



# MetroWest+

## Portishead Branch Line (MetroWest Phase 1)

TR040011

**Applicant: North Somerset District Council  
Complete Addendum to the Environmental Statement**

**Author: Womble Bond Dickinson (UK) LLP**

**Versions: 2a and 2b**

**Date: September 2021**



## **Explanatory Note:**

This document comprises two pdf versions of the ES Addendum No. 2.

Version 2a highlights further comments the Applicant has on carbon and cumulative effects, compared with ES Addendum No. 1 which was submitted on 26 August 2021.

The additional changes are highlighted in blue, so that these stand out for ease of reference.

Version 2b presents all the text changes the applicant proposes to the ES in grey, whether underlines (new text) or strikethrough (deleted text).

The overall content of the two versions of the Addendum No. 2 document is identical.

## **ES Addendum No. 2 - Version 2a**



# MetroWest+

## Portishead Branch Line (MetroWest Phase 1)

**TR040011**

**Applicant: North Somerset District Council**

**Addendum to the Environmental Statement**

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure)**

**Regulations 2009, regulation 5(2) (a)**

**Planning Act 2008**

**Author: CH2M**

**Date: September 2021**





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## Document history

|  |   |
|--|---|
| <b>Project</b>                                 | Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme |
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| <b>Lead Author</b>                             | CFF at CH2M   |

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|----------------|-------------|---|
| 01             | 26/8/2021   | Matters relating to carbon budgets and cumulative effects                             |
| 02             | 20/9/2021   | Matters relating to the removal of Trinity Primary School pedestrian and cycle bridge |



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# Acronyms and Abbreviations

|                         |   |
|-------------------------|---|
| dB                      | Decibel   |
| dB(A)                   | 'A' weighted decibel  |
| dB L <sub>Aeq,16h</sub> | Sound pressure (L), A-weighted equivalent continuous noise level (Aeq) over 16 hours (16h), measured in decibels (dB) |
| CEMP                    | Construction Environmental Management Plan  |
| CTMP                    | Construction Traffic Management Plan  |
| DCO                     | Development Consent Order   |
| ES                      | Environmental Statement   |
| GHG                     | Greenhouse gas  |
| kv                      | kilovolt  |
| LOAEL                   | Lowest Observed Adverse Effect Level  |
| MtCO <sub>2e</sub>      | Megatonnes of carbon dioxide equivalent   |
| m                       | metre   |
| mm/s                    | millimetre per second   |
| NO <sub>2</sub>         | Nitrogen dioxide  |
| NPSNN                   | National Policy Statement for National Networks   |
| NSIP                    | Nationally significant infrastructure project   |
| PPV                     | Peak Particle Velocity  |
| RIS2                    | Road Investment Strategy 2  |
| SOAEL                   | Significant Observed Adverse Effect Level   |
| t                       | tonne   |
| WPD                     | Western Power Distribution  |

## SECTION 1

# Introduction

- 1.1.1 The Secretary of State has requested further information in his letter of 13 August 2021 on the Environmental Statement of the Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme (the DCO Scheme) regarding:

*Item 1 - Request for an update to the environmental information*

- a) the scheme's compliance with the sixth carbon budget as set out in the Carbon Budget Order 2021 including an assessment of the impact of the scheme on the carbon budgets, and
- b) building on paragraph 18.3.13 in Chapter 18 of the Applicant's Environmental Statement, the direct, indirect and cumulative likely significant effects of the scheme with other existing and/or approved projects on climate, including greenhouse gas emissions and climate change adaptation; which should be set in light of the requirements contained in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations 2017) and in light of paragraphs 5.17 and 5.18 of the National Policy Statement for National Networks.

*Item 3 - Trinity Primary School Bridge*

- 1.1.2 In Item 3 of the same letter, the Secretary of State also noted the matters raised at the Examination regarding Trinity Primary School Bridge and advised that he is minded to remove the bridge (Work Number 7) from the proposed Order.
- 1.1.3 In subsequent correspondence dated 17 August, the Secretary of State noted that in respect of Item 3 in his letter of 13 August, the plans requested together with any consequential changes should be provided by 20 September. The Applicant considers that these consequential changes include editorial changes to the Environmental Statement to remove references to the Trinity Primary School Bridge and where appropriate revise the impact assessment of the permanent closure of the permissive at-grade crossing over the disused railway near the school.
- 1.1.4 This addendum to the Environmental Statement presents the Applicant's consolidated response to the Secretary of State regarding the matters raised in Items 1 and 3 of his letter dated 13 August 2021 and is additional information for the purposes of the EIA Regulations 2017 for the Secretary of State to examine with other environmental information when reaching a reasoned conclusion that is up-to-date at the time he makes the decision as to whether to grant development consent for the DCO Scheme pursuant to Regulation 21 of the EIA Regulations 2017.



## SECTION 2

# Carbon Budget and Cumulative Effects

## 2.1 Carbon Budget

2.1.1 The Environmental Statement Chapter 7 Air Quality and Greenhouse Gases [REP6-074] and Appendix 7.5 Climate [REP6-113] are amended as set out below.

2.1.2 The ES Chapter 7 paragraphs 7.2.10 and 7.2.11 [REP6-074] are amended and a new paragraph 7.2.11A added to describe the carbon budget values, including the Sixth Carbon Budget. The revised text is provided below.

“7.2.10 In 2011 (the latest figures available at the time of the assessment), the UK's progress against its Climate Change Act targets was a reduction of 29.1% (i.e. 549 Megatonnes CO<sub>2</sub>e abbreviated to MtCO<sub>2</sub>e) from 1990 levels excluding the effects of emissions trading<sup>4, 5</sup>. In terms of overall UK emissions, transport accounted for 135 MtCO<sub>2</sub>e (25%) and rail for 4 MtCO<sub>2</sub>e (less than 1%).

7.2.11 Carbon budgets were introduced as part of the Climate Change Act 2008. At the time of assessment, the first four, five-year budgets had been set in law from 2008 to 2027. Since the time of assessment, the fifth<sup>1</sup> and sixth<sup>2</sup> carbon budgets have been set in law to cover the two budget periods that span 2028 to 2037. The budgets are split into traded and non-traded carbon. A limit on UK carbon emissions is imposed for each five-year period. The budgets are prepared by the Committee on Climate Change, which was set up under the Climate Change Act as an independent evidence-base advisory body to the UK Government and Parliament, advises on setting and meeting carbon budgets. The Third Carbon Budget (2010) was accepted by Parliament and covers the period 2018 to 2022, setting out that annual UK emissions should be reduced to around 509 MtCO<sub>2</sub>e (a 37% reduction relative to 1990 baseline levels). By 2025, in accordance with the Fourth Carbon Budget, The key recommendations for the budget include:

the need for the UK to be on a pathway to at least an 80% cut in GHG below 1990 levels by 2050, with maximum 2050 emissions of 160 MtCO<sub>2</sub>e; and by 2025, annual UK emissions should be reduced to around 390 MtCO<sub>2</sub>e (a 50% reduction relative to baseline levels). The Fifth Carbon Budget sets the annual emissions limit at 345 MtCO<sub>2</sub>e (a 57% reduction relative to 1990 baseline levels).

7.2.11A The Sixth Carbon Budget for 2033 to 2037, set by the Carbon Budget Order 2021, which took effect on 24 June 2021, sets the limit for annual UK emissions at 965 MtCO<sub>2</sub>e over the Sixth Carbon Budget's five year period (i.e. 193 MtCO<sub>2</sub>e per annum). This represents a reduction in

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<sup>1</sup> The Carbon Budget Order 2016

<sup>2</sup> The Carbon Budget Order 2021

annual emissions to 2035 of 78% from 1990 levels. The Sixth Carbon Budget is the first budget to take account of the UK Government's 2050 net zero target."

- 2.1.3 A new paragraph 7.6.40A is added to Chapter 7 Air Quality and Greenhouse Gases [REP6-074] to include a worst-case calculation of regional greenhouse gas emissions, showing <0.001% contribution to the Sixth Carbon Budget emissions.

"7.6.40A This assessment was undertaken prior to the release of the Sixth Carbon Budget for 2033 to 2037. In the absence of available data for this time period, the total emissions for the period 2033 to 2037 is reasonably approximated to be 6,040 tonnes CO<sub>2</sub>e i.e. the annual rail CO<sub>2</sub> emissions for 2021 multiplied by five to represent the five year budget period. This equates to less than 0.001% of the Sixth Carbon Budget. This calculation assumes constant rail emissions per year, as per Table 7.16, and that there will be no offset of rail emissions associated with reduced road transport emissions in future years. This is a worst-case assumption that accounts for projected reductions in road transport emission factors and does not take into account the Department for Transport's plan, published on 14 July 2021, titled "Decarbonising Transport: A Better, Greener Britain", which sets out the path to achievement of a net zero emission rail network by 2050 through measures that include:

- delivery of a net zero railway network by 2050, with sustained carbon reductions in rail along the way, and aiming to remove all diesel-only trains (passenger and freight) from the network by 2040
- an ambitious, sustainable, and cost-effective programme of electrification guided by Network Rail's Traction Decarbonisation Network Strategy
- supporting the development of battery and hydrogen trains and deploying them on the network as it decarbonises. Also using technology to clean up diesel trains until they can be removed altogether
- building extra capacity on the rail network to meet growing passenger and freight demand and support significant shifts from road and air to rail
- working with industry to modernise fares ticketing and retail to encourage a shift to rail and cleaner and greener transport journeys
- improving rail journey connectivity with walking, cycling and other modes of transport
- introducing a rail freight growth target
- incentivising the early take up of low carbon traction for rail freight.

It is concluded that the DCO Scheme will not have a material impact on the government's ability to comply with the carbon budgets"

- 2.1.4 In the Environmental Statement Appendix 7.5 Climate [REP6-113], [paragraph 1.7.6 is updated and](#) a sixth bullet and final sentence is added.

"1.7.6 [The Climate Change Act 2008 \(2050 Target Amendment\) Order 2019 increased the UK's commitment to](#) cut greenhouse gas emissions [from 80% to 100%, compared with 1990 levels](#) by 2050 [known as "net zero"](#)).

Emission reductions will be delivered through a system of five year carbon budgets that set a trajectory to 2050. The following budgets have been made:

- 1st carbon budget (2008 to 2012) of 3,018 MtCO<sub>2e</sub>;
- 2nd carbon budget (2013 to 2017) of 2,782 MtCO<sub>2e</sub>;
- 3rd carbon budget (2018 to 2022) of 2,544 MtCO<sub>2e</sub>;
- 4th carbon budget (2023 to 2027) of 1,950 MtCO<sub>2e</sub>; and
- 5th carbon budget (2028 to 2032) of 1,765 MtCO<sub>2e</sub>; and
- 6th carbon budget (2033 to 2037) of 965 tCO<sub>2e</sub>.

In accordance with the Climate Change Act 2008 the Climate Change Committee will continue to advise successive UK governments on setting and meeting subsequent carbon budgets and preparing for climate change.”

- 2.1.5 In the Environmental Statement Appendix 7.5 Climate [REP6-113], a new paragraph 1.7.8A is added relating to the worst-case calculation (as per point b above).

“1.7.8A The Sixth Carbon Budget was set in law after the climate assessment was undertaken for the DCO Scheme and is the first carbon budget to be published since the net zero target was set in 2019. However, the worst-case contribution of the DCO Scheme to GHG emissions is estimated to be 6,040 tCO<sub>2e</sub> in total for the budget period of 2033 to 2037 (see paragraph 7.2.12 in the core assessment), equivalent to <0.001% of the Sixth Carbon Budget.”

## 2.2 Cumulative Effects

- 2.2.1 The assessment of direct, indirect and cumulative likely significant effects of the DCO Scheme with other existing and/or approved projects on climate, including greenhouse gas emissions and climate change adaptation, is to be undertaken in light of the requirements contained in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and in light of paragraphs 5.17 and 5.18 of the National Policy Statement for National Networks (NPSNN).
- 2.2.2 The direct emissions of the DCO Scheme comprise emissions into the atmosphere from direct fuel consumption by construction vehicles and diesel locomotives. Emissions from construction vehicles are considered in Appendix 7.1 to the Environmental Statement [REP6-113] in the context of air quality. Emissions from construction vehicles and from diesel locomotives are considered in Appendix 7.5 to the Environmental Statement [REP6-113] in the context of climate.
- 2.2.3 Indirect emissions from the DCO Scheme are those resulting from the consumption of electricity for the operation of the DCO Scheme and embodied carbon emissions resulting from the construction of the DCO Scheme. These have been identified and assessed in Appendix 7.5 Climate to the Environmental Statement [REP6-113].

- 2.2.4 Cumulative effects on air quality (including emissions of NO<sub>x</sub>, PM<sub>10</sub> and CO<sub>2</sub>) of the DCO Scheme with other existing and/or approved projects are assessed at Section 7.3 of Chapter 7 Air Quality and Greenhouse Gases [REP6-074], in Chapter 18 In-Combination and Cumulative Effects [APP-113] of the Environmental Statement and Appendix 18.2 [APP-191] of the Environmental Statement. The Transport Assessment used in the modelling of effects in these assessments includes traffic generated by committed developments. The other projects are detailed in the Transport Assessment in Appendix 16 [APP-160] of the Environmental Statement. As explained in Chapter 7 Air Quality and Greenhouse Gases [REP6-074] of the Environmental Statement, the assessment of cumulative effects also considers other projects not incorporated into the traffic model (see paragraphs 7.3.52 – 7.3.53).
- 2.2.5 The vulnerability of the DCO Scheme to climate change is assessed in Appendix 7.5 Climate [REP6-113], which draws on information presented in the Flood Risk Assessment [APP-076 to 092].
- 2.2.6 The UK Carbon Budgets, which provide the context in which emissions from road and rail nationally significant infrastructure projects (NSIP) should be considered, are by their nature cumulative as they encompass emissions across the UK's different economic sectors. In the recent case of R (Transport Action Network) v Secretary of State for Transport and Highways England (2021) EWHC 2095 (Admin) the High Court recognised that there are different pathways forward and that, for each of the carbon producing sectors with their different carbon reduction strategies moving at different rates, there is scope for UK governments to make policy adjustments to keep the UK on track to net zero.
- 2.2.7 The High Court also confirmed that the only cumulative targets against which the cumulative assessment of emissions could be made were the carbon budgets (para 140). The Court noted that there was no reason to question the judgement reached by the Department for Transport that the contribution made by emissions from all of the projects included in the Department's Road Investment Strategy 2 (RIS2) over the period assessed (to the end of the Fifth Carbon Budget) was de minimis (paras. 147 and 159). The predicted emissions of the DCO Scheme are no greater than/less than each of the individual road schemes that together make up RIS2.<sup>3</sup>

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<sup>3</sup> Note the Court listed five RIS2 projects. Information about the predicted emissions for each is set out below:

(1) Lower Thames Crossing (14.5 miles of new dual carriageway): Preliminary modelling results presented in the Preliminary Environmental Information Report (<https://protect-eu.mimecast.com/s/c67jC48gpuEKRPKHxi-ov?domain=highwaysengland.citizenspace.com>) suggests an increase of 62,587 tonnes of carbon dioxide equivalent emissions in the opening year);

(2) A66 Northern Trans-Pennine: 18 miles of dual carriageway to replace a single carriageway; Scoping Report of June 2021 (predicted carbon emissions not yet published but Scoping Report lists sources and states that it is not expected that construction and operation emissions will compromise the ability of the UK to meet its carbon reduction targets): [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010062/TR010062-000025-TR010062%20-%20Scoping%20Report%20\(Part%201%20of%2011%20-%20Main%20Report%20&%20Appendices\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010062/TR010062-000025-TR010062%20-%20Scoping%20Report%20(Part%201%20of%2011%20-%20Main%20Report%20&%20Appendices).pdf)



2.2.8 The current NPSNN was issued in 2014 and predates the Government's legal commitment to net zero, the 10 Point Plan for a Green Industrial Revolution, the new Sixth Carbon Budget and the new, more ambitious policies outlined in the Transport Decarbonisation Plan. In a Ministerial Statement issued on 22 July 2021 the Secretary of State for Transport advised that a review of the NPSNN will begin later in 2021 this year, to be completed no later than Spring 2023. "While the review is undertaken, the NPS remains relevant government policy and has effect for the purposes of the Planning Act 2008. The NPS will, therefore, continue to provide a proper basis on which the Planning Inspectorate can examine, and the Secretary of State can make decisions on, applications for development consent."

