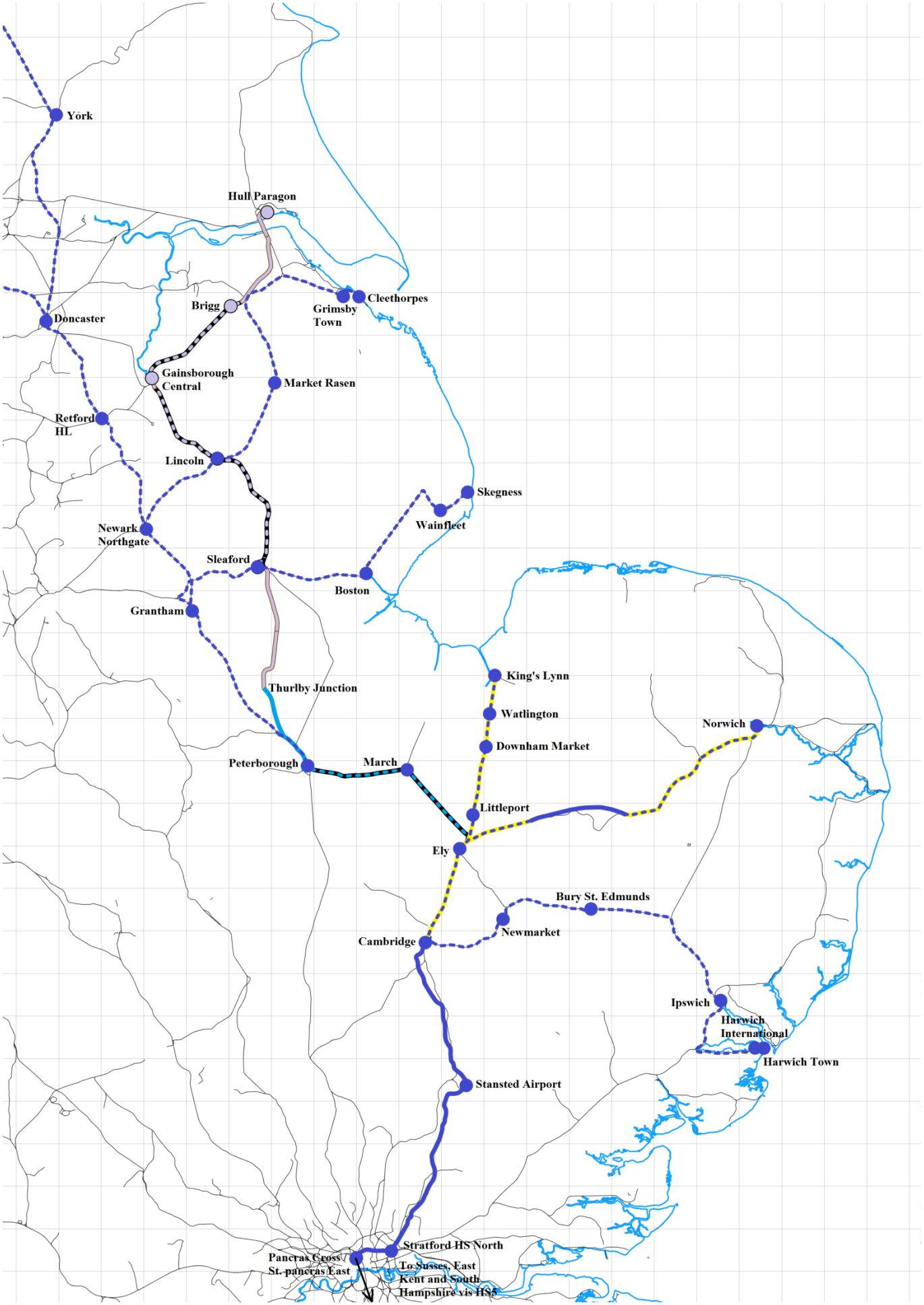

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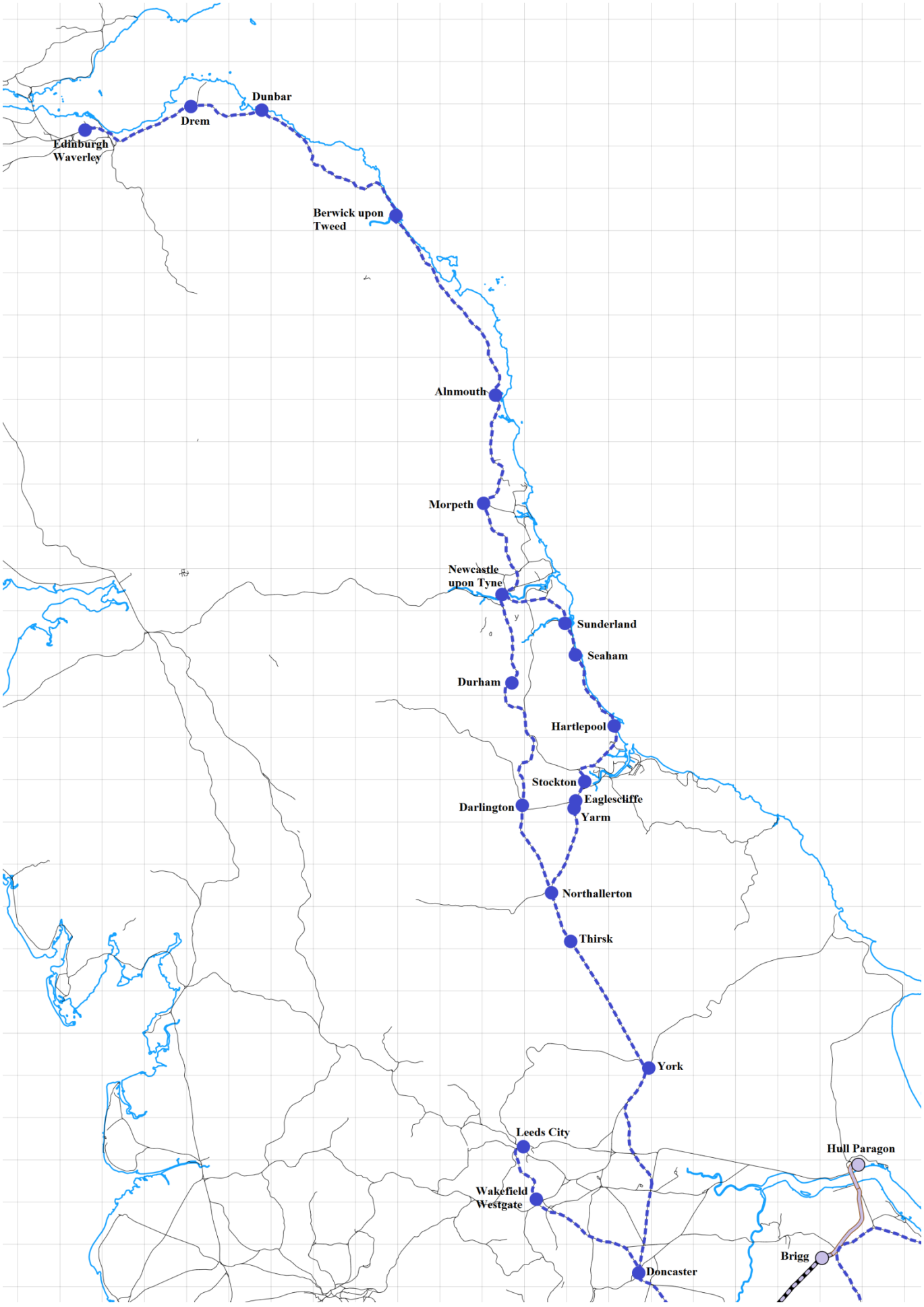

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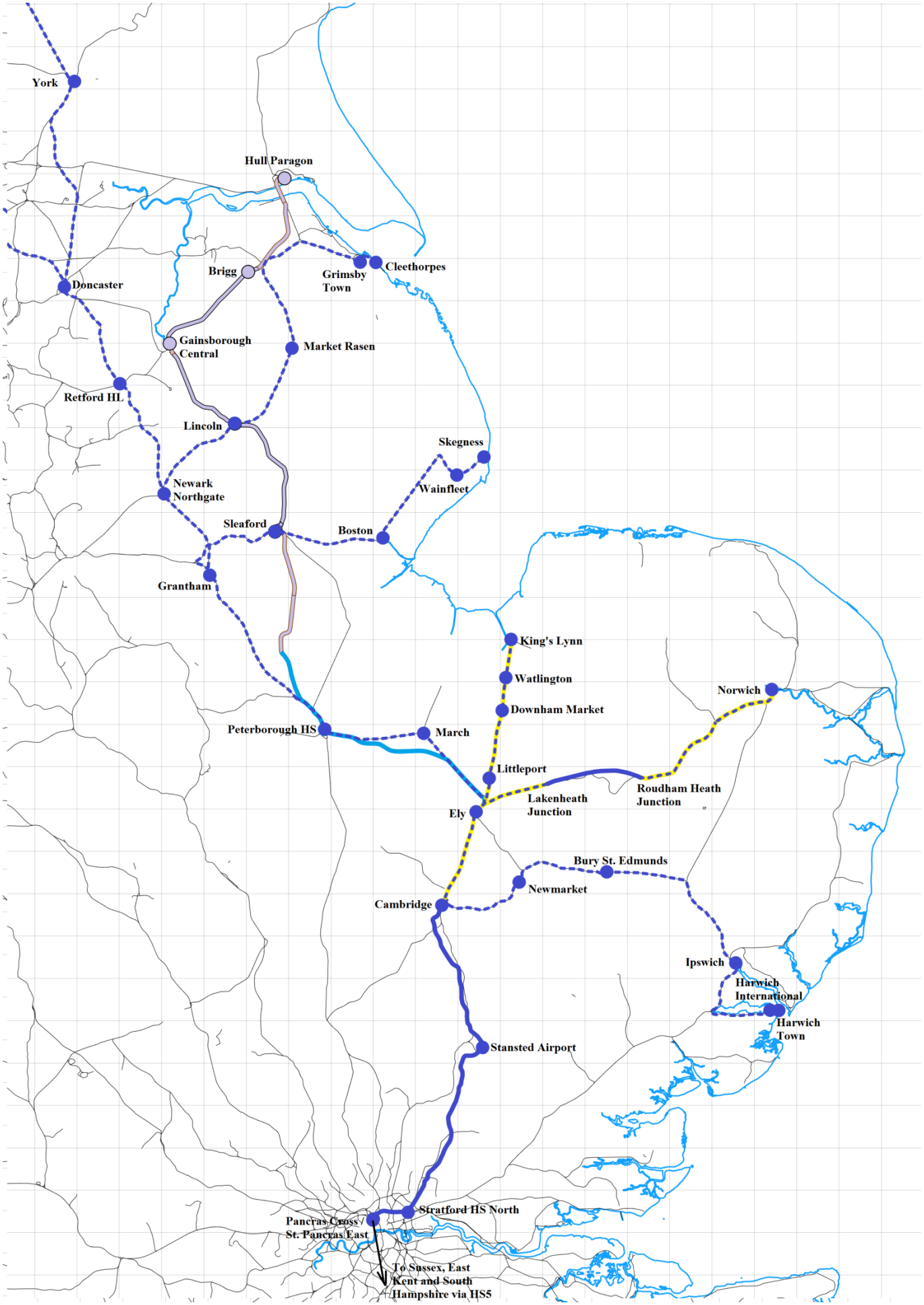

