

PULP NEWS!

It is only when the news media covers a subject known to the reader or viewer that the standard and accuracy of reporting can be tested. Then he is often left wondering how much he can trust the coverage of subjects about which he knows little.

Rashness spurred by instinct could have led this railway to see an opportunity for publicity, there being so much attention suddenly focussed on the destruction of the railway at Dawlish. For a moment, it was thought that some beautiful people could be hired to parade outside St. David's and Newton stations with placards to prick the politicians.

WHERE ARE
THE
DIVERSIONARY
ROUTES?

REOPEN
EXETER
CHRISTOW
HEATHFIELD
NEWTON ABBOT

REOPEN
EXETER
OKEHAMPTON
TAVISTOCK
PLYMOUTH

But would it have been picked up by the newshounds? Would the British Transport Police have moved on the placard carriers? Would it have done any good; made any lasting impression? Would it not just have been playing to the cameras?

This railway campaigns all year round, as can be seen by the issues detailed on these pages. None of this would interest the 24-hour pulp news industry, whose outpourings are hysterical at worst and hastily-researched at best. The *meja* feeds off mumbling ministers and prattling politicians, off the "human interest" of people suffering or about to lose everything. It does not want solidity or depth or continuance in its material.

In a few days or weeks, the story will go off the boil and be dropped, just as Cowley Bridge was last year. And for campaigners it will be back to the long march.







These snaps aren't the best because our celebrity photographer was away on a shoot for a lingerie catalogue and could not make it to the coast. The guy needs to sort out his priorities. It's not like we don't pay him. Er, actually, it is that we don't pay him.

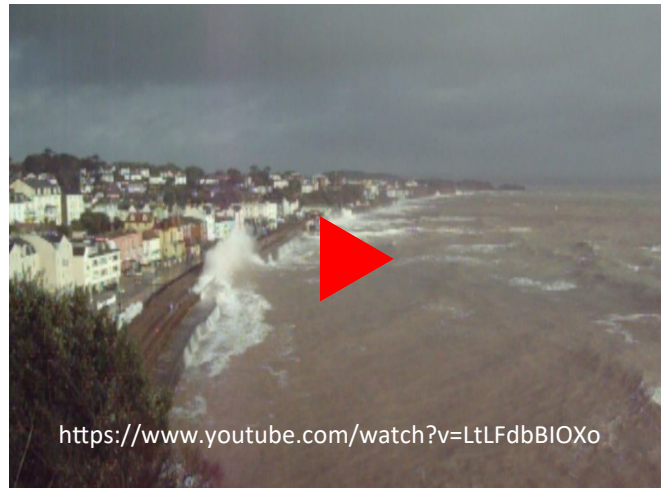
An Alternative Route Page 34



By the time this poor quality video was taken on the morning of 5th February, 2014, the wind had eased, the tide was ebbing and most of the damage had been done. Nevertheless, there is still anger and excitement in the air and sea.

It is fortunate that winds must change and tides turn, for cliffs, beaches and man's defences would look very different were these extreme conditions to prevail.

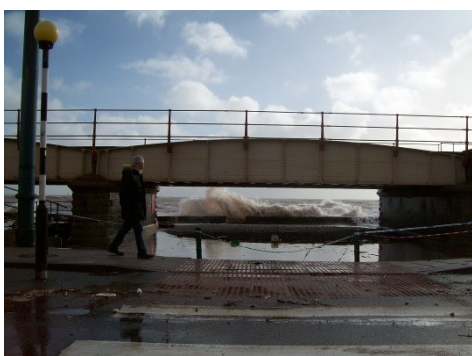
Beside the photographer on the coast path that leads up above Kennaway Tunnel to Lea Mount was a woman with a tripod and camera, which appeared to be pointing at Sea Lawn Terrace. He imagined that the pedlars of woe at Wapping would pay well for a shot of the moment a house crumbled into the sea.



Some more photographs taken on the morning of 5th February, 2014

These images may be seen enlarged and with captions by going to the web page:

<https://www.teignrail.co.uk/political-campaigning.php#dawlshdeacle>



Sky News on the Scene

Kevin Cook, railway historian and friend of the Teign Valley, was called upon by Sky News to be interviewed on site from the studio not long after the débâcle. He recalled that he had expected a warm up but instead went straight on the air.

<https://www.youtube.com/watch?v=0fTArYAm-Hs>

He gave his views again on the morning the line was reopened, after Prime Minister David Cameron had delivered his scripted spiel.

<https://www.youtube.com/watch?v=EAWws2STzhU>

Letter to the *Western Morning News*, 14th February, 2014

Railway long considered expendable transport system

BY COLIN BURGES

Owner and Operator,
Exeter & Teign Valley Railway

There is no reason to get excited about the building of another railway route in the West Country because nothing is going to happen while current trends continue and under the existing organization.

The most basic reconnection of Tavistock has been talked about for well over 20 years and this would involve rebuilding just six out of the 21 miles between Meldon and Bere Alston, which would complete the Southern route from Exeter to Plymouth.

The Dawlish Avoiding Line scheme was finally wound up in 1949. As much a driver for its construction as the vulnerability of the coastal line was the heavy holiday traffic, which was at

its most intense on a mere ten summer Saturdays.

The avoiding line was really part of a bigger move towards greater capacity between Taunton and Newton Abbot. The line had been quadrupled between Cogload Junction (east of Taunton) and Norton Fitzwarren, and between Newton Abbot and Aller (junction for Torbay and Plymouth). Platform relief lines had been provided at stations between Taunton and Exeter.

The work that was done has since been undone and the railway has given up on the bulk of the holiday traffic, which has anyway changed in pattern.

If Network Rail were really aiming to keep all options open, the firm would have come up with a more constructive reply when consulted last year about a

bridge on the Teign Valley line which the state has spent £200,000 destroying—more than it would have cost to repair. Instead of “not interested,” the miserable track authority could have said: “We are not sure where the future might take us.”

Not an unpredictable outcome of the vast spending on roads, the railway has long been considered a secondary, expendable system of transport, carrying a mere 5% of traffic in the West Country and affecting the lives of around 10% of the population. There is negligible freight and no other ancillary business.

Many railway staff travel around by road in the course of their duties, every consumable needed for railway operation comes by road and so will most of the equipment and material needed at Dawlish.

David Cameron was pictured at Laira depot beside a power car about to be loaded onto a lorry. If the P.M. had asked, he would have been told that the fuel and everything else is delivered by road.

For a railwayman who believes that one day there will be a fully developed and expanded network, it is painful to have to state these facts.

The time to get excited will be when the trend starts reversing, the system enables rather than hinders decisive action and the railway organization is structured to react dynamically.

Teign Valley line not like a country lane Branch line would never be a substitute

The Teign Valley branch line is often spoken of as if it had been akin to a narrow, twisting country lane which drivers venture along cautiously for fear of meeting something coming the other way or getting stuck in a ford.

Its origin was two railways: the Teign Valley built beside the river most of the way upstream to Christow; and then Exeter, which dug its way through the north of the Haldon Hills. This section was severely graded and curved.

The line was of limited use as a diversionary route to begin with because there was only one short passing loop, but in 1943 government paid for four ten-coach loops to be installed which greatly improved its value during an emergency.

Some folk still remember small engines struggling with heavy, diverted trains. These days, if the engineer passed the route for 40 m.p.h., that is the speed the trains would go; twenty miles in half an hour, or in practice around 40 minutes, compared with 20 minutes via the main line.

A ride on a through train working over the Newquay Branch in summer gives a feel for what the Teign Valley journey would be like. Sometimes made up to nine trailers, HSTs bound up Luxulyan bank—a gradient more harsh than any on the Teign Valley—and squeal on the curves of what is largely a former horse tramway.

With modern traction and signalling, sufficient

passing loops and a pre-arranged plan, many trains would now be getting around the blockade at Dawlish, with passengers remaining at their seats; this, assuming that the Teign Valley and Moretonhampstead branches had themselves been defended against flooding.

The Teign Valley would never be a substitute for the main line: it would be a year-round functional and tourist branch line with diversionary capacity, supported socially in the same way as the

comparable Newquay Branch is today.

Perhaps the state should give a private railway the money and the powers to get cracking with reconstruction as an example.

More information can be found on teignrail.com.

Colin Burges
Owner and Operator,
Exeter & Teign Valley Railway

Key to colours

The heading which would have been preferred by the railway.

Edited in/out.

Note that the editor could not allow anyone to read further on the subject.

An HST heading for Newquay could almost be slipping through the hills to bypass Dawlish.



Descending Luxulyan Bank https://www.youtube.com/watch?v=2_fIW3BYvmE

Climbing Luxulyan Bank <https://www.youtube.com/watch?v=bGfTI-jFp7c>

Western Morning News, Jan 6th 1930. THE W

TRACK HANGING OVER CHASM

ALARMING STATE OF G.W. MAIN LINE

40-FT. BREACH IN SEA WALL AT DAWLISH

TRAFFIC DIVERTED TO TEIGN VALLEY

One of the most serious effects of the recent bad weather, and a further heavy gale in the South-West on Saturday, is the total suspension of traffic on the Great Western Railway main line between Dawlish and Dawlish Warren on the well-known South Devon stretch of coast railway.

This is the result of a continuance of the breach in the sea wall which was discovered at Christmas, and which led to a single-line service over this portion of the track.

Running parallel to the sea wall is a footpath raised from the beach and largely used as a holiday esplanade. This acts as a buttress to the wall, excepting for a short length where the walk was discontinued, because, it is stated, of some objection in past years to its being continued. It is at this exposed part of the base of the wall that the breach has occurred.

