



What does the next
3.5 years of CP6
look like?



Kevin Collins
Project Director Capital Delivery – Wales & Western

Our Vision: Putting Passengers First

We want to be a company that **is on the side of passengers and freight users;** that is **easy to engage with, efficient and a dependable partner;** **a company people are proud to work for;** **instinctively recognised as an industry leader.**

Who we are

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With a 5,000-strong workforce and 2,700 miles of railway, our routes are here to serve communities and businesses of Wales, the Thames Valley, West of England and the South West Peninsula.

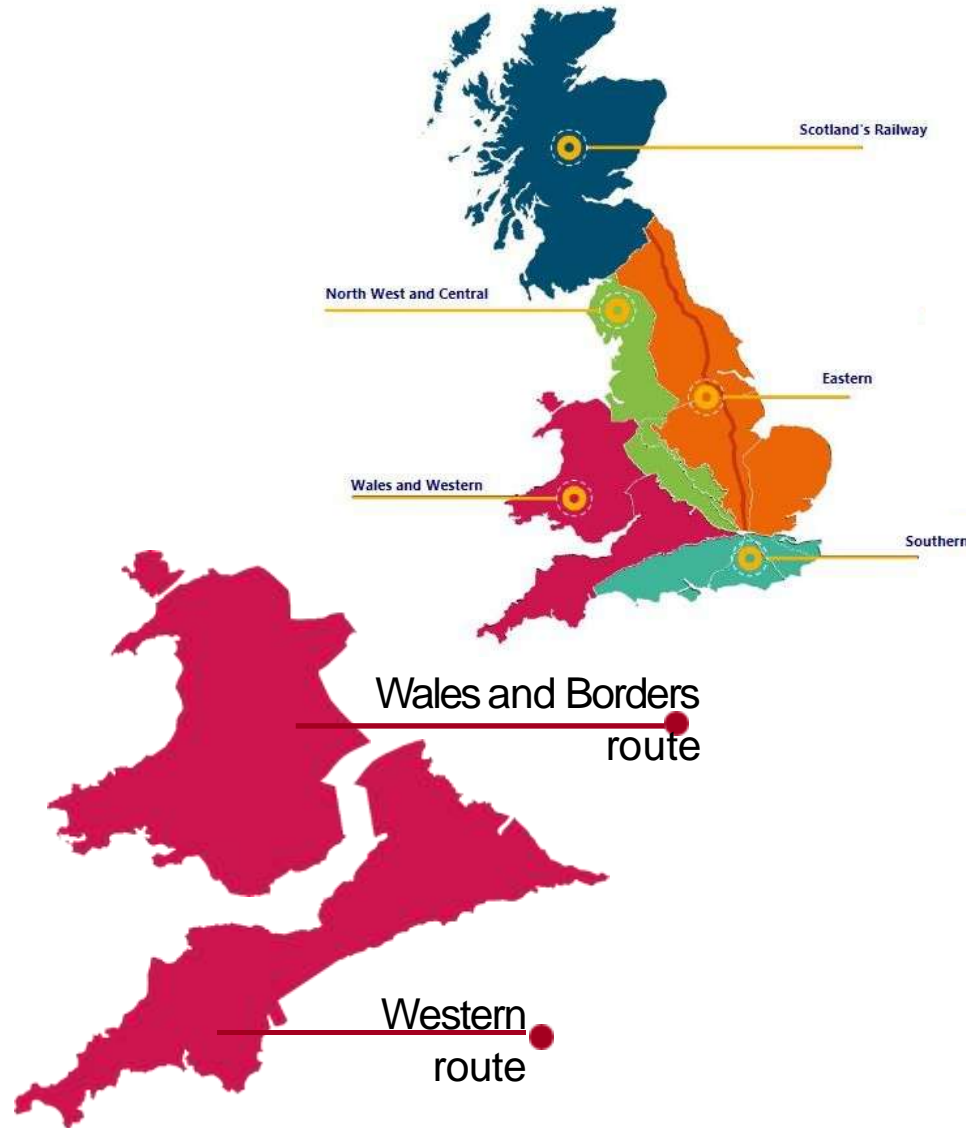
We transport commuters to key employment hubs including London, Cardiff, Bristol, Birmingham, Manchester and Liverpool. We directly serve London Heathrow, Europe's busiest international airport and provide connections to Cardiff, Bristol, Birmingham, Manchester, and London Gatwick airports. We support leisure and tourism in all of these areas and support critical freight services, notably aggregates, moving millions of tonnes of freight every year.

We are focussed on getting the basics right; putting the passenger first to provide a safe, reliable and high performing railway every day. Our most recent accomplishments include the successful delivery of the December 2019 timetable change - the biggest timetable changes to GWR services since 1976 and electrification between London and Cardiff, providing thousands of extra seats and more frequent, quicker and greener journeys.

The road ahead

We are supporting the delivery of Transport for Wales' ambitious vision to transform the railway in Wales and Borders. We are working hard with Transport for London to prepare for the Elizabeth line which will bring a 'metro frequency' service from Reading through London Paddington to Heathrow, Central London, Essex and Kent.