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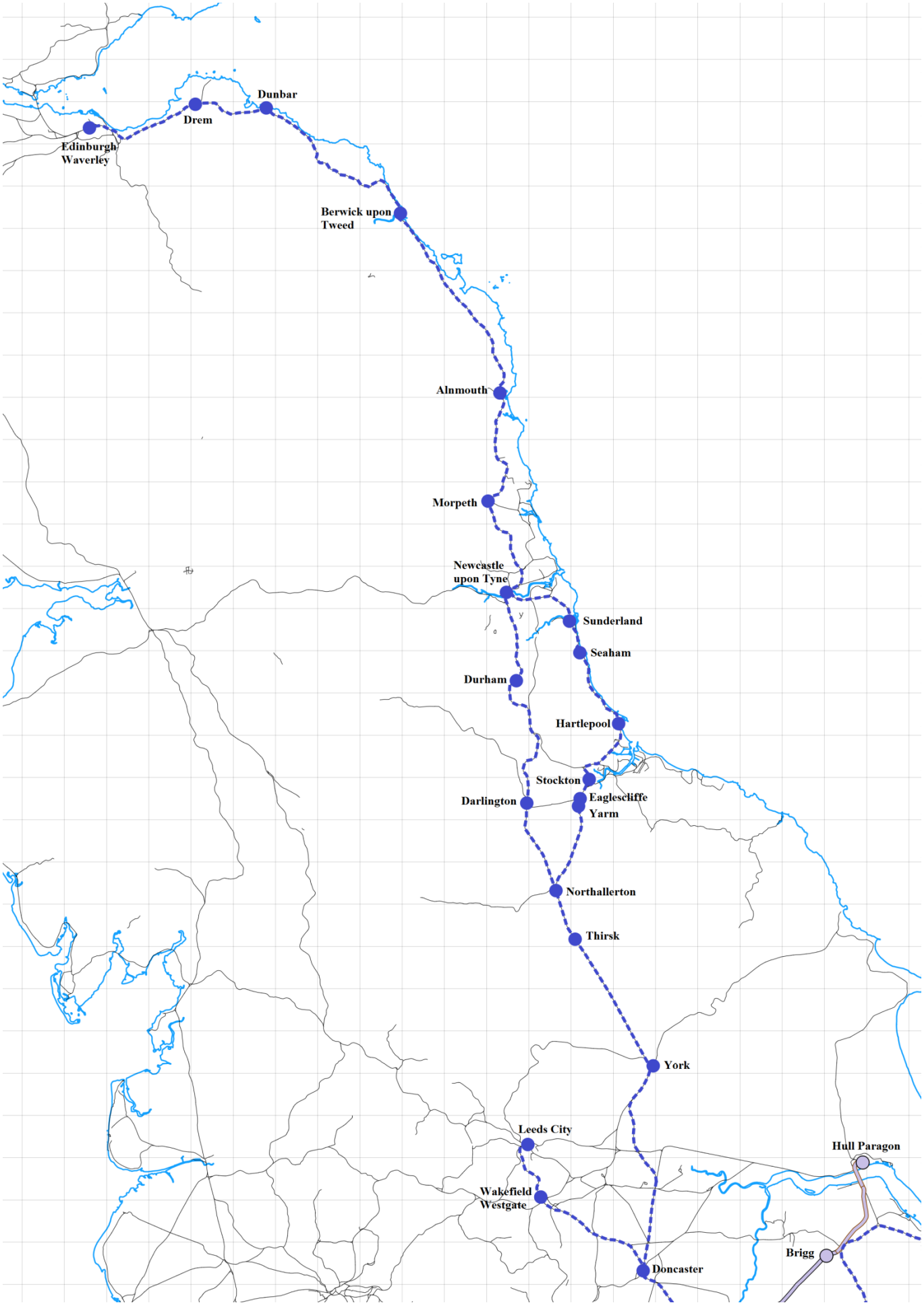

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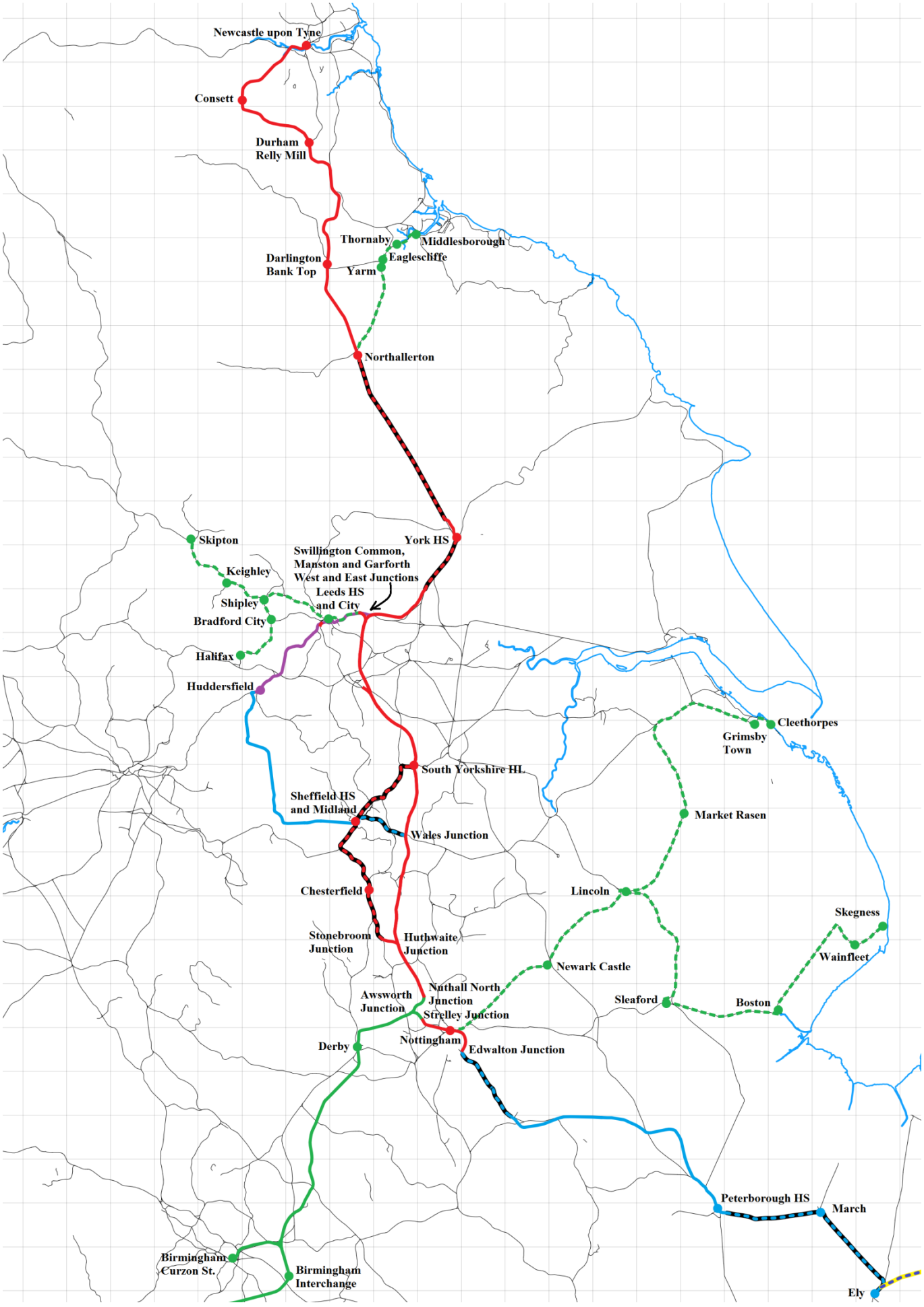

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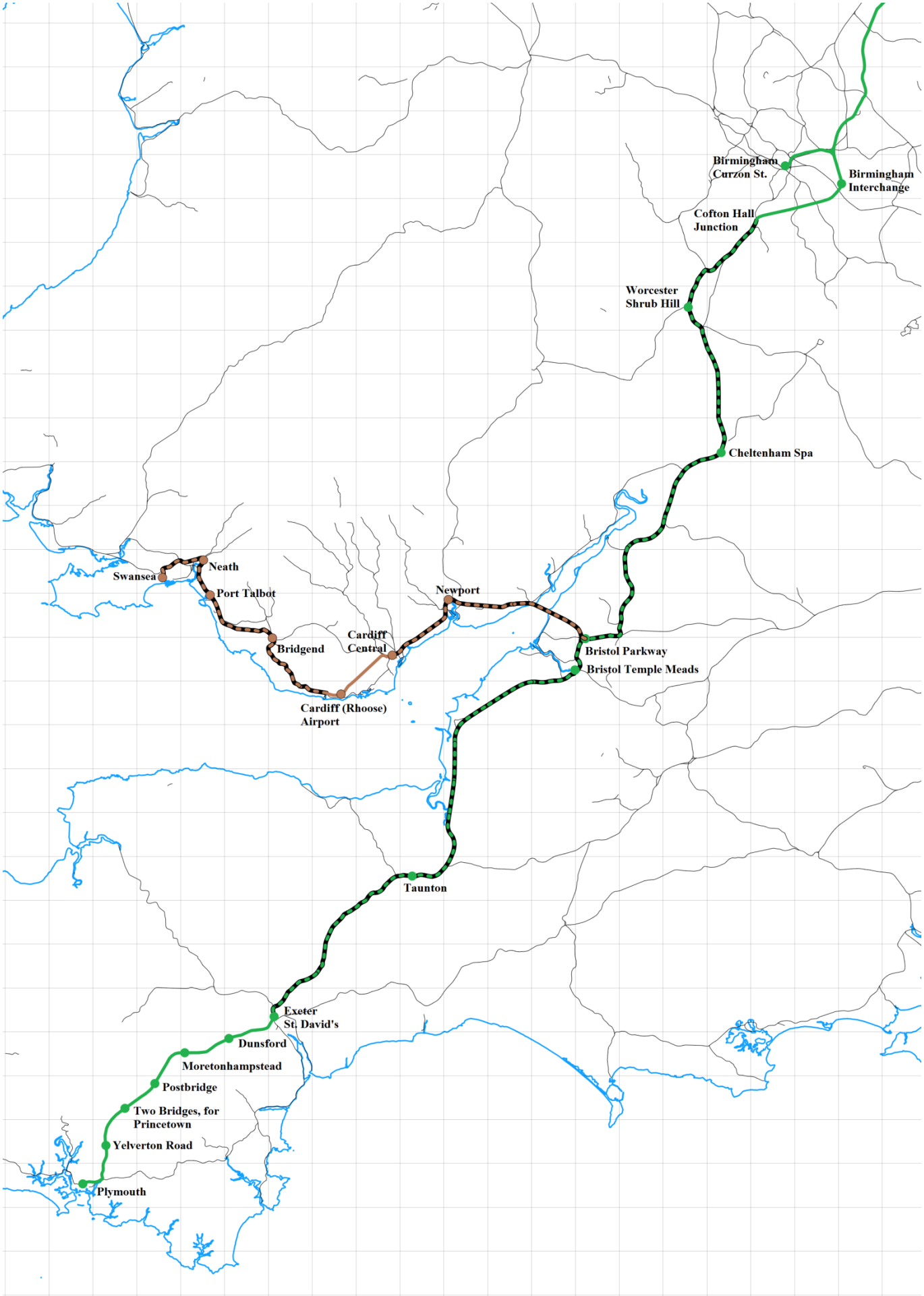