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(3) [A46 Newark bypass: converting 3 miles of single carriageway to dual carriageway; it was announced on 16 September 2021 that there has been a delay in announcing the preferred route: https://highwaysengland.co.uk/our-work/east-midlands/a46-newark-bypass/](https://highwaysengland.co.uk/our-work/east-midlands/a46-newark-bypass/)

(4) [A417 Air Balloon: 3.6 miles of dual carriageway to replace single carriageway; Environmental Statement Chapter 14, Table 14-16 predicts 190,224 tonnes of Carbon Dioxide equivalent in the opening year: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010056/TR010056-000221-6.2 Environmental Statement - Chapter 14 - Climate.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010056/TR010056-000221-6.2%20Environmental%20Statement%20-%20Chapter%2014%20-%20Climate.pdf)

(5) [M60/M62/M66 Simister Junction Interchange: new loop structure to provide free-flow roads at busy junction \(used by around 90,000 vehicles a day\): https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiOjMb3xoTzAhX9QEEAHeoCIEQFnoECAkQAQ&url=https%3A%2F%2Fhighwaysengland.co.uk%2Four-work%2Fnorth-west%2Fm60-junction-18-simister-island-interchange%2F&usg=AOvVaw2dV9ApI595OO5WheoAe4P5](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiOjMb3xoTzAhX9QEEAHeoCIEQFnoECAkQAQ&url=https%3A%2F%2Fhighwaysengland.co.uk%2Four-work%2Fnorth-west%2Fm60-junction-18-simister-island-interchange%2F&usg=AOvVaw2dV9ApI595OO5WheoAe4P5)





## SECTION 3

# Trinity Primary School Pedestrian and Cycle Bridge

## 3.1 ES, NonTechnical Summary

3.1.1 The ES, NonTechnical Summary [REP6-066], Paragraph 2.2.3 is modified to remove reference to the Trinity Primary School Bridge.

“2.2.3 The associated development works comprise:

- a new railway station at Portishead;
- car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue ~~and a new foot and cycle bridge near Trinity Primary School;~~”

3.1.2 The final bullet in paragraph 5.2.2 is modified to remove reference to the Trinity Primary School Bridge and associated paths.

- ~~“A new bridge linking to existing paths and Trinity Primary School (B on Figure 3) and temporary lay down area opposite Tansy Lane during construction.”~~

3.1.3 Paragraph 4.5.14 is deleted.

~~“4.5.14 — The new pedestrian and cycle bridge in Portishead would be a prominent feature in the residential area near Tansy Lane and Trinity Primary School (see Photomontage 1). Paragraph not used”~~

3.1.4 Photomontage 1 is deleted, together with its listing in the contents sheet.

3.1.5 Paragraph 4.9.13, first bullet is modified to remove reference to the Bridge.

“4.9.13 Temporary and permanent land-take will be required from:

- land used by the local community on the north and south side of the railway corridor for construction activity and new foot and cycle paths approaches to build the new Trinity Primary School Bridge; and”

## 3.2 ES, Chapter 3 Scheme Development and Alternatives

3.2.1 ES Chapter 3 [REP6-070] Table 3.2 *Summary of alternatives considered for specific scheme elements* is modified as follows.

**Table 3.2: Summary of alternative considered for specific scheme elements**

| Option Description                          | Option Consideration   | Outcome   |
|---|--|---|
| Portishead and Pill Station platform length | The initial design brief was for a 105 m (4 train carriages) platform. Following technical | The outline (GRIP 3) design brief in 2016 was amended to include 130 m (5 train |

**Table 3.2: Summary of alternative considered for specific scheme elements**

| <b>Option Description</b>     | <b>Option Consideration</b>  | <b>Outcome</b>   |
|-------------------------------|--|--|
|                               | <p>engagement during the outline design (GRIP 3) in 2016 it was decided it would be appropriate to make provision for 5 coach trains.</p> <p>There are no environmental or planning designations on this land, except for the preservation of this corridor for the railway in previous Local Plans.</p> <p>Ecological surveys identified the presence of protected species, for example Great Crested Newts. However, suitable mitigation measures would have to be put in place regardless of the length of platform, and the presence of protected species would not materially affect the platform length option.</p> <p>In the future, longer trains could affect operational noise levels. This is taken into account in the noise impact assessment, as the opening year scenario assumes a three car train and the future year scenario assumes a five car train. With a <u>2 m high, 200 m long absorptive acoustic barrier along the southern boundary of between Portishead Station and Trinity Primary School Bridge</u>, the assessment concluded that there were no likely significant effects on noise during operations.</p> | <p>carriages) platforms. This will be retained for the revised proposals for the one train per hour service.</p>   |
| Trinity Primary School Bridge | The existing permissive pedestrian/cycle crossing over the railway will have to be closed for safety reasons. The crossing is highly used and any diversion route via Quays Avenue (realigned) would   | A bridge <del>was</del> proposed and indicative details were set out in a non-statutory public consultation in June 2015. The footbridge <del>was been</del> designed with low gradient ramps for use by people with |

**Table 3.2: Summary of alternative considered for specific scheme elements**

| Option Description | Option Consideration  | Outcome   |
|--------------------|---|---|
|                    | <p>increase the walking distance by about <del>600</del>700 m during construction and almost 500 m during operation (450 m net excluding the distance of the original crossing).</p> <p>The option to close the crossing and require pedestrians to use the footpaths around the station was not taken forward given the high usage of this crossing, primarily by school children.</p> <p>This site is unsuitable for a subway due to the poor ground conditions, high water levels, and utilities in the area. There were also concerns about public safety.</p> <p>A foot and cycle bridge is a feasible option. However, this does have landscape / visual impacts given the height of the structure and the long ramps to achieve a suitable gradient for equality groups.</p> | <p>reduced mobility. The visual impact <del>was been</del> softened with landscaping. <u>The proposals for the Trinity Primary School Bridge were presented in the ES and submitted in the DCO Application.</u></p> <p><u>The need for the bridge and the environmental effects were considered during the Examination. Following this, the Secretary of State has advised that he is minded to remove the Trinity Primary School Bridge from the DCO Scheme.</u></p> |

### 3.3 ES, Chapter 4 Description of the Scheme

- 3.3.1 The ES Chapter 4 [REP6-072] subheading “Trinity Primary School Bridge and associated new paths” and paragraphs 4.5.39 to 4.5.57 are modified or deleted from the ES to reflect the removal of Trinity Primary School Bridge (Work No. 7) and electrical supply cables (Work No. 7E) and the amalgamation of footpaths (Work Nos. 7A and 7C).

#### “Trinity Primary School Bridge and associated ~~n~~New paths connecting the station and residential areas to the east

~~“4.5.39 A new combined pedestrian and cycle overbridge is proposed to link residential areas on the south the railway to the residential areas to the north of the railway and Trinity Primary School, also on the north side of the railway. The existing permissive at-grade crossing over the disused railway will be closed permanently. replaced by the new bridge, referred to as the Trinity Primary School Bridge. N New foot and cycle path routes to Quays Avenue, parallel to the railway will be provided. The existing access routes~~

linking with the surrounding residential area will be altered and improved, from Galingale Way to the Trinity Primary School Bridge on the south side and from Tansy Lane to the Trinity Primary School Bridge on the north side.”

“4.5.40 During construction the open space to the north of the disused railway and south of Tansy Lane may be used as a temporary construction compound. The new bridge will be built on approximately the same alignment as the existing crossing and a temporary crossing over the railway will be provided nearby during construction.”

“4.5.41 Trinity Primary School Bridge will be pre-fabricated off site and delivered in sections. The vegetation on site will be removed and excavation works will be undertaken for the associated piling and foundation works. The embankment on the north side will be built up and drainage ditches will be infilled or culverted as required. A piling mat and crane pad will be constructed to provide a stable platform for the pile driver and crane. Piles will be driven into the ground using a pile driver and the crane will be used to construct the bridge piers and install the pre-fabricated bridge sections. Paragraph not used.”

#### **~~Work Number 7: A combined pedestrian and cycle overbridge~~**

“4.5.42 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4). Paragraph not used.”

“4.5.43 *Location:* South west of Trinity Primary School, Portishead Paragraph not used.”

“4.5.44 *Detail:* The new bridge is designed with staircases and ramps to provide step free access over the railway. A zig-zag ramp arrangement will be provided on both sides of the railway (with a gradient of 1:15) as well as staircases. Solid parapets 1.8 m high will be provided over the Portishead Branch Line while open parapets and handrails will be provided on the staircases and ramps. The whole structure is likely to be made of steel painted in a neutral colour. The overall height of the structure will be approximately 8.5 m above rail level to accommodate future electrification as required by Network Rail. A temporary crossing will be provided nearby during the construction of the bridge. Paragraph not used.”

“4.5.45 *Key elements:*

- ~~Pedestrian and cycle bridge including steps and ramps;~~
- ~~Lighting;~~
- ~~Signage;~~
- ~~Surface water drainage;~~
- ~~Fencing; and~~
- ~~Hardstanding.~~ Paragraph not used.”

#### **Work Numbers 7A, and 7B and 7C: New paths to connect Portishead Station to the Village Quarter, Portishead**

“4.5.46 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4).”

“4.5.47 *Location:* North and south of the Portishead Branch line, between Quays Avenue and Trinity Primary School.”

~~“4.5.48 *Detail:* A network of paths will be provided between Quays Avenue, Phoenix Way and the Trinity Primary School Bridge New paths will be provided to the north and south of the new railway corridor to link with the existing permissive paths between Galingale Way and Tansy Lane either side of the existing permissive at-grade crossing over the disused railway line which will be closed. The new paths will become public rights of way and maintained by the local highway authority.”~~

~~“4.5.49 *Key elements:*~~

- ~~• Hardstanding to form new combined pedestrian and cycle paths;~~
- ~~• Lighting;~~
- ~~• Signage;~~
- ~~• Surface water drainage;~~
- ~~• Fencing and~~
- ~~• Landscaping.”~~

#### **Work Number 7D: Temporary construction compound, Tansy Lane, Portishead**

~~“4.5.50 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4).”~~

~~“4.5.51 *Location:* North of the Portishead Branch line, south of Tansy Lane and west Trinity Primary School.”~~

~~“4.5.52” *Detail:* A small temporary compound will be established on the land between the disused railway and Tansy Lane to be used for the works to construct the new bridge to connect Tansy Lane and Galingale Way railway, network of new paths and Portishead Station.”~~

~~“4.5.53 *Key elements:*~~

- ~~• Temporary fencing;~~
- ~~• Storage of materials plant and machinery.”~~

#### ~~**Work Number 7E: Electrical supply cables to Work No. 7**~~

~~“4.5.54 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4). Paragraph not used”~~

~~“4.5.55 *Location:* North of the Portishead Branch line and south of Tansy Lane. Paragraph not used”~~

~~“4.5.56 *Detail:* Electrical supply cables are required to power the lighting on the new Trinity School Bridge. Paragraph not used”~~

~~“4.5.57 *Key elements:*~~

- ~~• Permanent electricity supply cables Paragraph not used”~~

3.3.2 Paragraph 4.5.283 is modified to remove reference to the Trinity Primary School Bridge.

~~“4.5.283 *Between Portishead Station and Trinity Primary School Bridge* An acoustic barrier 200 m long and 2 m high close timber boarded fence will be installed along the south side of the railway by Portishead Station~~

(see Work Number 5). The acoustic fence will be separate to the Network Rail security fence which will be located approximately 1 m inward of the acoustic fence. To the east, the existing fencing will be removed and replaced with paladin fencing. On the north side of the railway, the existing palisade fencing will be retained between the station and the end of the platforms for security purposes and continue as paladin fencing.”

## 3.4 ES, Chapter 9 Ecology and Biodiversity

3.4.1 The ES Chapter 9 [REP6-078] Paragraph 9.6.6 is modified to remove reference to the construction of Trinity Primary School Bridge as follows.

“9.6.6 At Portbury Wharf Nature Reserve, the existing noise level at the most representative survey location for the pools and lagoons used by SPA and Ramsar-qualifying birds is 46 dB  $L_{Aeq,16h}$  (Table 7.103 of ES Appendix 13.7, DCO Document Reference 6.25). The noise levels generated by construction activities in the vicinity of the reserve are shown in Tables 13.19 and 13.20 of ES Chapter 13 (DCO Document Reference 6.16). The works at Portishead Station are sufficiently distant (900 m) and attenuated by housing that there will be no discernible increase in noise at the pools. Construction of the haul route is the noisiest activity associated with the construction of the Sheepway compound (Table 13.20 in ES Chapter 13, DCO Document Reference 6.16), with a highest noise level of 68 dB  $L_{Aeq,16h}$  at 50 m from the source of the noise. Given that the pools are 650 m from the compound, the noise levels are likely to be lower than levels found to cause disturbance of wetland birds (Cutts et al., 2013). The activities most likely to cause disturbance of birds using the pools and lagoons, due to noise levels and distance are the ballasting, tamping and lining works required for construction of the line (650 m from the pools and lagoons) and percussive (hammer) piling for approximately two weeks for the construction of the Trinity Primary School Bridge (500 m from the pools and lagoons). The predicted combined (baseline and construction) noise at the pools and lagoons is 49 dB  $L_{Aeq,12h}$  from Ballasting/Tamping/Lining works and 49 dB  $L_{Aeq,12h}$  from percussive (hammer) piling works at Trinity Primary School Bridge (Table 7.103 of ES Appendix 13.7, DCO Document Reference 6.25). ~~These are~~ This is lower than levels found to cause disturbance of wetland birds (Cutts et al., 2013) and therefore no impacts on SPA and Ramsar-qualifying birds are anticipated.”