Working through our Alliance with GWR on Western route and through our close working relationship with TfW in Wales, we are delivering a number of projects to create more capacity on the network, reduce journey times and improve facilities for passengers.





stations serving passengers across
Wales, the Borders and Western

Wales and Western



Serving
122m
passengers each year
across the route



5,000
employees across the
combined route

Managing and maintaining



1,750
level crossings



4,500
signals



5,841
bridges

Serving
**London
Heathrow**

and 5 other int'l airports



Moving over

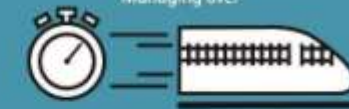


tonnes of freight per week

Managing track covering



2,700 miles



3,540 passenger and
freight services a day

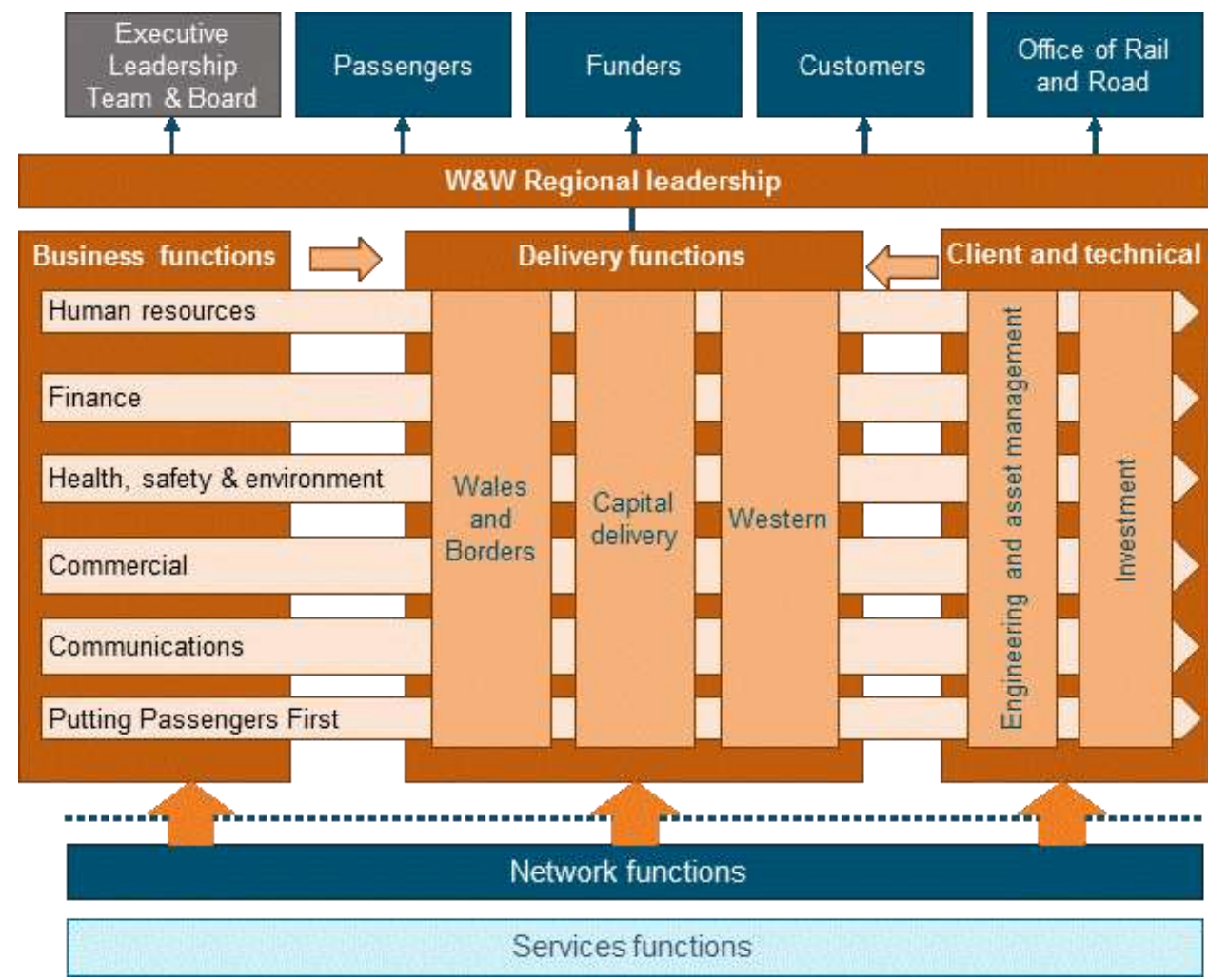


Go Live of the New

ting Model



OFFICIAL Opera

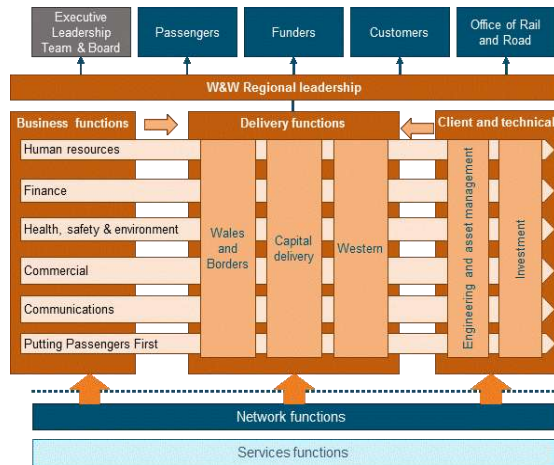


Our new organisation is focused on the delivery of safe, efficient and effective operations, maintenance, renewal and enhancement of our infrastructure through our two routes and Capital Delivery.

These three delivery functions are supported by other regional business functions.

What has changed?

