Adrian Gannon
Connect Launceston
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Returning the Railway to Launceston

Engineering options with recommendations for further study

Introduction

A number of potential route options exist and need to be considered in returning railway connectivity to Launceston, Cornwall. Each route option brings its own engineering challenge that will need to be carefully assessed along with a number of common issues relevant to all routes. Some of these engineering challenges may be significant and will preclude routes from further study. Three potential route options should be considered as part of an initial feasibility study along with the optimal location for a Launceston Parkway station/East Cornwall interchange hub.

(1) the old LSWR Launceston route running from Okehampton via Halwill Junction;

(2) the old GWR Launceston route running up from Plymouth via Lydford;

(3) a potential new route following the A30 transport corridor from Okehampton.

Recommendation 1: Conduct an initial feasibility study to assess the viability of the three potential route options along with a proposed station site(s) in Launceston.

Until we have a better understanding of these respective route options it is not possible to estimate how near we might be to making a viable business case for reopening a railway to Launceston. Clearly, if any route option leads to significant engineering challenges that cannot be solved without incurring major expenditure, then that particular solution, as currently envisaged, might prove impossible. The proposed initial feasibility study should be sufficient to identify any engineering hold points at an early stage discounting further investigation. Funding an Outline Business Case (OBC) would be incomprehensible without initial studies to de-risk all or some of these route options and their respective engineering challenges.

If we consider these potential routes in order:

(1) <u>LSWR route from Okehampton via Meldon & Halwill Junctions</u>

It is assumed that in returning the railway to Cornwall, the original LSWR route would be considered from Okehampton. This requires re-certification of Meldon viaduct for train passage or replacement of the viaduct, re-instatement of Meldon Junction and then a crossing over the adjacent A30 trunk road before rejoining a relatively clear route to Halwill Junction.

These obstacles have all been recently assessed in an engineering study funded by Connect Bude in response to their Engineering Strategy issued in February 2023. Credible engineering options exist to resolve these issues and the output from this study has been shared with Connect Launceston. A number of alternative route paths around Halwill Junction have been identified as part of this study. Two options appear compatible with extending the line to Launceston but this will need to be confirmed in any future study.

On leaving Halwill Junction the original route quickly becomes obscured by the encroachment of undergrowth and trees. The station sites at Ashwater and Tower Hill need careful consideration, as both areas have been redeveloped for agricultural purposes. These sites may present potential obstacles to future line reinstatement.

A number of areas along the route have been returned to farming and the trackbed has been sold off to local landowners along its length. There is no record of current land ownership.

Recommendation (2): Conduct a land registry study to establish a list of the current landowners along the length of the trackbed from Halwill Junction to Launceston.

There are no less than 52 railway structures in the 13.5 miles between Halwill Junction and Launceston. Many of the original structures appear to be in a state of disrepair or have been removed; there is evidence of bridge infill at Blagaton bridge, Ashwater station and Heale bridge. St Leonards (Launceston) Sewage works occupies the trackbed at Tamar bridge on the approach to Launceston. Private land ownership makes identification of these issues difficult to assess without a formal site visit.

Recommendation (3): Assess the general engineering state of bridges and road crossings along the length of the line to determine the amount of new build/regeneration required for comparison with alternative route options.

The river Carey encroaches on the trackbed in a number of places and it appears that many of the original river crossings, four in total, have been removed following the closure of the line or subsequent flood damage. Assessments are required to determine the state of the river crossings at Dury bridge, Coombe Mill and Tamar bridge (Coombe Mill & Tamar bridge have been removed). Many of these crossings may not pose significant engineering challenges in their own right but collectively may make this route expensive to re -instate. Also, the impact of climate change in recent years may make these crossings more difficult to re-instate.

Recommendation (4): Assess the general engineering state of bridge river crossings along the length of the line to determine the extent of the civil engineering works to re-instate the railway.

Tamar Bridge and the adjacent sewage works at St. Leonards occupying the trackbed, make the original approach to Launceston particularly challenging. Rather than addressing this obstacle in isolation this needs to be considered in parallel with a future site for a Launceston Parkway/East Cornwall transport hub. The output from the station study will determine the final route requirements into Launceston. This issue is further addressed under '**Launceston**'.

(2) <u>GWR Route from Tavistock via Lydford Junction</u>

The route from Lydford Station and the junction with the original Okehampton/ Tavistock mainline is remarkably clear from obstruction until you reach the industrial area in Tinhay. The site of the former station and the adjacent junction at Lydford have not significantly changed since the railway closed in 1964, although there is extensive encroachment from tree and undergrowth around the site. Also, there is clear evidence of private ownership along the length of the line from Lydford through Coryton to Marystow. The trackbed has been sold off to local landowners along its length and we do not have access to an up to date record of ownership.

Recommendation (5): Conduct a land registry study to establish a list of the current landowners along the length of the trackbed from Lydford to Launceston.

The original GWR branch joins the mainline in a southerly direction with a through path to Tavistock, thus it is assumed Lydford Junction was an important interchange for travel

south to Plymouth or north east to Okehampton. There is no clear option for a railway chord to the north east enabling a through path to Okehampton due to the proximity of Lydford Gorge, an area of important natural beauty in the Dartmoor National Park. As a result, it is assumed that Tavistock would be an interchange hub in any future planning.