3.4.2 Paragraph 9.7.8 is modified as follows:

“9.7.8 The landscape proposals are summarised as follows:

- Permissive crossing of the railway line by South of Trinity Primary School Bridge – woodland planting to reinforce existing planting on the north side of the line and vegetation retained south of the line;”

## 3.5 ES, Chapter 11 Landscape and Visual Impact Assessment

3.5.1 The ES Chapter 11 Landscape and Visual Impact Assessment [APP-106] is amended as set out below.

3.5.2 Paragraph 11.6.34 is revised as below.



~~“11.6.34 Construction traffic would use the new highway to gain access to the track. bringing in the Trinity Primary School Bridge components with larger lorries and cranes moving in the landscape.”~~

3.5.3 Paragraph 11.6.39 is revised as below.

~~“11.6.39 There would be the temporary loss of open space at Tansy Lane as the area would be used as a construction site. of the Trinity Primary School Bridge. Construction of bridge foundations including the piling and associated piling rig, and the use of cranes to lift and position the bridge components would be intrusive in the local landscape due to their height.”~~

3.5.4 Paragraph 11.6.134 is revised as below.

~~“11.6.134 The introduction of movement associated with the passenger trains and the new Trinity Primary School Bridge would add new elements to the landscape. The bridge would be a new relatively large-scale feature in the small-scale open landscape between the houses at Tansy Lane and Trinity Primary School.”~~

## 3.6 ES, Chapter 13 Noise and Vibration

3.6.1 The ES Chapter 13 Noise and Vibration [REP6-082] is amended to remove reference to construction noise in particular as a result of percussion piling for the foundations as set out below.

3.6.2 The last bullet in paragraph 13.6.4 is deleted.

~~“13.6.4 The Portishead area would be exposed to noise from the following construction activities:~~

- Construction compound at the site of the proposed car park and a lay down area alongside the railway line by Tansy Lane
- Realignment of Quays Avenue
- Car park construction
- Station construction – piled foundations, building and platform
- Railway line construction works
- ~~Construction of the Trinity Primary School Bridge.”~~

3.6.3 Paragraph 13.6.12 is deleted.

~~“13.6.12 The construction of Trinity Primary School Bridge is expected to take approximately a year allowing for settlement, perhaps six months for the actual construction works. During this time the highest noise levels would be from the percussive piling. The closest receptors to this activity are at 25 m from the works and noise levels could be up to 77 dB(A) for short periods of time. The duration of the piling work is likely to be no longer than two weeks. Paragraph not used.”~~

3.6.4 The last row in Table 13.19 referring to Trinity Primary School Bridge is deleted.



**Table 3.19: Predicted noise levels from construction activities in Portishead**

| Location of works / work areas                           | Highest expected noise level at the closest receptor, L <sub>Aeq</sub> dB | Activity associated with highest noise level <sup>1</sup> | Distance to closest receptor, m | Effect level <sup>2</sup> |
|--|---|---|---------------------------------|---------------------------|
| Compound construction                                    | 72  | Haul road construction                                    | 20                              | LOAEL                     |
| Compound operation, including laydown area at Tansy Lane | 62  | Vehicle movements   | 20                              | LOAEL                     |
| Utility diversions                                       | 73  | Cutting road surface                                      | 30                              | LOAEL                     |
| Road realignment   | 83  | Pavement works  | 15                              | SOAEL                     |
| Car park construction                                    | 68  | Earthworks  | 30                              | LOAEL                     |
| Station construction – building and platform             | 78  | Vegetation clearance and platform construction            | 25                              | SOAEL                     |
| Station construction – piling                            | 73  | Percussive piling   | 25                              | LOAEL                     |
| Railway line works                                       | 83  | Tamping and lining  | 15                              | SOAEL                     |
| <del>Trinity Primary School Bridge</del>                 | <del>77</del>   | <del>Percussive piling</del>                              | <del>25</del>                   | <del>SOAEL</del>          |

<sup>1</sup> Some work areas have more than one activity. These are shown in detail in Appendix 13.7 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25).

<sup>2</sup> These are in terms of daytime predicted noise level.

3.6.5 Paragraphs 13.6.49 and 13.6.50 are amended to remove reference to Trinity Primary School Bridge and the renumbering of locations where high levels of vibration are predicted.

“13.6.49 Potential impacts from vibration are considered in those locations where there is the potential for activities which could generate high levels of vibration. Given that no contractor has been appointed and the construction methodology not finalised, such activities have been examined at ~~seven~~six locations and the worst case possible piling method has been assumed.”

“13.6.50 The first of these is at Portishead station, where percussive (or hammer) piling may be required for the new platform foundations. ~~At the Trinity Primary School Bridge, percussive (or hammer) piling is required to create secure foundations for the structure in order to take the vertical load of the structure itself. The third~~second~~ and fourth~~third~~~~ of the locations where

vibration generating activities could take place is the construction of the walls at Hardwick Cutting for the Pill station works and the embankment stabilisation works at Mount Pleasant. These works take the form of kingpost piling, where H-section piles are inserted using a percussive hammer attachment on a large excavator to create uprights into which are slotted concrete or steel planks to ensure earthworks retention. The ~~fifth~~<sup>fourth</sup> location of possible piling is at the Avon Road bridge, where a vibratory piling method may be required for bridge foundation works. Along the Avon Road embankment, the ~~sixth~~<sup>fifth</sup> location of possible percussive piling, small piles may be required for the bank stabilisation works. Finally, along the line from Portishead to Pill, vibratory compaction could be used where works are required in the vicinity of existing structures or on the main earthworks themselves in order to ensure a finished trackbed that will not settle further and be subject to subsequent maintenance works.”

- 3.6.6 Table 13.23 *Predicted levels of vibration from selected activities* is amended by the deletion of the row for Trinity Primary School Bridge.

**Table 13.23: Predicted levels of vibration from selected activities**

| Location   | Distance to closest receptor, m | PPV <sup>1</sup> , mm/s | Effect level <sup>2</sup> |
|--|---------------------------------|-------------------------|---------------------------|
| Portishead station<br>(percussive piling)                        | 25                              | 0.4                     | LOAEL                     |
| <del>Trinity Primary School<br/>Bridge (percussive piling)</del> | <del>25</del>                   | <del>0.4</del>          | <del>LOAEL</del>          |
| Hardwick Cutting<br>(percussive piling)                          | 20                              | 0.5                     | LOAEL                     |
| Mount Pleasant<br>(percussive piling)                            | 15                              | 0.8                     | LOAEL                     |
| Avon Road bridge<br>(vibratory piling)                           | 20                              | 1.2                     | SOAEL                     |
| Avon Road embankment<br>(percussive piling)                      | 20                              | 0.4                     | LOAEL                     |
| Railway line works<br>(vibratory compaction)                     | 15                              | 1.7                     | SOAEL                     |

<sup>1</sup> PPV is defined as the maximum instantaneous positive or negative peak of the vibration signal. It is specified in millimetres per second (mm/s). It is important to note that the PPV refers to the movement within the ground of molecular particles and not surface movement.

<sup>2</sup> Only applicable to the assessment against impacts on human receptors. See Table 2.7 of Appendix 2 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25).

- 3.6.7 Paragraph 13.6.54 regarding vibration during construction of Trinity Primary School bridge is deleted.

~~“13.6.54 The closest receptors to the Trinity Primary School Bridge are the dwellings in Holmlea and Tansy Lane. Using the scale presented in Table 2.6 of Appendix 13.2 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25), this predicted level of 0.4 mm/s PPV is below the level where building damage may occur and would be classed as a negligible impact. Examining the impact on humans using Table 2.7 of Appendix 13.2 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25), the predicted level of vibration would be just above the level where “vibration might be just perceptible in residential environments” and would be classed as a minor impact and a **slight adverse** significance of effect, which is not significant in relation to the EIA Regulations 2017. Paragraph not used.”~~

### 3.6.8 Paragraph 13.7.6

“13.7.6 Alongside Peartree Field, a noise barrier has been included within the design in order to mitigate likely significant adverse operational environmental effects at this location. This barrier extends from the western end of the platform at Portishead Station ~~and finishes at the Trinity Primary School Bridge~~ for 200 m along the southern side of the railway (see the General Arrangement Plans Sheet 1 in DCO Document Reference 2.4 and the Environmental Masterplan in DCO Document Reference 2.53). The barrier will be 2 m high and absorptive to avoid reflections to the opposite side where there are sensitive receptors in Tansy Lane. With this barrier, and taking into account the change in alignment of Quays Avenue, the impact for the dwellings closest to Quays Avenue would be a reduction in noise of just over 1 dB(A) in the short term. With the overall noise level below the SOAEL this would result in a **slight beneficial** significance of effect. In the future assessment year, the decrease in noise is predicted to be just under 1 dB(A), which using the long term impact scale would also be a **slight beneficial** significance of effect. However, for the majority of dwellings directly to the south of the proposed station at Portishead, there would be an impact of just under 1 dB(A). With the overall noise level below the SOAEL this would result in a **slight adverse** significance of effect, which is not a significant effect in relation to the EIA Regulations 2017. In the future assessment year, the increase in noise is predicted to be at worst 1.3 dB(A), which using the long term impact scale would be **slight adverse** significance of effect and not a significant effect in relation to the EIA Regulations 2017.”

### 3.6.9 Table 13.26 is amended to remove reference to the Trinity Primary School Bridge.

Table 13.26: Summary of the assessment of the DCO Scheme on noise and vibration receptors

| Aspect and control measures embedded in the DCO Scheme  | Receptors  | Impact  | Environmental Mitigation   | Residual Effects   |
|---|--|---|--|--|
| <b><i>Operation activities</i></b>  |  |   |  |  |
| Operation of the new stations, the rail services, and the changes in road traffic distribution. | Nearby sensitive receptors, which would include dwellings and schools.<br><b>Value: High</b> | Increased noise level as trains pass.<br><b>Magnitude: Minor to Major adverse</b> | A 2 m high, 200 m long absorptive noise barrier to the south of Portishead Station from the western end of the station platform <del>to the Trinity Primary School Bridge</del> .<br>A 2.4 m high, 55 m long reflective noise barrier alongside the Old Station House, Portbury. | <b>Magnitude: Minor adverse</b><br><b>Significance of Effect: Slight adverse</b><br><b>Significance for EIA legislation: Not significant</b> |

## 3.7 ES, Chapter 14 Socio-economics and Economic Regeneration

- 3.7.1 The ES Chapter 14 [APP-109] Table 14.2 *Summary of consultation responses* is amended to explain that although the DCO Application was submitted with the proposal to build the Trinity Primary School Bridge and, following discussion on the Bridge during the examination, the Secretary of State has advised that he is minded to remove this structure from the DCO Scheme.

**Table 14.2: Summary of consultation responses**

| <b>Organisation and date</b>  | <b>Summary of response</b>  | <b>Consideration within ES</b>   |
|---|---|--|
| <b><i>Informal Micro-consultation on DCO Scheme Boundary (22 June to 3 August 2015)</i></b> |   |  |
| North Somerset Local Access Forum   | A bridge between Galingale Way and Trinity Primary School preferred over footpath only option. The length of diversion required for the footpath (c. 600 m) only option unacceptable for young children. The bridge should also be suitable for cyclists. | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u> |
| <b><i>Formal Stage 1 Consultation (22 June to 3 August 2015)</i></b>                        |   |  |
| Transport Focus   | Trinity Primary School Bridge: The proposals to replace the current unofficial footpath over the disused track may concern some in the local community and careful consideration of this proposal is essential.   | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out proposals for Trinity Primary School Bridge. The bridge has been designed with low gradient ramps for accessibility and connects into the existing network of paths. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the</u>                            |

Table 14.2: Summary of consultation responses

| Organisation and date | Summary of response   | Consideration within ES   |
|-----------------------|---|---|
| British Horse Society | A bridge between Galingale Way and Trinity Primary School preferred over footpath only option. The length of diversion required for the footpath (c. 600 m) only option unacceptable for young children. The bridge should also be suitable for cyclists. | <p><u>Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u></p> <p><u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7)-sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u></p> |

## 3.8 ES, Chapter 15 Soils, Agriculture, Land Use and Assets

- 3.8.1 The ES Chapter 15 [REP6-084] Paragraphs 15.4.42 and 43 in the baseline section are modified to remove reference to Trinity Primary School Bridge.
- 15.4.42 There are four Western Power high voltage electricity cables along the south side of railway corridor into the centre of Portishead. The locations of the cables have been confirmed on site with Western Power Distribution ("WPD") ~~and should not be affected by the location of the Trinity Primary School Bridge.~~ Consideration of utilities ~~sh~~would still be taken during detailed design of the ~~Trinity Primary School Bridge,~~ acoustic fence, highway works and car park.
- 15.4.43 The ~~existing permissive at-grade crossing over the railway proposed Trinity Primary School Bridge~~ is located close to the high voltage electricity cables and a drainage ditch on the south side of the railway corridor and a Wessex Water foul sewer and 11 kv voltage electricity cable along the north side of the railway corridor. The drainage ditch is culverted across the high voltage cables and under the railway corridor and continues westwards along the north side of the railway corridor. At this location, residential areas lie to the north and the south of the railway corridor. ~~and the proposed bridge will replace a~~ The permissive at-grade crossing over

the railway, which is heavily used by adults and schoolchildren. ~~The bridge will connect with open space and footpaths on either side of the crossing used for informal recreation.~~ Site investigations and site meetings with Wessex Water and WPD have been carried out to establish the location and depth of these services. The information collected will be reviewed during detailed design to minimise impacting these utilities and to avoid health and safety issues for the workforce and the local community.”

- 3.8.2 Paragraph 15.5.8 is modified to remove reference to the Trinity Primary School Bridge.

“15.5.8 The DCO Scheme has been designed to minimise the impact of land acquisition or occupation on adjoining land-ownership and property. A relatively small amount of permanent land acquisition is required, primarily to facilitate access, for example maintenance and emergency access to Pill Tunnel eastern portal ~~and the approaches to Trinity Primary School Bridge~~ and the new car parks. More extensive areas of temporary land occupation are required during the construction phase, for access and construction compounds for offices, storage of materials and spoil, and plant.”

- 3.8.3 Paragraph 15.6.18 is modified to explain the background to remove the Trinity Primary School Bridge from the DCO Scheme and provide an assessment of the absence of the bridge on land used by the community.

“15.6.18 Permanent and temporary land acquisition or occupation ~~was identified will be required~~ on the north and south side of the proposed Trinity Primary School Bridge ~~to for construction construct the access ramps and connecting footpaths, and protect the pond on the south side of the railway from construction activities.~~ Residents and pedestrians may use this space for walking through the residential area or informal recreation. Land known as The Vale on the south side of the disused railway is designated as Local Green Space. ~~Some of the land will become public rights of way, so will change in status but remain available to the public. As a local resource, the land in this area is given a low value and the temporary and permanent land acquisition is very small with a negligible magnitude of impact, resulting in a~~ **neutral** ~~significance of effect. As the Secretary of State is minded to remove the bridge from the DCO Scheme, there will be no change to the use of this~~ land.”