One of many newspaper cuttings pasted into an old school exercise book which cover occasions between 1921 and 1956 when incidents on the main line caused the Teign Valley Branch to be used as a bypass route. The book is under glass in the "Temporary

The large gap thus created caused the foundation of the railway track to subside, leaving a large hole in the main line. The subsidence affects both lines, and for a distance of about 40ft. the down line metals and sleepers are hanging suspended without any support, and are sagging.

EMERGENCY ARRANGEMENTS.

Fortunately, the railway company have been able to make emergency arrangements, and yesterday there was only slight delay in traffic. The local services were continued downward as far as Dawlish Warren, and upward to Dawlish, and a connecting link between these two stations was provided by a motor bus service from Starcross to Dawlish. The through trains were diverted at Exeter and Newton Abbot over the Exeter railway, which runs through the Teign Valley, and which was some years ago used for the same purpose in similar circumstances.

Yesterday gangs of men were busily engaged in shifts, endeavouring to repair the damage, but because of interference from the tides operations can continue only about six hours out of the 24. For several years the company have experienced similar trouble at this spot during winter time. About four years ago they obtained Parliamentary powers to take a line inland at Dawlish Warren to avoid the cliff section.

The occupants of houses near have been warned of possible danger to their property.

The damage is the most serious that has yet occurred along this piece of railway line, which is admittedly one of the most expensive the company has to maintain.

Considerable time must elapse before it can again be available for traffic. Spring tides are now at their height, and further damage is likely to occur.

On inquiry at Exeter last night we were informed that the Great Western Railway Company will commence to use the Southern Railway main line from Exeter to Plymouth with the 8.44 a.m. train to-day from Exeter.

It must be emphasized that the undermining of the sea wall which culminated in both lines being closed on 4th January, 1930, was nothing like the extensive breach which occurred on the night of 4th February, 2014. Nevertheless, if there were a complete railway system, much of the above report would read the same today.

“Beeching lines to re-open”*

In an effort to provide a lead for a story, included with the letter above were a copy of the 1930 newspaper clipping reproduced below and a page from the notice issued the same day by the Superintendent’s office in Exeter detailing the emergency working, including trains diverted via Christow.

On several occasions this railway has sent interesting material to the *Western Morning News*, only for it to be ignored while shortly afterwards a piece on a fellow collecting bottle tops or some other banal pastime would be published.

In the current case, the paper thought a better story was to be had by sending a reporter to Brentor (a former station between Okehampton and Tavistock, where the platforms remain and the building is now a private residence) to ask the surprised occupant how he felt about his home being requisitioned in readiness for the line to be reopened.

And the editor of this regional tabloid would claim to be taking the subject seriously.

* A front page headline soon after the Dawlish débâcle.

The writing was on the wall but the wall’s gone

In almost every piece that this railway has published over many years, making the case for the reinstatement of the Teign Valley and Moretonhampstead branches, their usefulness in providing a diversionary route away from the coast has been mentioned.

Not by a long way would this be their only or primary purpose. What has always been said is that the branches’ value when trains were diverted during an emergency, or in weather conditions that allowed only the Up main line to be used, or to enable planned engineering work, or when trains were routed in the normal course to ease pathing pressure along the coast, would have to be recognized in the accounting as a monetary benefit.

There are enormous costs, not just in repairing the breach at Dawlish and other storm damage, but also in conveying the traffic past the blockade by road and the consequent disruption.

There are fewer passengers; the train operating company has reduced fares; revenue is down; the road vehicles hired in are a huge additional expense; some traffic will be lost permanently; the few freight trains there are left in the timetable have been cancelled *furno*.

How many businessmen have been clubbing together to run a seven-seat taxi to Newquay Airport (R.A.F. St. Mawgan), Tiverton Parkway (Sampford Peverell), Bristol Parkway (Stoke Gifford) or even *Town* (London)? How many commuters will get used to the bus or coach? Horror of horrors, how many will have bought cars and will keep on using them?

Had the rail bypass route been available, it would have earned enough credits during this blockade to justify its existence for many years to come.

The latest offering, written in March, 2013, sent to Teignbridge District Council objecting to a proposal to demolish a bridge on the Teign Valley Branch, included these words:-

“Despite repeated claims that the estuarine and coastal main line is secure, the reality is that a combination of severe weather events could sever the route completely and a prolonged blockade would be disastrous for the network west of Exeter.”



B.B.C. Spotlight Feature

Everyone knows that the Teign Valley is delectable. Now its railway has been described as "curvaceous."

Neil Gallacher, Spotlight's Business Correspondent, telephoned on 4th March to say that he was putting together material for a piece on railways that may one day avoid the sea wall at Dawlish.

He seemed a pleasant young fellow but caused some consternation when he confessed that he had been reading these web pages but could not make out where the E.& T.V.R. stood. "Would the railway (being reinstated) be a good thing or a bad thing?" he asked. Some spluttering followed from this end.¹

When he asked whether the Teign Valley would like to state its case to camera, it was suggested that since most of the coverage hitherto had been pretty superficial, he might contact Gerard Duddridge, the chairman of the local branch of Railfuture for some serious and informed comment.

Mr. Gallacher telephoned the next day and advised that he would be speaking to Mr. Duddridge. He was given the railway's permission to film at Christow on the 6th, but the railway declined to take part, suspecting that no matter what was said, the angle being sought was along the lines of "Japanese found in jungle ..."

The feature was broadcast over three nights from 11th March, covering the former London & South Western's main line to Plymouth, via Okehampton and Tavistock, the Teign Valley and Moretonhampstead branches, and the now legendary Dawlish Avoiding Line. Each was given around four minutes and the longest speech from a "Rail Expert" was 17 seconds.

As remarked upon in an article above, the *Western Morning News'* idea of constructive journalism was to send someone to Brentor Station to ask the owner how he felt about the sound of rail spikes being driven in the distance and the sight of the surveying gang approaching.

Mr. Gallacher said that he was going to do better but his style was just the same. He went to the owner of the station building at the former Tavistock North, recently marketed as three residential units, who was worried that there may be a train at seven in the morning and another at nine at night — "We just don't know." Mr. Gallacher went to the former Exminster Station, now occupied by a firm of architectural salvors, where the owner expressed sadness that his house may have to be demolished because he had only just done it up.²

And the reporter came to Christow. In the seven seconds used from what his cameraman shot, he could have fixed on props with punch, but chose instead to film the collection of rolling ruins which await repair, in the absence of the sentimental crank.

Mr. Gallacher opened the Tuesday evening piece (4' 15") about the London & South Western route with: "Let's assume as railway planners do that Tavistock will, within a decade or so, have a railway line coming up from Bere Alston."³ Five spokesmen appeared:-

An unidentified local on Tavistock Viaduct	...	.	...	.	5 seconds
Councillor Kevin Ball, West Devon Borough Council	.	...			15 "
Owner of the former Tavistock North Station	.	...	.		11 "
Tony Berkeley, "Rail Expert"	.	...	.	...	11 "
Jonathan Roberts, "Rail Expert"	.	...	.	...	17 "

On Wednesday evening's piece about the Teign Valley route (3' 36"), only two appeared.

In his 15 seconds, "Rail Expert" Jonathan Roberts (Managing Director of Jonathan Roberts Consulting)⁴ said: "The Teign Valley route via Chudleigh is of limited benefit other than just as a diversionary route when the Dawlish sea wall is not available. It could have some commuter benefits but its journey time capabilities are very restricted."

Tony Berkeley (Anthony Fitzhardinge Gueterbock, O.B.E., 18th Baron Berkeley)("Tone" to his mates), in his 13 seconds, said: "The problem is that it's got severe gradients, I'm told, and it's quite curvaceous⁵ – windy – so the speeds on it would be low. I would call it a second or third rate solution."

Three appeared on Thursday evening's piece (four minutes) on the Dawlish Avoiding Line:-

Neill Mitchell, Rail Expert"	...	...	.	...	.	...	17 seconds
Tony Berkeley, "Rail Expert"	...	.	...	.	...	.	13 "
Jonathan Roberts, "Rail Expert"	...	.	...	.	...	.	13 "

Gerard Duddridge, the only man with any real knowledge of the subject, in the event did not appear and the whole effort can be disregarded as of no consequence.



- 1 Several followers were asked about this and the reassurance was obtained that the railway's position is unequivocal. Which just shows what comes from reading snippets on a smartphone.
- 2 Attentive viewers will have spotted in the yard the Devon County Council cast iron and timber road sign which until the late 1970s stood at the crossroads at Spara Bridge (Ashton Station).
- 3 Another decade would make it 33 years since the first feasibility study was completed.
- 4 See this consultant's report, "Investment in resilience and economic development: the West Country rail network." www.jonathanrobertsconsulting.co.uk
- 5 **Curvaceous** (an obscure engineering term), *having an attractive body with rounded hips and breasts.*

March, 2019: After leaving the B.B.C., Neil Gallacher published the pieces that originally had been broadcast over three evenings in March, 2014.

Idea for reopening the Teign Valley rail route <https://www.youtube.com/watch?v=90LbHbKtvHI>

Idea for reopening the North Dartmoor rail route <https://www.youtube.com/watch?v=GQzvVs9yYgY>

Idea for a new rail route just inland of Dawlish <https://www.youtube.com/watch?v=RenfUngqzeY>

November, 2022: "Coast" with Dr. Mark Horton and Dr. Peter Kay <https://youtu.be/6kqeNAqS-Wo>

November, 2023: A compilation of television newsreel and documentary clips, recording the disastrous breach of the railway's sea wall at Dawlish, the subsequent eight-week blockade and the triumphal reopening of the line in 2014.

