

# The South Devon Metro

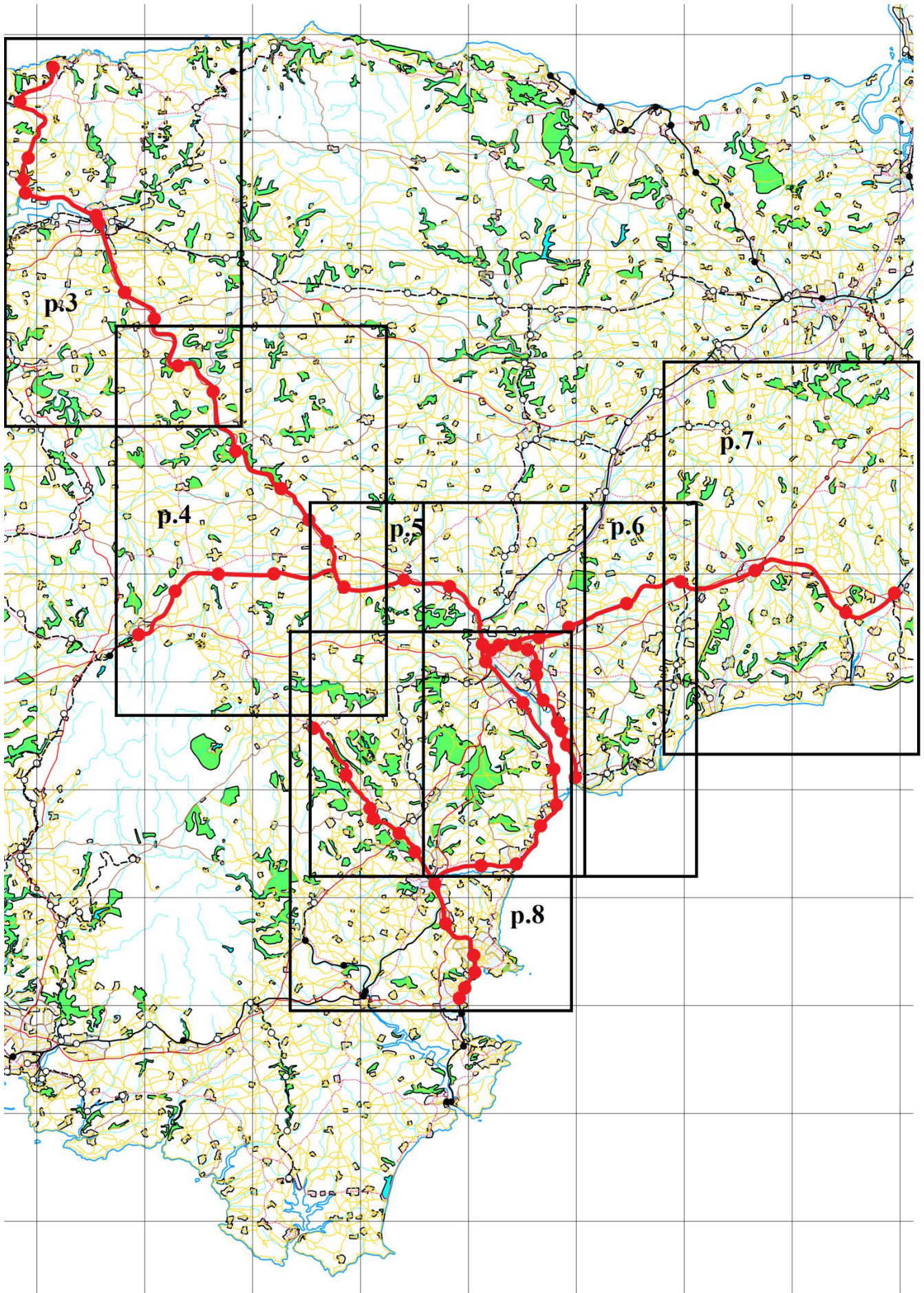
The South Devon Metro is so called because it is focused on Exeter, with a second focus on Torbay, as is perfectly clear from the overall map, and most of the services are clustered around Exeter, to the east and south. However, the Barnstaple branch is also included, since this has a significant commuter traffic into Exeter, and so the proposed restoration to Ilfracombe (which is about as far north as Devon extends!) is likewise included, as it will provide a fast service from Barnstaple. The South Devon Metro thus covers much of Devon, from Woolacombe in the west to Axminster in the east, and from Ilfracombe in the north to Paignton in the south. It uses existing or former routes exclusively.

The proposed metro services are:

