A Global Centre of Rail Excellence in Wales

Llywodraeth Cymru
Welsh Government

Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

Powys

Welcome

- Speakers
  - **Ken Skates MS**, Minister for Economy, Transport and North Wales
  - **Arthur Emyr**, Major Project Lead, Economy & Infrastructure, Welsh Government
  - **Damian Barry**, Associate Director, Arup
  - **Jonathan Riley**, Business Development Director Transport, Serco
  - **Steve Phillips**, Chief Executive Officer, Neath Port Talbot County Borough Council

Agenda

- Project overview and progress to date
- Vision and economic benefits of GCRE
- An industry perspective
- A local authority perspective
- Next steps for GCRE

Video animation

Arthur Emyr, Major Project Lead -

Damian Barry, Planning Lead -

ARUP

- Project overview
- Progress to date

Project Overview

- Strategic Outline Case – published June 2018.
- Industry engagement and project technical development mid 2018 to now.
- Industry Evaluation Board established and ran Sept-Dec 2019 with input from Amey & Serco as a ‘shadow dev co’ to support Outline Business Case.
- *Innovation Accelerator* opportunity explored with industry and academia in late 2019 - ongoing.
- Outline Business Case submitted to UKGOV July 2020 with an ask for support.
- The critical requirement is UKGOV policy support.
- Negotiations progressing with Celtic Energy on site acquisition.

Progress to Date

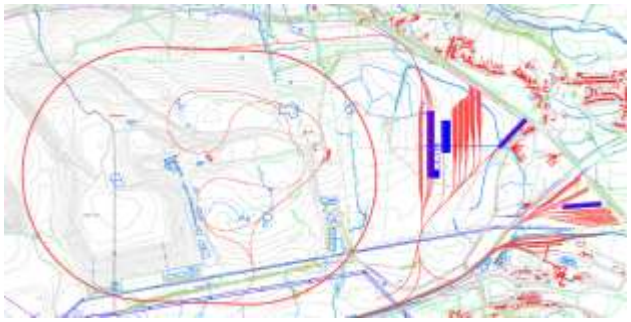
- Restoration proposals by Celtic Energy consented in June 2020 and an earthworks scheme to prepare the ground formation for the GCRE rail infrastructure was consented in July.

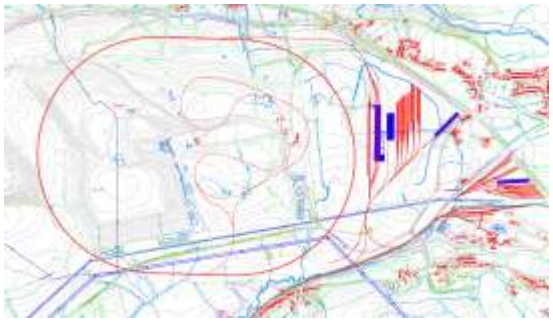
- The outline planning application to establish the GCRE facility is currently out to pre-application consultation (17th September to 14th October).

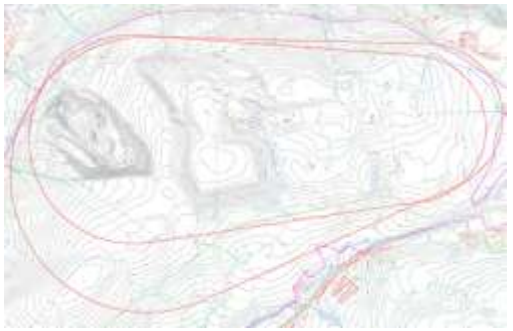
- Strategies/applications for common land, rights of way and Scheduled Monument Consent applications being prepared in parallel.

❖ *shovel readiness* – key advantage and vital in the messaging to government, potential investors and the industry