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In June we consolidated our finance, human resources, and communications capabilities into business functions to provide support to the region. Now, on 14 September 2020 we have made the following changes:

- **Our two routes (Wales & Borders, Western):** new structures align with our customers, clarifying accountabilities and defining the support framework we need to deliver effectively and efficiently
- **Capital Delivery:** new matrix structure in line with best-practice construction organisations, maximising efficiency and resources across projects and programmes
- **Health, Safety & Environment:** where possible, safety is delivered at the front line, with a regional team to give a professional, independent overview of safety across the region
- **Commercial:** capability is being consolidated to provide a dedicated specialist service for our three delivery functions (the routes and Capital Delivery) and the region
- **Engineering and Asset Management:** new regional asset management organisation to provide expert asset management and assurance for our routes and Capital Delivery
- **Investment:** re-aligned to fit more closely with our customers, communities and stakeholders, with increased long-term strategic planning capability
- **Putting Passengers First:** team established to embed our new organisational changes and the culture change required to deliver the benefits of this programme
- **Property team:** team welcomed into our regional finance team to manage our property portfolio and deliver value for our stakeholders and customers

These changes ready us for the final stage of devolution, including new accountabilities from Network Services, Technical Authority and System Operator in the coming months.

Why have we made this change?

Train performance	New timetable issues	Capital delivery issues	Cumbersome processes	Supporting our people	Difficult & faceless	Industry leadership	Williams Rail Review
<p>Punctuality declined from 2011 to 2018.</p> <p>Working jointly with operators we are focused on delivering a consistent, reliable and punctual train service.</p> <p>We still need to do much more to turn performance around.</p> 	<p>In May 2018, we had significant reputational issues with the introduction of the new timetable</p> 	<p>Issues with capital delivery have led to numerous reviews. Projects are now delivering more reliably, but stakeholders simply don't believe we exercise good cost control and are cost efficient</p> 	<p>Safety is such a strong part of our culture it is sometimes perceived to be too cumbersome and sometimes used as an excuse</p> 	<p>Internal feedback that we are not supporting our staff</p> 	<p>External feedback that we are seen as difficult and faceless; stakeholders say we must change</p> 	<p>Industry changes require leadership – but we are not set up to respond and are perceived as too arrogant to do this collaboratively</p> 	<p>The Williams Rail Review is underway and through the Putting Passengers First programme we want to demonstrate that we are taking action to better deliver for passengers and be in a strong position to respond to what comes out.</p> 

Putting Passengers & Freight Users First



Wales and Western Executive Team



Mark Langman
managing director
Wales and Western



Bill Kelly
route director
Wales and Borders



Mike Gallop
route director
Western



Stuart Colvert
capital delivery
director



Jane Austin
engineering & asset
management
director



Mike Gurtenne
finance director



Nicky Hughes
communications
director



Lindsey Worton
human resources
director



Paul Clark
health & safety
director



Francis McGary
investment
director



Jadon Silva
commercial
director



Position to be filled
programme director

Wales and Western Capital delivery leadership team September 2020



Heads of function



Stuart Calvert
Capital delivery director



Suzanne Kay
Head of S&SD



Steve Naybour
Head of Programme
Management and Controls



Graeme Tandy
Head of Project and
Construction Management



Alix Briden
Personal Assistant



Martin Robinson
Transformation Director



Debbie Wiles
Business Manager



Simon Gardner
Head of Engineering



Project directors:



Natasha Luddington
Project Director
Enhancements



Dan Holder
Project Director
Signalling



Brian Paynter
Project Director
Track



Michael Contopoulos
Project Director
Building & Civils



Kevin Collins
Project Director
Wales



Matt Jackson
Project Director



Jonathan Davies
Project Director
Track Alliance



Works Delivery



Route Programme Director -
Works Delivery Western
(vacant post)



Dave Stanbury
Route Programme Director -
Works Delivery Wales

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Functional support leads:



John Spencer
Commercial director



Andy Tappern
Finance director



Zoe Rose
Head of Human Resources



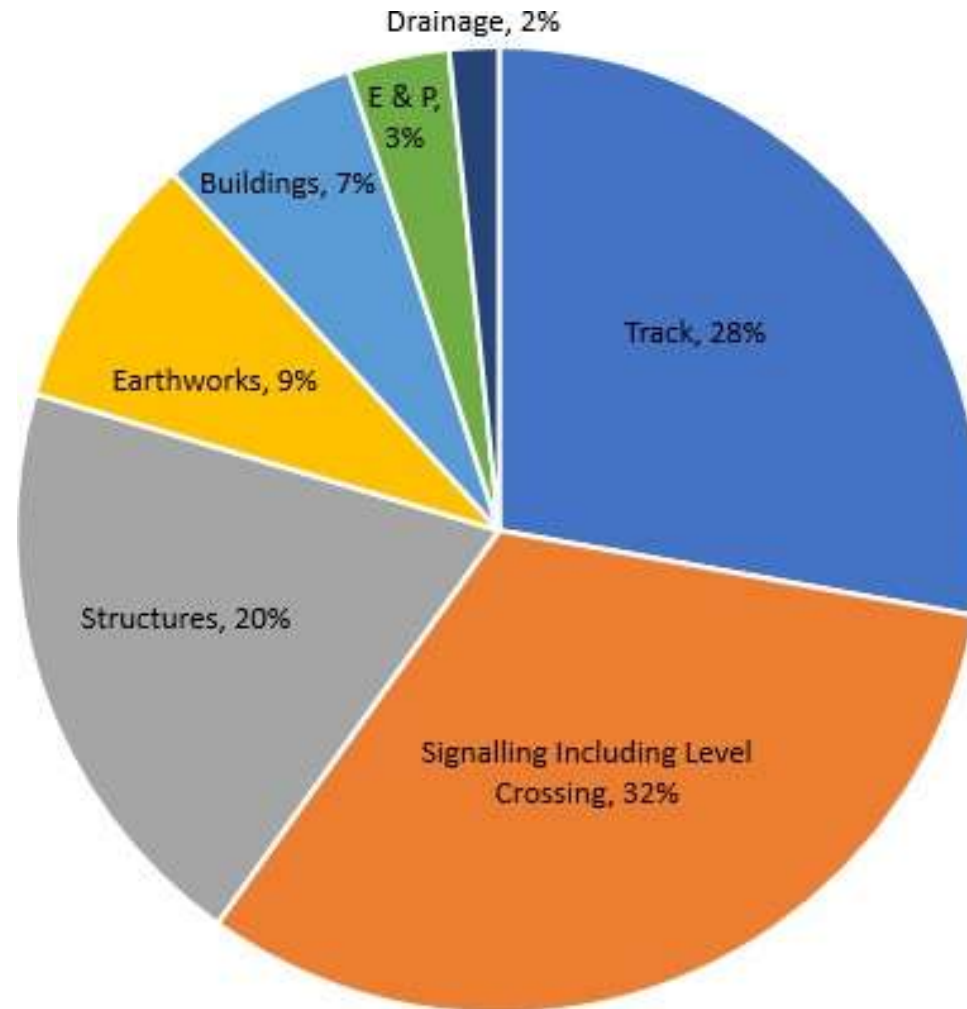
Richard Griffiths
Head of external
communications (projects)