<https://www.youtube.com/watch?v=gJoacD31wrk>

Occasionally, small pieces of evidence come to light which happen to support the greater historical account. Here, an open reference given to a nurseryman reveals that his former place of work, the modern-day *Jack's Patch* at Bishopsteignton, had been bought as part of preparations for the construction of the Dawlish Avoiding Line in 1937, as had much of the land needed between Newton Abbot and Teignmouth. It was not sold back until some years after the scheme was wound up in 1949.

Appendix: Reference from The Teignmouth Horticultural Company

<https://www.teignrail.co.uk/pdfs/CampaignAppendix8.pdf>



It has to be wondered whether the features editor of the *Western Morning News* telephones one of his regular little coterie of safe writers to request some copy, thus: "Can you send us fifteen-hundred words on blah-blah? Usual stuff will do. You'll get your hundred quid."

Neill Mitchell, "independent regional connectivity analyst," was wheeled out again in the Friday, 4th April edition, the day the line at Dawlish was to reopen. He had written an amusing letter the day before, saying that a junior civil engineer of his acquaintance, named Oliver (aged 4½) from Chudleigh, had planned a new line tunnelling beneath Haldon that would be eight miles shorter than the existing one and 15 minutes quicker.

Without checking, Mr. Mitchell quoted these figures in his article commissioned to appear on the morning that services resumed through Dawlish.

It is assumed that the analyst lives in or near Bere Alston, since it is on the platform of this station that he often faces the television cameras. Yet he pours cold water on the idea of reviving the main "Green Line" from Waterloo, despite having been a regular traveller on it (this writer also remembers journeys between Exeter and Plymouth).

In a rational world, young Oliver would campaign for his local station (on the Teign Valley Branch) to reopen, Neill Mitchell would press for through trains from his home station to Waterloo and everyone else would forget about building unnecessary high speed cut-offs.

Letter to the *Western Morning News*, 7th April, 2014

Teign Valley line is answer to rail crisis

From Exeter to Newton Abbot by rail is 20 miles and the distance is covered non-stop in 19 minutes or less.

If a new line were to make a junction at Exminster and run dead straight to Newton Abbot, the overall distance would be 16 miles.

Exeter to Newton Abbot as the crow flies is 14 miles.

How does Neill Mitchell ("Joined-up thinking offers hope of faster rail travel to region," *Western Morning News*, 4th April) think it possible to reduce 20 miles by eight and a journey of 19 minutes by fifteen?

A direct high speed line, costing £500-million or more, would save about eight minutes, a reduction which could be achieved by electrification through to Plymouth.

The obvious answer to the problem of the vulnerable sea wall is the mirror-image, 20¾-mile Teign Valley route. It would be the first of Devon's lines to re-open and would surely become as

successful as those which survived closure; the clencher being its invaluable diversionary capacity.

This would not just be in times of extreme disruption but on the many occasions when main lines are impassable, for reasons of safety or because of engineering work. It would also ease pathing pressure and be a popular return route for excursions and land cruises.

Had the Teign Valley line been available during the 59 days of the Dawlish débâcle, it would have carried around 3,000 trains; many more if all the traffic lost to rail had been worked at night.

Would anyone now be questioning the value of the Teign Valley? Certainly not the businessman on the *Golden Hind*, tucking into his breakfast or engrossed in his laptop, who had been delayed but not disturbed by diversions.

More information is published on www.teignrail.com.

Colin Burges
Owner and Operator of
Exeter & Teign Valley Railway

Letters to the Editor are submitted type-written, yet routinely mistakes are made; it is rare these days to find anyone who is capable of faithfully copying work.

This letter found fault with figures stated in an article by a professional consultant. It may reasonably have been hoped that, even if the copy-typist had messed up the grammar, spelling, punctuation and syntax, at least the figures would have reached the page unadulterated, important as they were to the sense of the letter.

But, hope dashed, the crucial sentence was ruined:-

"How does Neill Mitchell think it possible to reduce 20 miles by eight and a journey of 19 minutes by fifteen?"

was printed as:-

"How does Neill Mitchell think it possible to reduce 10 miles by eight and a journey of 19 minutes to fifteen?"

Of course, it is accepted that newspapers are produced hurriedly and mistakes are bound to happen, but the sad truth is that, despite all the undoubted advances in technology and supposed advances in education, it is likely that a hand-written letter would have been published more precisely in the days when it first had to be typed up and was then set in hot metal.

To the strains of "Bridge over the River Kwai," the South Devon Railway's main line reopened to traffic on 4th April.

Repairs were estimated to have cost £35-million. £16-million compensation is to be paid to train operators. The total cost of the disruption may only be guessed.

As part of the promotional effort designed to make the line attractive to local passengers, it is to be dubbed "The Atmospheric." It is not often that this railway applauds anything that the present shower does, but it has to be said that this is a splendid idea.

Sorry to spoil the mood, but ...

The praise that has been heaped upon Network Rail and its "superhuman" workforce should be tempered by a sprinkling of reality.

There is no doubt that the track authority devised a plan and mobilized men, plant and materials very smartly. Given the constraints of the modern construction site, the work could not have been done any faster.

It is no use conjecturing how different it may have been in times gone by, when the engineer could have called up trains laden with boulders from rail-served quarries on either side of the blockade; cranes, locos and wagons at his immediate disposal; and plentiful manpower, with not a hard hat or an orange jacket to be seen. So, the engineer might have had the Up road back in place for 5 m.p.h. within a week. That was a world removed from this one.

brought by road to Dawlish Warren and Dawlish stations. Only in the final weeks did a ballast train tread the rusty metals from Exeter. The staff are no longer railwaymen at all. They spend their working lives racing vast distances on the road system and scarcely use the trains for duty or pleasure. Not one of them has the faintest vision of an expansive, general purpose railway muscling its way into new territory and areas of transport business.

Network Rail may have acquitted itself satisfactorily with the repair, but it should not be forgotten that before the débâcle the outfit had continued to state that it was sure such a failure could not happen and had rubbished the calls for work to start on reopening the other routes west.

Network Rail is part of the *Frankenstein* railway; less grotesque than Railtrack, perhaps, but still a monstrous, artificial creation that must be put out of its pointless misery.



Clare Meiklejohn

The staff and contractors that kept the local fast-food joints busy were just doing their jobs; none wore orange capes and tights. Some put their backs into it; others, as always, were seen just marking time. But for the emergency, many of the men would have been on "bare strokes" (basic pay); now, it is a cert that every one of them will be taking an expensive foreign holiday this year, buying a new car or making a hefty payment on his mortgage.

The task proved once again that the railway has ceased to serve itself. Very nearly all of the equipment and materials were

Had the weather gods been angrier and the conditions of 4th February prevailed over numerous tides—which admittedly seldom occurs—then the damage could have been nightmarish: enough to close the railway for much longer than two months, even well into the summer timetable period. If the industry quietly accepted that it had been lucky, no air of humility was allowed to pervade its self-congratulatory outpourings.

A compilation of television newsreel and documentary clips, recording the disastrous breach of the railway's sea wall at Dawlish, the subsequent eight-week blockade and the triumphal reopening of the line in 2014.

The engineering work is rightly given prominence but it is not overlooked that there was feverish activity behind the scenes as controllers dealt with the unprecedented disruption. Hardy passengers have their say, too.

Also covered are the inspections of the line across the flooded Somerset Levels; the relining of Whiteball Tunnel; the removal by road of H.S.T. power cars and trailers to and from Laira Depot; and the loading of logs at Exeter Riverside Yard.

The recordings were made originally on magnetic tape. They were transferred to D.V.D., uploaded to the computer and converted to MP4. The eighty minutes were edited and divided into five-dozen segments using *Movie Maker*.

One of the great strengths of the British railway system was its route diversity. All the effort and expense in the ten years since the débâcle has been devoted to reducing the vulnerability of the main line, while not one chain of an alternative route has been built.

Correction: The presenter at 11:55 is Andy Breare, not Justin Leigh.

<https://www.youtube.com/watch?v=gJoacD31wrk>

The Expendable Transport System

Rusty Rails



The disused South Devon main line passing beneath Clapperbrook Lane Bridge. Behind the camera is the site of the planned £4-million Marsh Barton Station. Would it have gone 59 days without seeing a passenger train?

There seems to be a strange residual belief at large that the railway still somehow fulfils the essential functions it once did, when many or most aspects of life, industry and commerce were in one way or another touched by rail transport. But that age is now so long in the past it is hard to see how anyone remains ignorant of what has happened: that the greatly predominant system is now road transport.

The wildly inflated sums that it was claimed were being daily lost as a result of the Dawlish débâcle do not stand scrutiny. For them to have been taken as reasonably accurate, there would have to have been obvious evidence such as factories on short time; business deals not being struck; holiday accommodation emptier than it would normally be in February and March; raw materials and components, consumables and luxuries not being delivered; and a host of other debilitating effects—in short, a severe economic slow-down.

The painful truth is that life in the two “cut off” counties went on and if people’s travel habits were disrupted, it was more likely to have been because of damage to their local roads. Everyone got his paper and post, his food and fuel; these and everything else have been on road for many years. Certainly in the West Country, the railway is a side show whose traffic can be absorbed onto the roads without it even being noticed.

Train operators were running coaches direct from Plymouth to Tiverton and Bristol car park stations quicker than the trains. No-one bothered running trains to Dawlish Warren and Teignmouth. Diesel units were moved on lorries, albeit the 139 loads were far more than usual. Gas oil fuel was put on road last year.