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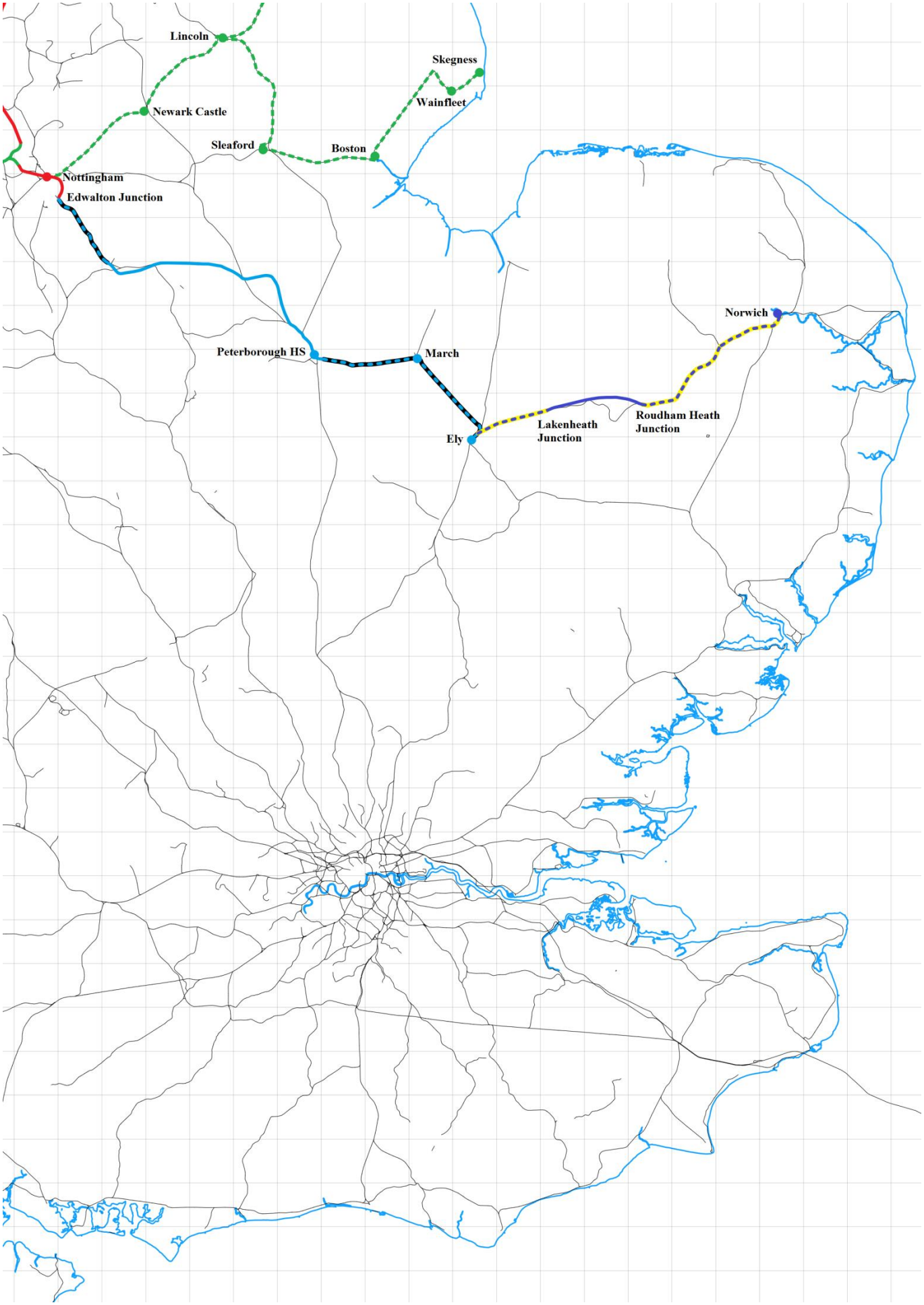

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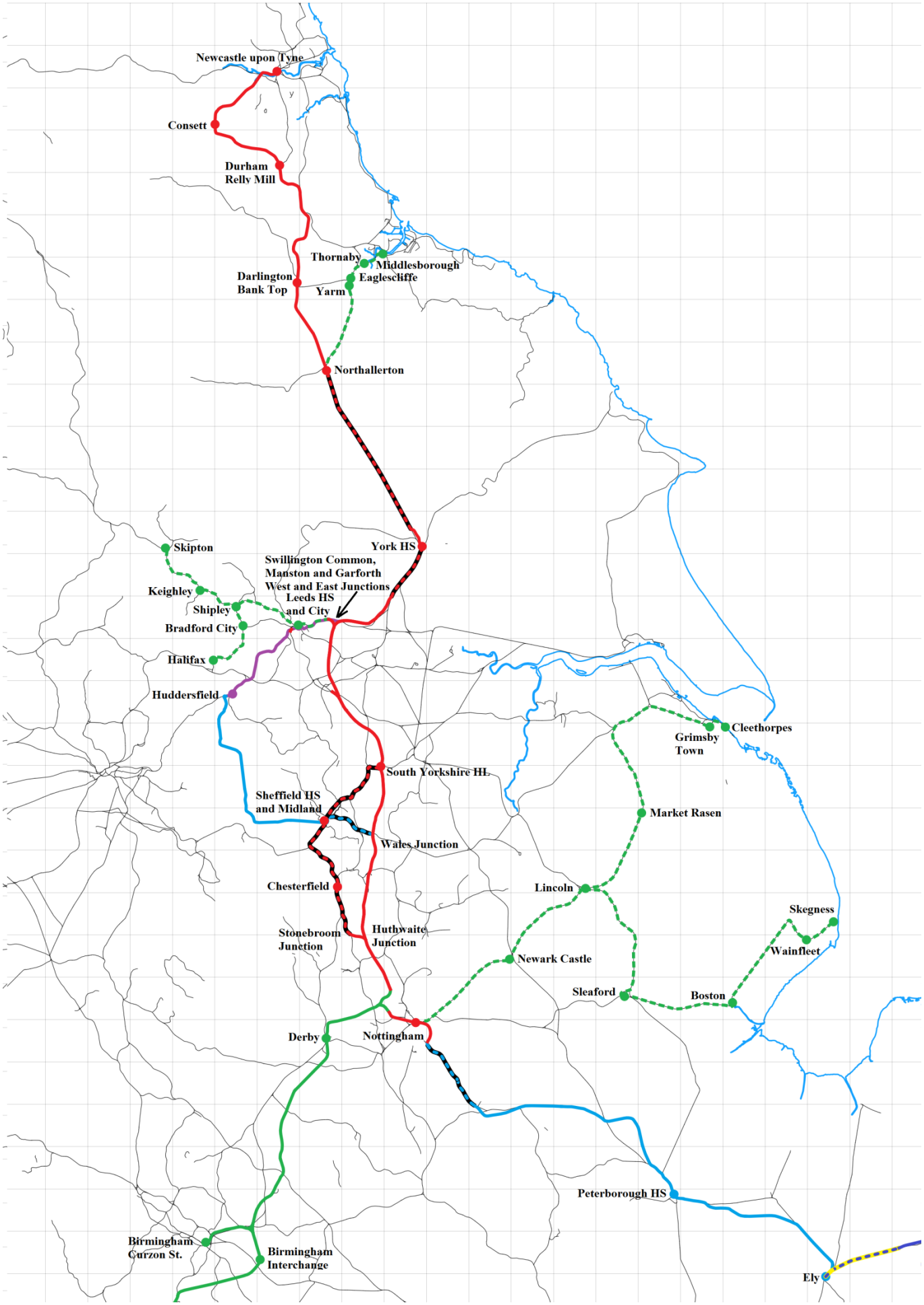

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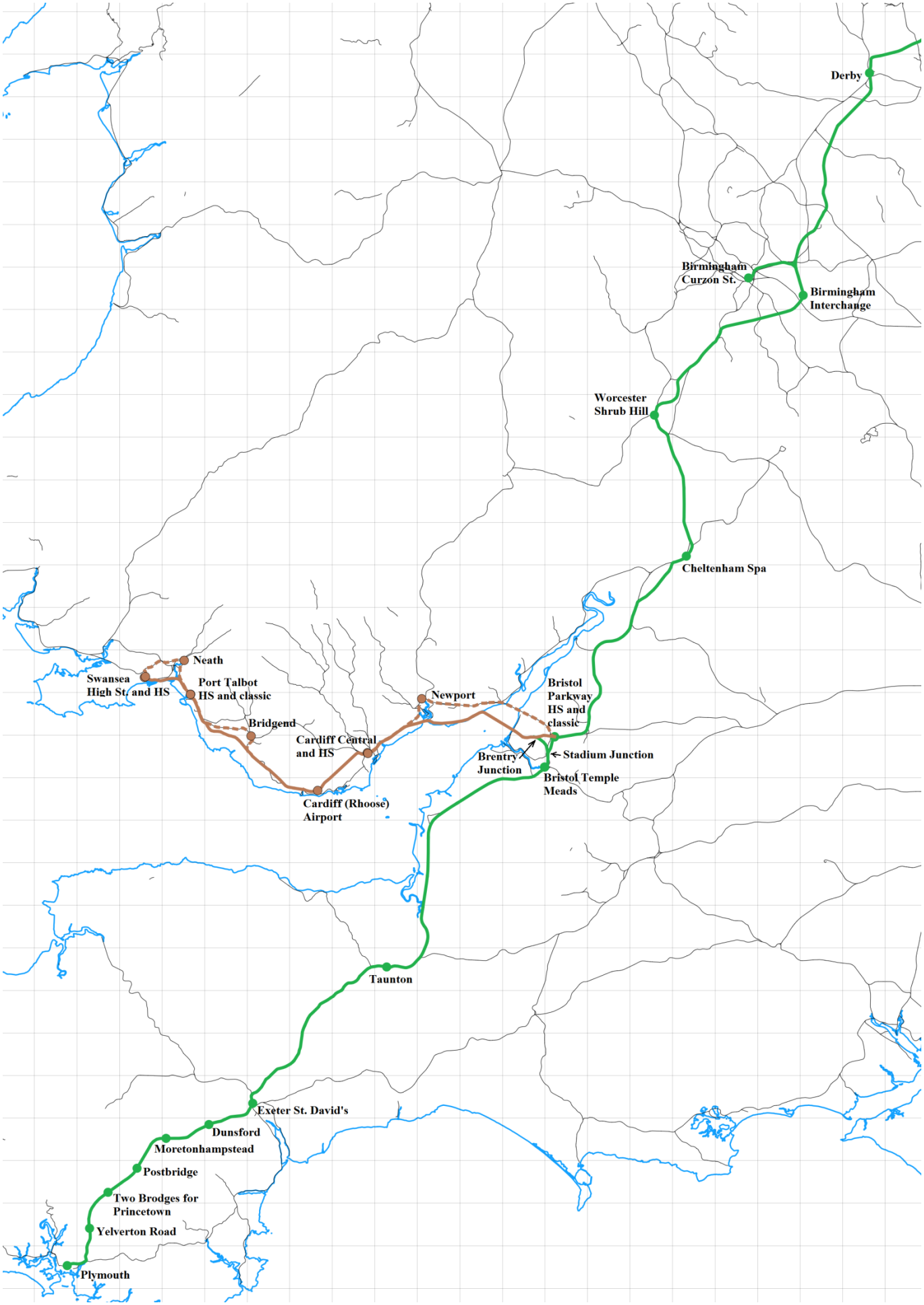