Wales and Western CP6 Schemes



Split of Investment Across the Renewals Portfolio



Track

- 35km Full Renewal
- 7km Steel Sleeper Relaying
- 40km HO Ballast Cleaning
- 87km Rerailing
- 26km Conventional Reballasting

- 50 units S&C Renewal
- 100 units S&C Refurbishment

- 25km Rail Milling
- 80km Patch Resleepering
- 100km Repadding



Structures



Cefn Viaduct



Kidwelly Viaduct



Barmouth Viaduct

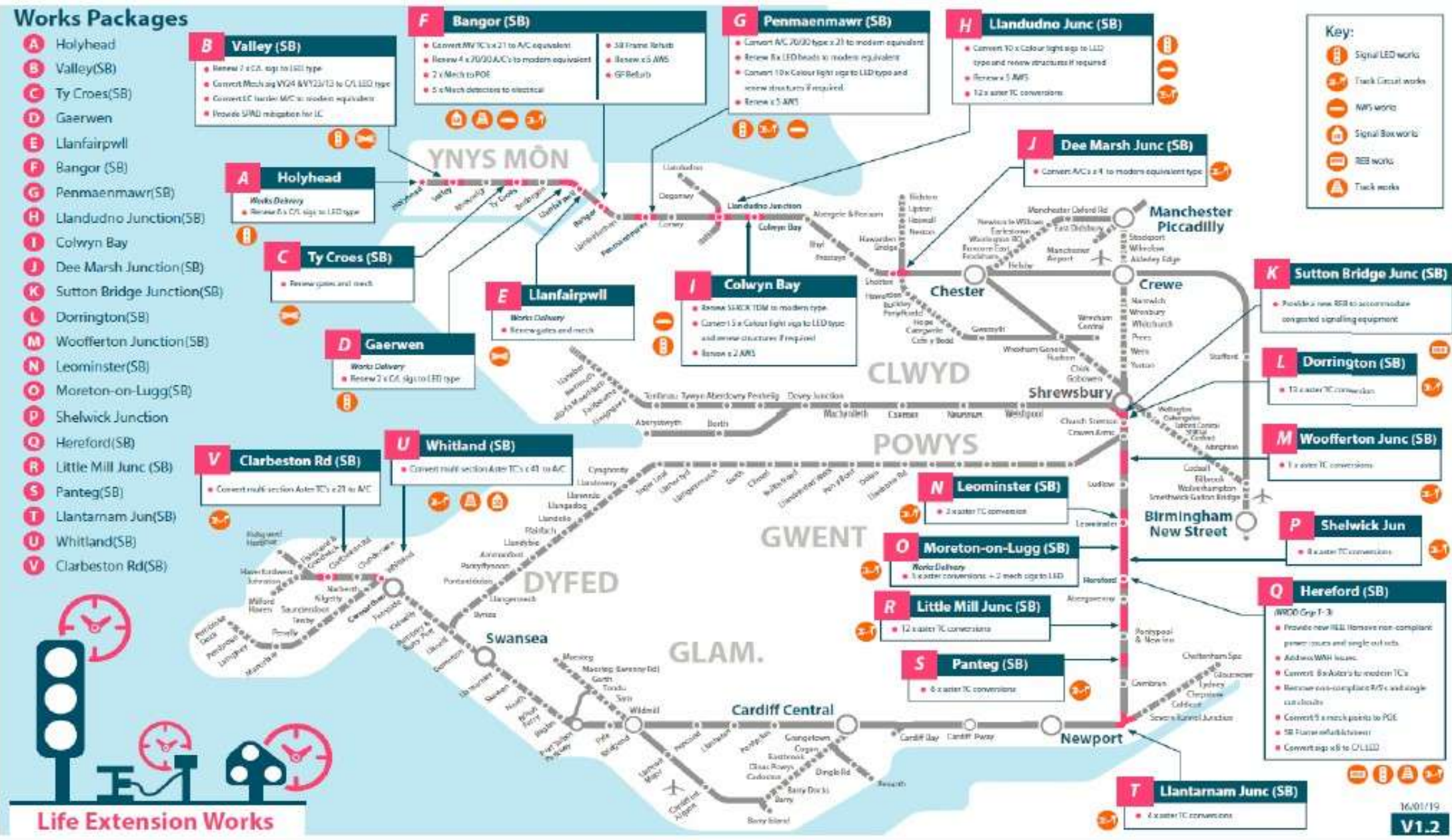
Signalling

Major signalling renewals

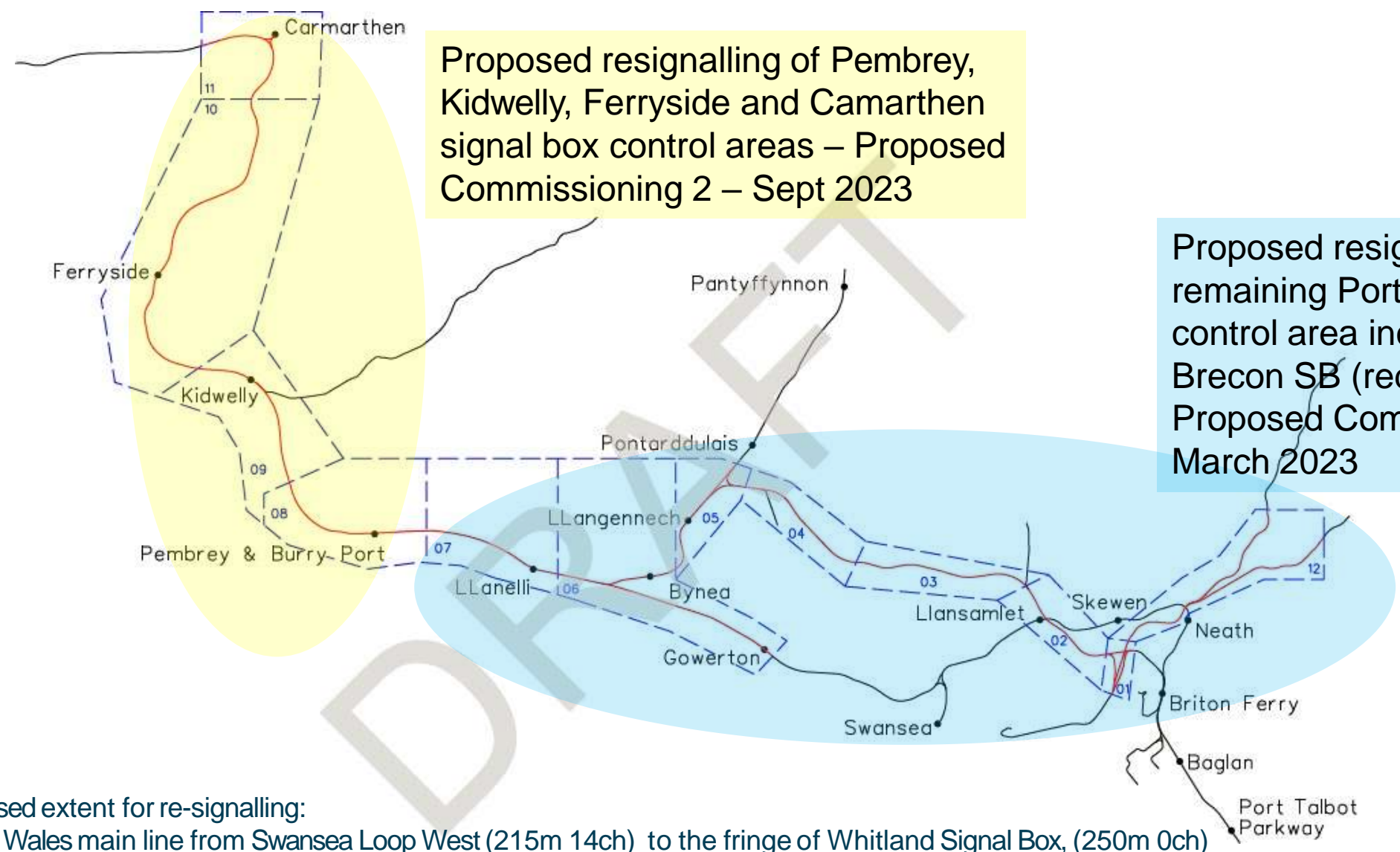
- Port Talbot West Phase 2 re-signalling
- Port Talbot East recontrol
- Tondur Recontrol