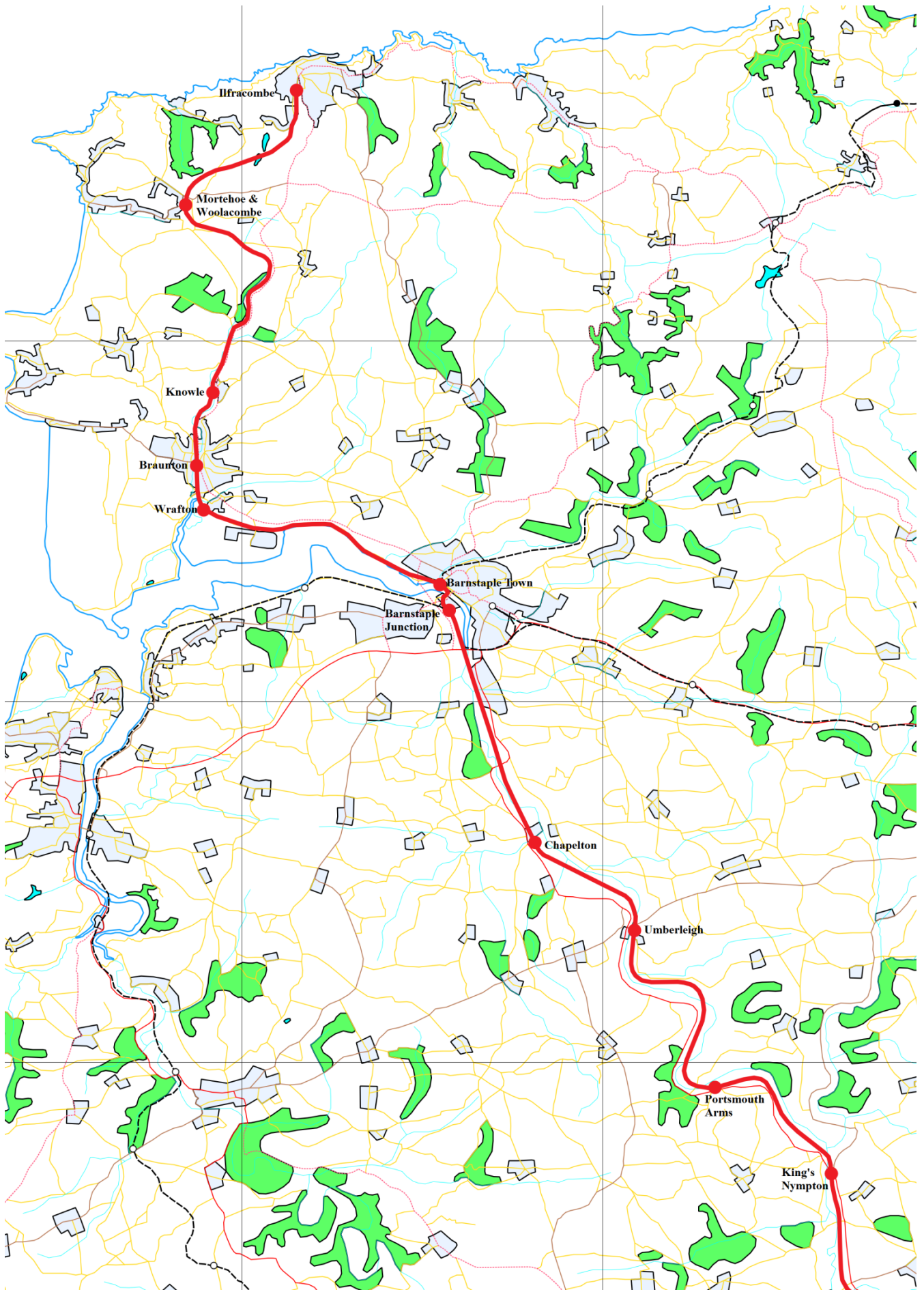
- 2tphRS Exmouth – Lymington Village – Lymington Commando – Exton – Topsham – Newcourt – Digby & Sowton – Wipton – Polsloe Bridge – St. James Park – Exeter Central – Exeter St. David's (splits / joins) –:
  1. – Newton St. Cyres – Crediton – Yeoford – Copplestone – Morchard Rd. – Lapford – Eggesford – Kings Nympton – Portsmouth Arms – Umberleigh – Chapelton – Barnstaple
  2. (reverse) – Exeter St. Thomas – Exminster – Starcross – Dawlish Warren – Dawlish – Teignmouth – Bishopsteignton – Newton Abbot – Kingskerswell – Shiphay – Torre – Torquay – Hollicombe & Preston – Paignton
- 2tphRS Exmouth – Lymington Village – Lymington Commando – Exton – Topsham – Newcourt – Digby & Sowton – Wipton – Polsloe Bridge – St. James Park – Exeter Central – Exeter St. David's (splits / joins) –:
  1. – Newton St. Cyres – Crediton – Yeoford – Bow – North Tawton – Sampford Courtenay – Okehampton
  2. (reverse) – Exeter St. Thomas – Exminster – Starcross – Dawlish Warren – Dawlish – Teignmouth – Bishopsteignton – Newton Abbot – Kingskerswell – Shiphay – Torre – Torquay – Hollicombe & Preston – Paignton
- 4tphRS Moretonhampstead – Lustleigh – Bovey Tracey – Ilsington Rd. – Heathfield – Teigngrace – Newton Abbot – Kingskerswell – Shiphay – Torre – Torquay – Hollicombe & Preston – Paignton
- 4tphR Axminster – Seaton Junction – Honiton – Feniton – Whimble – Broad Clyst – Pinhoe – St. James Park – Exeter Central – Exeter St. David's – Newton St. Cyres – Crediton – Barnstaple Junction – Barnstaple Town – Wrafton – Braunton – Knowle – Morteohoe & Woolacombe – Ilfracombe
- 4tphR Axminster – Seaton Junction – Honiton – Feniton – Whimble – Broad Clyst – Pinhoe – St. James Park – Exeter Central – Exeter St. David's

There are thus 8tph between Axminster and Exeter St. David's and between Exeter St. David's and Crediton, and 4tph between Exmouth and Paignton (8tph between Newton Abbot and Paignton).

The following page gives the key to the various maps of the South Devon Metro, followed by the maps themselves. After that come the detailed service plans. Appendix A describes the layout at Exeter St. David's, the hub of the system.