The majority, if not all, the road crossing bridges are still intact and the land ownership between their respective retaining walls is the responsibility of National Highways, a government-owned company "sponsored" by DfT. As a result, the bridges have been well maintained and there is clear evidence of a recent on-going maintenance programme involving brickwork pointing, fencing and parapet repair. A number of river crossings exist along the length of the line. The state of these crossings is unclear from mapping, but satellite imaging suggests bridges still exist, but their state of repair is unknown and access is difficult.

Recommendation (6): Conduct a brief engineering assessment to ascertain the status of river crossings to ensure a complete engineering picture is captured.

A significant blockage exists at Tinhay/Lifton. The site of the Ambrosia Dairy has expanded over the original railway site since its closure in 1964. In addition, Mole Valley Farmers operate a grain store/distribution centre adjacent to the dairy, blocking the original rail path. A new alternative route avoiding Tinhay would need to be investigated. On leaving Tinhay towards Launceston the railway can clearly be retraced from an excellently maintained road bridge over the original railway west of Lifton.

Recommendation (7): Conduct a brief study to consider potential route deviations to bypass industry in the centre of Tinhay/Lifton.

The next significant obstacle is the A30 dual carriageway trunk road which crosses directly through the path of the old railway trackbed north west of Lifton on the approach to Launceston. An engineering study is required to assess the viability of crossing over or under the A30 on its approach to Launceston following the line of the original trackbed.

Recommendation (8): Conduct an engineering study to assess the potential of crossing over or under the A30 trunk road on the approach to Launceston.

Beyond this point, any future railway path will be dictated by the proposed siting of Launceston Parkway/East Cornwall Transport hub. If a station is chosen close to the original Launceston LSWR/GWR site then further study will be required beyond the A30 trunk road.

Alternatively, if a high level station is selected to the south of Launceston along the new A30 transport corridor then a railway pathway adjacent to the A30 into Launceston would be preferred and would need consideration. This issue is further addressed under '**Launceston**'.

(3) <u>A potential new route along the A30 transport corridor from Okehampton</u>

The existing GWR and LSWR routes to Launceston from Tavistock and Okehampton respectively, were constructed to meet the needs of the railway companies in Victorian times. In the 21st century, neither offers a direct trouble free path to the reinstatement of a mainline railway connection to Launceston.

In the 1980's, the A30 trunk road was built to create a strategic dual carriageway down the spine of Cornwall to improve West Country connectivity. This includes direct linkage from Okehampton to Launceston creating a perfect relatively straight transport corridor with the potential for direct access to the railhead at Okehampton.

It may be possible for a potential new railway to be built in parallel with the existing A30 along this busy transport corridor. The impact on the surrounding countryside would be significantly contained and there is the potential for land already owned by DfT to be made available, reducing the impact and cost of land re-purchase. Operationally from a railway prospective, this could have numerous advantages over the existing alternative routes, particularly as a reduction in travel time would be a clear benefit along with enhanced connectivity at Okehampton.

Departure from Okehampton could follow the proposed alternative route along the new A30 transport corridor, avoiding Meldon viaduct/junction and leaving the proposed line for Bude shortly before reaching Sourton Cross. On reaching Launceston, options exist for a number of alternative new station sites (as yet undefined). This issue is further addressed under '**Launceston**'.

Recommendation (9): It is recommended that the A30 transport corridor from Okehampton to Launceston is considered as a potential new alternative railway path to the existing GWR and LSWR routes. Any significant engineering challenges that would impact this option need to be identified. This recommendation is dependent on the output from the proposed initial feasibility study (**Recommendation 1**).

(4) <u>Launceston</u>

Both the GWR and LSWR routes entered Launceston through a converging railway corridor from the east resulting in two separate stations in close proximity in or around Newport. Today this area is heavily industrialised and significant housing development has made this site a difficult location to build a new credible station. Equally, the traffic congestion and pollution levels in this area would be further aggravated by the return of the railway and the resultant increase in traffic flow.

The future needs of the town need to be considered and options for a new station with good access, easy parking and excellent connectivity for the population of Launceston as a whole need to be addressed. There is potential for a station to be built to the east of the town, most likely near Polson Bridge, or new station transport hubs could be located close to the A30 trunk road, adopting a parkway style approach integrated with new housing developments in the town.

Recommendation (10): Conduct a feasibility study to assess the options for the location and viability of a parkway style station adjacent or near to the A30 trunk road and/or a town station to the east of Launceston. This recommendation is of significant importance as it will impact all three potential route options into Launceston.

Recommendations

The recommendations as proposed could be conducted initially as a series of locally funded exercise(s) by Connect Launceston to understand and develop the various route options and their respective engineering challenges. These could be worked up later in more detail so that a shortlist of options (including a preferred option) could be identified for study in any future OBC.

Before any individual route recommendations are addressed it is recommended that an initial feasibility study is conducted to assess the viability of the three potential route options. This will make down-selection easier and affordable.

It is likely that specialist help will be required to address a number of these recommendations in due course but the output from the proposed initial feasibility study should ensure funding is not wasted on impractical unrealistic solutions. Connect Launceston will need to engage subject matter experts (SME's) to conduct and support these recommendations but if Connect Launceston can undertake the initial high level optioneering then Connect Launceston can limit the cost of consultancy through targeted studies.

Summary

A series of 10 recommendations have been made to progress various route options for reconnecting Launceston to the National Rail network. The recommendations should derive a series of options that can be studied in greater depth and considered as part of any future Outline Business Case (OBS) submission. Equally, the studies should provide Connect Launceston with additional evidence to share with the Local Authorities and stakeholders to advance discussion on local town/district planning in support of any future railway bid.

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