- Park Jcn and Western Valley Re-signalling and recontrol
- Life extension work across Wales route



Signalling: Life extension Works



Port Talbot West Resignalling Phase 2 (PTW2) - Geography



Proposed resignalling of Pembrey, Kidwelly, Ferryside and Camarthen signal box control areas – Proposed Commissioning 2 – Sept 2023

Proposed resignalling of remaining Port Talbot PSB control area inc Neath & Brecon SB (red lines only) – Proposed Commissioning 1 – March 2023

Proposed extent for re-signalling:

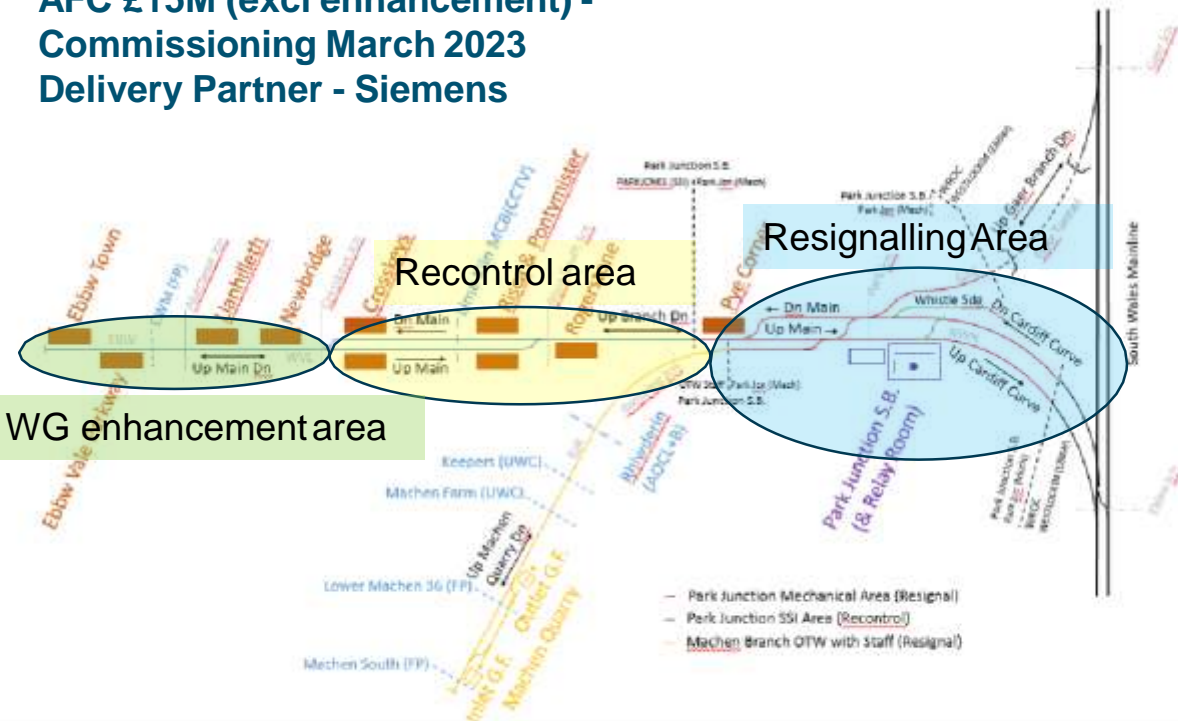
South Wales main line from Swansea Loop West (215m 14ch) to the fringe of Whitland Signal Box, (250m 0ch)