Of course, a great number of rail passengers were put out by the blockade and these general observations are not meant to diminish the delay and inconvenience caused to individuals. But these difficulties must be seen in scale: fewer than 1% of people in Devon, for example, travel to work by train.¹

As is the way of things, it is very unlikely that the railway will benefit from any but the most half-hearted action. Strong weather resilience will not be achieved. Indeed, expenditure may go to other modes. Government has already agreed to subsidize Newquay Airport and the campaign to improve the A303 road has become louder.

¹ 2001 Census

February, 2022: After taking some photographs on Polehouse Lane, where the bridge over the Teign Valley Branch and Devon Cutting have been infilled, the scout continued up the hill and turned left into Markham Lane. He quickly came upon someone on the road with a tripod, which he thought at first was a surveying instrument. When he realized that it was a fellow filming, he drew up quietly and waited.

It turned out to be John Ayres, the well known B.B.C. *Spotlight* reporter. The scout, despite having been watching the chap's 2014 coverage of the Dawlish D  b  cle only a few days before, could not think of his name and so "you're on the television" had to do.

He was filming (two seconds in the broadcast) for a piece on the controversial proposed housing development nearby, which he discussed with the scout along with numerous other subjects, most notably the sea wall.

He had been with his crew covering flooding at Looe when he was ordered to Dawlish, which his bosses didn't think was far away. Even though he didn't make it until the following morning, he was still the first reporter on the scene. It remained, he told the scout, his biggest story.

How fortuitous it was that the scout's decision to photograph an old bridge that day led to him having twenty minutes alone with John Ayres.

January, 2024: With the tenth anniversary of the d  b  cle approaching, a compilation of television newsreel and documentary clips, recording the disastrous breach of the railway's sea wall at Dawlish, the subsequent eight-week blockade and the triumphal reopening of the line in 2014, was posted on T.V.T.V.



<https://www.youtube.com/watch?v=gJoacD31wrk>

Great Western Main Line West of Exeter Route Resilience Study

At the time of the Dawlish D  b  cle, Network Rail was charged with reporting to Government on its proposals for ensuring future dependability of West Country rail services. This was supposed to include ways of strengthening the existing coastal section as well as examination of five other possible routes: the former Southern main line between Exeter and Plymouth; the Teign Valley and Moretonhampstead branches between Exeter and Newton Abbot; and three variations of the 1930s Dawlish Avoiding Line scheme. It was said that there would be extensive consultation in the areas concerned.*

From all accounts it was understood that Network Rail would report in the first instance by the end of June, with a more detailed study to be delivered in autumn.

The interim report is more likely to be a package of half measures than what is really needed, but the truth is that rail's share of traffic is so small that Treasury would balk at funding anything grand, even if the wretched track authority were to make a bid. However, it would be a tragedy if all that resulted from February's d  b  cle were subsidy for Newquay Airport and a start on upgrading the A303.

Every year, the railway finds some pretext to draw attention to the Teign Valley. Early on, it was obvious that no effort would be needed in 2014, as the route appeared nationally on television screens and newsprint.

Naturally, there was much chatter throughout the hiatus and some ridiculous assertions were made by the usual panel of self-appointed experts. The railway sent some letters to the paper to give factual information an airing, but it was decided that the time for action would be between the main line being reopened and Network Rail submitting its ideas.

Using a mere 3,000 words and language for the most part intelligible to the establishment, "A Summary of the Case for Reopening the Inland Railway Route between Exeter and Newton Abbot" was sent out towards the end of June, with a copy aimed to land on the desk of the Secretary of State for Transport on 27th.

* A Network Rail gang was seen in the Teign Valley but the men spent all day sitting in their van.

A Summary of the Case for Reopening the Inland Railway Route between Exeter and Newton Abbot

<https://www.teignrail.co.uk/pdfs/R2.pdf>

In **February, 2017**, a Postscript was added.

Circulation List

<u>Recipient</u>	<u>Position</u>	<u>Response</u>
Patrick McLoughlin, M.P. Department for Transport Peninsula Rail Task Force Network Rail	Sec. of State for Transport	Personal reply ¹ " " " " " " 2
Rail Delivery Group Rail Freight Group		No reply " "
Lilian Greenwood, M.P. Hugo Swire, M.P. Ben Bradshaw, M.P. Mel Stride, M.P.	Notts. South (Shadow Rail Minister) East Devon Exeter (Labour) Central Devon (Con.)	" " " " Standard reply No reply ³
Anne Marie Morris, M.P. Adrian Sanders, M.P. Sarah Wollaston, M.P. Oliver Colvile, M.P. Alison Seabeck, M.P. Gary Streeter, M.P. Sheryll Murray, M.P. Stephen Gilbert, M.P. George Eustice, M.P. Sarah Newton, M.P. Andrew George, M.P. The Lord Berkeley, O.B.E.	Newton Abbot (Con.) Torbay (Lib. Dem.) Totnes (Con.) Plymouth, Sutton (Con.) Plymouth, Moor View (Lab.) South West Devon (Con.) South East Cornwall (Con.) St. Austell and Newquay (Lib. Dem.) Camborne and Redruth (Con.) Truro and Falmouth (Con.) St. Ives (Con.)	" " 4 " " Personal reply No reply Personal reply " " No reply " " " " " " " " " "
Devon County Council Exeter City Council Teignbridge District Council Starcross Parish Council Dawlish Town Council Teignmouth Town Council Newton Abbot Town Council Christow Parish Council Dartmoor National Park Authority Transport Salaried Staffs' Assoc. Rail & Maritime Trades Union A.S.L.E.F.		" "
Baroness Jones of Moulsecoomb Dr. Molly Scott Cato, M.E.P. Exeter Green Party Diana Moore David Bailey Railfuture Campaign for Better Transport Devon & Cornwall Rail Partnership Nigel Harris Christian Wolmar Jason Schofield <i>Railways Today</i> <i>Railnews</i> <i>Western Morning News</i> <i>Mid-Devon Advertiser</i>	Green Party Green Party P.P.C., Exeter Green Party Green Party, Dawlish Pressure group " " Editor, <i>RAIL</i> magazine Railway author C.E., Sutton Harbour Holdings, PLC	" " " " " " Personal reply No reply " " " " " " " " Personal reply No reply " " " " " "

¹ From Claire Perry, M.P., Under Secretary of State for Transport.

² Network Rail treated the submission as an enquiry and issued a Service Request Number.

³ Christow Station lies within this M.P.'s constituency. He has publicly stated his preference for reopening the route to Plymouth via Okehampton. He was there like a shot when the Friends of Ashburton Station asked for his help and promised some publicity.

⁴ The affected main line and part of the Teign Valley lies within this M.P.'s constituency.

Copies of the E. & T.V.R. summary were sent also to numerous individuals, whose omission from the above list does not signify that they are less important.

Every summary was accompanied by a letter tailored to the recipient's position. Clearly, many recipients were not expected to reply, it being the intention merely to inform them and bring some clarity through the fog of news reporting. Some, though, as usual, felt much too superior or uninterested to acknowledge the communication.

The Government Minister responsible warmly responded. What does it matter if others did not bother to reply?

The Network Rail Report

Playing to the cameras while visiting Dawlish shortly after the line was washed away, Prime Minister David Cameron announced that he had ordered Network Rail to prepare a report detailing what might be done to strengthen the route or build an alternative, as if money were no object.

Off record, in a hushed aside to the senior Network Rail officer, it is imagined that he added: "But don't go to a lot of trouble."

And, bless it, the firm did not. Its study, submitted at the last minute like a grubby schoolboy handing in his prep, could not have been awaited with less eagerness.

Broadly, it looks at three options:-

- (i). Do no more than usual;
- (ii). Strengthen the sea defences and stabilize the cliffs;
- (iii). Talk about the impossibility of an alternative route.

Item three involved rebuilding the Southern route to Plymouth via Okehampton, building a new double line railway along the Teign Valley route and building a new inland cut-off with junctions somewhere between Marsh Barton and Hackney. This was narrowed down to five specimen routes out of a possible twenty.

Costs ranged between £470-million and £3-billion. The Teign Valley was the least expensive, though still extremely poor value for money, rating a Benefit-Cost Ratio of 0.29.

What Network Rail did not do was price for a branch line

With a diversionary route available, breaches of the sea wall would not be so disruptive. It might then be best for the sea and weather to find the weaknesses and for the defences to be strengthened by repairs over time.

with enhanced diversionary capacity, the value of which the track authority probably failed to understand.

The estimated cost of reinstating the Teign Valley would be £180-million, or ten times the loss¹ sustained in February and March. Delivering a B.C.R. of about 0.7, it would better the "Borders" project in Scotland.

Since the report was not meant to be taken seriously, there is no more that need be said, but some extracts are reproduced here to prove that someone has read the thing.

The map used on page four and throughout is taken from a road atlas and has the railways picked out, including parts of the Moretonhampstead and Cattewater branches that were taken up more than three years ago.

¹ The compensation paid by Network Rail to train operators, not the overall damage to the West Country economy.

The report was actually the work of consultancy firm, Jacobs, which is often found lurking behind the scenes.

So, a report written by non-railway people for a track authority that doesn't run any trains for a government that would much rather build roads and airports.

There may be a lesson from history here. In 1939, the Great Western Railway as good as gave up on the government-funded £10-million Dawlish Avoiding Line and in 1943 took £30,000 to install four long loops and improved signalling on the Teign Valley Branch.