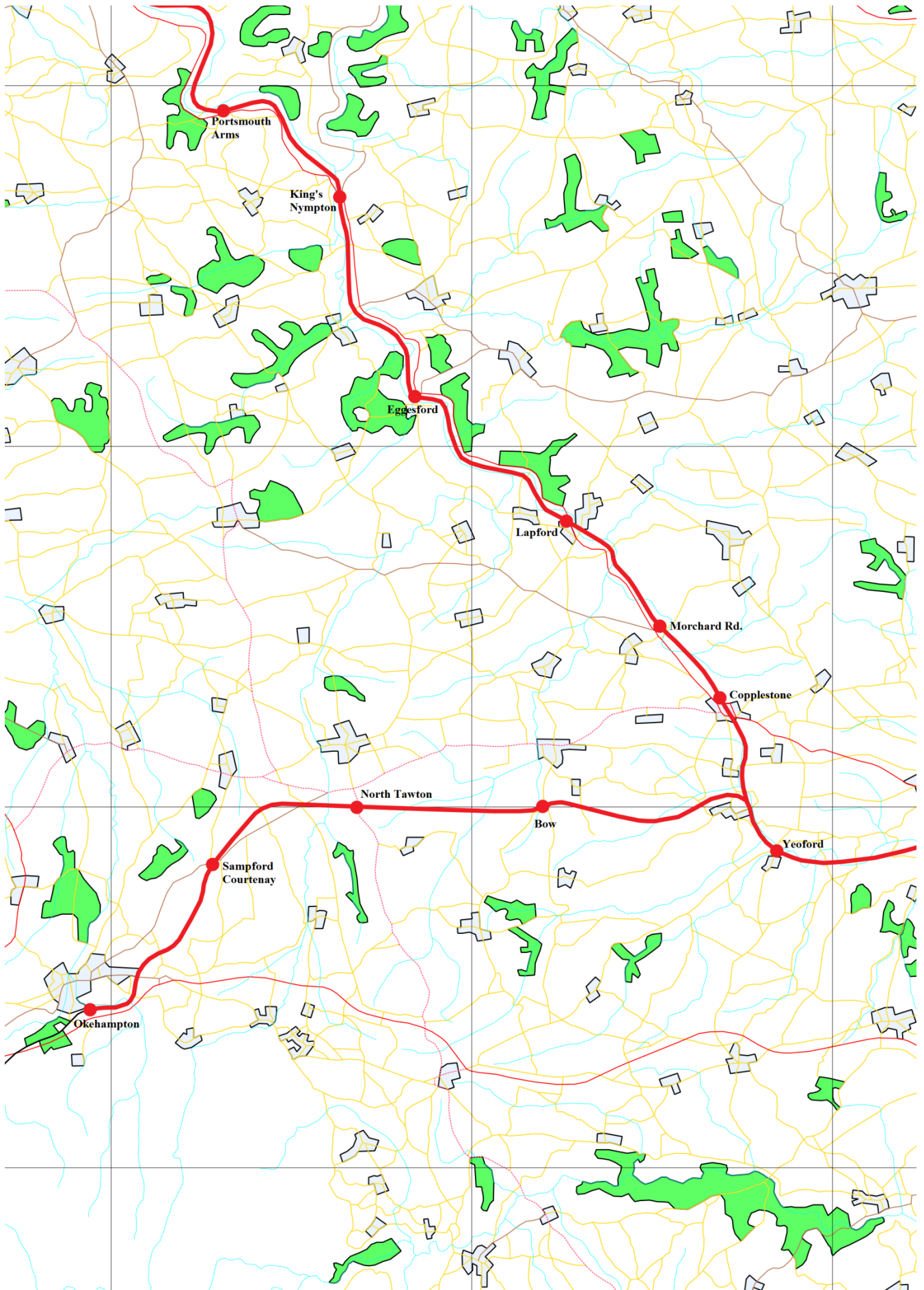




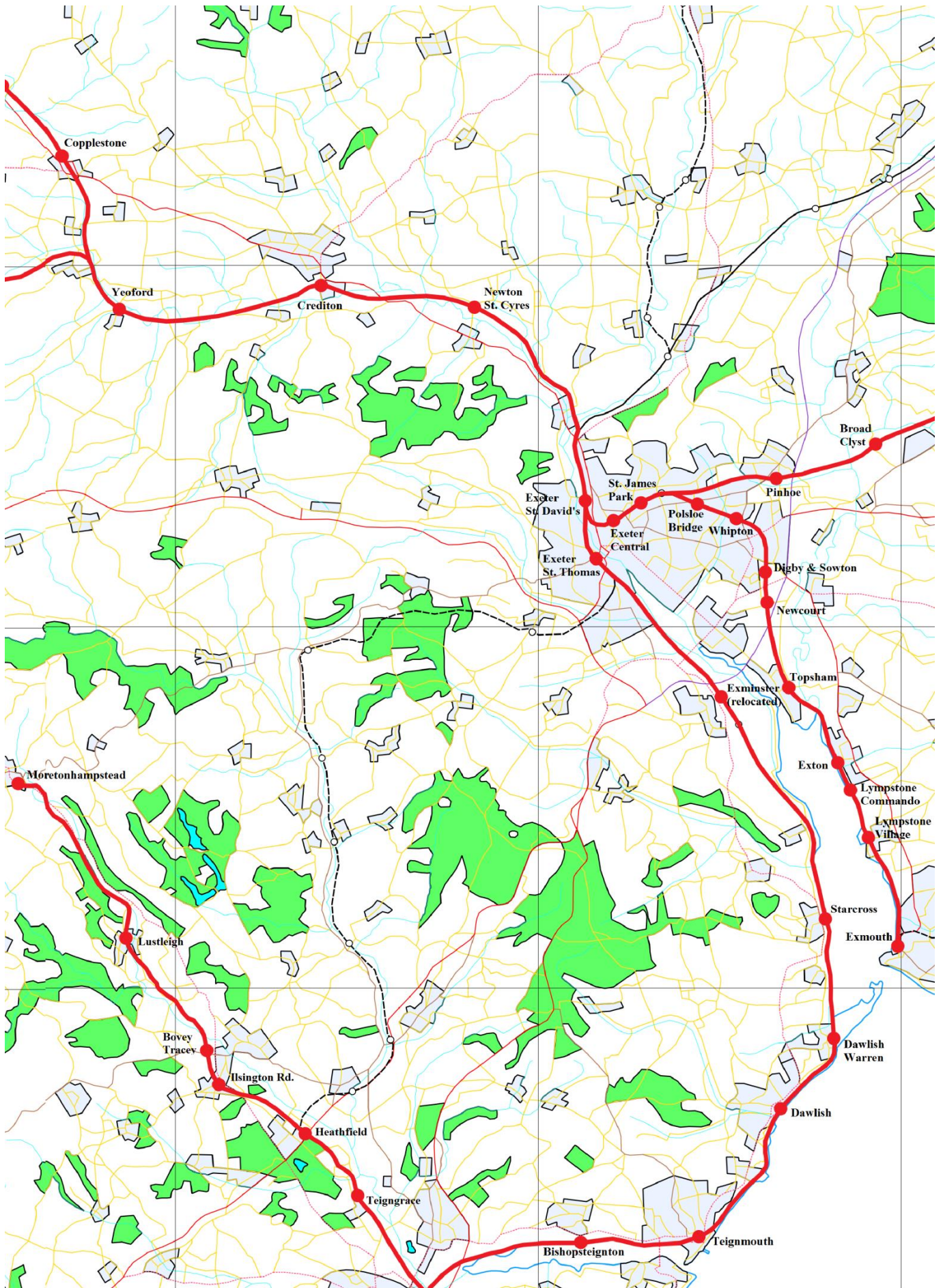
South Devon Metro North Sheet