District Lines (VON 33m14ch to VON 46m30ch, NAB10m10ch to NAB 00m00ch, SDI 207m30ch to SDI 208m49ch, SDI 00m00ch to SDI 10m64ch, LLA4m54ch to LLA0m00ch, RSB19m16ch to 20m24ch, JER1m24ch to 2m26ch).

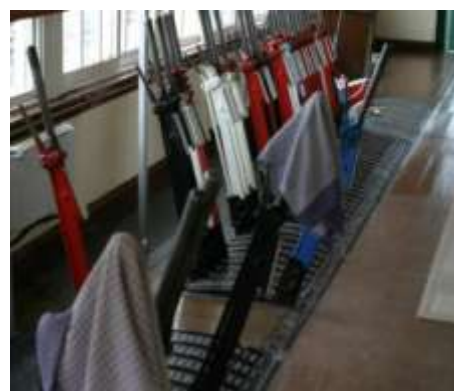
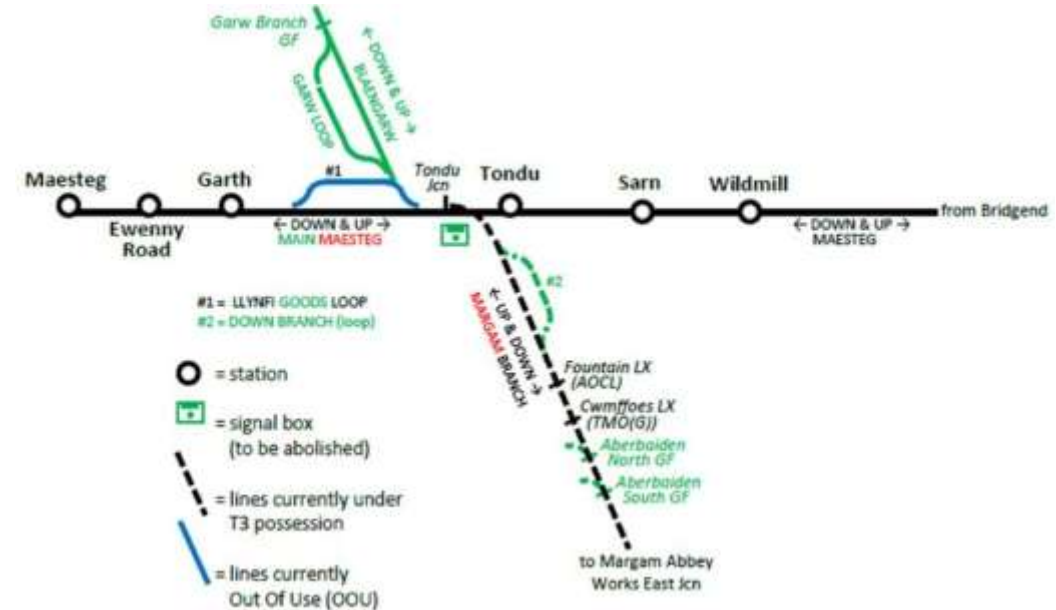
PTW2 Project Scope

- Move all control functions from the Port Talbot Signal Box, Neath and Brecon Junction Signal Box, Pembrey Signal Box, Kidwelly Signal Box, Ferryside Signal Box and Carmarthen Signal Box to the WROC.
- Approximately 65 track miles to resignal – covering the South Wales Main line, Swansea District lines and Neath and Brecon lines – 115 new signals, in excess of 50 points to recontrol, 7 new point ends.
- Rationalise track layouts including S&C, sidings and branches where beneficial and in situations that will enable reduced SEU count (approx. 35 point ends to recover/plain line) – approx. 325 pairs of IRJ's to recover.
- Conversion of following road levelcrossings:
 - Penybedd AHB – Retained as AHB, Duffyn AHB – Upgrade to Obstacle Detection (OD) Mk2, Bertwyn AHB – Upgrade to OD Mk2, Ferryside MCB – Upgrade to OD Mk2, Pembrey MCB – Upgrade to OD Mk2, Kidwelly MCB – Upgrade to OD Mk2, Sarnau CCTV – Recontrol as CCTV to WROC
- Llanelli East and West crossings are already OD, and will be recontrolled to the WROC.
- Projected project AFC of circa £128M managed by Network Rail and delivered with our delivery partner Siemens undertaking Signalling, Civils, Power and Comms with Network Rail delivering the related track works.
- The project commenced CP6 in early GRIP development and is due to commission in year 4 / 5 of the control period.