Page	Extract	Comment
5	<p>In any event, Network Rail is committed to maintaining the existing route via Dawlish. In collaboration with stakeholders, Network Rail is continuing to develop proposals for reinforcing the existing railway to achieve an improved and appropriate level of resilience in the face of changing climatic conditions. This report¹ will be available in the first part of 2015.</p> <p>Our stakeholders will continue to consider the wider and social impacts of rail services. For example, quantifying the effects of the events in February, and assessing how new or improved services on existing or reinstated lines might contribute to local plans and aspirations for spatial and economic growth.</p>	<p>¹ Western Route Study</p>
6	<p>The wider cost to the local economy resulting from the events at Dawlish is much harder to estimate for a number of reasons:</p> <ul style="list-style-type: none"> • There may be a delayed impact including loss of custom arising from longer-term reputational damage, the effects of which may not be known for some time • Some enterprises, such as local bus, coach and taxi firms, may have benefited from the situation <p>On average some 12,500 rail journeys are made across this route each day.</p>	<p>Making 4½-million per annum.</p>
10	<p>Table of freight train movements in spring, 2014, lists two trains a day, carrying china clay, timber and petroleum.</p> <p>Forecasts from the Freight Market Study suggest that commercial freight traffic volumes by 2043 will remain broadly as they are today, i.e. one to two trains in each direction per day.</p>	<p>The petroleum traffic (internal gasoil) was lost to rail last winter.</p>
12	<p>Train services along the Dawlish sea wall can be suspended by wave overtopping or sea spray.</p>	
19	<p>Option 3 (Alternative Route A) - The former London & South Western Railway route</p> <ul style="list-style-type: none"> • Meldon Viaduct, an 165 metre long and 46 metre high listed structure located immediately south of Meldon quarry, is too badly deteriorated for re-use. A new structure would be required, adjacent to the existing viaduct • It is likely that a proportion of existing earthworks will be deficient, having been constructed prior to a modern knowledge of soil mechanics, adding a measure of uncertainty <p>... reversals add at least a further 10 to 14 minutes to through journeys. ... at least seven minutes at Exeter for a High Speed Train and at least five minutes for a Class 220 Voyager ...</p>	<p>This applies to the entire British railway system.</p> <p>In the 1990s, some stopping services between Cardiff/Bristol and Paignton/Penzance, formed by DMUs, called at Exeter Central, involving two reversals in quick succession.</p>
23	<p>Option 4 (Alternative Route B) - former Teign Valley Railway route</p> <p>Construction, including moving tunnelling machinery and removing spoil, would be difficult owing to limited road access.</p> <p>All former structures would require renewing or rebuilding for a two track railway.</p>	<p>Railways used to be constructed very largely within the corridor using temporary lines.</p> <p>In common with many single line branches, all the overline bridges on the Exeter, Teign Valley and Moretonhampstead railways were built for a double line.</p>
25	<p>Introduction to Option 5 (Alternative Routes C1 to C5)</p> <ul style="list-style-type: none"> • A maximum gradient of 1 in 150 to allow freight train operation 	<p>Not far beyond Newton Abbot is Dainton bank, which stiffens to 1:37.</p>
	<p>It may also be possible to use some of the tunnel spoil in the construction of new railway embankments.</p>	<p>Has this been done before?</p>

29 **Financial and economic appraisal**

b. General Assumptions

Benefits to non-rail users through modal shift from car to rail (e.g. road decongestion, environmental benefits) have been included in the appraisal.

Indirect taxation impacts are also factored into the appraisal. This is the effect on tax revenues of users switching from private car and therefore contributing less in fuel duty.

30 c. Results

i. Option 3 (Alternative Route A) - reinstated railway via Tavistock and Okehampton

... appraisal of this option as a diversionary route omits ... a local service as it would significantly worsen the performance of the option in the appraisal.

33 e. Conclusions

The results indicate that, from a transport economic appraisal point of view, all the alternative route options represent poor value for money. This remains true under a range of sensitivity tests.

This is Network Rail being bullish.

... this appraisal has not taken account of wider social and economic benefits that might have been forgone during the closure of the railway in February 2014. Our stakeholders continue to gather research to help quantify the size of these wider impacts, and to understand the extent to which they might contribute towards enhancing any business case for an additional or alternative route.

***Western Morning News* transport analyst discovers worm hole in space-time continuum**

Neill Mitchell — mentioned before; establishment drip formerly of Margaret Thatcher's press office; no doubt his contacts at the *Daily Mail* got him a little retirement retainer with the regional rag — had another opinion piece published in the *Western Morning News* on 9th September: "Why we must demand the best railway services for all regions."

He stated in a previous article that the distance between Exeter and Newton Abbot could be reduced by eight miles. This railway responded with a letter to the editor pointing out that the distance by rail is 20 miles and from St. David's to Newton Abbot as the crow flies is 14 miles. The letter was printed incorrectly and posted in cyberspace for all to see, making the railway seem incompetent.

Mitchell made the claim again in a subsequent article. This time the railway wrote a letter not for publication to the editor showing up the daftness of his stock contributor.

"The letter asking how it was possible to reduce 20 miles by eight, when the distance as the crow flies is fourteen and the shortest possible diversionary line would be 16 miles long, had its figures printed incorrectly so that no one took any notice."

Now, in his latest piece, Neill Mitchell claims that building a modern Dawlish Avoiding Line "... would clip some 12 miles off the circuitous length of the current 60 m.p.h. main line, reducing the rail mileage between Plymouth and Exeter from 57 miles to near parity with the 44 road miles of the A38 "Devon Expressway.""

What hope is there of revealing deeper truths if the small matter of the distance between two places cannot be established?

Following the Débâcle ...

After the Network Rail helicopter was seen hovering over Christow while tracing the course of the railway, a scouting party came on the ground to look more closely at the abandoned diversionary route.

Quite naturally, the "pathfinders" called in at Christow where it was explained to them what the Teign Valley line could provide, both in emergencies and in the normal course, given the advances in traction and signalling technology.



From the 121 comments on an article in
The Telegraph

5th February, 2014

By the cheerful [StuckinUK4Now](#)

**Look at this shocking photograph.
Cornwall and South Devon
deserve a railway they can rely on**

(The other alternative—the former Teign Valley branch from Exeter to Newton Abbot through the hills—is shorter, but was just a pottering country branch line and in no way suitable for main line traffic. Nor are there any significant population centres along that route to make it viable; the largest place it served, Chudleigh, is such a small town that it doesn't even rate a bank branch any more—the last one, Lloyds TSB, closed in 2006. The Teign Valley route would only be of value as a purely diversionary route when the sea-wall route was out of action and would probably 'rust in peace' for most of the time).

UPDATE: Not everyone agrees with the idea that reinstating the Teign Valley branch line is an unsuitable idea; there's an outfit calling itself the 'Exeter & Teign Valley Railway' with grandiose ideas about reopening it as a privately run community line, and seems a touch eccentric! You can view their website [here](#):

Admittedly they don't seem to be proposing it as a substitute for the sea-wall route through Dawlish, but as to the viability of the line which merely served a few villages and one very small town, I stand by my original evaluation above (although I would be happy if the group succeeded in their aims and proved me wrong!)

Sea-level rise impacts on transport infrastructure: The notorious case of the coastal railway line at Dawlish, England

This paper, recently published in the Journal of Transport Geography, finds that the incidence of disruption has increased, and will increase further, with the rise in sea level.

Some extracts:-

... the Newlyn tide gauge recorded its highest ever water level on 3 February 2014.

... the southwest of England, which is sinking at a rate of 1.1 mm/yr due to ongoing glacio-isostatic adjustment, will experience the highest rates of relative sea-level rise during this century.

Track restrictions run from Level 1 to Level 3 and have a range of impacts on rail traffic from 20mph speed restrictions on the down line to full closure of both the up and the down lines until safety inspections (and any necessary remedial works) have been completed. In-sea sensors provide information to NR staff in advance of severe overtopping events in order to allow them to close the line before it becomes dangerous to passing rail traffic. The events of February 2014 amounted to a spectacular example of a Level 3 restriction, when the in-sea sensors returned the most extreme warning possible, a 'black alert'.

In this study, we assume that the underlying driver of change in overtopping frequency and thus transport disruption is sea-level rise, and thus for the first, empirical, stage of the work, we seek to establish from observations a relationship between overtopping and sea-level change.

During the lifetime of the railway, there has been ≈ 0.20 m of sea-level rise in the English Channel, although nearly half of this occurred during the last 40 years.

... 150 years of sea-level rise has significantly reduced the available 'freeboard' ...

If our calculations are correct, and assuming sufficient maintenance to retain sea defences in their current condition, then in headline terms: sea-level rise of 0.05-0.07 m by 2020 means the average number of DLRs [days with line restrictions] will double to 16-19 per year; by 2060, sea-level rise of 0.27-0.39 m will cause an annual average of 46-63 DLRs; and by the end of the century as many as 84-120 DLRs will occur each year as a result of a 0.55-0.81 m increase in sea level.

By 2060, with high-impact events occurring on average twice a year, the extent to which the railway would be able to maintain a credible service has to be brought into question.

... there is more and more evidence to show that travellers can adapt to a major change in network conditions rather more readily than policy makers currently assume; were such a major change the introduction of a regime or road user charging, rail patronage may increase to the point where such major disruption along the South Devon coast becomes a far greater test of public policy than it is today.

The authors are David Dawson, Jon Shaw and W. Roland Gehrels, from Leeds, Plymouth and York universities respectively.

<http://www.sciencedirect.com/science/article/pii/S0966692315002197>

Peninsula Rail Task Force

June, 2016

This talkshop, brought to prominence during the Débâcle, has drafted "The 20 Year Plan — for investment in the South West Peninsula Rail Network."

With not a practical railwayman, an environmentalist or a true forward thinker among its half-hearted proponents, the Teign Valley could scarcely find the words to comment:-

"Really? Two years' work by a host of contributors to form a plan to develop the most sustainable form of transport over the next twenty years and this is the best that can be done?"