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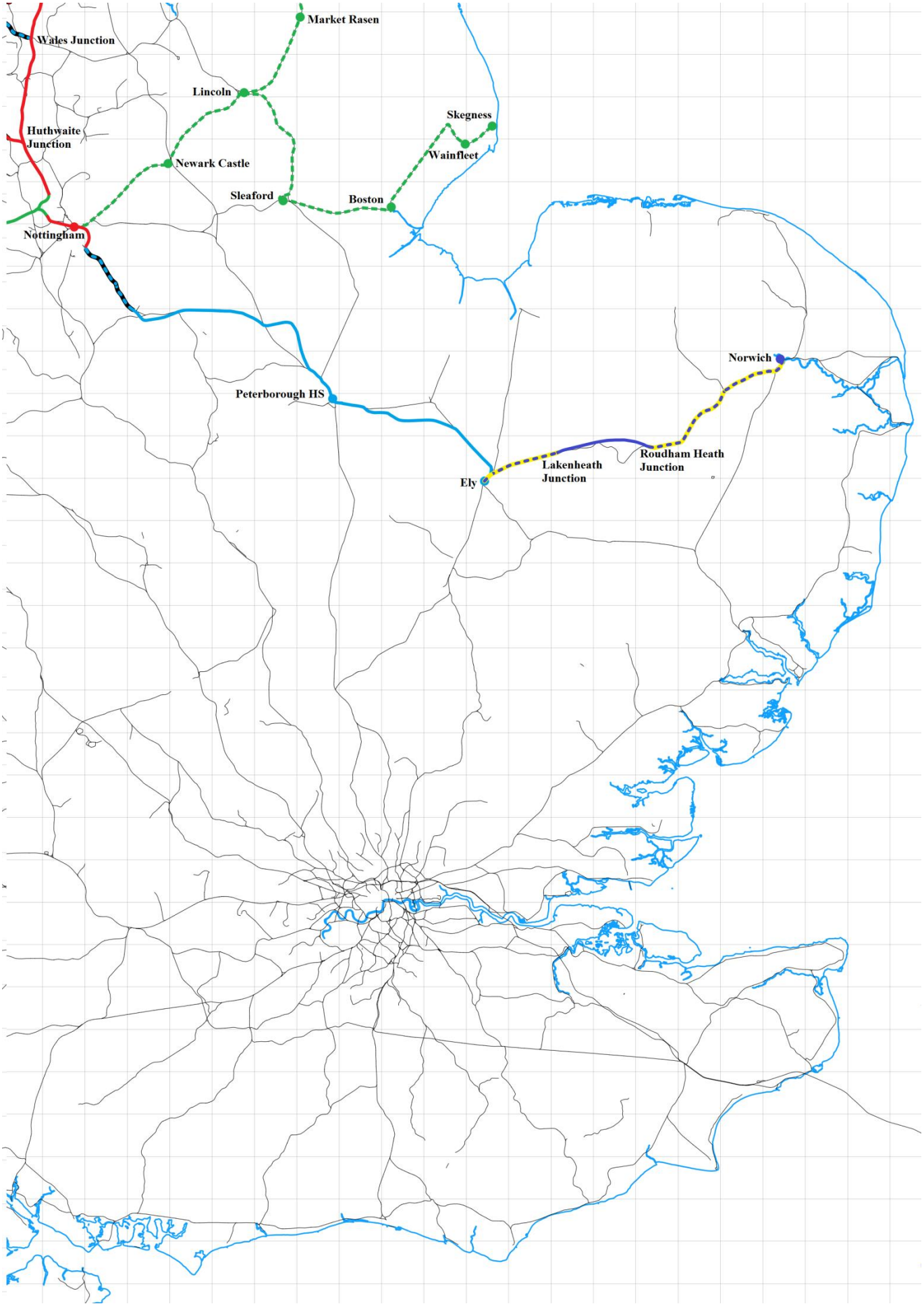

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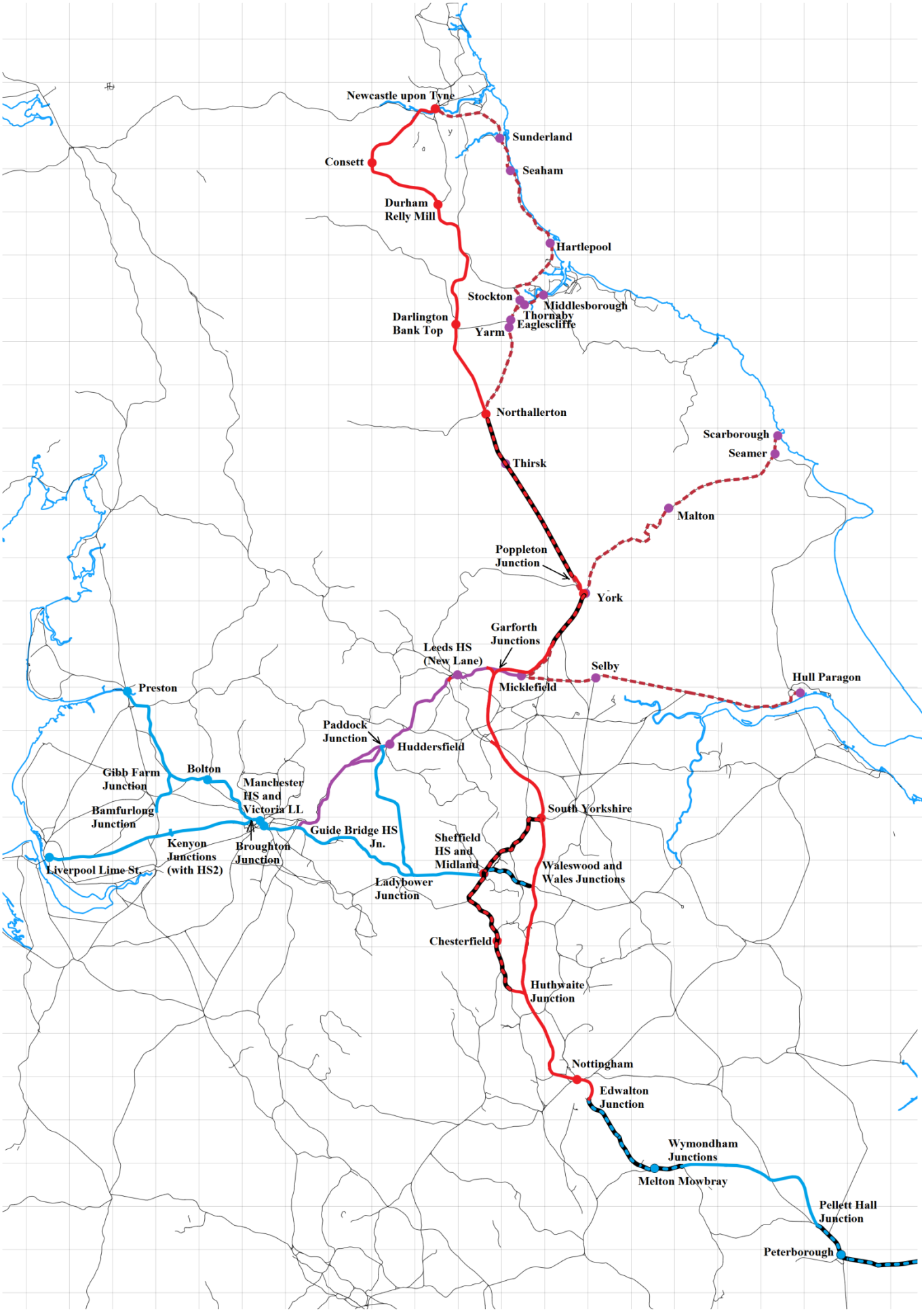

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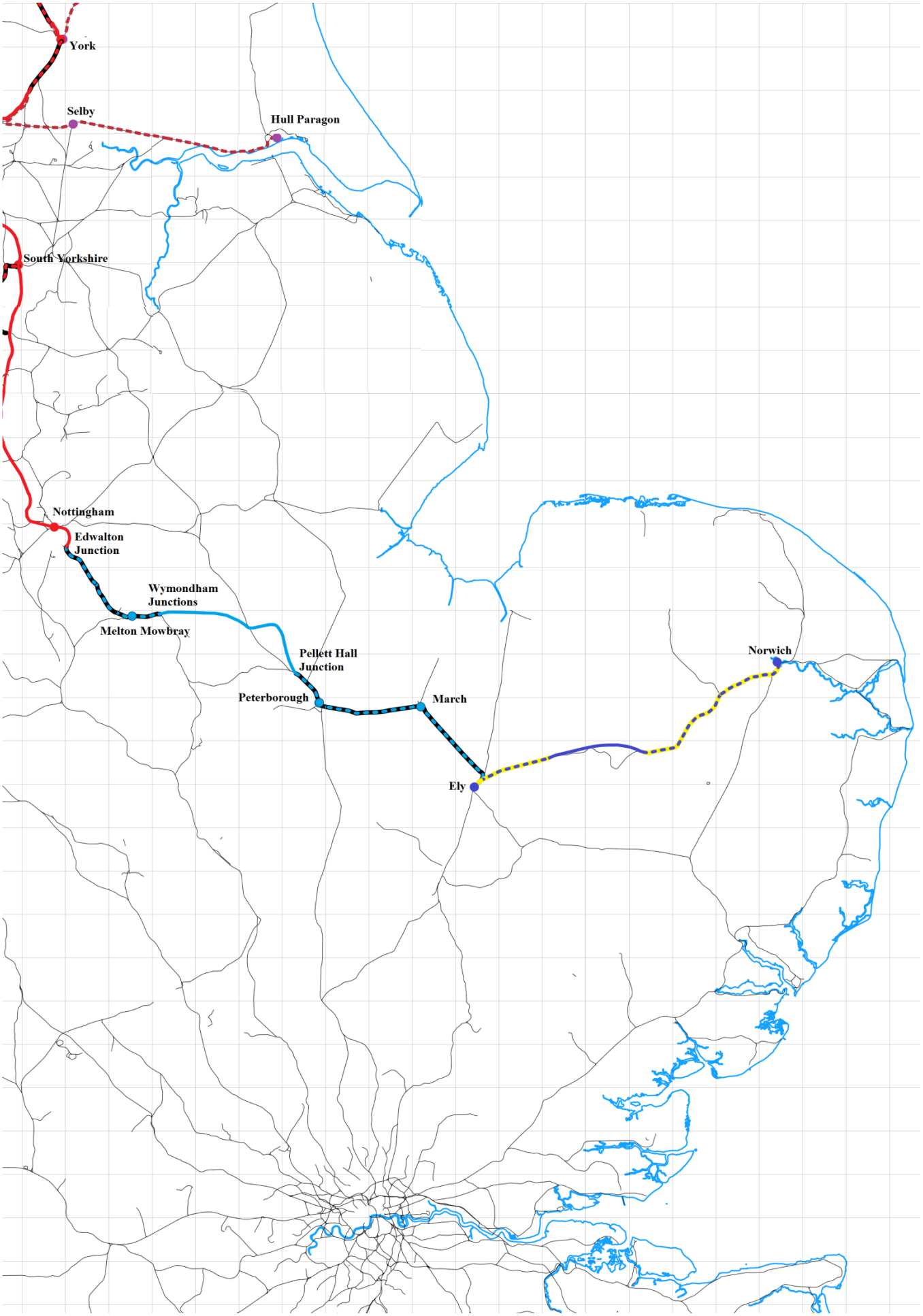