Park Junction Resignalling and Recontrol – AFC £15M (excl enhancement) - Commissioning March 2023 Delivery Partner - Siemens



Tondu to Maesteg Resignalling (inc Port Talbot East Recontrol to Wales ROC) – AFC £24M Commissioning Jan 2023 Delivery partner - Siemens



Electrification & Plant

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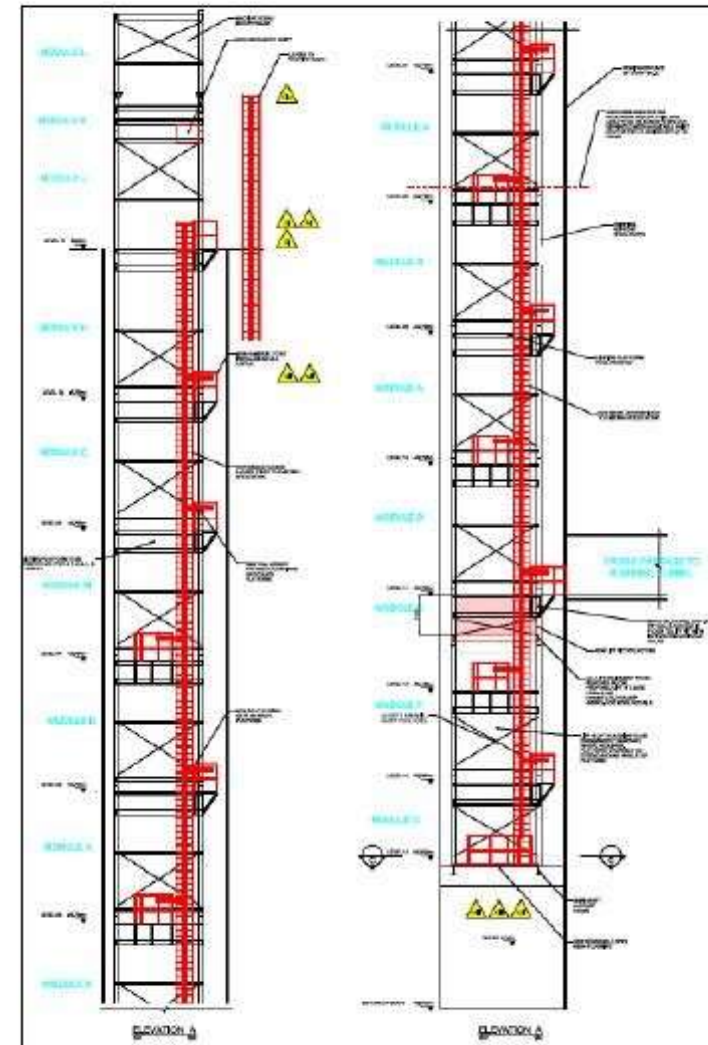
Sudbrook pump renewals



SIN 119 Signalling Power Compliance



Sudbrook Lift and Shaft



Points Heating – Gas to Electric



Geotech and Drainage



Conwy Valley



Commins Coch



Buildings and Utilities

- Ebbw junction depot renewal
- Building energy efficiency measures
- Station and lineside solar PV
- Forced air cooling systems



Buildings: Ebbw Junction Depot



Buildings: Canopy refurbishment



Rhyl Station

Level Crossings

- Upgrade 50 passive level crossings to OMSL (overlay miniature stop light) system
- Interventions at 20 protected level crossings
- Option design development for 13 level crossings
- Working collaboratively with third parties including LA's, Highways England, Trunk Road Agency and developers to close level crossings and improve traffic flows and the economy

Enhancement Schemes

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Crumlin River Bridge

Cadoxton Access for All (AfA)



Proposed AfA's standard design

Entry

- Open and inviting
- Simple and legible expression
- Entrance structure given primacy
- Motor room suppressed
- Maximised visibility

Corner/undercroft

- Corners tapered
- No platform columns
- Maximised visibility
- Ease of movement
- Undercroft open and inviting

Link piece

- Continuity of light triangulated structural expression from platform to platform.
- Anchored by brick plinth and lift tower.
- Highly legible

Linchpin/plinth

- Visual/material counterpoint/anchor to bridge
- Vertical proportions expressed
- Local landmark potential
- Context sensitive/adaptable expression



Resilience

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ENVIRONMENTAL SUSTAINABILITY STRATEGY

Delivering a sustainable railway

Rail is on a journey to a cleaner, greener future. It's already one of the greenest ways to travel, but there's more we can do.

We want to put passengers and freight users first, help passengers and freight users to make green choices, support local communities and be a good neighbour.