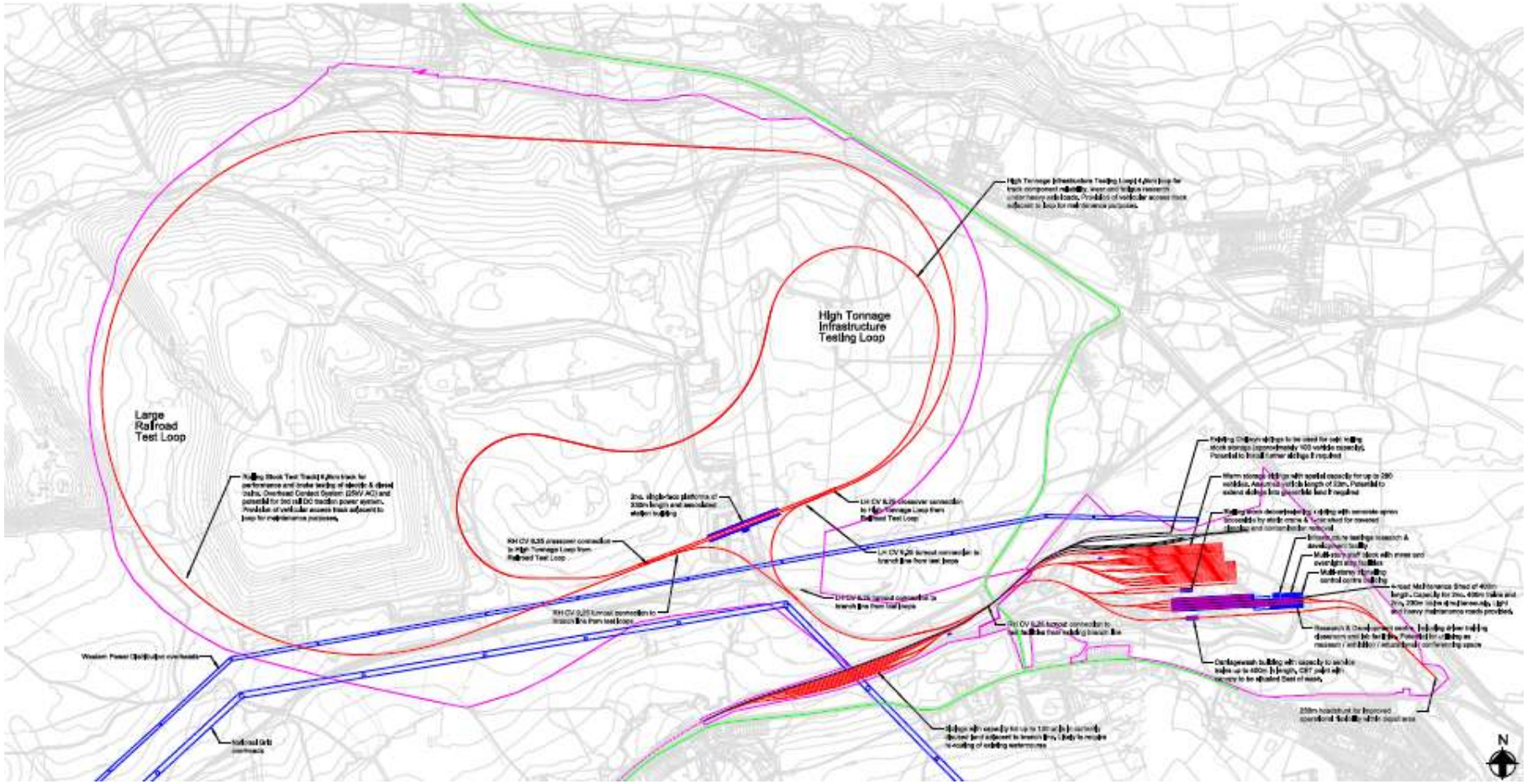
Scheme evolution



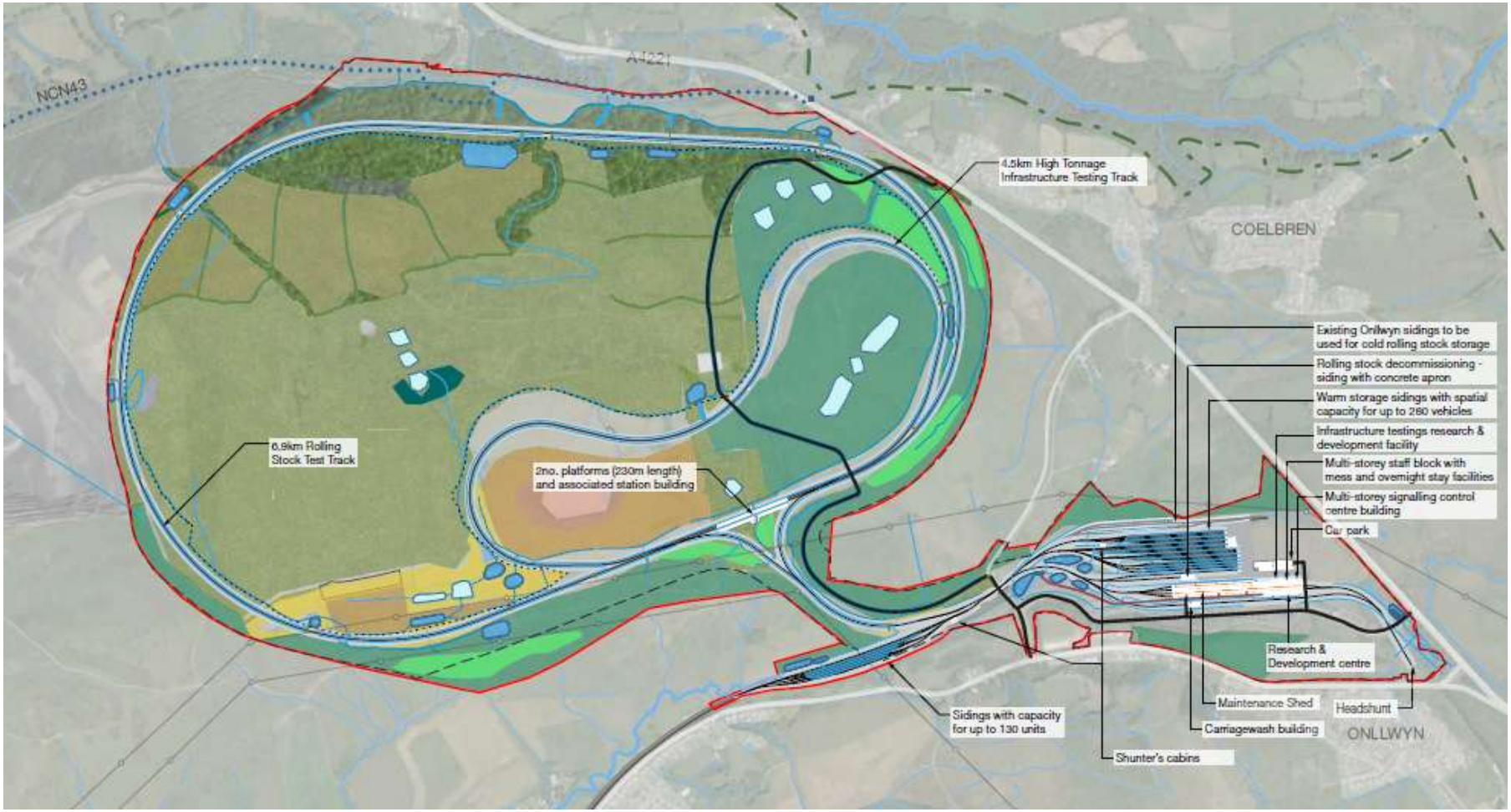




Technical arrangement



Illustrative masterplan



Ken Skates MS, Minister for Economy, Transport and North Wales

GCRE

What does this mean for the rail industry?

Jonathan Riley, Business Development Director Transport

GCRE – industry led
Serco, in partnership with Amey

- Serco, with Amey, has supported the Welsh Government in developing the GCRE business case.
- Serco uniquely brings more than 50 years of experience across the rail system to testing & commissioning, project management, consultancy, training, operations, engineering services and scientific analysis.
- Serco has operated the test track at Old Dalby for over 10 years, on behalf of LUL, Alstom and now for Network Rail as RIDC Melton.
- Serco is also able to complement our RIDC Melton services with additional testing and monitoring support to customer test programmes, such as pantograph monitoring.

Why do we need a national rail testing centre?

- Investment in rail continues - and in a post Covid-19 world it will be even more important to focus on innovative and agile approaches to research, development and testing of new product propositions.
- There is an acknowledged shortage of rail testing and commissioning capacity and capability in the UK - evidenced by the need for much of testing to be done in mainland Europe or even the USA.
- The increasing deployment of digital technologies, and the emergence of more mature autonomous products and systems makes it vital that we have leading edge facilities which enable the railway to be seen for what it is - an integrated system - focusing as much on the infrastructure and communications as the trains themselves. Testing hydrogen and battery trains is also going to be a necessity.
- RIDC Melton and Tuxford are important components of the overall testing and commissioning approach for the UK, as evidenced in the UKRRIN strategy - but they are fundamentally limited to being able to deliver commissioning of rolling stock fleets - rather than any innovative testing of emerging technologies or commissioning of integrated systems.
- Without effective testing and commissioning there is a continuing risk that the benefits on which the investments are predicated will not be able to be fully captured.