"The most glaring omission is the need for a feasibility study of the Teign Valley route, not as an alternative main line but as a branch line with enhanced diversionary capacity, the practical railwayman's preference."

<https://www.peninsulatrtransport.org.uk/>



27th February, 2014

Maddocks Extreme Weather Protocol, 2010

This Protocol for the Dawlish coast describes the process by which forecasts of extreme weather, in particular combinations of high tide and high winds, will activate corrective action by N.R. This is informed by a warning system based on weather forecasts provided by *MetDesk* at 0300 hours every day. This protocol consists of three levels which trigger different actions depending on the severity of the warning.

A key part of this Protocol is to assess the severity of the sea conditions being predicted and determine the level of risk. The protocol defines the actions to be taken and the key personnel to be contacted. The main group to be consulted is the Extreme Weather Action Team (E.W.A.T.). The E.W.A.T. telephone conference is held as soon as reasonably practical following the receipt of the warning and is chaired by the Route Control Manager. The factors in generating the severity of this warning are:

- Predicted wave action/surge effect on the sea wall
- Predicted wave periods/frequency—peaks and troughs affecting overtopping
- Predicted tide height exceeding laid down levels
- Predicted wind speed exceeding laid down limits
- Predicted wind direction being 'adverse'
- Atmospheric pressure

Each progressive Operating Level from One to Three involves greater restriction on services and therefore results in greater disruption to passengers.

Level One is triggered by winds greater than Force Five approaching from the east or southeast on a very high tide or greater than Force Seven under any other tide level. Actions include a temporary speed restriction on the Downline to 30 m.p.h. in daylight and 20 m.p.h. in poor visibility and, or, darkness. Level One normally applies for two hours either side of high tide. Level One working can only be withdrawn after the Downline has been inspected by members of the permanent way team.

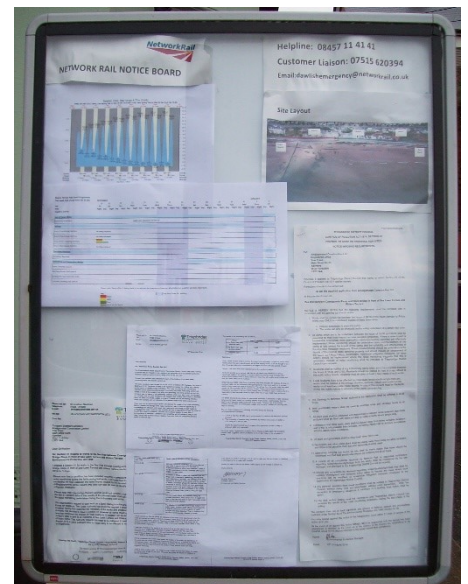
The **Level Two** Protocol is prompted by winds exceeding Force Nine and stops all services running on the Downline between Dawlish Warren and Teignmouth stations. Down services must run on the Up (reversible) line instead. Level Two working can be withdrawn with a temporary speed restriction after the Downline has been inspected by members of the permanent way team. Full operation can be resumed after the sea wall has been inspected from beach level.

Level Three operation refers to the full closure of the line with no services running in either direction on either the Down or Up lines. Following closure, a full inspection of both lines by permanent way staff is required before reopening. The restrictions following a Level Two period also apply.

It is important to note that specific rolling stock is withdrawn during adverse weather. For example, the Class 220/221 "Voyager" units (operated by *CrossCountry*) are withdrawn prior to the commencement time of a Level One warning. Under the previous warning system, N.R. was provided with a warning specific to the withdrawal of these services.



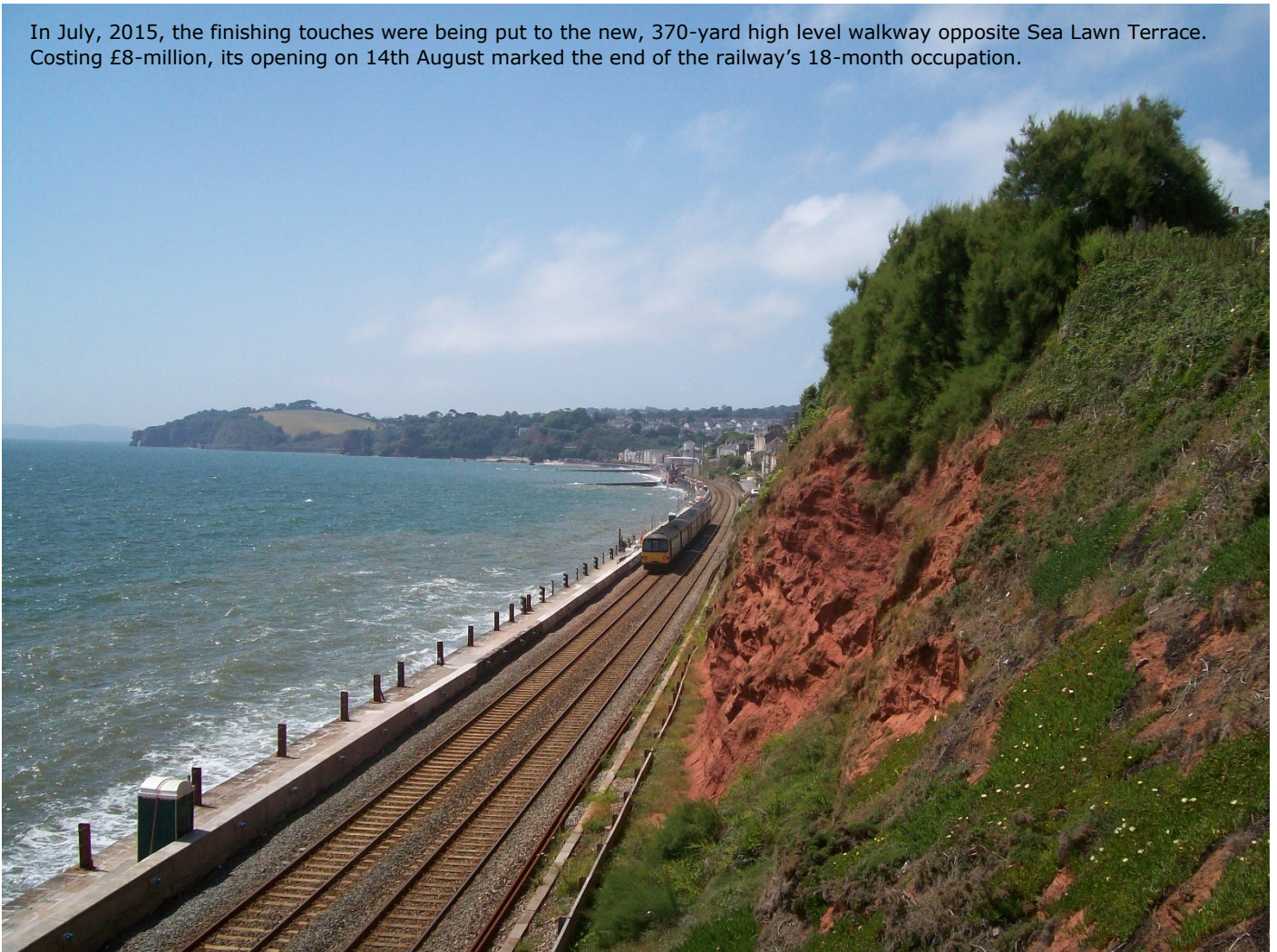
BLOCKADE (telegraphic code for "All lines blocked at ...") **Exeter St. Thomas**, 3rd April, 2014.
Exeter Railway Junction is just ahead and what is left of the Teign Valley goes off where the crane jib is seen.



23rd December, 2014



In July, 2015, the finishing touches were being put to the new, 370-yard high level walkway opposite Sea Lawn Terrace. Costing £8-million, its opening on 14th August marked the end of the railway's 18-month occupation.





August, 2016

Even the theoretical 200-year storm, which the wall has not yet had to face, should not harm this mass of concrete.

But the train service remains vulnerable. As the railway said in its case for reopening the inland railway route:—

"Disruption will not just occur when there is damage to the sea wall or the track above; there will be many occasions when white water alone will temporarily curtail the train service. Even where Network Rail has poured 5,000 tons of concrete, the line can still be lashed by waves."



The Network Rail Roadshow

"Come and find out the future proposals for defending the line," went the handout.

In November and early December, 2016, Network Rail put on a series of public information events to explain the measures proposed for the defence of the main line between Exeter and Newton Abbot.

The launch was held at the Langstone Cliff Hotel on 17th November and the E. & T.V.R. scout grudgingly went along, knowing that it was all a waste of time. He caught the train from Polsloe Bridge and after riding out to the seafront and stopping to look at the camping coaches, whose future was then uncertain, he climbed the path to the hotel. It appeared that the scout was the only one to have come by train and his was the only bicycle to be seen.

It did not take long to digest what was being proposed and the pie-in-the-sky nature of it; there had already been some release to the press. As the scout entered, a lady from Teignmouth was being interviewed in front of a television camera and she was talking about the fabled avoiding line. And there they were, the vain and the vacuous, lining up to deliver their well rehearsed, but quite meaningless, lines. Even standing as close as he could, the scout found it hard to catch what Tory Clone, Painted Doll and an ex-M.P. who had bought luxury furnishings for his London flat at taxpayers' expense, had to say—as if it mattered.

Eventually, the scout managed to grab the coat tail of the N.R. floorwalker, Uncle Monty from *Withnail and I*, that Dawlish had transformed from "a P.R. man who worked for the railway" into a "railwayman who has a P.R. job." It was put to him that the amount of work being proposed would never get funding in full and that anyway the timescale would probably see the programme fall apart. He referred to the £10-million just then announced to fund further development of the scheme; exploratory work so far had cost £3-million.