www.networkrail.co.uk/sustainability

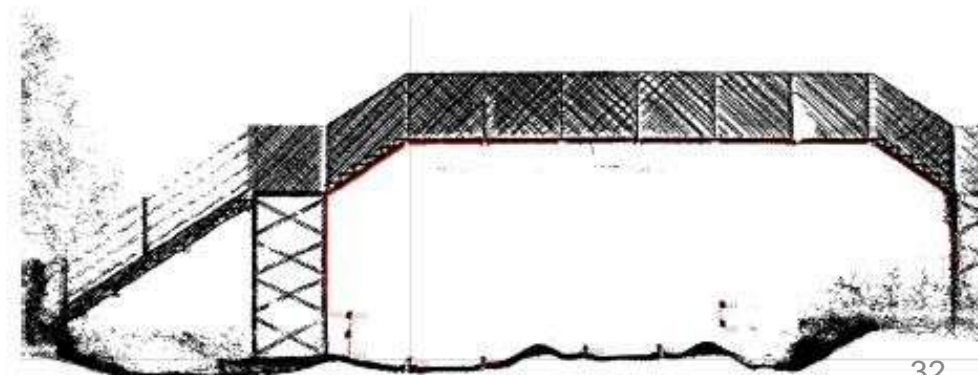
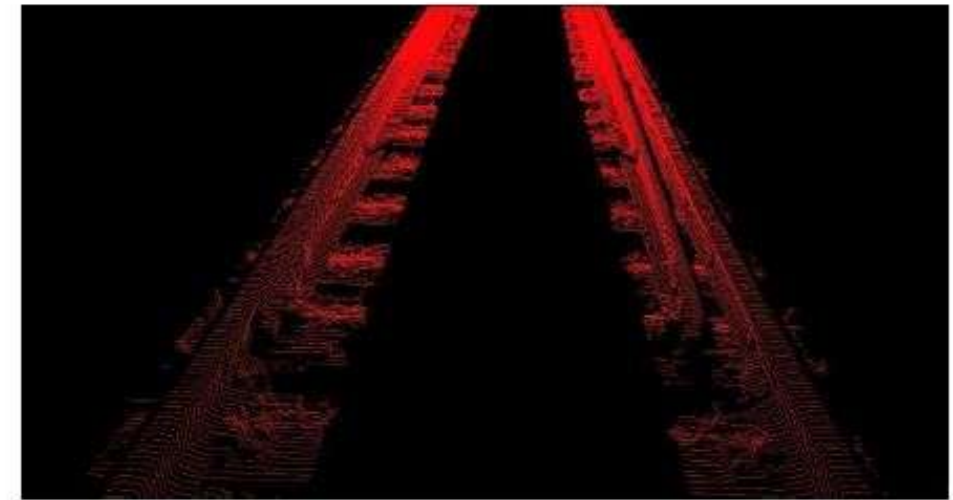
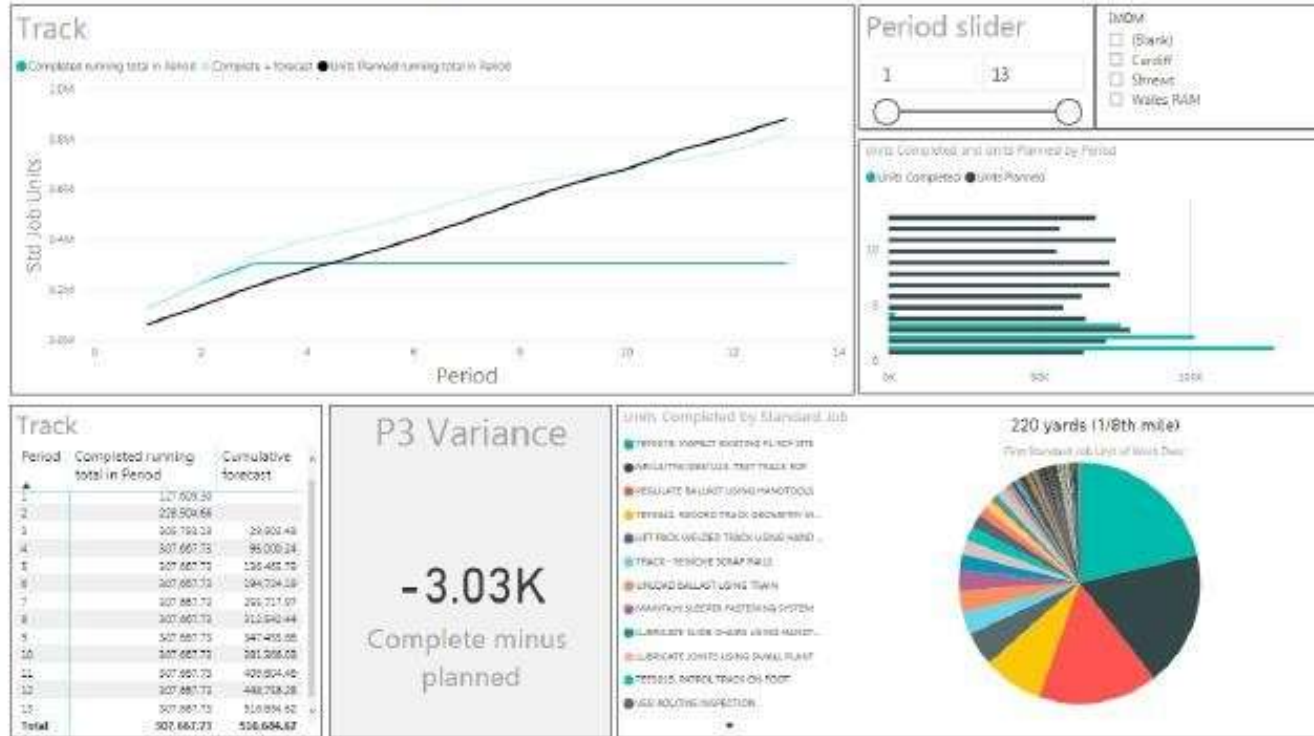
How will we achieve this?

- 1 A low-emission railway
- 2 A reliable railway service that is resilient to climate change
- 3 Improved biodiversity of plants and wildlife
- 4 Minimal waste and sustainable use of materials



Data Visualisation

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Common Data Environment (CDE) BIM Tools

- One Common Data Environment for all information
- All Drawing and Document sheet templates are standardised
- Standardised document numbering convention across the region
- Version control of design , construction and as built information
- Search function for all information as metadata used
- Lean Engineering – Right first time Construction
- All Project data is retained for handover and handback





Thank you