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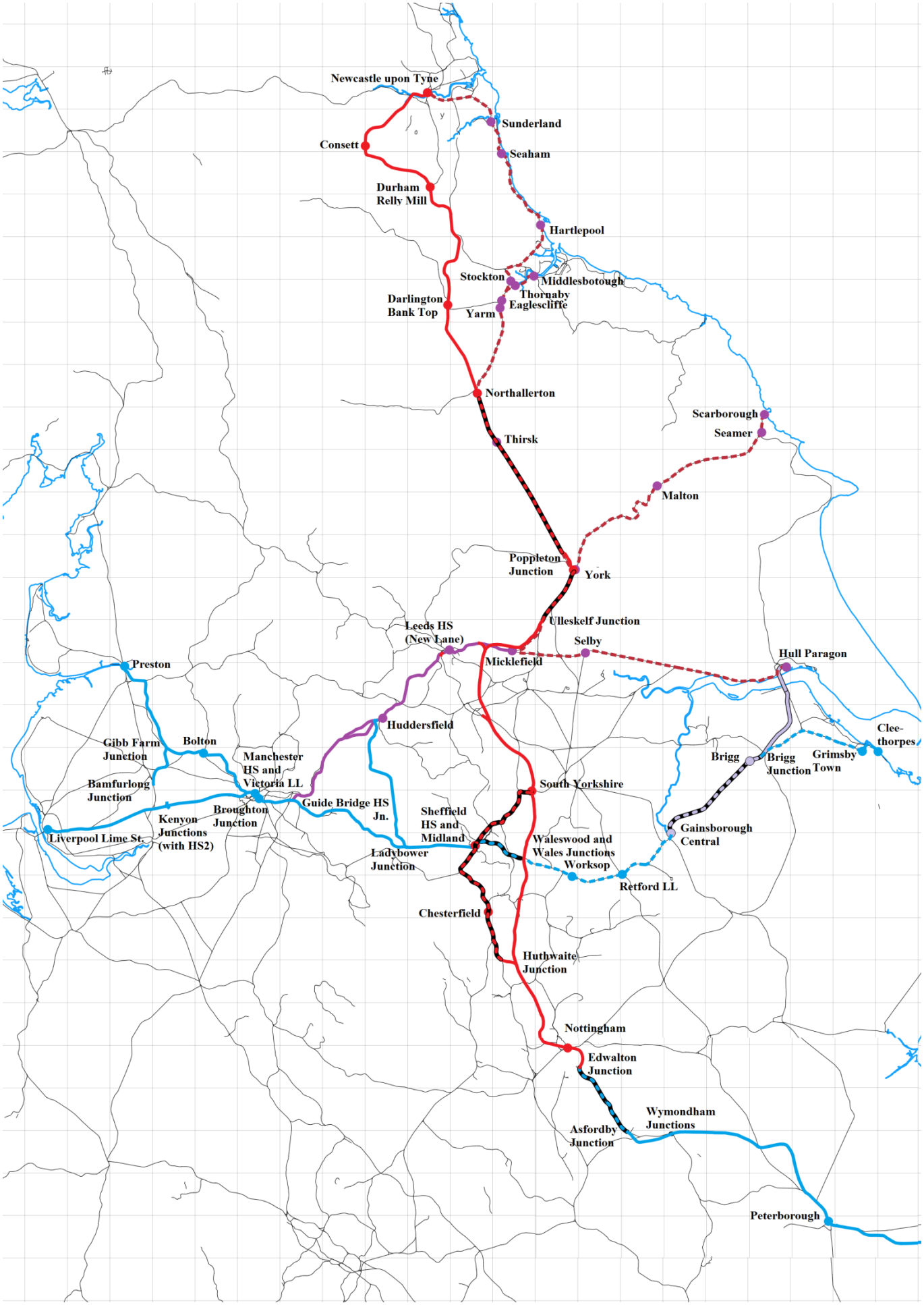

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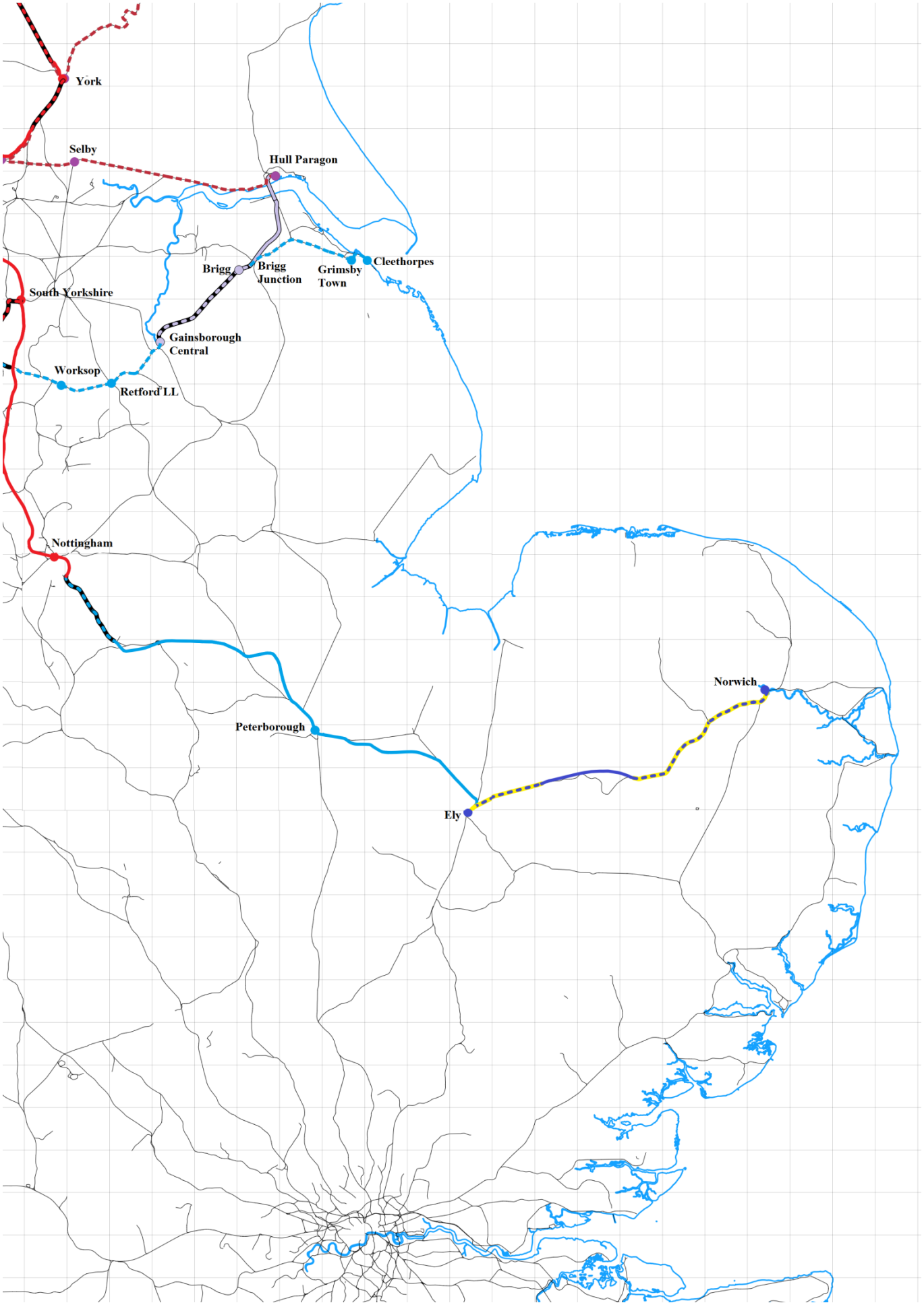

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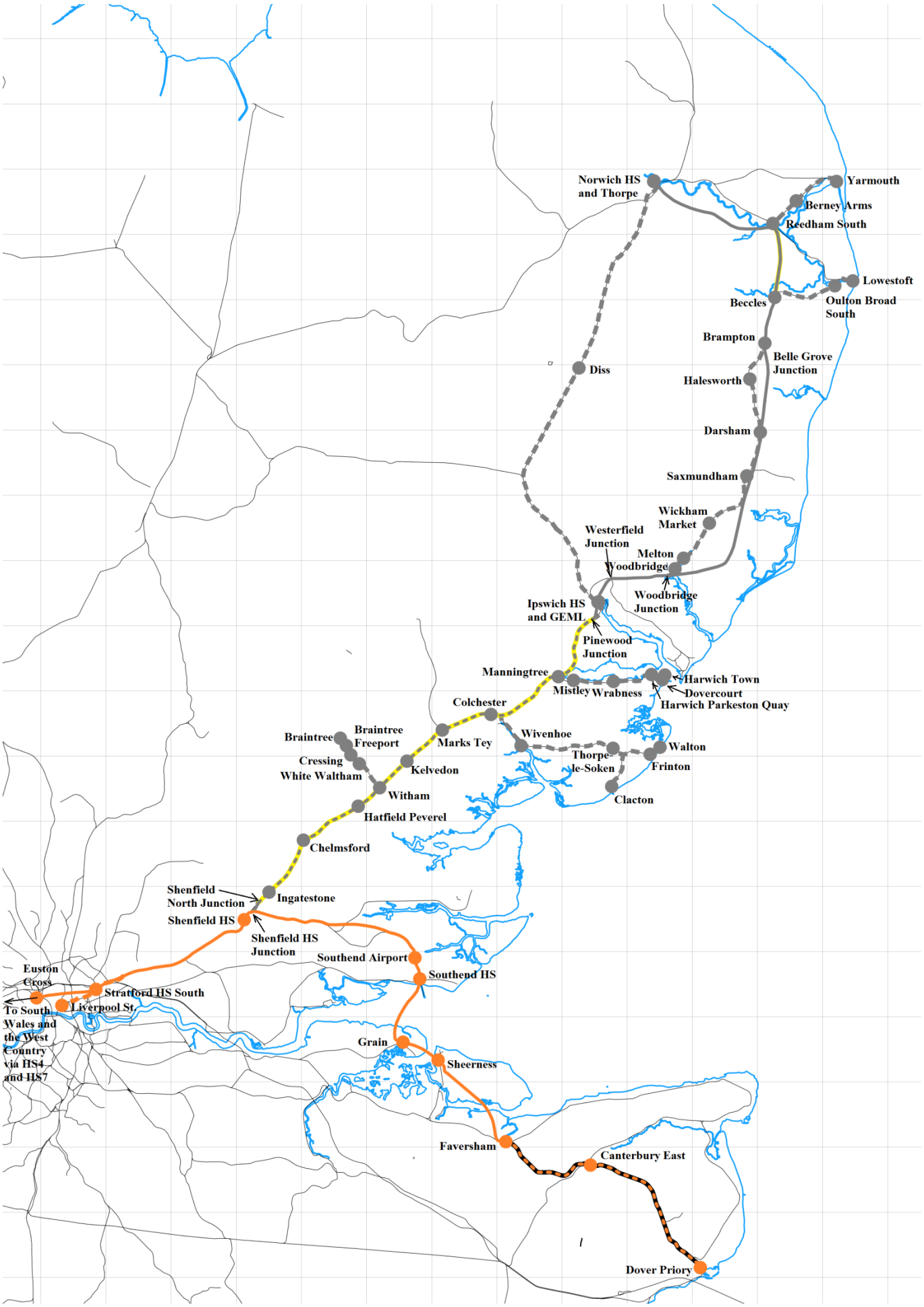