On the subject of bypasses, the scout had heard Mike Gallop (Route Asset Management (Western) Director) tell the *Beeb* that Network Rail had not ruled out another route but had decided that everything had to be concentrated on strengthening the existing line. The scout put it to *Monty* that quietly his authority had no intention of pursuing any expansion of the network. He trotted out the untruth that the Southern route would not give such a good service and that one of the factors that stood against it was the need for drivers to have dual route knowledge; he was about to explain what this meant when the scout let on that he was an ex-B.R. man.

"Are there any enthusiastic railwaymen within Network Rail that want to see the system expand into barren country and the railway recapture lost traffic?" the scout asked him. "We're all very enthusiastic," he replied. So the scout drew his attention to the two local stations that were completed well over budget at around £2-million each and the next one, Marsh Barton, whose estimate had now rocketed to over £7-million, most of which, according to D.C.C. reports, was industry loading. The scout put it to *Monty* that here the industry was the obstacle to railway development. He said that he didn't know much about it, only that Marsh Barton was a "difficult one."

The lady being interviewed earlier collared him about the lack of advertising and the failure to release details of the scheme. *Monty* seemed surprised and said that an agency did the N.R. advertising (naturally) and found what was by now in her hands on the N.R. web pages. The scout should have jotted down the link because it has eluded him since; this is the nearest that has been discovered:

https://drive.google.com/file/d/0B9x_iW8jXCh_VFh0aHZHSTJIUkk/view

Two publications were available: a leaflet, *Exeter to Newton Abbot railway defences: Long-term protection of the railway and the community*, and a pamphlet, *Exeter to Newton Abbot Geo-Environment Resilience Study*. Under "Additional Routes," the leaflet states: "Please note: This study does not cover the possibility of any additional routes into the South West. This issue was dealt with in a separate report published in June 2014, and there are no plans at the moment to build any of the options listed in that report."

Monty told the scout that the "Northern" route was costed at £600-million; but then he also advised that Portishead had been reopened (he meant Portbury). He also put a spin on the electrification fiasco, saying that it was not the disaster everyone was making it out to be. Bless him, he was only doing his job.

Afterwards, waiting alone on Warren platform for the 1827 to take him and his mount back to St. Thomas, the scout recalled being seated on the verandah of a G.W. brake van on the main line in the small hours of a January morning, having got a ride on the Signal & Telegraph's train dropping cable ducts for the Exeter area resignalling (actually, he was paid "rest-day worked").

Just to test the P.R. officer who looked like he enjoyed an occasional drink, in the following week the scout asked if it would be possible for the proponents of additional lines, the E. & T.V.R. and the Okey camp, to have pitches at the next stop on the roadshow, the Rougemont Hotel in Exeter. This was politely refused, which turned out to be a relief because when the scout looked in to see the venue on 28th, hardly anyone was there.

The Rougemont is opposite Central Station but it is still unlikely that any N.R. staff came by train or would even think of doing so, such is their remoteness from the system whose track they manage.

The visit was not without reward. This time the scout was approached by a keen young coastal engineer on secondment from Mott MacDonald who very capably answered every question put to him, including at last the positions of the mystery buoys that gave the fateful warning of extreme wave height back in 2014.

There is in reality only one and it is anchored at 50° 34' N., 3° 24' W., or roughly two miles east of Dawlish. It is managed by the Plymouth Coastal Observatory in connection with the Channel Coastal Observatory and its readings are relayed to shore currently.

On the Plymouth Coastal Observatory front page can be seen a picture of a WaveRider buoy, which must not be used for mooring:-

southwest.coastalmonitoring.org/live-waves-and-tides/

The works proposed range from simple flood defences and drainage between Exeter and Dawlish Warren, and between Teignmouth and Newton Abbot, to the quite fantastic ideas for the coastal section between Parson's Tunnel and Teignmouth.

Here, the cliffs are seen to be the greatest threat: a massive slip had to be induced to make them stable just before the line was reopened in 2014. The solution, it is held, is either to reduce the slope of the cliffs, involving substantial land acquisition above them and closure of the line for a year, or the construction of a new alignment commencing in Parson's Tunnel and taking the foreshore all the way to Teignmouth, which would allow the cliffs to be stabilized by toe buttresses of imported material. The latter bright idea would offer the possibility of an additional running line and a path along the undercliff as well as one along a new sea wall.

The track authority has vaguely programmed all the works proposed over a 60-year span and suggested a cost of around £500-million, both of which can be dismissed as worthless estimates.

A lot can happen in 60 years; under the right conditions, a lot can happen in six years. More than once on these pages, reference is made to how long work takes today compared with the time it took to build whole sections of line in the first place: three years to build the 22-mile P.D. & S.W. Junction between Lydford and Devonport compared with the 26 years spent to date talking about reopening the six miles between Tavistock and Bere Alston; over a year to make a single platform at Cranbrook compared with the four years it took the L. & S.W.R. to build the line from Yeovil to Exeter.

Almost the entire railway network in the West Country was completed in 60 years. In fact, the South

Devon between Exeter and Newton Abbot, with its original seven tunnels was built in two years.

With the fluxion of weather, unforeseen events and human frailty, looking 60 years into the future is hard enough for a seer; it is impossible for an organization that has not yet itself come of age. Since 1921, for instance, there has been no such period without a major change in railway organization; as the present muddle cries out for normalization, more sweeping change is sure to come.

No one knows what nature has in store that may interrupt or set back such long term plans. And with a precarious supply of energy and an overwhelming environmental imperative, there must soon come a time when the railway, along with other public transport, regains

supremacy; then all the dither and delay which afflicts it today will be swept aside so that expansion and development become just a matter of demand management and engineering practicality.



One of the solutions proposed by Network Rail along the length of line where the cliffs are seen to be the greatest threat is a new alignment further out on the foreshore. This would diverge from the existing within Parson's Tunnel and emerge from the cliff seaward of the western portal seen here. It would then run above a new sea wall of modern design nearly all the way to Teignmouth.





Could this be where the railway will one day run? Would it ever be worth incurring such huge expense?



The only freight train of the day, and possibly the week, is dwarfed by the cliffs. The cement tank empties have come from Moorswater on the old Liskeard & Caradon.



"Tell-tale" devices can be seen attached to the barrier giving some protection from slippage.



The Up line is signalled for "bi-directional" working.





The sea has been very unkind to the breakwater at Sprey Point.

The new alignment would take in most of Sprey Point.



And this is where the new alignment would sweep in from the sea at Teignmouth.



The line turns inland at Teignmouth but still has the Teign estuary to follow. Where the parapet wall finishes was once the eastern portal of East Teignmouth Tunnel, opened out into cutting in 1882.

The railway is run by a different cast now

The scout let his mind go back to the stories he was told by George Reynolds, a retired G.W.R. P.-Way inspector, a man who remembered seeing baulk road on the Moreton Branch—by then narrowed of course.

In his younger days he had been on the Slip & Drainage Gang. Spooning the cream off his gold top (Channel Islands) milk, the wiry old boy told the cub scout how stone was unloaded by hand using bars and rollers to strengthen the defences at Dawlish Warren; a siding continuing from the Down platform line went onto the sea wall as far as Langstone until 1941.

A wagon may only have carried a few rocks and the larger ones as they fell might cause the wagon to jump off the rails. Then it would have to be put back on the road—by hand. George recalled sloping the cliffs and working on the groynes, structures designed to control longshore drift and encourage accretion, much neglected today.

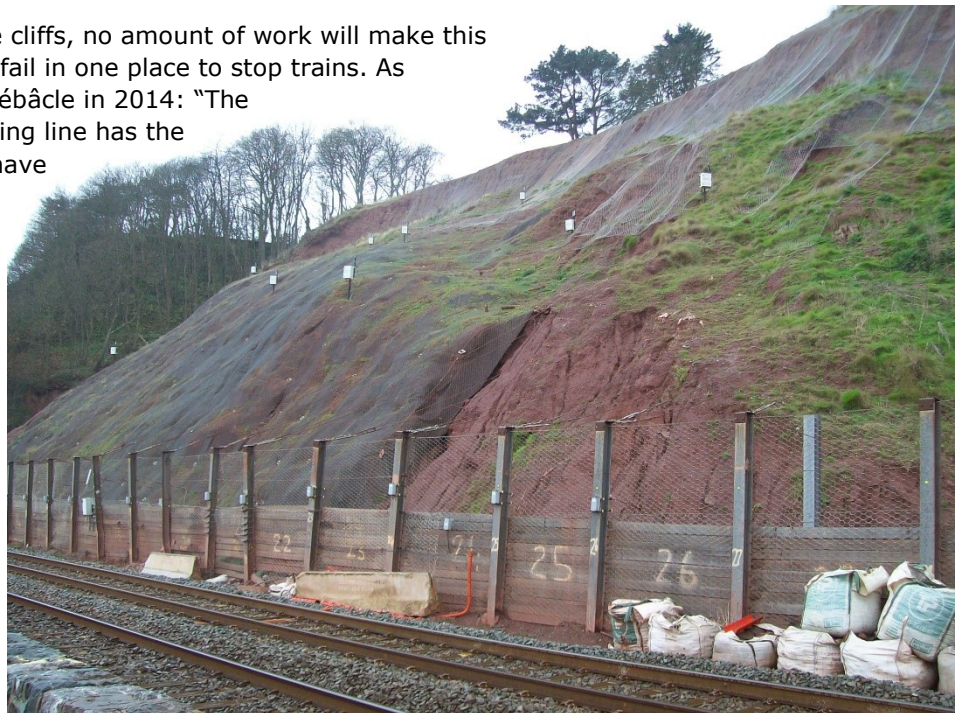
Such men did this extremely hard, dangerous work without bump caps or fluorescent overalls and there were no safety briefings or risk assessments. They worked with the minimum of protection and for a pittance of pay.