- 3.8.4 The second bullet in Paragraph 15.6.36 is deleted to remove reference to Trinity Primary School Bridge.

“15.6.36 The footprint of the former railway line largely defines the extent of the DCO Scheme within the Green Belt. The outward expansion of development mainly consists of works outside the Green Belt, comprising:

- the highway modifications, new station and car parks in Portishead;
- ~~Trinity Primary School Bridge and links to local paths;~~
- the restoration of the southern platform for Pill station, new station entrance, and new car park and associated maintenance compound; and
- highway modifications to improve traffic queuing on Winterstoke Road across the Ashton Vale Level Crossing and into the Ashton Vale Industrial Estate.”

- 3.8.5 Table 15.11 *Summary of the assessment of the DCO Scheme on soils, agriculture, land use and assets* is modified to delete reference to Trinity Primary School Bridge.



**Table 15.11: Summary of the assessment of the DCO Scheme on soils, agriculture, land use and assets**

| Aspect and control measures embedded in the DCO Scheme  | Receptors  | Impact  | Environmental Mitigation | Residual Impact   |
|---|--|---|--------------------------|---|
| <b><i>Loss of Land Used by the Community</i></b>  |  |   |                          |   |
| <p>Temporary and permanent land-take to Trinity Primary School Bridge.</p> <p>Replacement of the informal crossing with a new pedestrian and cyclist bridge, realignment of paths, and landscaping.</p> | <p>Amenity grassland and shrubs</p> <p><b>Value: Low</b></p> | <p>Temporary diversion of crossing.</p> <p><b>Magnitude: Negligible</b></p> | <p>N/A</p>               | <p><b>Magnitude: Negligible</b></p> <p><b>Significance of Effect: Neutral.</b></p> <p><b>Significance for EIA legislation: Not significant.</b></p> |

## 3.9 ES, Chapter 16 Transportation, Traffic, and Non-Motorised Users

- 3.9.1 A new foot and cycle bridge ('Trinity Footbridge', Work No. 7) was proposed for the informal and non-public right of way across the current disused railway line to connect Tansy Lane to Galingale Way. The bridge would need to be high enough to give safe clearance over the railway line and include accessible access ramps on both sides. As it would have been a structure of a significant size and scale, concerns were raised at the Examination by nearby residents about the size and scale of the structure, visual intrusion, and disturbance. The Secretary of State has noted the matters raised at the Examination and advised that he is minded to remove Trinity Footbridge from Work No. 7 from the proposed order.
- 3.9.2 As the existing informal and non-public right of way at-grade crossing over the disused railway at this point will no longer be available, pedestrians and cyclists will use the new paths that will run parallel to the railway line between Galingale Way / Vale Pond and Tansy Lane via Portishead station area and the realigned Quays Avenue. This diversion is almost 500 metres distance in total (450 m net after considering the permissive at grade crossing over the railway). During construction, until the new paths are available, the diversion will be longer, at around 700m, as it will follow existing roads Galingale Way and Tansy Lane.
- 3.9.3 The ES Chapter 16 Transport, Access and Non-Motorised Users [APP-111] is amended as set out below.
- 3.9.4 Table 16.3 (Summary of consultation responses on traffic and transport and how/where these have been addressed within the ES), the fourth paragraph for the organisation Sustrans under the heading 'Consideration within the ES' should be deleted "~~A new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the TA).~~"
- 3.9.5 Table 16.3 (Summary of consultation responses on traffic and transport and how/where these have been addressed within the ES), the second paragraph for the organisation Public under the heading 'Consideration within the ES' should be read "Table 16.8 outlines the infrastructure measures to be provided as part of the DCO Scheme including provisions for cyclists/pedestrians. Provision of bicycle parking facilities at the stations is discussed in Section 16.7 and a new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the TA, ES Appendix 16.1, DCO Document Reference 6.25)".
- 3.9.6 Table 16.3 (Summary of consultation responses on traffic and transport and how/where these have been addressed within the ES), the fourth paragraph for the organisation Transport Focus under the heading 'Consideration within the ES' should be deleted "~~A new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the TA).~~"
- 3.9.7 Table 16.8 (Infrastructure measures to be implemented), delete the contents of measure reference 6 (the whole line) to:

| Ref | Area       | Location               | Measure  | Type of measure         | Rationale   | Time-scale       | Responsible     |
|-----|------------|------------------------|--|-------------------------|---|------------------|-----------------|
| 6   | Portishead | Trinity Primary School | Provision of a bridge compliant with the Equalities Act 2010 | Integral part of scheme | To formalise the crossing point across the railway and to provide access to and from the primary school | Prior to opening | Scheme Promoter |

3.9.8 and the reference 6 should read 'not used'.

## 3.10 ES, Chapter 18 In combination and cumulative effects

3.10.1 The ES Chapter 18 [APP-113] Table 18.1 *In-combination effects during construction* and Table 18.2 *In-combination effects during operation* are modified to remove reference to Trinity Primary School Bridge and associated impacts.

Table 18.1 In-combination effects during construction

| Receptor   | Chapter                                    | Residual effect reports in the topic chapter  | Assessment of in-combination effects  |
|--|--|---|---|
| Properties on Peartree Field (south of the proposed station) | Chapter 13 Noise and Vibration             | Daytime noise: Slight adverse<br>Night time noise (if works take place at night): Slight adverse<br>Daytime vibration: Slight adverse from vibratory compaction of new railway line | <b>Temporary <u>very large to large</u> adverse</b> – Properties at this location will experience noise and vibration effects during construction of the station, <del>Trinity Primary School Bridge</del> and the railway line. The works will also produce dust and emissions from plant/vehicles. Views from 6 properties will be <u>very largely</u> adversely affected by construction activities associated with the station, access for works to the tracks to the east and the proposed acoustic barrier immediately north of Peartree Field, with the largest effect being experienced from the upper stories of the properties. |
|  | Chapter 7 Air Quality and Greenhouse Gases | Slight adverse  |   |
|  | Appendix 11.3 Visual Impact Assessment     | <u>Very large to large</u> adverse  |   |

| <b>Table 18.1 In-combination effects during construction</b>  |  |   |  |
|---|--|---|--|
| <b>Receptor</b>   | <b>Chapter</b>                             | <b>Residual effect reports in the topic chapter</b>   | <b>Assessment of in-combination effects</b>  |
| Tansy Lane (north of proposed station)  | Chapter 13 Noise and Vibration             | Daytime noise: Slight adverse<br>Night time noise (if works take place at night): Slight adverse<br>Daytime vibration: Slight adverse from <del>bridge piling</del> and from vibratory compaction of new railway line | <b>Temporary <u>very</u> large adverse</b> – Properties at this location will experience noise and vibration effects during construction of the station, <del>Trinity Primary School Bridge</del> and the railway line. The works will also produce dust and emissions from plant/vehicles. Views will be adversely affected by construction features such as temporary fencing and lighting, heavy machinery, piling rigs and crane, and <u>construction compound</u> for the <del>Trinity Bridge components</del> . Vegetation clearance will also open up the view. |
|   | Chapter 7 Air Quality and Greenhouse Gases | Slight adverse  |  |
|   | Appendix 11.3 Visual Impact Assessment     | <u>Very</u> Large adverse   |  |
| Properties on Holmlea Road and Tydeman Road (south of railway line)<br>Community land – amenity grassland and shrubs in this area | Chapter 13 Noise and Vibration             | Daytime noise: Slight adverse<br>Night time noise (if works take place at night): Slight adverse<br>Daytime vibration: Slight adverse for <del>bridge piling and</del> vibratory compaction of new railway line       | <b>Temporary <del>moderate</del><u>large</u> adverse</b> – Properties at this location will experience noise and vibration effects during construction of the railway line. <del>Properties on Holmlea Road will also experience noise and vibration effects during construction of Trinity Primary School Bridge.</del> The works will also produce dust and emissions from plant/vehicles. There will be glimpsed views of construction features during summer as they will be well  |

**Table 18.1 In-combination effects during construction**

| Receptor | Chapter  | Residual effect reports in the topic chapter | Assessment of in-combination effects   |
|----------|--|--|--|
|          | Chapter 7 Air Quality and Greenhouse Gases         | Slight adverse                               | screened by vegetation, but partial views during winter months when vegetation is more sparse. <del>Residents of this road may also be affected by the loss of amenity land during the construction of Trinity Primary School Bridge. A temporary replacement crossing will be in place during construction.</del> |
|          | Appendix 11.3 Visual Impact Assessment             | <del>Moderate</del> <u>Large</u> adverse     |  |
|          | Chapter 15 Soils, Agriculture, Land Use and Assets | Neutral                                      |  |

**Table 18.2: In-combination effects during operation**

| Receptor                     | Chapter                                    | Residual effect reported in chapter | Assessment of in-combination effects  |
|------------------------------|--|-------------------------------------|---|
| <b><i>Portishead</i></b>     |  |                                     |   |
| Properties on Peartree Field | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Large adverse</b> – Properties at this location will experience noise effects from the operation of the railway (the proposed noise barrier will reduce noise levels at this location) and emissions from trains. These properties will experience small increase in NO <sub>2</sub> associated with the scheme, but the air quality would still be well below the Air Quality Objectives. Six properties will experience a large adverse effect of changed views from the |
|                              | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |   |
|                              | Appendix 11.3 Visual Impact Assessment     | Large adverse                       |   |

**Table 18.2: In-combination effects during operation**

| Receptor  | Chapter                                    | Residual effect reported in chapter                                     | Assessment of in-combination effects   |
|---|--|---|--|
| Properties further back from Portishead Station and railway line on South side (i.e. behind Peartree Field) | Chapter 13 Noise and Vibration             | Slight adverse  | upper storeys, with the introduction of proposed 10 m high lighting columns, <del>Trinity Primary School Bridge</del> , fencing and passenger trains. Properties not affected by these changes in views would experience a smaller in-combination effect.<br><br><b>Minor adverse</b> – Properties further away will experience lower noise effects from the operation of the railway and emissions from trains and road traffic. Residents will experience changed views with the introduction <u>of Trinity Primary School Bridge and associated night-time lighting at the new station</u> , fencing and occasional glimpsed views of passenger trains. Views will improve over time as planting matures. |
|   | Chapter 7 Air Quality and Greenhouse Gases | Negligible  |  |
|   | Appendix 11.3 Visual Impact Assessment     | Slight adverse  |  |
| Tansy Lane  | Chapter 13 Noise and Vibration             | Slight adverse  | <b>Large to Moderate adverse</b> – Properties on Tansy Lane will experience noise effects from the operation of the railway and emissions from trains. Residents will have direct views of <del>Trinity Primary School Bridge</del> , the railway line and associated fencing and passenger trains. There will be oblique views to the station and platform. Some visual screening <u>will be provided by reinforcing vegetation along the railway boundary proposed trees and planting</u> . Whilst a line of tree planting is proposed north of the bridge to help screen the new bridge, due to the proximity of the receptors,   |
|   | Chapter 7 Air Quality and Greenhouse Gases | Negligible  |  |
|   | Appendix 11.3 Visual Impact Assessment     | <u>Large adverse in Year 1 reducing to Moderate adverse by Year 15.</u> |  |

**Table 18.2: In-combination effects during operation**

| Receptor   | Chapter                                    | Residual effect reported in chapter | Assessment of in-combination effects   |
|--|--|-------------------------------------|--|
|  |  |                                     | <del>and associated massing and lighting of the bridge, there will still be a large adverse impact.</del>  |
| Further back from Portishead Station and railway line on North side (i.e. north of Tansy Lane) | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Slight adverse</b> – Properties on this road will experience noise effects from the operation of the railway and emissions from trains.   |
|  | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |  |
| Holmlea and Tydeman Road   | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Slight adverse</b> – Properties on these roads will experience noise from the operation of the railway and emissions from trains. Residents will have direct, oblique or upper storey views of <del>Trinity Primary School Bridge</del> , the railway line and associated fencing and passenger trains. There will be oblique views to the station and platform from some properties.   |
|  | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |  |
|  | Appendix 11.3 Visual Impact Assessment     | Slight adverse                      |  |
| Trinity Primary School   | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Moderate adverse</b> – Trinity Primary School will experience noise from the operation of the railway and emissions from trains. There will be open views of <del>Trinity Primary School Bridge, its associated fencing and passing passenger and freight trains</del> , which are well screened by vegetation in places. Views will improve over time as <u>additional planting establishes itself along the school boundary</u> . <del>As proposed planting establishes to the south west of the School, views to Trinity Primary School Bridge will be partially screened. In addition, whilst views of occasional</del> |
|  | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |  |
|  | Appendix 11.3 Visual Impact Assessment     | Moderate adverse                    |  |



**Table 18.2: In-combination effects during operation**

| Receptor | Chapter | Residual effect reported in chapter | Assessment of in-combination effects  |
|----------|---------|-------------------------------------|---|
|          |         |                                     | <p>passenger trains will be filtered by additional planting to the southern boundary of the School, new features such as lighting on the bridge, and proposed fencing, will be visible and detract from the tranquillity of existing views.</p> |

## 3.11 ES, Appendix 1.2 Compliance with the EIA Regulations, Schedule 4

- 3.11.1 The ES Appendix 1.2 [APP-125] Table 1 is modified to remove reference to Trinity Primary School Bridge.

**Table 1: Compliance of the ES with the requirements of the EIA Regulations**

| Part 1, Schedule 4   | ES   |
|--|--|
| (d) an estimate, by type and quantity, of expected residues and emission (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases. | <p>Residues and emissions during construction and operation</p> <p>...</p> <ul style="list-style-type: none"> <li>Light. Lighting arrangements for the new stations and car parks are discussed in Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7). The lighting design for Pill Station is provided in the ES Appendix 9.18 (DCO Document Reference 6.25). See also, Portishead Station Platform Lighting and Lighting Control Layout (DCO Document Reference 2.14), <del>Lighting Scheme for Trinity Primary School Bridge Plan as shown on drawing S054 Trinity Footbridge Proposed Electrical Layout General Arrangement (DCO Document Reference 2.17)</del>, S050 Pill Station Lighting Proposed: Electrical Layout Plan (DCO Document Reference 2.20), Portishead Station Car Park Layout, Landscaping and New Boulevard and Access Plan (DCO Document Reference 2.38), Pill Station Car Park, and PSP Layout, Landscaping, Lighting and Access Plan (DCO Document Reference 2.42). Changes in light levels have not been estimated.</li> </ul> |

## 3.12 ES, Appendix 1.3 A summary of works required for the DCO Scheme

- 3.12.1 The ES Appendix 1.3 [APP-125] Table 1 is amended to remove Works No. 7 and 7E and combine 7A with 7C.