……and why GCRE

- The likely impact of having no such facility in the UK will be to dampen enthusiasm for developing and building railway assets in the UK.
- Fleets will continue to be built in countries with more favourable access to other test facilities.
- The rail industry has been searching for a suitable site for many years – an active industrial site where the concept (geology, history, environment, local acceptance) is supportive and the conditions are perfect for quickly being up and running. No other site has that.
- The ability to design the site purposely for the testing and commissioning of railway assets – for the benefit of everyone in the industry - should not be underestimated. There won't be the constraints of fitting it in within a facility with a different purpose or beholden to it being a single OEM's own site.
- With a Vision To be the leading hub of research, innovation, and development of service delivery excellence for the UK's rail industry we should all be able to identify why this is right for all of us across the rail industry.

Goals for GCRE

1. Enable the UK rail sector to achieve its targeted outcomes for both users and funders of passenger and freight services through the **delivery of professionally planned and executed testing and commissioning facilities and services**. The purpose for which is to mitigate and manage the inherent risks (and thus reduce the risk costs) of the respective investment or other development programmes.
2. **Development of skills and achieving sustainable levels of employment opportunities** that enable Onllwyn and Nant Helen in the Dulais Valley to be a great place to live, study and work and a place which becomes an incubation centre for ideas, technologies and economically and environmentally sustainable solutions that are recognised as ground-breaking on a global scale
3. **Development and testing of rail sector design, construction, operational and de-commissioning principles, standards and specifications** which improve the UK's competitive strengths as a leading contributor to achieving carbon neutrality including harnessing the natural environmental conditions present at the site to ensure that the GCRE itself is a leading exemplar of sustainable consumption of natural resources

How will the rail industry benefit?

- The model for GCRE is of a **public-private partnership** with Welsh Government (NPTCBC & PCC), supported by UK government funding, enabling the project to provide the basis for private sector industry led delivery – all with the aim of **securing public policy outcomes to the benefit of the rail industry**.
- GCRE has been deliberately planned as an **integrated concept built around both "real world" delivery of services at the GCRE site AND delivery of e-services.** At the core will be the following services with the facility operator managing some directly and others in partnership:
  - ✓ Testing and Commissioning Service – including a "one-stop" overall Managed Service
  - ✓ Delivery of customer specific engineering and operational test programmes
  - ✓ Configuration and operation of the test tracks enabling customers to deliver their own testing or commissioning programmes
  - ✓ Engineering measurement and certification services
  - ✓ Facilitation and management of collaborative joint projects involving multiple organisations from manufacturing, research and academic sectors as appropriate
- By offering this wider portfolio the revenue generating potential is more substantive which will strengthen the intention that **GCRE will be financially and commercially sustainable**.
- GCRE can help the rapid **commercialisation of rail assets** – boosting manufacturing and exports – also allow concepts to fail quickly – often equally important.
- Equally beneficial will be how use of GCRE will bring **cost and/efficiency benefits to major programmes** reducing time and cost to the industry and ultimately to the public purse, taxpayers and fare-payers....

Steve Phillips, Chief Executive Officer –

The benefits of the project to the local area from a Local Authority perspective

Essential Background

- Site straddles border between Powys and Neath Port Talbot.
- Strong political commitment from both authorities (as JVA partners with Welsh Government).
- Consenting process well advanced.
- Strong support in local communities based on previous engagement and consultation.
- Project entirely consistent with national and local economic, planning and spatial strategies.
- Compelling socio-economic case set out locally and regionally.

Local benefits – some obvious, some less so

- Employment – circa 200 permanent when fully operational, plus 250 construction (includes circa 120 jobs retained during earthworks programme).
- Training/Skills – in partnership with local universities and others.
- Promoting innovation and wider inward investment in “hard to reach” rural and post-industrial area.
- GVA benefits – up to £70m over ten years to regional economy.
- The cumulative effect is transformational. This is a UK project with significant local benefits.

Potential longer term benefits for the area

- Alignment with Welsh Government infrastructure improvements – A465 Heads of the Valleys Road e.g. journey times from the Midlands.
- Alignment with nascent Swansea Bay Metro proposal and existing rail line to site.
- Benefits to ports – Swansea and Port Talbot.
- Ancillary benefits – tourism, leisure, etc.
- Contribution to decarbonisation strategies.
- Covid recovery.

Next Steps

- Delivery.
- We aim to complete planning process by (very) early 2021.
- Get on site with Phase 1.
- Build the strategic, commercial, economic, financial and management cases for subsequent phases.
- Building on strong foundations of value for money, deliverability and viability.

Q & A

- Links to pre-application consultation below:

  Cy - https://llyw.cymru/canolfan-ragoriaeth-fyd-eang-cynllunio-cyn-cyflwyno-cais

  En - https://gov.wales/global-centre-of-rail-excellence-planning-pre-application