Coping with Perilous Exposure

The danger is that far too much money will be spent on this line and that vastly better resilience than it has now will never be achieved. With worsening conditions, it is possible that no real progress will be made and all the while there will have been no attempt to create route diversity, once a great strength of the British railway system.

Short of tunnelling behind the cliffs, no amount of work will make this route invulnerable: it only needs to fail in one place to stop trains. As this railway said after the Dawlish débâcle in 2014: “The challenge is to ensure that the existing line has the greatest possible resilience, but to have readily available an inland diversionary route between Exeter and Newton Abbot.”

Certainly more must be spent in future than was spent in the years of complacency. The sea defences should be strengthened over time, partly in response to nature probing their weaknesses. The sea wall should be rebuilt to a scientific design in stages over many years. The installation of “tell-tale” systems connected to signalling (already underway as in the figure at right) giving warning of the slightest movement of the cliffs or obstruction of running



lines, will greatly improve safety. In the winter months, trains laden with rock armour should be held at Exeter and Newton Abbot, along with dedicated on-track plant in a state of readiness when storms are forecast.

But to provide for intermittent closure, whether planned by the engineer or enacted by the gods, at a moment’s notice if necessary it must be possible to divert trains onto bypass routes according to emergency timetables based on the degree of disruption. Not, in the case of the Teign Valley, as a substitute for the main line, but rather—and the comparison is detested—as the series of back lanes that a motorist uses to avoid a pile-up on his quick way home. This is not the route he would take every day but one he knows is there if he needs it.

The Eclipse of Rail

Quite ridiculous claims were made at the time of the débâcle about the damage being done to the West Country economy by the closure of the main line.

Even if the railway is carrying more people than ever before, road traffic has grown to such an extent that it now far surpasses rail on almost every count.

The main line carries around 12,500 passengers a day and there is little other traffic. On the approach to Exeter the railway passes beneath Exminster Viaduct carrying the M5 motorway, and then goes under and over two principal roads into the city. The average daily flow of vehicles at these points is:-

M5 motorway	84,600
Bridge Road (former Exeter Bypass)	33,300
Alphington Road	23,300

To company car man, town planner and other such numbskulls, this level of traffic is seen as a measure of human success.; flows of road vehicles are seen almost as natural forces, like rivers. Few see the reality of finite reserves being frittered away in what will be in the end a very short-lived and irresponsible period of excessive and damaging consumption.

A very great unwinding of road transport, brought about by energy and material shortages, if not some unforeseen event, is inevitable. Far from being feared as the end of modern civilization, such curtailment should be embraced as an opportunity for a rational approach to transport provision. It can only be hoped that there will be enough time to plan and prepare, for there is such lack of vision that most will not have seen change coming.

There cannot simply be a transference of all road traffic onto rail and no one should want this even if it were possible. What should happen is that a highly developed, fully extended railway system, powered in the main by renewable energy, encompasses the greatest share of all necessary movement in every direction that it can.

Under these conditions, akin to a national emergency, the need to maintain the coastal railway line and to have what might be termed today 'redundancy,' in the sense that there is always more than one way, would be clearly understood. This would then hasten the decision to begin work.

***The Teign Valley: a branch line with enhanced diversionary capacity—
"the practical railwayman's preference."***

Exeter to Newton Abbot Geo-Environmental Resilience Study

September, 2016

CH2M (later Jacobs) was commissioned by Network Rail to undertake this study in December, 2014. Its aim was to build an evidence based long term strategy that identified interventions to improve the resilience, and minimise the potential for catastrophic events, over the next 100 years. Out of the study came the Baseline Report, Option Assessment Report and Option Selection Report. A vast amount of supporting material was collected.

The route is theoretically vulnerable to changes in climate and sea level for most of its 20 miles. For the purposes of the study, it was divided into five sections.

Section	Geographical characteristics	Principal environmental exposure	Solutions
Exeter to Dawlish Warren	Low lying River Exe floodplain and estuary	River and estuarine flooding	Sheet piling and realigned embankments
Dawlish Warren to Kennaway Tunnel	Sea wall backed by low cliffs	Marine erosion, wave over-topping and cliff instability	Improved sea wall protection
Kennaway Tunnel to Parson's Tunnel	Five tunnels with portals exposed to open coast, backed by high cliffs	Marine erosion, wave over-topping and cliff instability	Rockfall shelters and cliff stabilization
Parson's Tunnel to Teignmouth	Sea wall backed by high cliffs	Marine erosion, wave over-topping and cliff instability	New seaward railway alignment; toe buttresses to stabilize cliffs
Teignmouth to Newton Abbot	Low lying Teign Estuary (a ria)		Not considered vulnerable at this stage

The coastal frontage between Dawlish Warren and Teignmouth was divided into 34 Cliff Behaviour Units. For some reason, Langstone Cutting is No. 34 and Slocum's Bridge, Teignmouth, is No. 1.

An Alternative Route

This is the Paddington to Penzance, Great Western main line, as seen from Langstone Rock on the 5th February, 2014, looking towards Dawlish.

On this day, the line was closed because of extensive damage, including a massive breach of the sea wall and washout of material putting houses in Riviera Terrace, Dawlish, in danger of collapse.

The damage extended from Langstone Point all the way to Teignmouth. There were also massive earth falls from the cliffs and an impending slip had to be induced. It was originally estimated that repairs would take six weeks and cost £10-million, but another storm on 14th February did more damage, extending the main breach to 130 yards.

The line reopened to traffic on 4th April, after a blockade lasting 59 days. Repairs were estimated to have cost £35-million. £16-million compensation was to be paid to train operators. The total cost of the disruption could only be guessed.

Formerly, there were two diversionary routes available: the Teign Valley and Moretonhampstead branches, via Christow and Heathfield, until 1958; and the London & South Western's main line via Okehampton and Tavistock, until 1968.



Generations of holidaymakers, bound for Great Western resorts and full of anticipation for their first glimpse of the sea, redolent of the week to come, have been awed as their train swept past this point and the land fell away from the carriage windows. Even regular travellers are perpetually fascinated by the changing behaviour of the sea in all weathers, seasons and states of the tide.

From here to Teignmouth—three miles, not counting the shelter of the tunnels—the line is above the beach and below the cliffs. It is one of the most scenic stretches in the country and one of the most vulnerable.

Network Rail spends around £500,000 a year on maintaining the defensive, retaining wall. Except where rebuilt, it is the original 1846 masonry structure, not less than two feet thick, founded in the soft bedrock, often only just beneath the sand cover. Behind the wall is fill, readily washed out when there is a breach.

If the sandspit at Dawlish Warren, behind the camera, were to be greatly reduced—a process which is going on—then the line alongside the Exe estuary at Starcross would be exposed to the full force of the sea.

Throw a violent sou'easterly and a spring tide at it; raise the mean sea level; wash the cliffs down as well. What would be the effect of a catastrophic severing of the line?

Such is the diminished role of the railway today, the small percentage of passenger traffic and negligible

freight it carries could easily be accommodated on the road system. And might it not then just as well stay there? Serpell put it forward as an option thirty years ago: a national network which went no further west than Exeter.

That is not going to happen. In time, the railway will reverse the present situation and become again the dominant mode. When it does, it will be essential that there is always an alternative to a vulnerable route.



Taken from Langstone Rock on 12th January, 1996. On this day, the Down line was closed because of damage between Dawlish and Teignmouth, and only some trains were using the bi-directional Up line. The service was disrupted for several days on this occasion. The Parson and Clerk can be seen to the extreme left.

The Warren

At one time the entrance of the Exe consisted of two spits, one on either side of the mouth at Exmouth and Dawlish that oscillated in growth. Following development at Exmouth, the eastern spit is now largely fixed in position, leaving Dawlish Warren as the only active spit across the mouth of the Exe. Despite the 'entrapment' of sediment in Exmouth spit, both of these spits form part of a complex sediment transport system along with the flood (Bull Hill Bank) and ebb (Pole Sands) tidal deltas of the Exe.

Dawlish Warren spit has undergone recession and re-orientation, particularly since the construction of the breakwater at Langstone Rock, which has also prevented the supply of sediment to the spit from the shoreline to the south-west. This process occurs as a result of the retreat of the seaward face of the spit, with periodic breaching and destruction of the distal end (during south-easterly storms) of the spit followed by recovery and growth. The current trend at Dawlish Warren is accretion of the re-curved distal end of the spit, whilst the rate of retreat of the seaward face of the Warren, towards the proximal end, is increasing.

The Futurecoast (Halcrow, 2002) prediction for a 'with present management' scenario is for there to be continued erosion and narrowing of the spit and beaches of this section of coast. The impoundment of Exmouth spit would also prevent the shoreline from adjusting to future sea level rise and storm events, leading to an increased likelihood that the defences along the Exmouth frontage would fail and breach in the future.

At Dawlish Warren it is probable that a breach towards the distal end of the spit would occur, exposing the Exe Estuary behind to increased wave attack. The continued defence of the proximal end could limit the degree of such exposure by helping to retain part of the spit.

Changes in the shape and size of the spit at Dawlish Warren could impact on the rail embankment from Powderham Banks to Dawlish Warren. In particular, if the Warren decreases in size, larger waves could be generated within the estuary and larger waves from beyond the open coast could travel upstream into the estuary.

Extracts from the CH2M studies.