**Table 1: A Summary of Works Required for the Portishead Branch Line (MetroWest Phase 1) DCO Scheme**

| <b>Works No.</b> | <b>Description of the DCO Scheme Work No.</b>  | <b>Permanent or Temporary</b> | <b>Inside or Outside Operational / Disused Railway Boundary</b> | <b>Current Land Use</b>   |
|------------------|--|-------------------------------|---|---|
| <del>7</del>     | <del>A public foot and cycle track bridge over the railway to the south west of Trinity Primary School, Portishead.<br/>Work No. 7 includes: connections to cycle tracks, lighting, drainage, signage, fencing and hardstandings.</del>  | <del>Permanent</del>          | <del>Inside and outside the disused railway boundary</del>      | <del>Disused railway land, highway land and open space.</del>                                   |
| 7A               | A public foot and cycle path from Phoenix Way, Portishead to connect with the new foot and cycle bridge (Work No. 7 and Work No. 7C) south of Tansy Lane, Portishead and north of Work No. 1.<br><br>Work No. 7A includes: signage, drainage, lighting, fencing and landscaping. | Permanent                     | Inside and outside the disused railway boundary                 | Highway land  |
| 7B               | A public foot and cycle track from the new Quays Avenue, Portishead, to connect with the new foot and cycle bridge (Work No. 7) to the north of Galingale Way and to the south of Work No. 1.<br><br>Work No. 7B includes: signage, drainage, lighting, fencing and landscaping. | Permanent                     | Outside the disused railway boundary                            | Shrubs and trees and crossing of existing Quays Avenue  |
| <del>7C</del>    | <del>A public foot and cycle track from the new foot and cycle bridge (Work No. 7) north to Tansy Lane, Portishead.<br/>Work No. 7C includes: signage, drainage, lighting, fencing and landscaping.</del>  | <del>Permanent</del>          | <del>Outside the disused railway boundary</del>                 | <del>Permissive footpath and open space – amenity grass with occasional shrubs and trees.</del> |

**Table 1: A Summary of Works Required for the Portishead Branch Line (MetroWest Phase 1) DCO Scheme**

| <b>Works No.</b> | <b>Description of the DCO Scheme Work No.</b>  | <b>Permanent or Temporary</b> | <b>Inside or Outside Operational / Disused Railway Boundary</b> | <b>Current Land Use</b>                         |
|------------------|--|-------------------------------|---|---|
| 7D               | A temporary construction compound to the south of Tansy Lane, Portishead and to the north of Work No. 1. | Temporary                     | Outside the disused railway boundary                            | Public open space comprising amenity grassland. |
| <del>7E</del>    | <del>Underground electrical supply cables connecting from Work No. 7 to Tansy Lane, Portishead.</del>    | <del>Permanent</del>          | <del>Crosses over the disused railway</del>                     | <del>Disused railway.</del>                     |

### 3.13 ES, Appendix 4.2 Master Construction Environmental Management Plan

3.13.1 The ES Appendix 4.2 [REP6-110] Table 3.1 *Summary of current and proposed construction compounds* is modified to remove reference to Trinity Primary School Bridge.

**Table 3.1 Summary of current and proposed construction compounds**

| Place Name                       | Location  | Land Use                         | Proposed Principal Construction Use Subject to Detailed CEMP                            |
|----------------------------------|---|----------------------------------|---|
| Portishead Station Site Compound | Portishead on site of new station car parks A and B       | Urban highways, railway corridor | To facilitate construction of new station <del>and Trinity Primary School Bridge.</del> |
| Tansy Lane; Portishead           | <del>Trinity Primary School Bridge</del><br>Lay Down Area | Open space                       | Storage of materials <del>and assembly for Trinity Primary School Bridge.</del>         |

### 3.14 ES, Appendix 4.3 Schedule of Mitigation

3.14.1 The ES Appendix 4.3 [REP6-111] Table 1 is revised by deleting row 11.5 and modifying 13.3 and 14.1, as set out in Table A1 below. Furthermore, with the removal of Requirements 19 and 33, some of the requirements have been renumbered. A separate, updated Schedule of Mitigation has been provided to the Secretary of State to clarify these points.

Table A1

| Schedule of Mitigation |   |   |           |  |  |   |   |
|------------------------|---|---|-----------|--|--|---|---|
| ES Chapter Ref.        | Potential Impact  | Embedded Measures   | Phase     | Mitigation measures  | Monitoring of Likely Significant Effects | Securing mechanism  | Draft Requirement from the DCO  |
| 13.3                   | Increased ambient noise levels from the railway through Portishead. | No embedded measures.<br><b>Significance of Effect:</b><br>Significant  | Operation | Provide an acoustic barrier approximately 210 m long, 2 m high from the start of the proposed line at the new Portishead station to Trinity Primary School Bridge. This will screen the properties in Pear Tree Field from the adverse impacts. This barrier will be absorptive to avoid reflections to the receptors to the north of the line.<br><b>Significance of Effect:</b><br>Not significant | N/A                                      | DCO Requirement 256 (Permanent acoustic fencing).             | <b>Permanent acoustic fencing Requirement 256</b> (see 11.9 above).             |
| 14.1                   | Ease of access to and from the stations.                            | Design of step free access to Portishead Station.<br>Designation of parking spaces for disabled drivers close to Portishead and Pill stations.<br>Re-design of the bus stop and kerb close to Pill Station.<br>Design of shallow gradient ramps for the Trinity School Bridge, Pill station, and (if used) the Pedestrian and Cycle Ramp between Ashton Vale Road and Ashton Road.<br><b>Significance of Effect:</b><br>Not significant | Operation | None.<br><b>Significance of Effect:</b><br>Not significant   | N/A                                      | DCO Requirement 4 (Submission and approval of detail design). | <b>Submission and approval of detail design Requirement 4</b> (see 11.4 above). |

## 3.15 ES, Appendix 4.5 Major Accidents and Disasters

3.15.1 The ES Appendix 4.5 [APP-129] is modified to remove reference to the Trinity Primary School Bridge, in particular in relation to working near utilities.

3.15.2 Paragraph 2.4.19 is modified as follows.

~~“2.4.19 The disused railway corridor in Portishead proposed Trinity Primary School Bridge is located close to four Western Power Distribution (“WPD”) high voltage electricity cables and a drainage ditch on the south side of the railway corridor and a Wessex Water foul sewer and 11 kv voltage electricity cable along the north side of the railway corridor. The locations of the high voltage electricity cables have been confirmed on site with WPD and should not be affected by the location of the Trinity Primary School Bridge. The drainage ditch is culverted across the high voltage cables and under the railway corridor and continues westwards along the north side of the railway corridor. At this location, residential areas lie to the north and the south of the railway corridor and the proposed bridge will replace a permissive at-grade crossing over the railway which is heavily used by adults and schoolchildren. The re is bridge will connect with open space and footpaths on either side of the crossing used for informal recreation. Site investigations and site meetings with Wessex Water and WPD have been carried out to establish the location and depth of these services. The information collected will be reviewed during detailed design to minimise impacting these utilities and to avoid health and safety issues for the workforce and the local community.”~~

3.15.3 Paragraph 3.2.3 is modified to remove reference to the Trinity Primary School Bridge.

~~“3.2.3 The Associated Development works include:~~

- ~~• a new railway station at Portishead;~~
- ~~• car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue and a new bridge near Trinity Primary School;”~~

3.15.4 Table 4 *Further assessment of potential major accidents and disasters* is modified to remove text concerning the risk of construction of Trinity Primary School Bridge to utilities and health and safety of the workforce.

~~“Severance or damage to high voltage electricity cables, drainage ditches, foul sewer, and 11 kv voltage electricity cable during the construction of the proposed Trinity Primary School Bridge and associated paths.”~~

## 3.16 ES, Appendix 5.1 Scoping Opinion, Additional Matters

3.16.1 The ES Appendix 5.1 [APP-130] Table 1 *Scoping Opinion (Additional Matters)* is modified to remove reference to Trinity Primary School Bridge. The bridge was designed with sufficient height to allow passive provision for overhead line electrification at a future date. No other new structures will be built over the railway line. The removal of the bridge creates severance and

users of the permissive at-grade crossing over the railway would have to divert along new footpaths and around Portishead station.

**Table 1: Scoping Opinion (Additional Matters)**

| Summary of Response   | Consideration within the ES   |
|---|---|
| <b>Section 3 EIA Approach and Topic Areas</b>   |   |
| <p>Paragraph 2.46</p> <p>The potential impacts of these works (overhead line electrification) should be described and assessed in the ES.</p>   | <p>There are no plans to electrify the railway, so no description or assessment has been provided in the ES.</p> <p><del>Provision for electrification has been provided for new structures (Trinity Primary School Bridge) in compliance with current Network Rail policy.</del></p> <p>There has been no assessment of the need for modifications to existing structures (such as the four tunnels and bridges) to accommodate overhead line electrification.</p>   |
| <p>Statutory Body Response – Portishead Town Council</p> <p>The Town Council raised the following concerns and questions:</p> <ul style="list-style-type: none"> <li>• Substantial on street parking will be lost in the vicinity of the Healthy Centre on Harbour Road when the scheme goes ahead. Can parking provisions be made for visitors to the health centre?</li> <li>• To include provisions for cyclists using the trains.</li> <li>• Concern for the structure of the sloped footbridge (by Trinity school) for wheelchair users.</li> <li>• Arranging parking provisions for construction traffic to eliminate already congested on-street parking, particularly in The Vale.</li> <li>• Introduce a minibus around the Town linked to the train times.</li> </ul> <p>Displaced parking. Drivers wishing to avoid parking charges park in local residential roads for free causing a nuisance.</p> | <p>The ES Chapter 16: Transport, Access and Non-Motorised (DCO Document Reference 6.19) users covers matters relating to street parking</p> <p>The provisions for cyclists using the trains is a matter for the train operating company and outside the scope of the DCO Scheme.</p> <p>The <del>accessibility of Trinity Primary School Bridge is considered in Appendix 14.1 Equality Impact Assessment (DCO Document Reference 6.25).</del> <u>was designed for mobility impaired users with low gradient ramps. However, the Secretary of State has advised that he is minded to remove the bridge, which will result in the severance of the permissive at-grade crossing of the railway. The severance would be mitigated through the provision of new footpaths along the railway corridor to Portishead station.</u></p> <p>Minibus services lie outside the scope of the DCO Scheme.</p> |



## 3.17 ES, Appendix 5.2 Changes in Scheme Design

- 3.17.1 The ES Appendix 5.2 [APP-130] Table 1 Changes in Scheme Design and Implications for the Scoping Opinion is modified to explain the proposed change in design to remove Trinity Primary School Bridge post DCO Examination.

**Table 1: Changes in Scheme Design and Implications for the Scoping Opinion**

| <b>DCO Scheme Design Assumed in the Scoping Report</b>  | <b>Changes in Scheme Design between scoping and PEI</b>  | <b>Changes in DCO Scheme between PEI and the ES</b>   | <b>Implications for the Scoping Opinion</b>   |
|---|--|---|---|
| <b>Portishead Station, Car Parks and Highway Modifications</b>  |  |   |   |
| <p>The railway station to comprise a canopy structure sheltering the station building and part of the single platform.</p> <p>Platform to be 100 metres long for passive provision of a four-car train.</p> <p>Highway modifications to relocate Quays Avenue to the west of the new station.</p> <p>Two new car parks for 200 spaces.</p> <p>A combined pedestrian and cycle path linked to the town centre along the rest of the disused railway.</p> | <p>The station to comprise a canopy structure sheltering the station building and part of the platform. The station to include ticketing, waiting area, and public toilets.</p> <p>No material change to the highway modifications. Development of design details such as bus waiting facilities, taxis, and disabled parking.</p> <p>Platform to be 130 metres long for provision of a five car train. CCTV, public announcement system, a communications mast and lighting on the platform.</p> <p>Two new car parks, one north of the station and one to the west with provision for 250 parking spaces.</p> <p>A combined pedestrian and cycle link to the town centre</p> | <p>Work No. 2 and 2A Diversion of Quays Avenue and highway drainage to The Cut.</p> <p>Work No. 3 a pedestrian and cycle path from Harbour Road to Portbury Ditch (“the boulevard” feature).</p> <p>Work No. 4 new car park B south of Harbour Road and east of Portbury Ditch with 200 spaces plus 6 disabled spaces.</p> <p>Work No. 5 a new railway station at Portishead.</p> <p>Work No. 6 a new permanent car park A between Portishead Station and Phoenix Way with 54 spaces plus 13 disabled spaces.</p> | <p>The design for Portishead Station and surrounds is largely as described.</p> <p>Provision has been made for a five-car train in the future, which would be more efficient at delivering increased services compared with re-designing the scheme for a half hourly service.</p> <p>The operational noise assessment assumes five carriage trains in the future year assessment scenario.</p> <p>The description of the DCO Scheme with the design iterations remains materially the same as the proposed development that was the subject of the Scoping Opinion.</p> <p><b><u>Post-Examination Changes in the DCO Scheme</u></b></p> <p><u>The Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme. There are no implications for the Scoping Opinion. The implications for the assessment of likely significant</u></p> |

Table 1: Changes in Scheme Design and Implications for the Scoping Opinion

| DCO Scheme Design Assumed in the Scoping Report   | Changes in Scheme Design between scoping and PEI   | Changes in DCO Scheme between PEI and the ES  | Implications for the Scoping Opinion  |
|---|--|---|---|
|   | <p>along the disused railway (“the boulevard” feature).</p> <p>New footpaths linking the station along both the north and south side of the railway to a new bridge near Trinity School.</p> <p>Highway and car park drainage to The Cut and Portbury Ditch.</p>   |   | <p><u>environmental effects are provided in this Addendum to the ES.</u></p>  |
| <b>Trinity Primary School Bridge and associated footpaths</b>   |  |   |   |
| <p>A new bridge over the railway to replace the current permissive crossing over the disused railway line.</p> <p>Zig-zap ramp on both sides of the bridge.</p> <p>Steel painted in a neutral colour.</p> <p>Structure height about 6.2 metres.</p> | <p>A new combined pedestrian and cycle bridge and links to the existing path network.</p> <p>Zig zag ramp (gradient 1:15) to be accessible for disabled users.</p> <p>Solid parapets 1.8 metres high over the railway and open parapets and handrails on the staircases and ramps.</p> <p>Steel painted in a neutral colour.</p> | <p>Works Nos. 7, 7A-7E a new foot and cycle bridge over the railway, new paths to connect with the existing network, a temporary construction compound off Tansy Lane and a temporary path over the railway during construction of the new bridge.</p> <p><u>Material design changes</u></p> <p>To reduce land-take from open space the land contouring and landscaping</p> | <p>The Trinity Primary School Bridge is a large structure in a residential area. The modifications to the design do not affect the need for a landscape and visual impact assessment as required by the Scoping Opinion.</p> <p><u>Post-Examination Changes in the DCO Scheme</u></p> <p><u>The Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme, removing Works Nos. 7, 7A-7E. There are no implications for the Scoping Opinion. The implications for the</u></p> |

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**Table 1: Changes in Scheme Design and Implications for the Scoping Opinion**


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| <b>DCO Scheme Design Assumed in the Scoping Report</b> | <b>Changes in Scheme Design between scoping and PEI</b>   | <b>Changes in DCO Scheme between PEI and the ES</b> | <b>Implications for the Scoping Opinion</b>  |
|--|---|---|--|
|  | Structure height about 8.5 metres over the railway to allow for future overhead line electricity gauge clearance. | works have been scaled back.                        | <u>assessment of likely significant effects are provided in this Addendum to the ES.</u> |

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## 3.18 ES, Appendix 7.1 Construction Dust Assessment

3.18.1 The ES Appendix 7.1 [REP6-112] paragraph 3.1.4, modify the second bullet to remove reference to construction of Trinity Primary School Bridge.