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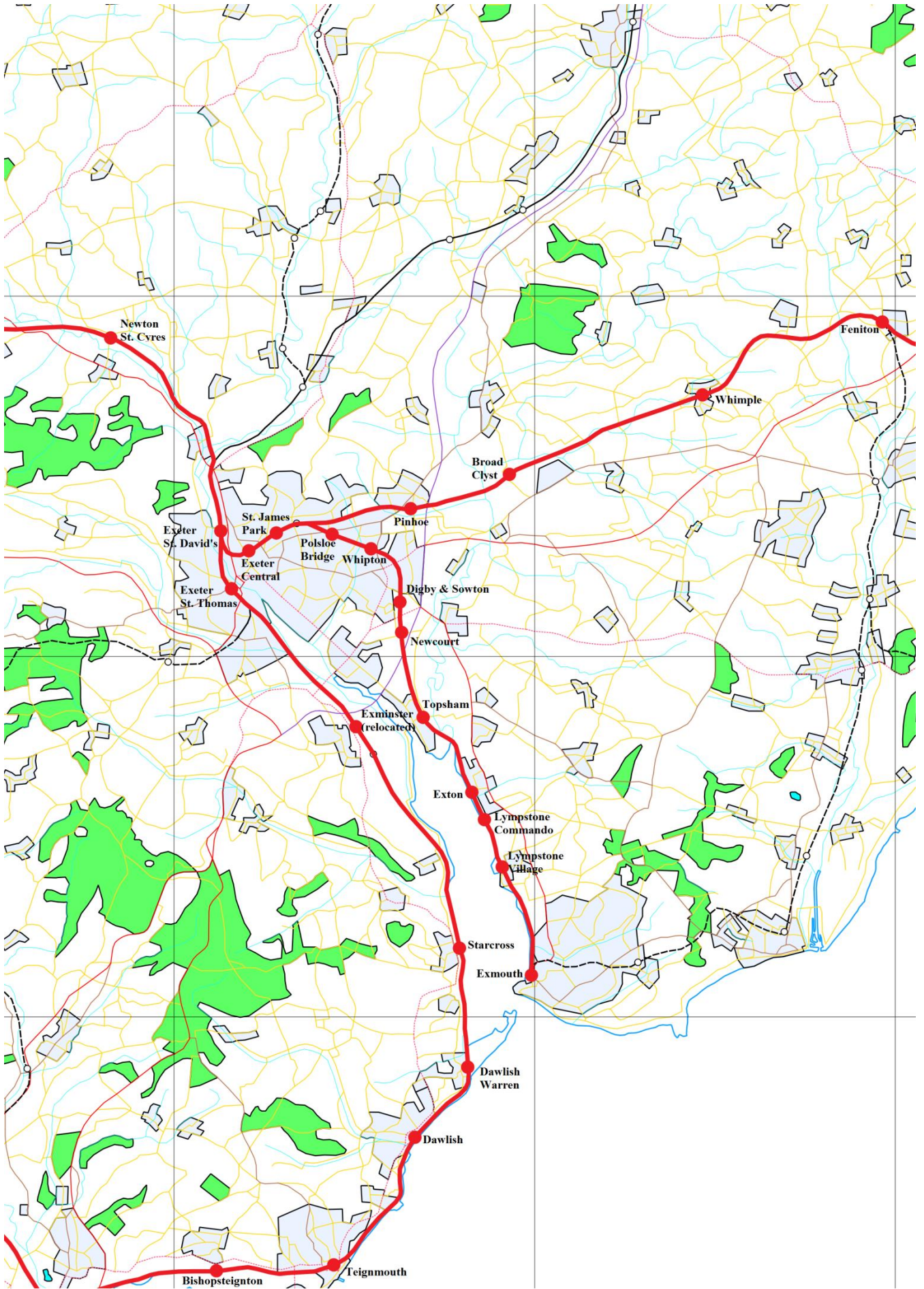
South Devon Metro West Central Sheet