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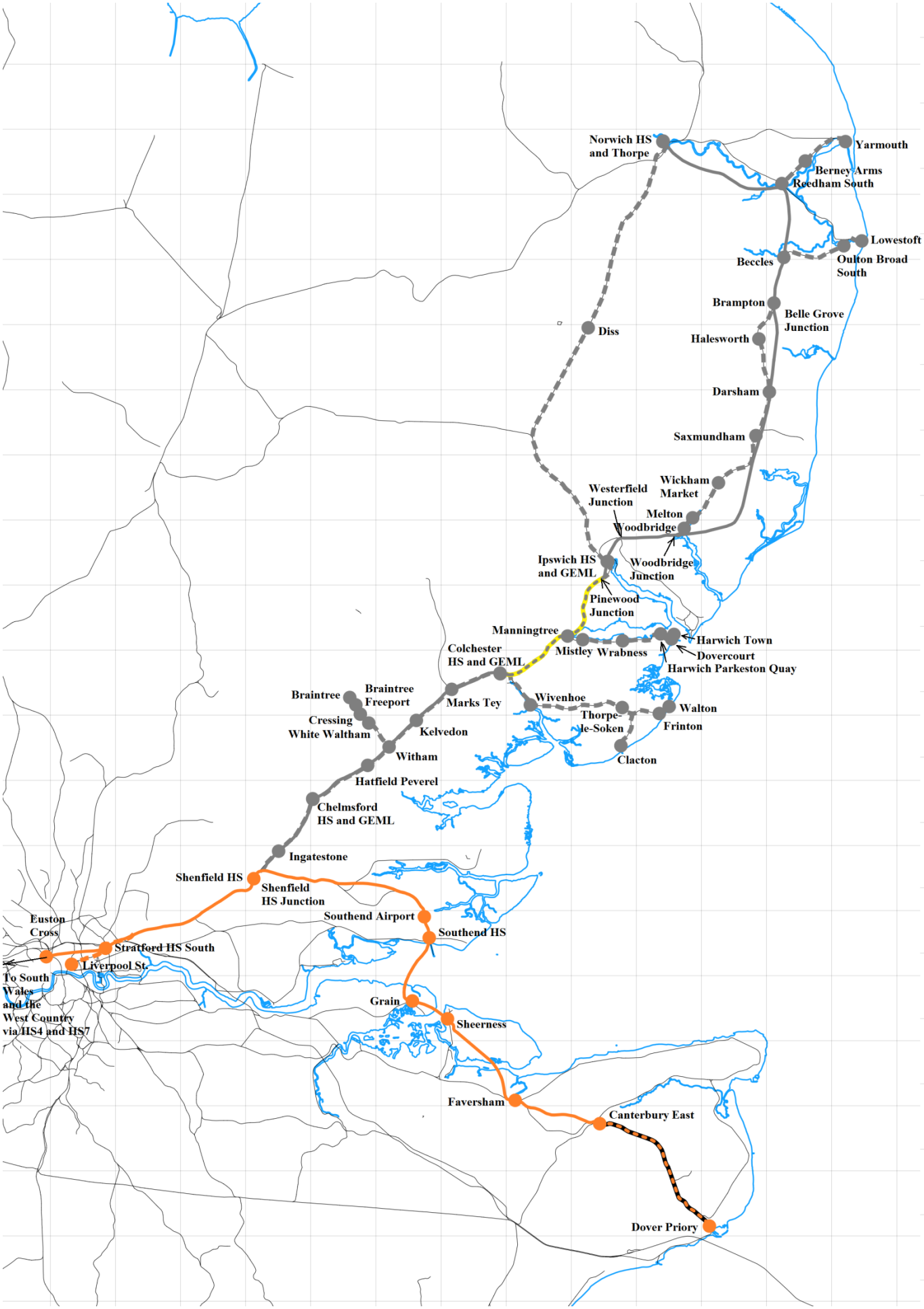

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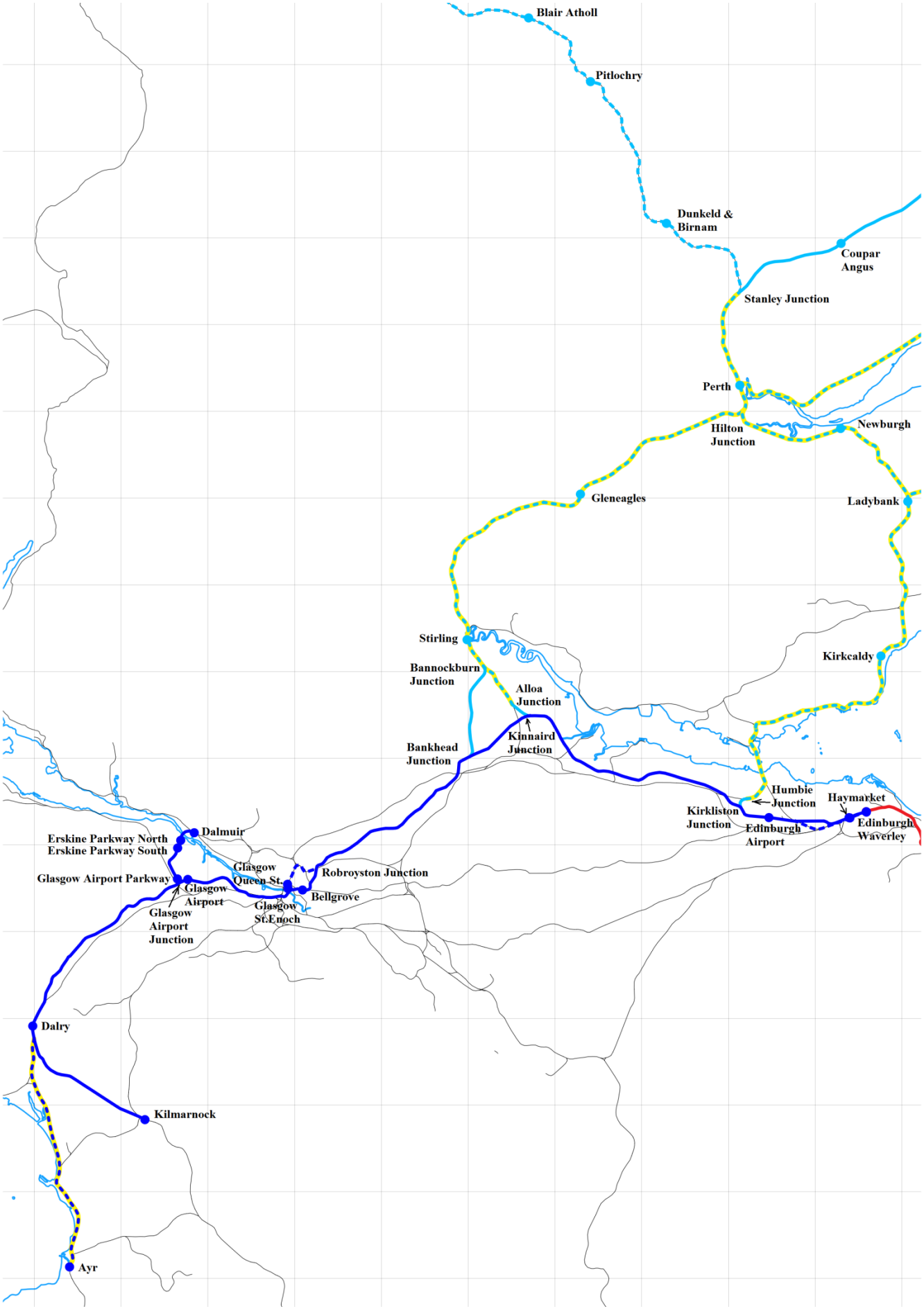

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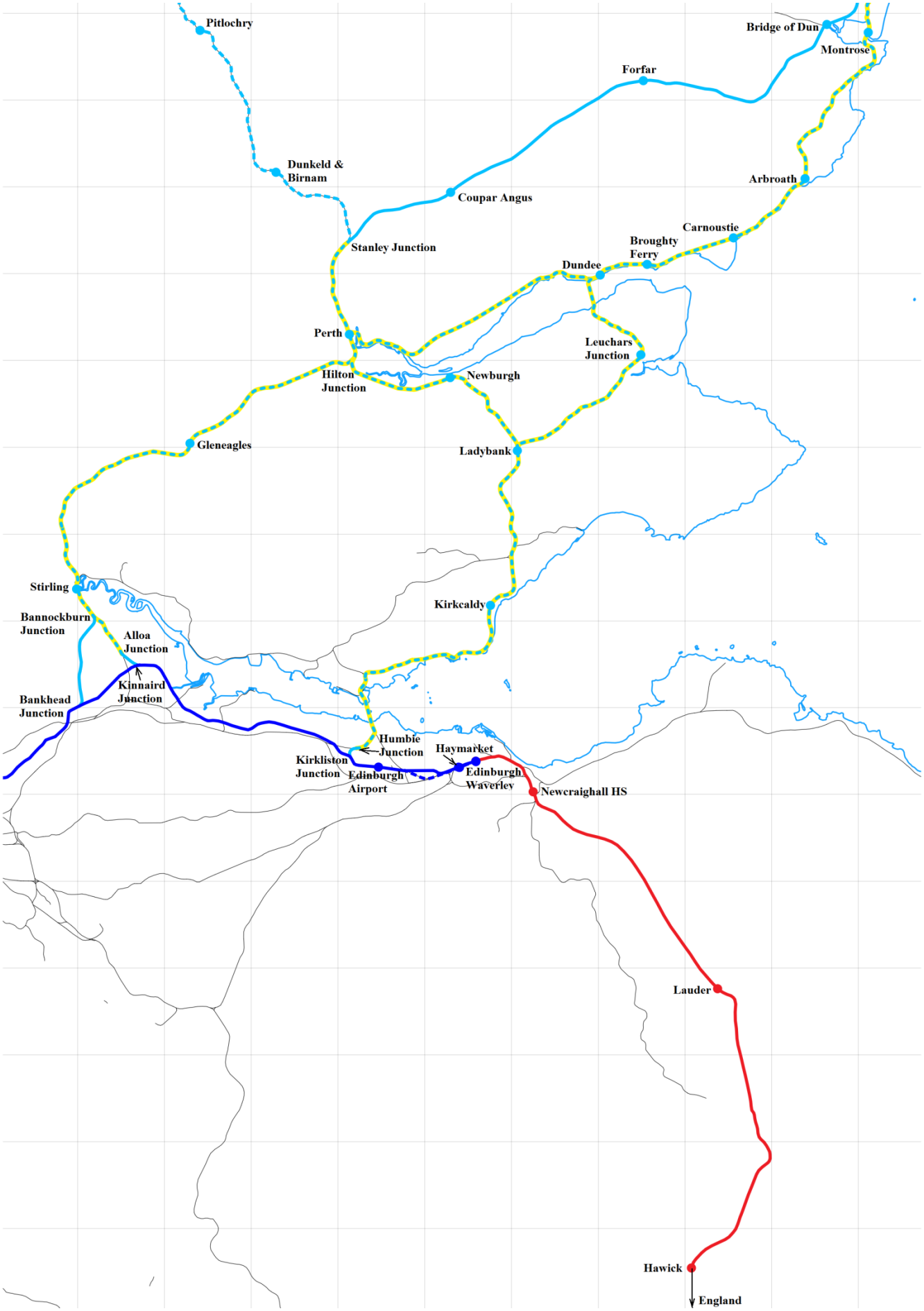