“3.1.4 The Associated Development works comprise:

- a new railway station at Portishead;
- car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue ~~and a new pedestrian and cycle bridge near Trinity Primary School;~~”

3.18.2 Modify paragraph 3.2.2 to remove reference to the construction of Trinity Primary School Bridge.

“3.2.2 Early re-alignment of Quays Avenue would release land for a temporary construction compound within what will become the car park in front of the new station and provide access to the railway corridor to re-build the railway ~~and new footpaths either side of the railway corridor—the new pedestrian/cycle crossing near Trinity Primary School, and the new station~~”.

3.18.3 Modify paragraph 3.2.3, 2<sup>nd</sup> bullet, to remove reference to the construction of Trinity Primary School Bridge.

- “**Earthworks:** The Portishead station construction site surface, including Quays Avenue and Phoenix Way roundabout and the associated construction compounds, is around 30,000 m<sup>2</sup>. The surrounding soil type is assumed to be moderately dusty and excavation activities expected in the carpark ~~and Trinity Primary School Bridge~~ construction plans include the use of up to two 25 t excavators and two 20t bulldozers<sup>4</sup>. In addition, 5-10 heavy earth moving vehicles are assumed to be active during construction activities. The areas outside the protected vegetation zones will be de-vegetated to facilitate the works. Considering there is no available information relating to the total material, and following a conservative approach, the magnitude of dust emissions from earthworks is considered to be **large**.”

3.18.4 The edits do not change the assessment.

## 3.19 ES, Appendix 9.12 Habitats Regulations Assessment

3.19.1 The ES Appendix 9.12 [REP6-120] Habitats Regulations Assessment [REP6-063] is amended to address the removal of Trinity Primary School Bridge and the associated adverse effects of construction noise on bird life associated with European sites.

3.19.2 Paragraph 3.2.8 is removed.

“3.2.8 ~~A new combined pedestrian and cycle bridge and associated paths are proposed to link residential areas in Portishead between the south~~

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<sup>4</sup> As reported in the Construction Plan Categorised List

~~and north sides of the railway in the vicinity of Trinity Primary School.”~~  
Paragraph not used

3.19.3 Paragraph 3.2.9 is modified as follows:

“3.2.9 Temporary construction compounds are proposed at the sites of the two new car parks to construct the station and railway and on land between Tansy Lane and the railway ~~to construct Trinity Primary School Bridge.”~~

3.19.4 Paragraph 5.3.9 is modified to remove the first bullet as follows:

“5.3.9 The anticipated works which could cause impacts on qualifying features at Portbury Wharf Nature Reserve are outlined below:

- ~~• Construction of the Trinity Primary School Bridge, which involves percussive piling, approximately 500 m from the pools and lagoons”~~

3.19.5 Paragraph 6.3.14 is modified as follows:

“6.3.14 The activities most likely to cause disturbance of birds using the pools and lagoons, due to noise levels and distance are the ballasting, tamping and lining works required for construction of the line (650 m from the pools and lagoons) ~~and percussive (hammer) piling for approximately two weeks for the construction of the Trinity Primary School Bridge (500 m from the pools and lagoons)~~. The predicted combined (baseline and construction) noise at the pools and lagoons is 49 dB  $L_{Aeq,12h}$  from Ballasting/Tamping/Lining works ~~and 49 dB  $L_{Aeq,12h}$  from percussive (hammer) piling works at Trinity Primary School Bridge~~ (Table 7.103 of ES Appendix 13.7, DCO Document Reference 6.25). ~~These are~~ This is lower than levels found to cause disturbance of wetland birds (Cutts *et al.*, 2013, see paragraph 5.3.15 above) and therefore no impacts on SPA and Ramsar-qualifying birds are anticipated.”

3.19.6 Paragraph 8.4.55 1<sup>st</sup> bullet is modified as follows:

“8.4.55 The landscape proposals are summarised as follows:

- ~~• South of Trinity Primary School Bridge~~ Permissive crossing of the railway line by Trinity Primary School – woodland planting to the north and vegetation retained south of the line;”

3.19.7 Evidence supporting the screening assessment in Matrix D3 (Severn Estuary SPA) of Annex D is modified as follows:

a) Pill Marshes and the adjacent intertidal section of the River Severn are currently subject to a range of noise and visual disturbance, including the freight rail traffic, M5 traffic and dog walkers. The noise model indicates an existing noise level at the SPA at Pill of 59 dB  $L_{Aeq,16h}$  (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). Construction activities will generate additional noise (Table 6.4 of this HRA) but given the low numbers of birds and existing noise levels and visual disturbance, there is not predicted to be LSE on SPA birds. At Portbury Wharf Nature Reserve, the SPA qualifying bird species shelduck and gadwall were recorded using the wetland areas in the northern part of the reserve which is approximately 650 m north of the DCO Scheme. The existing noise level at the most representative survey location for the pools/lagoons is 46 dB  $L_{Aeq,16h}$  (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). The

construction activities most likely to cause disturbance of birds at the pools is considered in paragraph 6.3.13 of this HRA. The predicted noise at the pools/lagoons where SPA/Ramsar birds are most likely to occur considering both the existing and predicted noise levels is 49 dB LAeq,12h from Ballasting/Tamping/Lining works and 49 dB LAeq,12h from percussive (hammer) piling works at Trinity Primary School Bridge (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). This is lower than levels found to cause disturbance of wetland birds (paragraph 5.3.15 of this HRA) and therefore no LSE.

3.19.8 Evidence supporting the screening assessment in Matrix D4 (Severn Estuary Ramsar) of Annex D is modified as follows:

f) Pill Marshes and the adjacent intertidal section of the River Severn are currently subject to a range of noise and visual disturbance, including the freight rail traffic, M5 traffic and dog walkers. The noise model indicates an existing noise level at the Ramsar boundary at Pill 59 dB LAeq,16h (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). Construction activities will generate additional noise (Table 6.4 of this HRA), but given the low numbers of birds and existing noise levels and visual disturbance, there is not predicted to be a LSE on Ramsar birds. At Portbury Wharf Nature Reserve, the Ramsar species shelduck, gadwall, teal and pintail were recorded using the wetland areas in the northern part of the reserve which is approximately 650 m north of the DCO Scheme. The existing noise level at the most representative survey location for the pools/lagoons is 46 dB LAeq,16h (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). The construction activities most likely to cause disturbance of birds at the pools is considered in paragraph 6.3.13 of this HRA. The predicted noise at the pools/lagoons where SPA/Ramsar birds are most likely to occur considering both the existing and predicted noise levels is 49 dB LAeq,12h from Ballasting/Tamping/Lining works and 49 dB LAeq,12h from percussive (hammer) piling works at Trinity Primary School Bridge (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). This is lower than levels found to cause disturbance of wetland birds (paragraph 5.3.15 of this HRA) and therefore no LSE.

## 3.20 ES, Appendix 11.3 Visual Impact Assessment

3.20.1 The ES Appendix 11.3 Visual Impact Assessment [REP6-123] is amended as set out below.

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No.                     | Location                                      | Existing View   | Construction Impacts   | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-------------------------|---|---|--|---|--|
| <b>HIGH SENSITIVITY</b> |   |   |  |   |  |
| 1                       | Footpath backing onto Wyndham Way Retail Park | Views generally looking northeast/southwest along the footpath with views east towards the disused line screened by Sainsburys and to some extent by the vegetation on the site of the proposed main car park | Part of the path would need to be closed during construction to allow for the improved connection between the proposed main station car park, over the rhine and west towards the town centre. More open views across the site of the main car park with the loss of the vegetation and longer views down the site to the station building construction and compound that would serve the construction of the new station <del>and Trinity Primary School Bridge</del> . Piling rigs and cranes would be seen in the middle distance.<br>Magnitude: major adverse<br>Significance: large adverse | More open views generally with a long view east over the main car park with its new trees and lighting towards the station building, consisting of a canopy structure extending over a new station building and the buffer stop enclosure wall. The new station design includes an external GSM-R mast and communications mast. <del>In the middle distance the upper part of the new Trinity Primary School Bridge will be visible crossing the railway behind the station.</del><br><br>Magnitude: moderate adverse | More open views generally with a long view east over the main car park towards the station building, with the new trees alongside the footway/cycleway on the south side of the car park forming a new landscape feature. This would also partially screen views towards the station building <del>and Trinity Primary School Bridge beyond</del> .<br><br>Magnitude: moderate adverse<br><br>Significance: moderate adverse |



**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location      | Existing View  | Construction Impacts   | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|---------------|--|--|---|--|
| 2   | The Vale Park | Views north to the line mostly screened by trees and other vegetation around the balancing pond. Some glimpsed views in the winter months. | Glimpsed view of construction activity associated with the construction of the line and <del>new Trinity Primary School Bridge</del> , which is well screened by vegetation. Construction features include heavy machinery, temporary fencing and lighting and piling rigs <del>cranes visible over the trees for a limited during the construction of the bridge</del> . Partial views through vegetation in winter months and screened by vegetation during the summer months.<br>Magnitude: minor adverse<br>Significance: slight adverse | Significance: moderate adverse<br><br>Glimpsed view of the reconstructed railway line, <del>the Trinity Primary School Bridge</del> and passenger trains, which are well screened by vegetation. Partial views through vegetation in winter months, likely to be to the moving trains <del>and the top of the bridge and</del> screened by vegetation during the summer months.<br>Magnitude: minor adverse<br>Significance: slight adverse | Glimpsed view of the reconstructed railway line, its associated fencing and passenger trains, <del>and the Trinity Primary School Bridge</del> , which are well screened by existing vegetation. Partial views through vegetation in winter months and dense screening during the summer months.<br>Magnitude: minor adverse<br>Significance: slight adverse |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                   | Existing View   | Construction Impacts   | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|----------------------------|---|--|---|--|
| 3a  | Peartree Field, Portishead | Residential receptors on the stretch of Peartree Field that runs along the boundary of the disused line ( <u>Nos. 1 to 11, 6</u> properties affected), are orientated north with upper storey views over intervening vegetation to the disused line, Wessex Water pumping station, and properties on Tansy Lane beyond. | During construction there will be open upper storey views of construction activities on the station area compound and of the station construction with piling rigs and cranes, <del>and including construction of Trinity Primary School Bridge more oblique in the view.</del> Some screening at ground floor from existing retained vegetation but with views through.<br>Magnitude: major adverse<br>Significance: very large adverse | Though some of the existing vegetation to the north will be retained, the introduction of the new station directly opposite <del>and the Trinity Primary School Bridge</del> will form a new feature in upper storey views. Views to proposed lighting columns, will further detract from views north, especially at night. Glimpsed views towards the station building and roof tops of stationary/moving trains.<br><br>Magnitude: major adverse<br><br>Significance: large adverse | Upper storey views to the Station <del>and Trinity Primary School Bridge</del> , with the lighting columns, associated fencing, and passenger trains. <del>will be</del> Some news towards pedestrians on the new path partially screened by existing vegetation.<br><br>Magnitude: major adverse<br><br>Significance: large adverse |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                                   | Existing View   | Construction Impacts  | Operational Impacts after 1 year   | Operational Impacts after 15 years  |
|-----|--|---|---|--|---|
| 3b  | Galingale Way / Peartree Field, Portishead | Pocket of residential receptors accessed from the south by Galingale Way and to the west by Peartree Field afford oblique upper storey views over intervening vegetation to the disused line and beyond to Houses on Tansy Lane with glimpsed / filtered winter views of Trinity Anglican Methodist Primary school. | <p>Whilst some vegetation will be retained during construction, upper storey oblique views will be possible of the <del>new bridge</del> and station construction and associated works, including fencing / temporary lighting. Views will be disrupted by the introduction of tall construction machinery such as piling rigs and cranes, with some glimpsed views of construction activities north west towards the highway works and compound at Portishead Station.</p> <p>Magnitude: major adverse<br/>Significance: large adverse</p> | <p>There will be filtered summer and winter views <del>North East to from the newly constructed Trinity Primary School Bridge, in particular the ramp and steps of the bridge which are located approximately 7—8 m from the boundary of the nearest residential receptor. Operational lighting on the bridge will be a detractor in views occasional upper storey windows of occasional glimpses views of passing trains will be possible through gaps in the ramp and existing vegetation.</del></p> <p>Magnitude: <del>major adverse moderate adverse</del></p> | <p>There will be filtered summer and winter views <del>North East to from the newly constructed Trinity Primary School Bridge, in particular the ramp and steps of the bridge which are located approximately 7—8 m from the boundary of the nearest residential receptor. Operational lighting on the bridge will be a detractor in views occasional upper storey windows of occasional glimpses views of passing trains will be possible through gaps in the ramp and existing vegetation.</del></p> <p>Magnitude: moderate adverse<br/>Significance: <del>large adverse moderate adverse</del></p> |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                         | Existing View  | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|----------------------------------|--|---|---|--|
| 3c  | Holmlea\Tydeman Road, Portishead | Houses on the stretch of Holmlea and Tydeman Road that back onto the boundary of the disused railway with filtered (by existing vegetation) upper storey winter views into the disused railway line immediately north and towards the Trinity Anglican Methodist Primary School / other residential properties to the north and northeast. | Filtered upper storey winter views of activity associated with the construction of the line, which is well screened by vegetation. Construction features include heavy machinery fencing and temporary lighting. <del>More oblique views towards the construction of Trinity Primary School Bridge.</del> No. 6 Holmlea faces towards the <u>bridge railway</u> construction in close proximity with views partially filtered to some degree by existing vegetation.<br>Magnitude: major adverse<br>Significance: large adverse | <p>Significance: <del>large</del> <u>adverse</u> <u>moderate</u> <u>adverse</u></p> <p><del>Filtered upper storey oblique views to Trinity Primary School Bridge to the north west, with its associated lighting at night detracting from existing views.</del> Upper storey filtered views of the reconstructed railway line, its associated fencing and passing trains. No. 6 Holmlea faces towards the <u>bridge railway</u> with views filtered to some degree by existing vegetation but with views through to the lighting.</p> <p>Magnitude: minor adverse</p> | <p><del>Filtered upper storey oblique views to Trinity Primary School Bridge to the north west, with its associated lighting at night detracting from existing views.</del> Upper storey filtered views of the reconstructed railway line, its associated fencing and passing trains. No. 6 Holmlea faces towards the <u>bridge railway</u> with views filtered to some degree by existing vegetation but with views through to the lighting.</p> <p>Magnitude: minor adverse<br/>Significance: slight adverse</p> |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                                      | Existing View  | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|---|--|---|---|--|
| 5   | Residential Buildings, Tansy Lane, Portishead | View south from residential properties across front gardens and open grassland towards railway line and associated vegetation. | Direct view, in close proximity, of construction activity associated with the construction of railway line <u>and</u> station <del>and new Trinity Primary School Bridge</del> . View of construction features such as fencing and temporary lighting, heavy machinery, piling rigs, <del>and crane and lay down area for bridge components</del> . In addition, vegetation removal will contribute to the change in view by opening it up.<br>Magnitude: major adverse<br>Significance: very large adverse | Significance: slight adverse<br><del>(No 6 – major adverse/large adverse)</del><br>Direct view, in close proximity, of the <del>new Trinity Primary School Bridge, as well as of</del> the reconstructed railway line, its associated fencing and passenger trains. Oblique views to station and platform. The proposed tree planting would not offer any screening at this stage.<br>Magnitude: major adverse<br>Significance: large adverse | <del>(No 6 – major adverse/large adverse)</del><br>Direct view, in close proximity, of the <del>new Trinity Primary School Bridge, as well as of</del> the reconstructed railway line, its associated fencing and passenger trains. Oblique views to station and platform. Some limited screening provided by proposed trees.<br>Magnitude: <del>major</del> <u>moderate</u> adverse<br>Significance: <del>large</del> <u>moderate</u> adverse |