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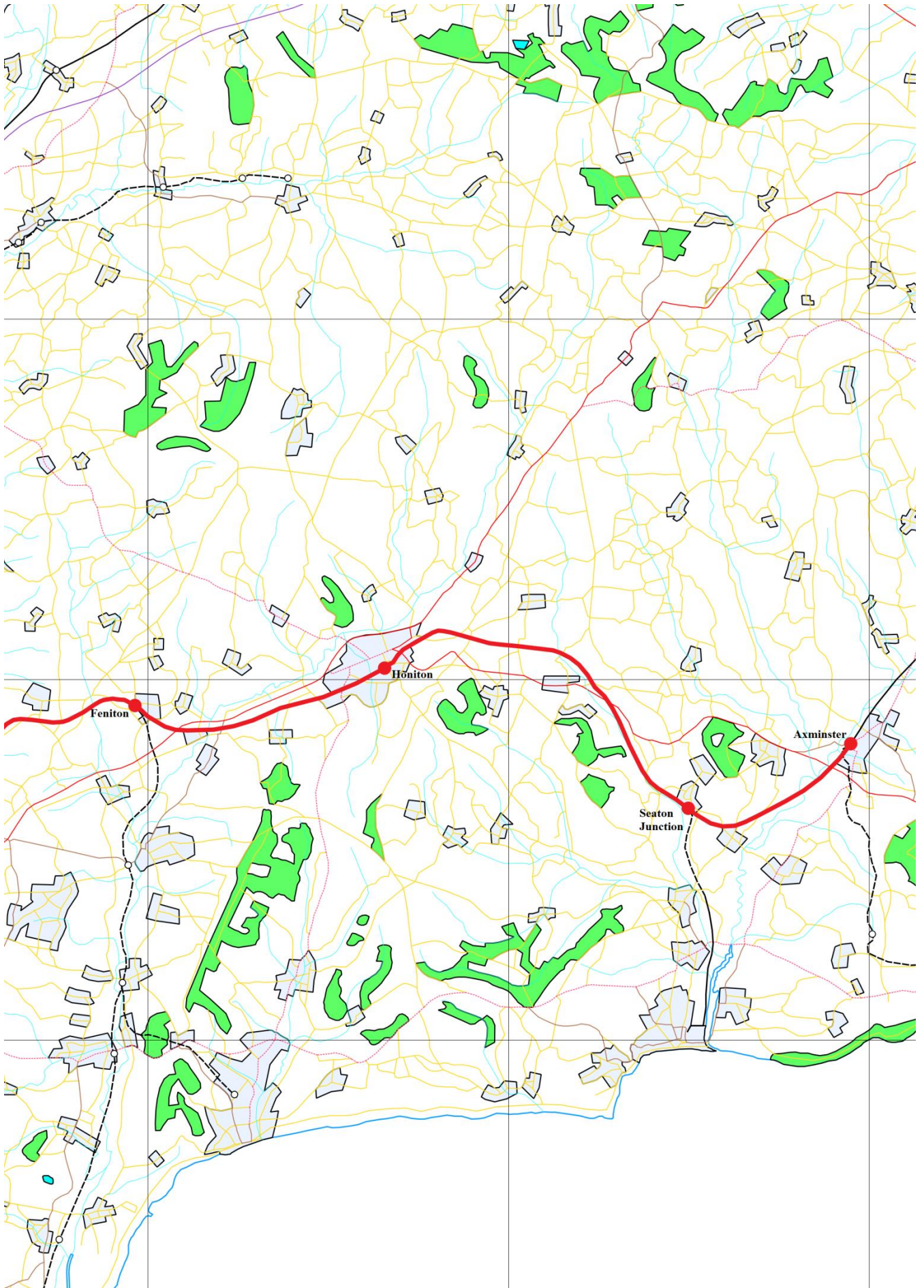


South Devon Metro East Central Sheet

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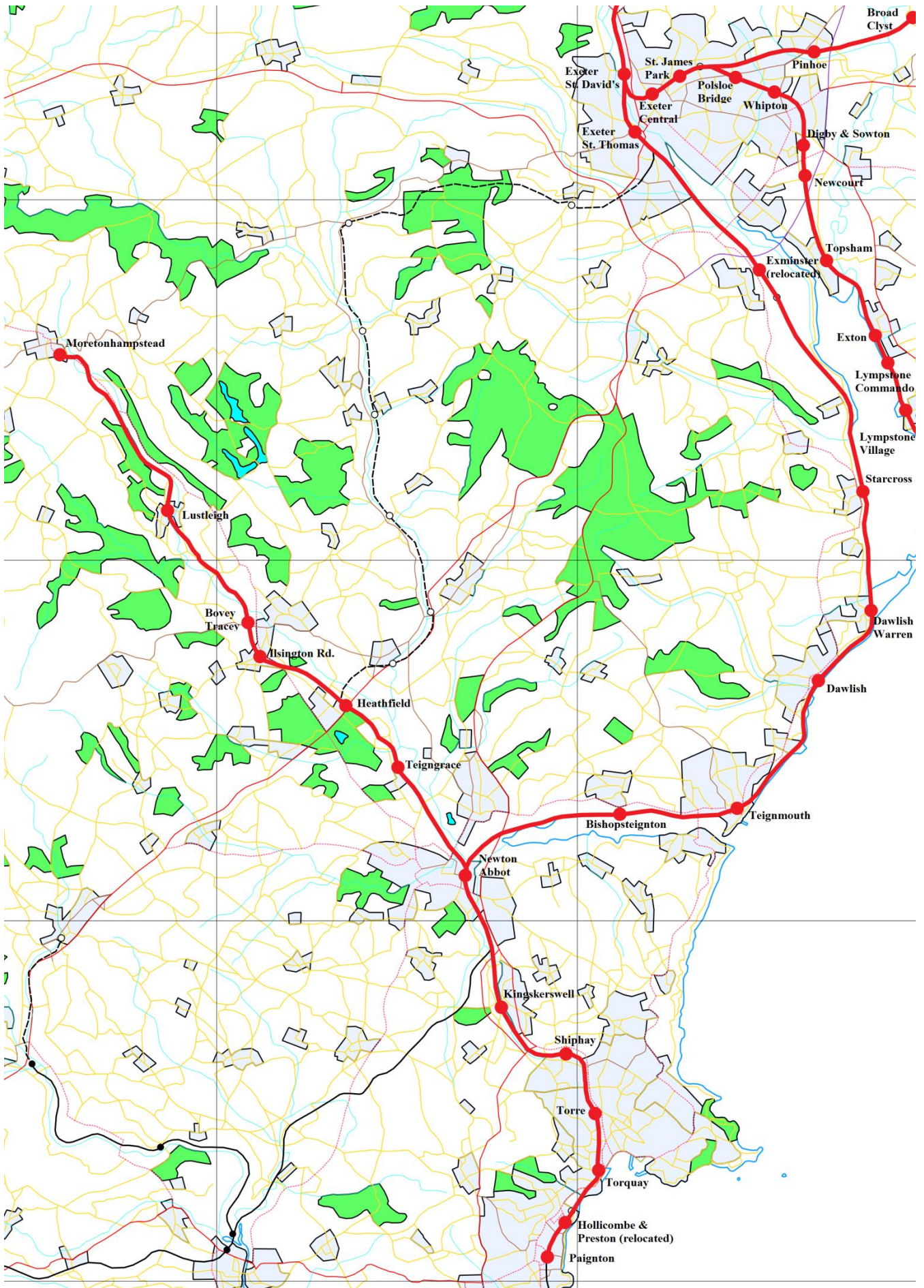