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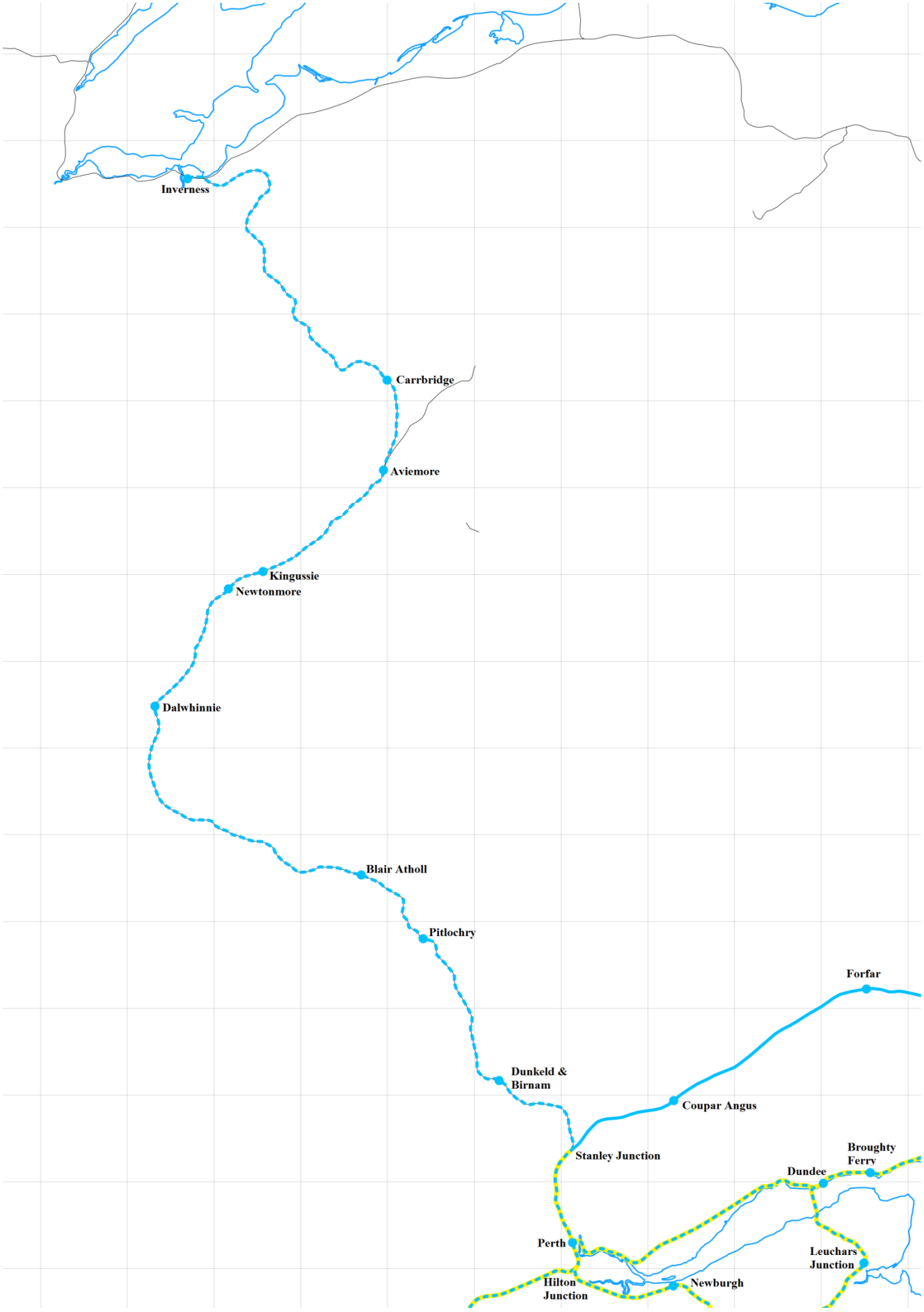

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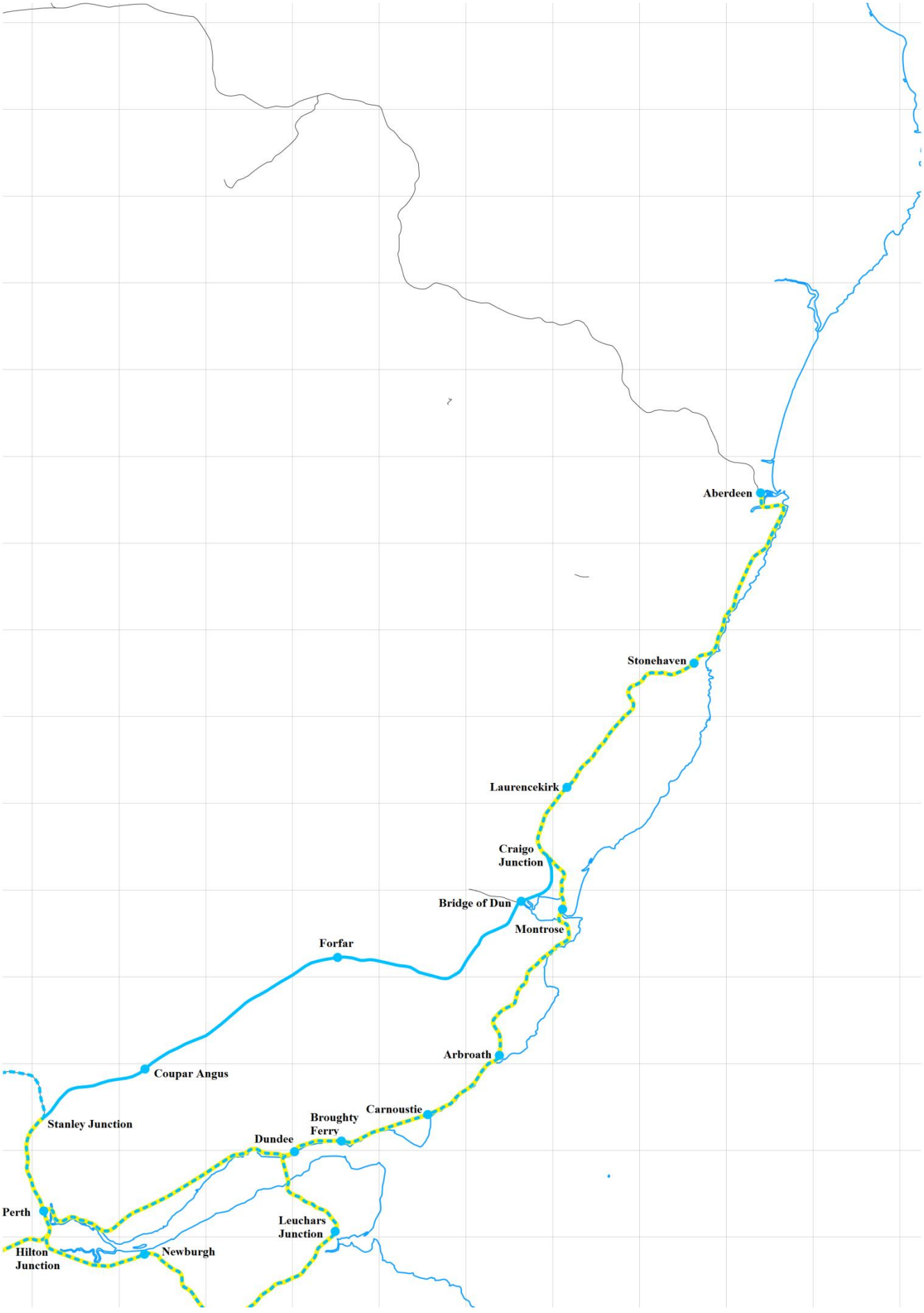

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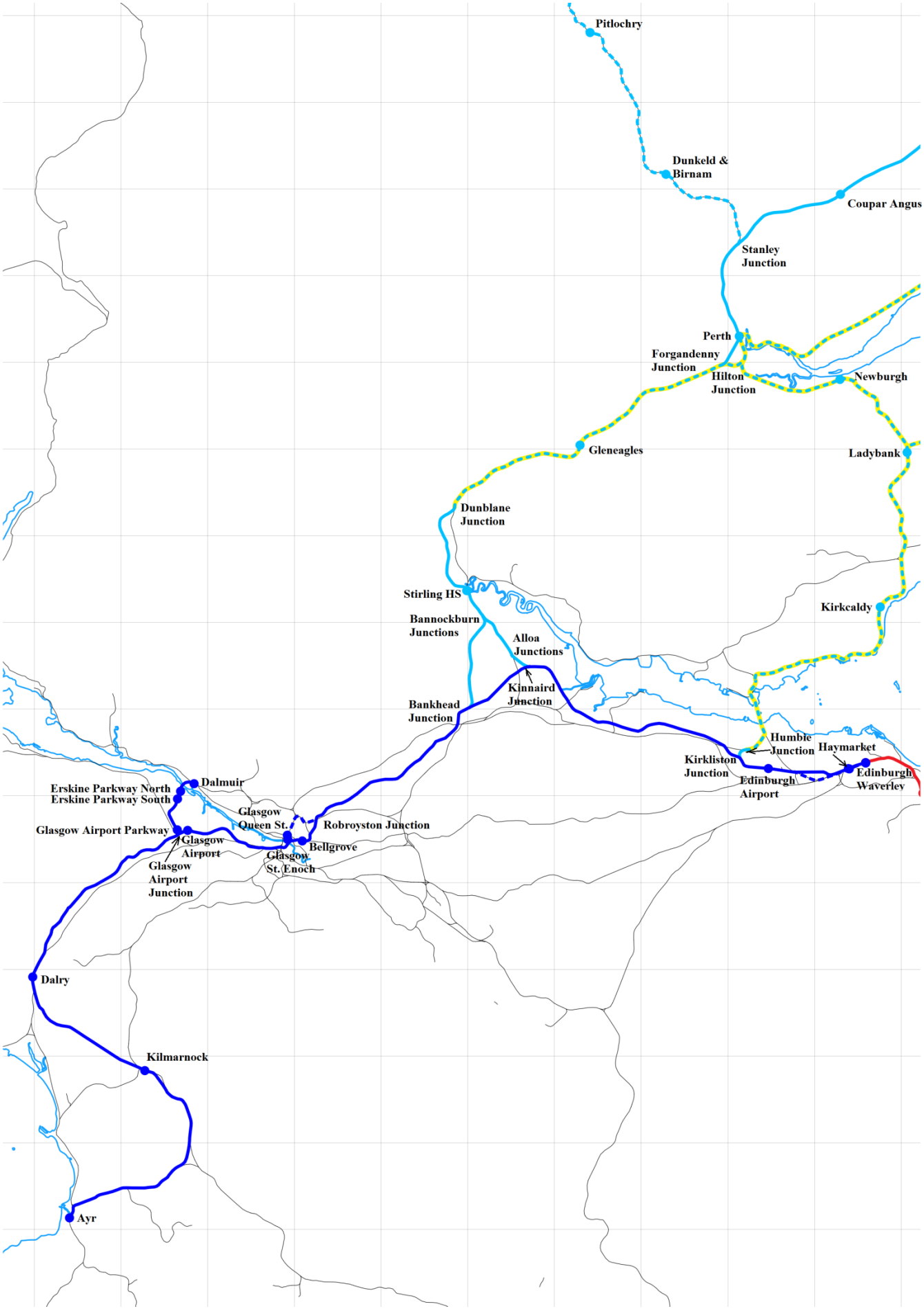