**MEDIUM SENSITIVITY**

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| <b>No.</b> | <b>Location</b>                    | <b>Existing View</b>   | <b>Construction Impacts</b>  | <b>Operational Impacts after 1 year</b>   | <b>Operational Impacts after 15 years</b>  |
|------------|------------------------------------|--|--|---|--|
| 45         | Commercial Buildings, Serbert Road | Views north from the back of the buildings towards the adjacent disused line and beyond to buildings along Harbour Road. | View north and east towards the Quays Avenue compound to the north east, serving the construction of <del>Trinity Primary School Bridge</del> and the Portishead Station as well as the view of construction activity associated with the new highway layout. Views to the construction of the station main car park and station. View east of station construction features such as heavy machinery including piling rigs and cranes, associated temporary fencing and lighting, vegetation removal and construction traffic.<br><br>Magnitude: major / moderate adverse<br><br>Significance: large adverse | Whilst formal boulevard style planting is proposed to the north of the receptors, views to the proposed carpark will remain fairly open until the boulevard planting can establish and provide intermittent screening. Views further north and east include the associated highway works, the car parking, new Portishead Station building <del>and the Trinity Primary School Bridge more obliquely</del> . Additional features include proposed lighting columns in the car parks in addition to lighting on <del>Trinity Primary School Bridge</del> and Portishead station. | Views north and east towards the main car park and station, as well as vertical features such as lighting are only partially filtered by the formal boulevard tree planting due to proximity.<br><br>Magnitude: moderate adverse<br><br>Significance: moderate adverse |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No.                    | Location  | Existing View  | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|------------------------|---|--|---|---|--|
| 46                     | Trinity Anglican Methodist Primary School, Marjoram Way | Open views south from the grounds to the railway line. | <p>Open view of construction activity associated with the construction of the line and new Trinity Primary School Bridge. Construction features include heavy earth moving machinery, temporary fencing and lighting, piling rigs and cranes used to lift the bridge into place.</p> <p>Magnitude: <del>major adverse</del> <u>moderate adverse</u></p> <p>Significance: <del>large adverse</del> <u>moderate adverse</u></p> | <p>Magnitude: moderate adverse</p> <p>Significance: moderate adverse</p> <p>Open view of the reconstructed railway line, Trinity Primary School Bridge, its associated fencing and passing passenger trains, with view west to the station building.</p> <p>Magnitude: <del>major adverse</del> <u>moderate adverse</u></p> <p>Significance: moderate adverse</p> | <p><del>As proposed planting establishes to the south west of the School, views to Trinity Primary School Bridge will become partially screened. Whilst Views of occasional passenger trains will become filtered by new planting to the southern boundary of the School, new features such as lighting on the bridge, and proposed fencing, will be visible.</del></p> <p>Magnitude: moderate adverse</p> <p>Significance: moderate adverse</p> |
| <b>LOW SENSITIVITY</b> |   |  |   |   |  |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| <b>No.</b> | <b>Location</b> | <b>Existing View</b>   | <b>Construction Impacts</b>  | <b>Operational Impacts after 1 year</b>  | <b>Operational Impacts after 15 years</b>  |
|------------|-----------------|--|--|--|--|
| 52         | Harbour Road    | View south towards the line partially screened by existing vegetation. | <p>Direct open views to the highways on Harbour Road with traffic management and works in close proximity.</p> <p>View south towards the construction of the station main car park the station construction and Trinity Primary School Bridge beyond, as well as vegetation removal to the east.</p> <p>Magnitude: major adverse</p> <p>Significance: moderate adverse</p> | <p>View of the new highway layout. View south towards the station main car park and the station as well as features such as lighting and new planting. Planting is not yet dense enough to provide substantial screening.</p> <p>Magnitude: moderate adverse</p> <p>Significance: slight adverse</p> | <p>View south towards the station main car park and the station and vegetation which is mature and established, providing screening in summer months and open view in winter months.</p> <p>Magnitude: moderate adverse</p> <p>Significance: neutral adverse</p> |



## 3.21 ES, Appendix 11.4 Photomontages Technical Report

- 3.21.1 This section describes the changes to the photomontages presented in the Environmental Statement Appendix 11.4, Photomontages Technical Report [REP6-123] as a result of the removal of Trinity Bridge. New photomontages have not been prepared.
- 3.21.2 Photomontage 1: The existing trees behind the existing hedge in the foreground would still be removed to allow for the construction of the station and footpath thereby opening up the view to the buildings beyond on the north side of the railway. To the right of the photomontage, the top of the bridge rail handrail would no longer be within the view.
- 3.21.3 Photomontage 2: The bridge would be removed from the view as well as the proposed individual trees. The view would show the existing grass foreground with the proposed path running through it. The proposed fence would be partially screened by some of the existing vegetation where it is possible to retain it. New planting would not be visible in the short term but would establish to provide visual screening of the proposed fence, track and passing trains once it has become established, much as the existing vegetation does in the existing view. New scattered trees would provide high level screening in the longer term. The houses on the southern side of the track would still be exposed due to the loss of existing vegetation.
- 3.21.4 Photomontage 3: No change
- 3.21.5 Photomontage 4: No change
- 3.21.6 Photomontage 5: The bridge would be removed from the view as well as the proposed individual trees between camera position and bridge. The view would show the existing path and grass in the foreground with the proposed fence behind. The fence would be partially screened by some of the existing vegetation where it is possible to retain it. New planting would provide visual screening of the proposed fence, track and passing trains once it has become established. New scattered trees would provide high level screening in the longer term.
- 3.21.7 Photomontage 6: The proposed bridge would be removed from the view with the proposed fence line visible in the gap between the existing vegetation in the view.

## 3.22 ES, Appendix 13.7 Construction Plant List

- 3.22.1 The ES Appendix 13.7 Construction Plant List [APP-153] is revised to remove calculations for the construction of Trinity Primary School Bridge, which will not now be built.
- 3.22.2 Table 7.24 *Trinity Primary School Bridge – Foundations*, Table 7.25 *Trinity Primary School Bridge – Piling* and Table 7.26 *Trinity Primary School Bridge – Erection* are deleted, as the bridge will not now be constructed.
- 3.22.3 Table 7.107 is modified to remove input parameters for calculations of vibration for percussion piling for Trinity Primary School Bridge, which would not now be constructed.

- 3.22.4 Table 7.103 is modified to remove the prediction noise levels at the Portbury Wharf Nature Reserve due to percussion piling at Trinity Primary School Bridge.

## 3.23 ES, Appendix 14.1 Equality Impact Assessment

- 3.23.1 The ES Appendix 14.2 Equality Impact Assessment [APP-154] is revised to remove the Trinity Primary School Bridge and assess the impact of the permanent closure of the permissive at-grade crossing over the railway corridor on protected characteristic groups.
- 3.23.2 Table 3.1 is amended to remove the reference to Trinity Primary School Bridge.

**Table 3.1. Location of Lower Super Output Areas within the Study Area**

| LSOA code                                       | Scheme component   | Area                  |
|---|--|-----------------------|
| <b>Local Study Area</b>                         |  |                       |
| North Somerset<br>001G (part),<br>003D and 003E | Proposed Portishead Station, <u>and</u><br>Portishead construction compound <u>and</u><br><del>proposed bridge to Trinity Primary<br/>School</del> | Central<br>Portishead |

- 3.23.3 Paragraph 4.1.21 is modified to remove reference to the Trinity Primary School Bridge.
- “4.1.21 The Trinity Primary School is located off Marjoram Way ~~near the proposed Bridge~~ and a playground is located on The Vale (south of railway line) in Portishead. Busy Bees Nursery is located on Serbert Road in Portishead (south of the proposed station).”
- 3.23.4 Paragraph 4.4.15 is modified to remove reference to the proposed Trinity Primary School Bridge and mention the new footpaths along the railway. The heading to the subsection is also renamed to “Portishead Trinity Primary School Bridge Crossing”
- “4.4.15 The re-opened railway line will sever this footpath and will be replaced with new foot and cycle paths along the southern and northern boundaries of the railway corridor around Portishead Station ~~a new foot and cycle bridge.~~”
- 3.23.5 Table 5.1 *Summary of consultation responses* is modified to explain that while the DCO Application included Trinity Primary School Bridge, this was removed from the DCO Scheme post-Examination.

**Table 5.1: Summary of consultation responses**

| Organisation and date  | Summary of response                                | Consideration within ES                                 |
|--|--|---|
| <b>Informal micro-consultation on DCO Scheme Boundary (22 June to 3 August 2015)</b> |  |   |
| North Somerset<br>Local Access Forum   | A bridge between Galingale Way and Trinity Primary | <u>Proposals for Trinity Primary School Bridge were</u> |

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b>   | <b>Summary of response</b>   | <b>Consideration within ES</b>  |
|--|--|---|
|  | School preferred over footpath only option. The length of diversion required for the footpath (c600 m) only option unacceptable for young children. The bridge should also be suitable for cyclists. | <u>presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u>   |
| <b><i>Formal Stage 1 Consultation (22 June to 3 August 2015)</i></b> |  |   |
| Transport Focus  | The proposals to replace the current unofficial footpath over the disused track may concern some in the local community and careful consideration of this proposal is essential                      | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out proposals for Trinity Primary School Bridge. The bridge has been designed with low gradient ramps for accessibility and connects into the existing network of paths. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u> |
| British Horse Society  | A bridge between Galingale Way and Trinity Primary School preferred over footpath only option. The length of diversion required for the footpath (c600 m) only                                       | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7)</u>  |

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b> | <b>Summary of response</b>  | <b>Consideration within ES</b>  |
|------------------------------|---|---|
|                              | option unacceptable for young children. The bridge should also be suitable for cyclists.  | <del>sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</del>  |
| Sustrans                     | The alignment of the ramps on the proposed bridge between Marjoram Way and Galingale Way adds significantly to the distance for walkers and cyclists. Ramp alignments which run north / south would avoid this. As considerable spoil could be generated by the development, perhaps this could be used to build earthwork ramps. | <del>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out proposals for Trinity Primary School Bridge. The bridge has been designed with a ramp as well as stairs to prevent discrimination against people with reduced mobility and is compliant with the Equality Act 2010. The positioning of ramps north / south (rather than east / west along the railway corridor) would require additional permanent land take from "open space" within the residential area which would be more visually intrusive and would in turn require the Council to provide exchange land for the loss of open space. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to</del> |

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b>                                       | <b>Summary of response</b>   | <b>Consideration within ES</b>  |
|--|--|---|
| Public   | Concerns regarding pedestrian cycling infrastructure within the wider area and opportunities to enhance infrastructure within the general areas, Quays Avenue, Tansy Lane, Galingale Way, Conference Avenue and on routes to Pill. | <p><del>remove Trinity Primary School Bridge from the DCO Scheme.</del></p> <p>Sections 16.4 and 16.6 of Chapter 16 Transport, Access and Non-Motorised Users (DCO Document Reference 6.19) outline the existing transport situation and the impacts of the DCO Scheme on the area surrounding the stations. Table 16.8 in Chapter 16 outlines the infrastructure measures to be provided as part of the DCO Scheme including provisions for cyclists/pedestrians. Provision of bicycle parking facilities at the stations is discussed in section 16.7 <del>and a new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the Transport Assessment).</del></p> |
| <b>Stage 2 Formal Consultation (23 October to 4 December 2017)</b> |  |   |
| General public   | Trinity Primary School Bridge. The bridge is required as the walk around the station is too long for people of reduced mobility / elderly / pushchairs, etc.   | The DCO Scheme includes <del>sd</del> a bridge for pedestrians and cyclists to replace the current crossing over the disused railway. This is described in Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) and on the Plan S051 Trinity Footbridge Proposed General Arrangement (Sections) in DCO Document Reference 2.8.3.  |
| 3.23.6   | The subheading and paragraph 6.1.16 are modified to remove reference to Trinity Primary School Bridge and introduce the new footpath connections to Portishead station.  |   |

~~“Trinity Primary School Bridge~~

~~“6.1.16 A new cycle and pedestrian bridge will be built over the railway. The bridge has been designed with a ramp as well as stairs to prevent discrimination against people with reduced mobility and is compliant with the Equality Act 2010. The gradient is 1:15 and is 2.5 m wide. There are also landing and turning areas on the ramps and the stairs. The existing permissive at-grade crossing over the railway corridor will be closed permanently and pedestrians and cyclists will be able to use a short diversion provided by new footpaths on the south and north sides of the railway corridor via Portishead Station.”~~

- 3.23.7 Paragraph 7.3.2 is modified to remove reference to the Trinity Primary School Bridge and also the Ashton Vale ramp which was removed from the DCO Scheme during the examination.

~~“7.3.2 The DCO Scheme provides benefits for most of the protected characteristic groups by providing a safe and reliable means of transport. The DCO Scheme would lead to positive effects for age and disability groups resulting from the design of the urban realm around Portishead to facilitate pedestrian movements, the step-free access to the station, and the low gradient of the ramps for Trinity Primary School Bridge, the ramp at Pill station, and the pedestrian and cycle ramp at Ashton Vale.~~

- 3.23.8 Tables 7.1 and 7.2 are modified to show the revised assessment of the closure of the permissive crossing during construction and operation.