South Devon Metro East Sheet

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South Devon Metro South Sheet

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## *The Service Plans*

In deriving the service plans, it is assumed that the LSW route to Plymouth via Okehampton has its own tracks between Exeter and Cowley Bridge Junction, so is completely independent of the GW route. It is also assumed that the section between Exmouth Junction and Exeter Central is 4-track, paired by direction, with a flyover at Exmouth Junction. The Exmouth branch is double track at least as far as Topsham (as it formerly was, so this is just replacing former infrastructure). The following stations have four platforms (2 island platforms) allowing cross-platform interchange and overtaking: Exeter Central, Axminster, Crediton and Newton Abbot. The following stations have an overtaking capability only, i.e. the fast tracks through the centre, platforms only on overtaking loops: Broad Clyst, Dawlish Warren and Eggesford. Finally, Okehampton, and Barnstaple Junction each have a third, through platform, enabling the stopping service to terminate (in the centre platform) out of the way of the through service(s).

The metro services are listed at the beginning of the article. The following Regional Metro services must also be accommodated (see the article ‘Regional Metro Services to the West Country’ for full details):

- 2tphR Paddington – Old Oak Common – LHR Interchange – Reading – Thatcham – (\*) – Pewsey – Westbury – Frome – Castle Cary – Taunton – Tiverton Parkway – Cullompton – Exeter St. David’s – Dawlish – Teignmouth – Newton Abbot – Totnes – Brent – Ivybridge – Plymouth
- 2tphR York – Micklefield – Leeds City – Wakefield Westgate – Rotherham – Sheffield Midland – Chesterfield – Derby – Burton on Trent – Tamworth – Birmingham New St. – University – Bromsgrove – Droitwich Spa – Worcester Shrub Hill – Ashchurch – Cheltenham Spa – Gloucester (reverse) – Bristol Parkway – Bristol Temple Meads – Weston Super Mare – Highbridge – Bridgwater – Taunton – Tiverton Parkway – Cullompton – Exeter St. David’s – Dawlish – Teignmouth – Newton Abbot – Totnes – Brent – Ivybridge – Plymouth
- 2tphR Swansea – Neath – Port Talbot – Bridgend – Cardiff – Newport – Filton Abbey Wood – Bristol Temple Meads – Weston Super Mare – Highbridge – Bridgwater – Taunton – Tiverton Parkway – Cullompton – Exeter St. David’s – Dawlish – Teignmouth – Newton Abbot – Totnes – Brent – Ivybridge – Plymouth
- 2tphR Stalybridge – Ashton-under-Lyne – Manchester Victoris – Salford Central – Eccles – Warrington Bank Quay – Helsby – Chester – Wrexham General – Ruabon – Chirk – Gobowen – Shrewsbury Church Stretton – Craven Arms – Ludlow – Leominster – Hereford – Abergavenny – Pontypool & New Inn – Cwmbran – Newport (reverse) – Filton Abbey Wood – Bristol Temple Meads – Weston Super Mare – Highbridge – Bridgwater – Taunton – Tiverton Parkway – Cullompton – Exeter St. David’s – Dawlish – Teignmouth – Newton Abbot – Totnes – Brent – Ivybridge – Plymouth
- 2tphR Paddington – Old Oak Common – LHR Interchange – Reading – Basingstoke – Salisbury – Tisbury – Gillingham – Templecombe – Yeovil Junction – Crewkerne – Chard Parkway – Axminster – Seaton Junction – Honiton – Exeter Central – Exeter St. David’s – Crediton – Okehampton – Tavistock – Bere Alston – Plymouth
- 2tphR Brighton – Hove – Shoreham-by-Sea – Worthing – Chichester – Havant – Fareham – Southampton – Romsey – Salisbury – Tisbury – Gillingham – Templecombe – Yeovil Junction – Crewkerne – Chard Parkway – Axminster – Seaton Junction – Honiton – Exeter Central – Exeter St. David’s – Crediton – Okehampton – Tavistock – Bere Alston – Plymouth
- 2tphR Cleethorpes – Grimsby Town – Barnetby – Market Rasen – Lincoln – Newark Castle – Nottingham – East Midlands Parkway – Loughborough – Leicester – Market Harborough – Kettering – Wellingborough – Bedford Midland – Bletchley – Winslow – Calvert – Bicester