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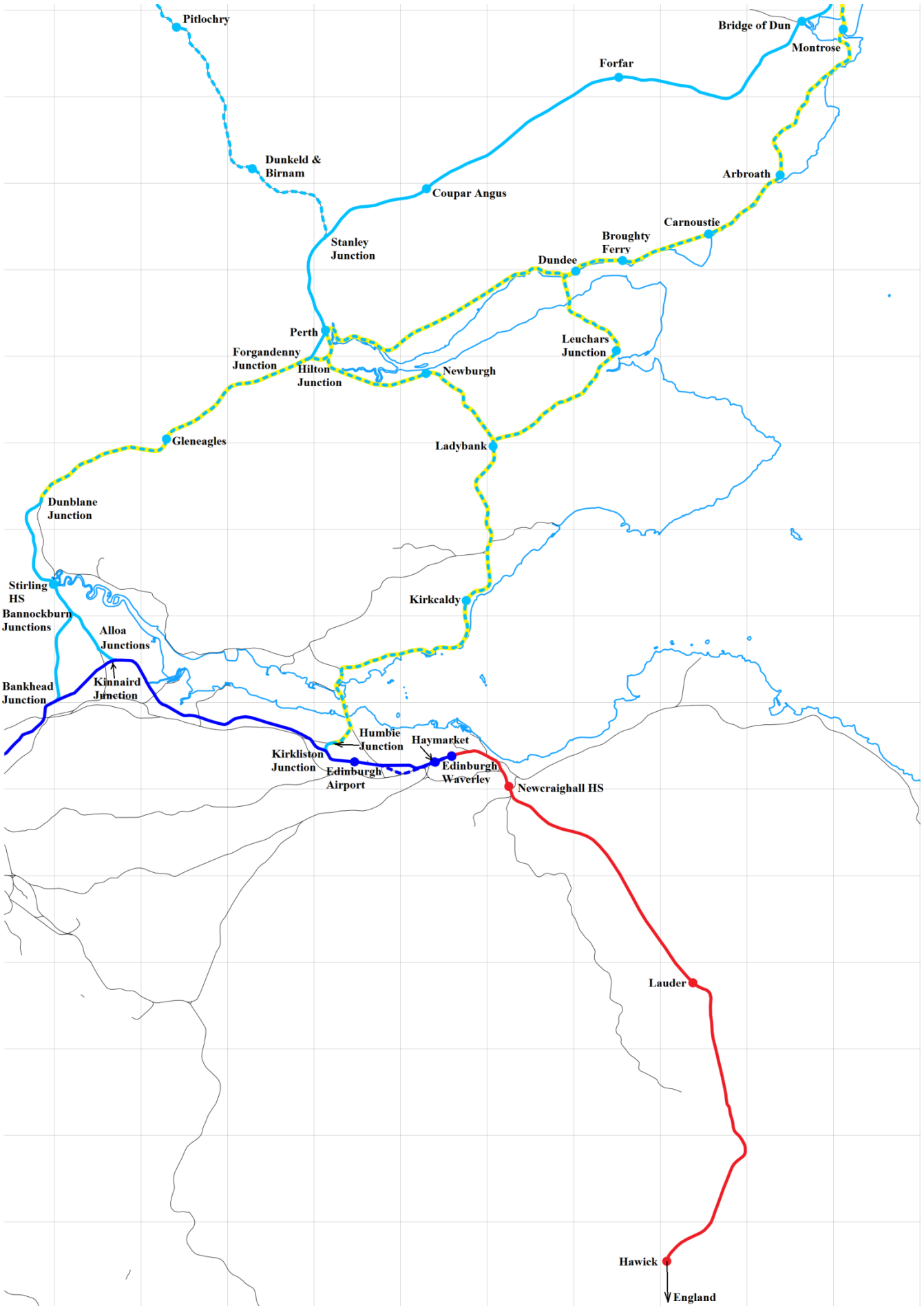

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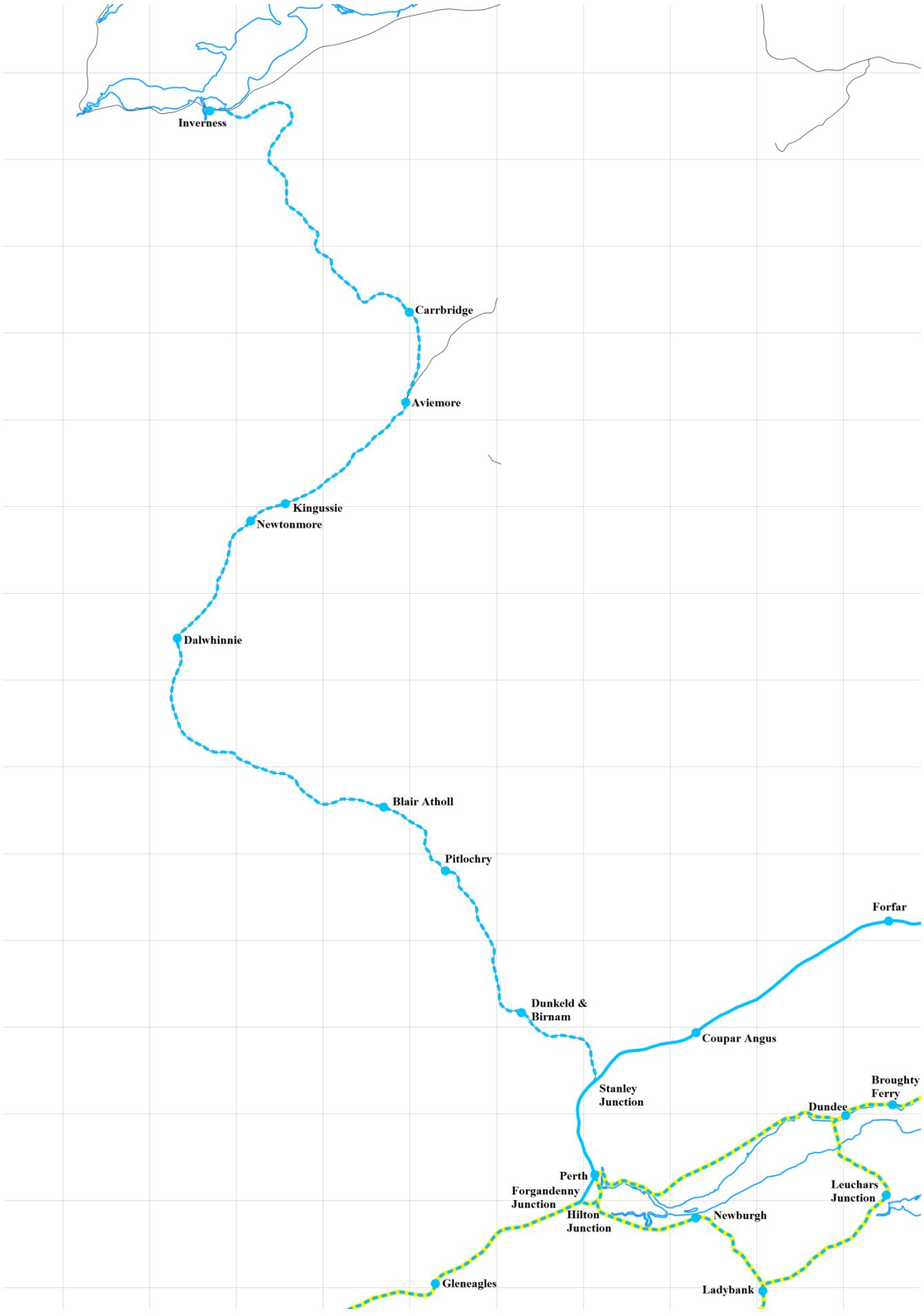

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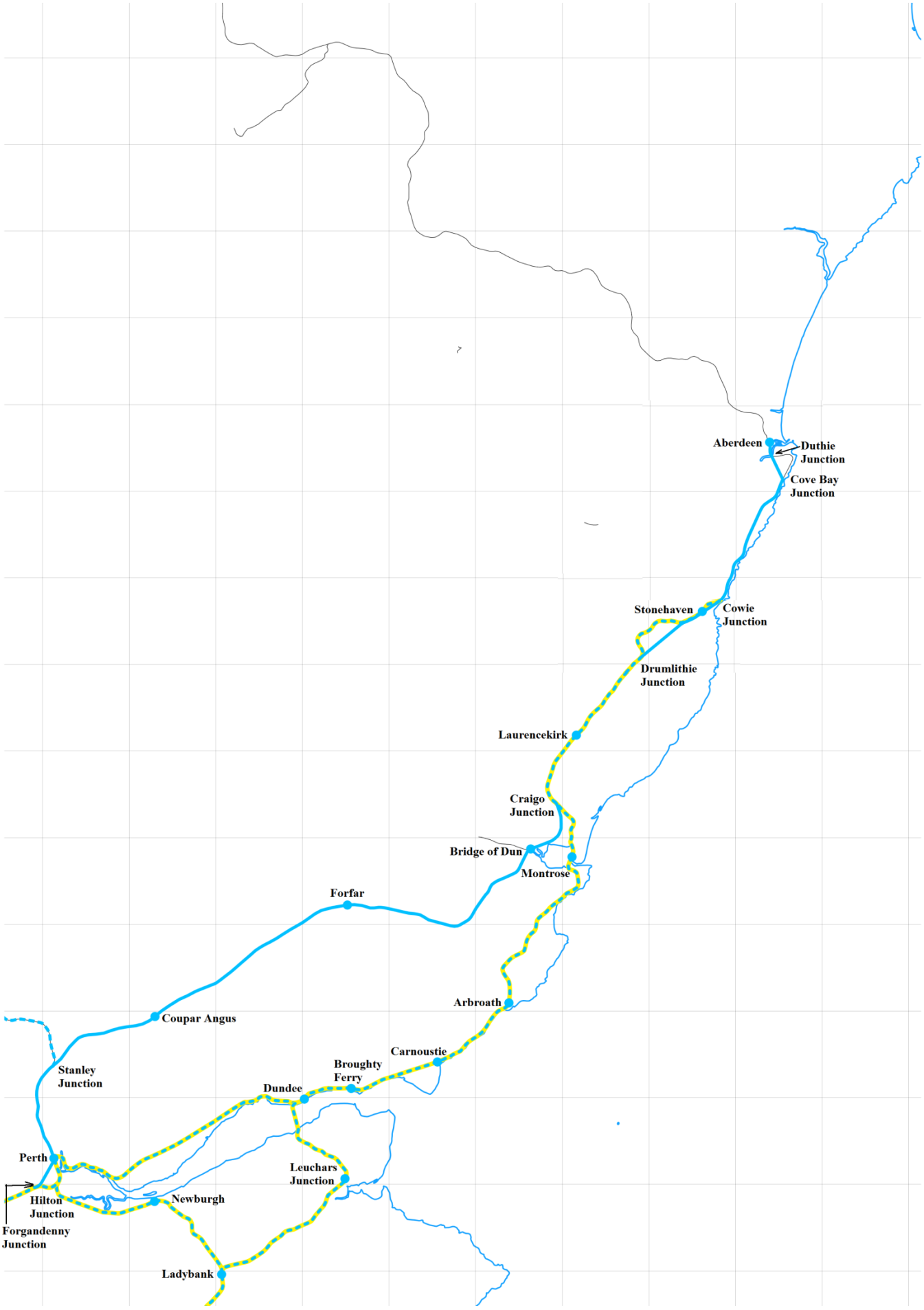

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