Village – Oxford Parkway – Oxford – Wantage Rd. Swindon – Royal Wootton Bassett – Chippenham – Melksham – Holt Junction – Trowbridge – Westbury – Frome – Castle Cary – Yeovil Pen Mill – Yeovil Junction – Crewkerne – Chard Parkway – Axminster – Seaton Junction – Honiton – Exeter Central – Exeter St. David’s – Crediton – Okehampton – Tavistock – Bere Alston – Plymouth

- 2tphR Norwich – Wymondham – Thetford – Ely – Cambridge – Sandy – Bedford St. John’s – Bletchley – Winslow – Calvert – Bicester Village – Oxford Parkway – Oxford – Wantage Rd. Swindon – Royal Wootton Bassett – Chippenham – Melksham – Holt Junction – Trowbridge – Westbury – Frome – Castle Cary – Yeovil Pen Mill – Yeovil Junction – Crewkerne – Chard Parkway – Axminster – Seaton Junction – Honiton – Exeter Central – Exeter St. David’s – Crediton – Okehampton – Tavistock – Bere Alston – Plymouth

(\*) The Paddington – Plymouth via Newbury service has no stop at Newbury as it has to overtake the LHR Shuttle to Marlborough there. However, it makes a connection for Newbury at Thatcham, and from Newbury at Pewsey.

The services on HS7 don’t in any way have to be ‘accommodated’, having their own tracks throughout, but the following services serve Exeter:

- 2tphG (HS7) Newcastle – Consett – Durham (Relly Mill) – Darlington Bank Top – York – Leeds New Lane – Huddersfield – Sheffield HS – Derby – Birmingham Interchange – Worcester Shrub Hill – Cheltenham Spa – Bristol Parkway HS – Bristol Temple Meads HS – Taunton – Exeter St. David’s – Plymouth
- 2tphC (HS4) Paddington – Old Oak Common – LHR Interchange – Bristol Parkway HS – Bristol Temple Meads HS – Taunton – Exeter St. David’s – Plymouth → stations in Cornwall
- 2tphG (HS7) Exeter St. David’s – Dunsford – Moretonhampstead – Postbridge – Two Bridges (bus connection for Princetown) – Yelverton Rd. – Plymouth

The key station is Exeter St. David’s, where there are extensive cross-platform interchange facilities. Appendix A gives the (amended) layout of the station, illustrating the contraflow arrangement around the two (classic) island platforms. The representative hourly interchange pattern is (platform numbers in parentheses):

- 00G (HS7) Newcastle – Plymouth (7)
- G (HS7) Exeter St. David’s – Plymouth (8)
- R Paddington – Plymouth via Newton Abbot (4)
- R Paddington – Plymouth via Okehampton (3)
- RS Axminster – Exeter St. David’s (0)
- 04RS Exmouth – Barnstaple Junction (1)
- RS Exmouth – Paignton (1A)
- 07R (Stalybridge – ) Manchester – Plymouth via Newton Abbot (4)
- R Norwich – Plymouth via Okehampton (3)
- 12R Axminster – Ilfracombe (3)
- 15C (HS4) Paddington – Plymouth → stations on Cornwall (7)
- R York – Plymouth via Newton Abbot (4)



R Brighton – Plymouth via Okehampton (3)

RS Axminster – Exeter St. David's (0)

20RS Exmouth – Okehampton (1)

RS Exmouth – Paignton (1A)

23R Swansea – Plymouth via Newton Abbot (4)

R Cleethorpes – Plymouth via Okehampton (3)

27R Axminster – Ilfracombe (3)

– repeating at 30, 34, 37, 42, 45, 50, 53 and 57 minutes past.

Representative hourly cross-platform interchange pattern at Exeter Central

00R Paddington – Plymouth

RS Exmouth – Barnstaple Junction / Paignton

07R Norwich – Plymouth

(no connection)

15R Brighton – Plymouth

RS Exmouth – Okehampton / Paignton

23R Cleethorpes – Plymouth

(no connection)

– repeating at 30, 37, 45 and 53 minutes past. Note that the Exmouth service arrives first at Central, and waits there to be overtaken by the Plymouth service.

Representative hourly cross-platform interchange pattern at Crediton is:

00R Paddington – Plymouth

R Axminster – Ilfracombe

07R Norwich – Plymouth

RS Exmouth – Barnstaple Junction

15R Brighton – Plymouth

R Axminster – Ilfracombe

23R Cleethorpes – Plymouth

RS Exmouth – Okehampton

– repeating at 30, 37, 45 and 53 minutes past.

Representative hourly cross-platform interchange pattern at Okehampton is:

00R Paddington – Plymouth

RS Exmouth – Okehampton

07R Norwich – Plymouth

(no connection)



15R Brighton – Plymouth  
(no connection)

23R Cleethorpes – Plymouth  
(no connection)

– repeating at 30, 37, 45 and 53 minutes past.

Representative hourly cross-platform interchange pattern at Axminster is:

00R Paddington – Plymouth  
RS Axminster – Ilfracombe

07R Norwich – Plymouth  
RS Axminster – Exeter St. David's

15R Brighton – Plymouth  
RS Axminster – Ilfracombe

23R Cleethorpes – Plymouth  
RS Axminster – Exeter St. David's

– repeating at 30, 37, 45 and 53 minutes past. Note that on this section (indeed as far as Crediton) the Axminster – Ilfracombe is an all-stations stopping service. Note also that the mainline trains also stop at Seaton Junction and Honiton, so over this section have exactly the same timings as the metro trains. (Axminster, Seaton Junction and Honiton thus have a 16tph service to Exeter Central and St. David's.)

Representative hourly cross-platform interchange pattern at Newton Abbot is:

00R Paddington – Plymouth  
RS Exmouth – Paignton

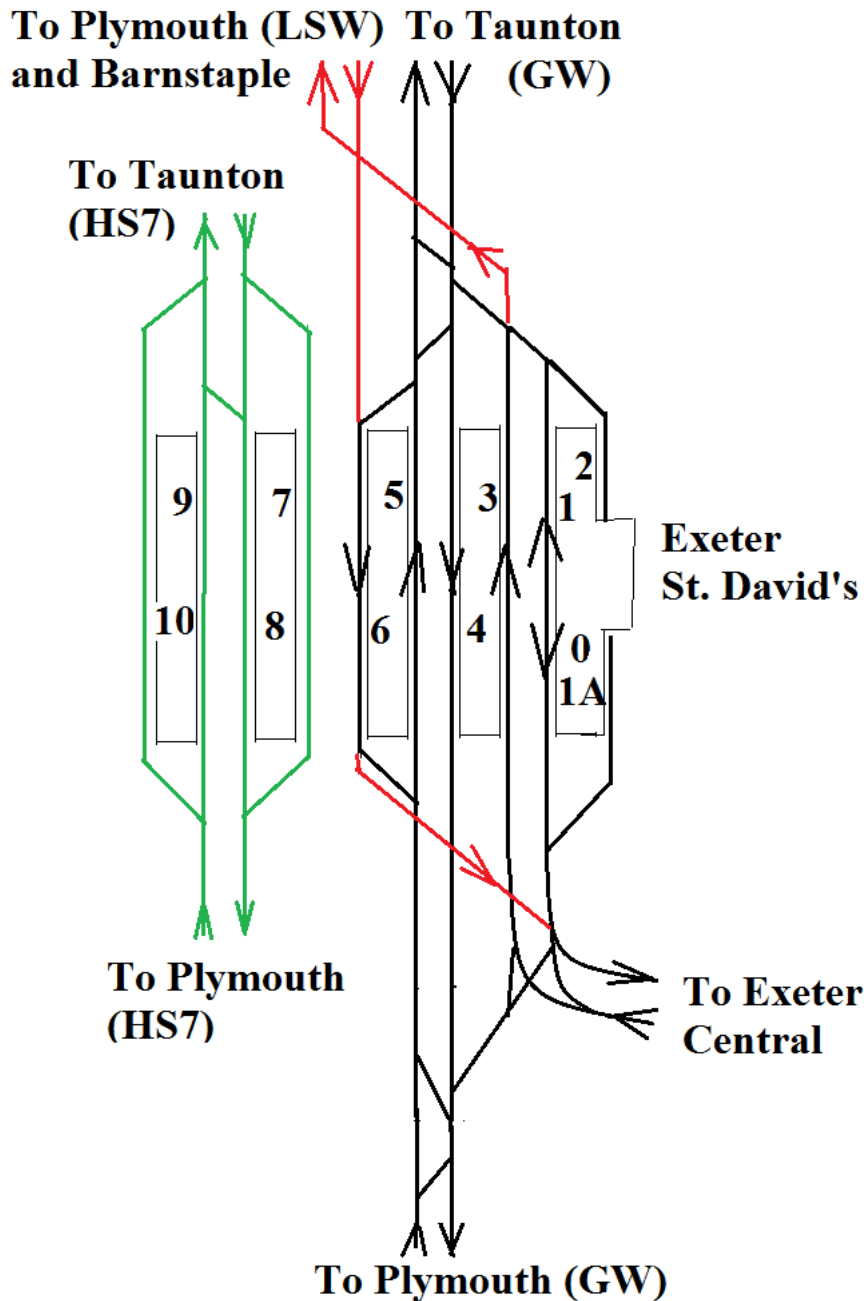
07R (Stalybridge – ) Manchester – Plymouth  
RS Moretonhampstead – Paignton

15R York – Plymouth  
RS Exmouth – Paignton

23R Swansea – Plymouth  
RS Moretonhampstead – Paignton

– repeating at 30, 37, 45 and 53 minutes past. Note that Torbay is served solely by the South Devon Metro (and every mainline train makes a connection at Newton Abbot).

# Appendix A – Exeter St. David's Station Arrangements



The layout plan is a topological diagram, showing connections only. It gives no indication of shape, size or orientation. Those lines in black are the existing layout. Those in green illustrate the proposed HS7 station, immediately adjacent. The new lines, in red, (which cross the other classic lines – no pointwork,) enable a contraflow arrangement around the two island platforms, such that each pair of Plymouth trains make cross-platform connections with each other, thus each train to Plymouth via Newton Abbot, on platform 4, connects with its corresponding train to Plymouth via Okehampton, on platform 3. Likewise each train from Plymouth via Newton Abbot, on platform 5, connects with its corresponding train from Plymouth via Okehampton, on platform 6.

There is no possibility of these trains getting in each other's way since they approach and depart from the platforms in opposite directions. Accordingly, the connecting lines crossing on the flat are entirely appropriate. Even

in the other case there is no problem: a train to Plymouth via Newton Abbot, on platform 4, and a train from Plymouth via Okehampton, on platform 6, approach the station by entirely separate routes, as do a train from Plymouth via Newton Abbot, on platform 5, and a train to Plymouth via Okehampton, on platform 3. The pairs of trains in these last two examples must not attempt to **depart** from St. David's simultaneously, or they would get in each other's way, but arrival is no problem.

Platform 0 is new (but probably existed previously) and platform 2 has no use in the current plans (but could serve a future service to Tiverton, by the restored route). The HS7 provision is included because HS7, most unusually, has a stopping service between Exeter and Plymouth, serving various locations around Dartmoor, which currently have no service at all.