**Table 7.1: Initial Assessment of the Construction Impacts on the Protected Characteristic Group**

| Project component   | Age   | Disability  | Gender                       | Religion/belief               | Gender reassignment / sexual orientation |
|---|---|---|------------------------------|-------------------------------|--|
| <p>Trinity Primary School Bridge Severance of the <u>permissive at-grade crossing</u></p> | <p>During construction of the bridge, a temporary crossing will be provided, which may be closed intermittently. During these occasions <u>The permissive crossing will be closed and diversions</u> will route pedestrians and cyclists westwards around the station site and back towards Trinity School (see DCO Document Reference 2.34 Diversion Route for Pedestrians and Cyclists). This may particularly affect school children attending the Trinity Primary School due to increased walking distances and journey times. This is assessed to have a <u>permanent short-term, intermittent, minor negative</u></p> | <p>People with reduced mobility, including those on wheelchairs/mobility cars would also experience longer routes between the north and south side of the railway line during the intermittent closures <u>following the closure of the temporary crossing. This is assessed to have a permanent minor negative effect on people with reduced mobility.</u></p> | <p>No significant effect</p> | <p>No significant effect.</p> | <p>No significant effect.</p>            |

**Table 7.1: Initial Assessment of the Construction Impacts on the Protected Characteristic Group**

| Project component  | Age | Disability | Gender | Religion/belief | Gender reassignment / sexual orientation |
|--|-----|------------|--------|-----------------|--|
| <p>(differential) effect for the age protected characteristic group.<br/>                     NSDC and the contractors will liaise with the school before and during the construction works.<br/>                     School children should be informed about the construction proposals and taught about the risks and measures they should take to keep safe.</p> |     |            |        |                 |  |



**Table 7.2: Initial Assessment of the Operational Impacts on the Protected Characteristic Group**

| Project component   | Age   | Disability  | Gender                        | Religion/belief               | Pregnancy/maternity  | Sexual orientation/<br>Transgender |
|---|---|---|-------------------------------|-------------------------------|--|------------------------------------|
| <p>Trinity Primary School Bridge<br/><u>Severance of the permissive at-grade crossing</u></p> | <p>The new pedestrian and cycle bridge incorporates a low gradient ramp in addition to stairs. It will provide a safe and accessible path for travel, although the route along the ramps is longer than the existing crossing at grade. A positive differential effect is predicted. <u>The closure of the crossing would result in a journey of an additional 450 m along footpaths around the station, which could make the journey more challenging for the elderly and very young. A minor negative (differential) effect is predicted.</u></p> | <p>The new pedestrian and cycle bridge incorporates a long gradient ramp in addition to stairs. It will provide a safe and accessible path for travel, although the route along the ramps is longer than the existing crossing at grade. A positive differential effect is predicted. <u>The closure of the crossing would result in a journey of an additional 450 m along footpaths around the station, which could make the journey more challenging for mobility impaired. A minor negative (differential) effect is predicted.</u></p> | <p>No significant effect.</p> | <p>No significant effect.</p> | <p>The bridge crossing will be designed with appropriate surfaces, suitable for parents and guardians travelling with buggies and pushchairs. <u>The closure of the crossing would result in a journey of an additional 450 m along footpaths around the station, which could make the journey more challenging for pregnant women and women with prams and pushchairs. A minor negative (differential) effect is predicted.</u></p> | <p>No significant effect.</p>      |

## 3.24 ES, Appendix 14.2 Health Impact Assessment

- 3.24.1 The ES, Appendix 14.2 Health Impact Assessment [APP-154] is revised to remove the Trinity Primary School Bridge and assess the impact of the permanent closure of the permissive at-grade crossing over the railway corridor on health determinands.
- 3.24.2 Table 2.1 in the HIA is revised to remove reference to Trinity Primary School Bridge.

**Table 3.1: Location of Lower Super Output Areas within the Study Area**

| LSOA code                                       | Scheme component  | Area                  |
|---|---|-----------------------|
| <b><i>The DCO Scheme</i></b>                    |   |                       |
| North Somerset<br>001G (part),<br>003D and 003E | Proposed Portishead Station, <del>and</del><br>Portishead construction compound <del>and</del><br><del>proposed bridge to Trinity Primary School.</del> | Central<br>Portishead |

- 3.24.3 Table 5.1 in the HIA is amended as shown below.

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b> | <b>Summary of response</b>   | <b>Consideration within the ES</b>   |
|------------------------------|--|--|
| General public               | Trinity Primary School Bridge. The bridge is required as the walk around the station is too long for disabled / elderly / pushchairs, etc. | <p><del>The DCO Scheme includes a bridge to replace the informal crossing over the disused railway. This is described</del><br/> <u>Proposals for Trinity Primary School Bridge were presented</u> in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7). <u>The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u></p> |

## 3.24.4 Paragraph 6.1.7 is amended as follows:

“6.1.7 The changes in noise levels due to the operation of the DCO Scheme, including the train movements, idling in the stations, and the noise from the PA systems have been considered and mitigation proposed where required. The DCO Scheme includes a 200 m long 2 m high absorptive noise barrier in Portishead on the south side of the railway corridor extending east from Portishead station and Trinity Primary School Bridge to reduce the effects of operational noise on residents. The DCO Scheme will follow Network Rail standards on noise levels from public address systems to address noise impact at station platforms (and potentially to lineside neighbours).”

## 3.24.5 Paragraph 7.1.1 is modified to reflect closure of the permission crossing.

“7.1.1 The assessment of the effects of the DCO Scheme during construction is set out in Table 7.1 below. Effects that are significant in relation to the EIA Regulations 2017 are deemed to be moderate or larger, or as indicated in the text. The following significant effects have been identified:

- short term peak construction noise levels, especially when occurring at night,
- potential effect of vibration on humans in residential receptors within 15 m of line works due to vibratory compaction and within 20 m of the works at the Avon Road Bridge piling site,
- safety of pedestrians and cyclists using footpath / cycling diversions following closure of the permissive at-grade crossing during the construction of Trinity Primary School Bridge, and
- access to services and safety of pedestrians and cyclists in Pill during construction.”

## 3.24.6 In Table 7.1 the row relating to the construction of the Trinity Primary School Bridge is modified to remove reference to the high noise levels associated with piling and focussing on the severance caused by closure of the permissive crossing.

| <u>Site</u>   | <b>Health<br/>determinand<br/>altered</b> | <b>Significance of Effect</b>   |
|---|---|---|
| <u>Severance of the permissive crossing Trinity Primary School Bridge</u><br>Enabling works:<br>Close existing crossing, <u>and</u><br>vegetation | Noise and vibration                       | <del>The SOAEL is predicted to be exceeded for the noisiest activity – piling works – during the day-time at the nearest properties about 25 m from the construction works. Piling noise would exceed the UAEL for night-time works.</del><br>Sensitivity = High<br>Magnitude = Negative<br>Significance = Short term significant adverse effect. |

| <u>Site</u>  | Health<br>determinand<br>altered    | Significance of Effect   |
|--|-------------------------------------|--|
| <p><del>clearance, utility diversions</del></p> <p><u>Construction of new footpaths to the south and north of the railway corridor</u></p> <p><del>Excavation for piling and foundation works</del></p> <p><del>Build up earth bank to north and allow to settle</del></p> |                                     | <p><del>The application of Best Practical Means would be expected to reduce the construction noise levels and assist with reducing the predicted temporary significant effects. The contractor will review the construction noise assessment, confirm proposed mitigation and residual noise, and seek a S61 agreement with the local authority. These measures would be sufficient to reduce the significance to no significant adverse effect.</del></p> <p><del>There are no significant adverse effects from vibration.</del></p>  |
| <p><del>Piling works</del></p> <p><del>Pre-fabricate bridge off-site and deliver in sections by road or rail, assembly of bridge,</del></p> <p><del>Drainage works</del></p> <p><del>Lighting</del></p> <p><del>Finishing works.</del></p>                                 | <p><b>Crime and safety</b></p>      | <p>The presence of large numbers of pedestrians in proximity to the construction site along the railway corridor could pose health and safety risks, particularly for school children who may be less aware of the dangers. Construction traffic on the local highway may pose safety risk to school children who will access Trinity Primary School from various routes near the site. Diversion of pedestrians/cyclists to re-aligned Quays Avenue potentially increasing conflict between construction activities and pedestrians (including children) and cyclists.</p> <p>Mitigation = <del>During construction of the bridge, a temporary crossing will be provided, which may be closed intermittently. During these occasions diversions will route pedestrians and cyclists westwards around the station site and back towards Trinity School (see DCO Document Reference 2.34 Diversion Routes for Pedestrians and Cyclists Plans).</del></p> <p>The CEMP to include measures for pedestrian and cyclist safety, security of construction sites, and the CTMP.</p> <p>Sensitivity = High</p> <p>Magnitude = Moderate</p> <p>Significance = Short term, slight negative but not significant effect.</p> |
|  | <p><b>Access to green space</b></p> | <p><del>During construction, a temporary crossing will be provided close to the informal crossing over the railway, which may be</del></p>   |

| <u>Site</u> | <b>Health<br/>determinand<br/>altered</b> | <b>Significance of Effect</b>  |
|-------------|---|--|
|             |   | <p><del>closed intermittently. During these occasions</del> diversions will route pedestrians westwards around the station site and back towards Trinity School (see DCO Document Reference 2.34 Diversion Routes for Pedestrians and Cyclists Plans), which is a short distance to the Portbury Wharf Nature Reserve. Some groups, such as families with young children, the elderly and disabled may be reluctant to use <u>the diversions</u> due to the increased length of the route. Some residents along Galingale Way will experience increases in pedestrian movement along their quieter roads. The proposed works will alter current visual character of the area.</p> <p>Sensitivity = Low-high<br/>Magnitude = Minor negative<br/>Significance = Short term neutral to slight negative but not significant effect</p> |

3.24.7 Table 7.2 is modified to remove reference to the construction of Trinity Primary School Bridge and assess the severance caused by closure of the permissive crossing on health determinands during operation.

**Table 7.2: Summary of health impacts along the DCO Scheme during the operations phase**

| <b>Site</b>  | <b>Health<br/>determinand<br/>altered</b> | <b>Significance of the effect</b>   |
|--|---|---|
| <p><b>Portishead Station</b></p> <p>Hourly service<br/>0600 to 2300<br/>Monday to<br/>Saturday and 0900<br/>to 1900 on<br/>Sundays.</p> <p>Or, an hourly plus<br/>service with a train<br/>every 45 minutes<br/>during morning and<br/>afternoon peak;</p> <p>Traffic circulation;</p> | <p>Noise and<br/>vibration</p>            | <p>With mitigation the ambient noise levels for lineside neighbours will increase slightly, but with distance and intervening screening by properties, the noise increases fall to negligible levels. The health impact could range from annoyance to sleep disturbance, dependent on the age and health condition of receptors and the noise insulation properties of buildings.</p> <p>Mitigation = <u>A 200 m long 2 m high absorptive acoustic barrier on south side of the railway between the Portishead station and Trinity Primary School Bridge.</u></p> <p>Sensitivity = High</p> |

**Table 7.2: Summary of health impacts along the DCO Scheme during the operations phase**

| Site   | Health determinand altered  | Significance of the effect   |
|--|---|--|
| <p>Pedestrian movements to and from the station;<br/>New permanent lighting at the car parks, station, and platform.</p> |   | <p>Magnitude = Minor negative<br/>Significance = Slight adverse effect, not significant<br/>There are no significant adverse effects from vibration.</p>   |
| <p><b>Closure of permission crossing near Trinity Primary School Bridge</b></p>  | <p>Access to services<br/>Access to green space, open spaces, and physical activity</p> | <p>The new bridge will replace the existing crossing. Low gradient ramps will be provided in addition to stair cases for people with reduced mobility. The bridge permanent closure of the permissive crossing will result in a longer crossing due to the ramps on either side- <u>journey of about 450 m.</u><br/>Sensitivity = High<br/>Magnitude = Minor negative<br/>Significance = Neutral to slight negative but not significant effect</p> |
|  | <p>Townscape and quality of the local environment</p>                                   | <p>Although the proposals will permanently alter the landscape, the proposed landscaping near Tansy Lane would help to soft the appearance of the structure in time and therefore the proposals may have a slight negative impact on the sense of well-being for the immediate adjoining neighbours.<br/>Sensitivity = Low-medium<br/>Magnitude = Negligible<br/>Significance = Slight negative but not significant effect</p>                     |
|  | <p>Townscape and quality of the local environment</p>                                   | <p>Although the proposals will permanently alter the landscape, the proposed landscaping near Tansy Lane would help to soft the appearance of the structure in time and therefore the proposals may have a slight negative impact on the sense of well-being for the immediate adjoining neighbours.<br/>Sensitivity = Low-medium<br/>Magnitude = Negligible<br/>Significance = Slight negative but not significant effect</p>                     |

**Table 7.2: Summary of health impacts along the DCO Scheme during the operations phase**

| Site | Health<br>determinand<br>altered | Significance of the effect |
|------|----------------------------------|----------------------------|
|------|----------------------------------|----------------------------|

## 3.25 ES, Appendix 16.1 Transport Assessment

### Main Report

- 3.25.1 The Environmental Statement Appendix 16.1 Transport Assessment (part 1 of 18) [APP-155] is amended as set out below.
- 3.25.2 The List of Figures, should read and the figures deleted:  
 Figure 3-9: ~~Trinity Bridge General Arrangement (sheet 1)~~ Not used  
 Figure 3-10: ~~Trinity Bridge General Arrangement (sheet 2)~~ Not used  
 Figure 8-4: ~~Diversion at Trinity Bridge~~ Not used
- 3.25.3 The second bullet point in the description of ‘the Associated Development Works’ in the Glossary of terms should read:  
 “Car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue and widening of the shared use path on the west side of Quays Avenue ~~and a new bridge near Trinity Primary School;~~”
- 3.25.4 Table 2.2 (Assessment of the TA against the NPS) NPS reference 2.9 key issues, second bullet point should read:  
 “Provide a safe link ~~by means of a bridge~~ between Trinity Primary School and the residential land to the south of the line by means of new shared-use paths parallel to the railway line and along Quays Avenue.”
- 3.25.5 Table 3.1 (MetroWest Phase 1 Proposed Engineering Works) Work Number 7 should read:  
 “~~A combined pedestrian and cycle overbridge to the south west of Trinity School, Portishead~~ Not used”
- 3.25.6 Paragraph 3.3.3 should read:  
 “To support movement and circulation around the station, there are a number of enhancements to the pedestrian and cycling environment. A toucan crossing across Quays Avenue is proposed which will link the new bus stops that are planned to the south west of the station site. The crossing is also aligned with a new shared use path which will provide the principal pedestrian and cyclist access from the station towards the town centre. The station will also link with proposed footpaths connecting with ~~the Trinity Primary School crossing (proposed overbridge, refer to section 3.6.1)~~ along both the north and south side of the railway.”
- 3.25.7 Heading above Paragraph 3.6.2 ‘~~Portishead Trinity Bridge~~’ should be deleted.
- 3.25.8 Paragraphs 3.6.2 and 3.6.3 are deleted as follows.



~~“3.6.2 To the east of the new station at Portishead is a permissive footpath across the line that provides one of the main access routes to the Trinity Anglican Methodist Primary School from the residential areas on the south side of the railway. The re-opened railway line will sever this footpath and as a result, a new pedestrian and cycle bridge will be constructed to the southwest of the primary school over the Portishead Branch Line Railway as shown in Figures 3.9 and 3.10. This bridge will be designed to comply with the Equalities Act 2010 so it is suitable for disabled users as well as cyclists and will connect Tansy Lane on the north side of the line to Galingale Way on the south side. Paragraph not used.~~

~~“3.6.3 While the bridge will be accessible for cyclists, its proposed width at 3m means cyclists will be expected to dismount when using it. The existing permissive at grade crossing over the dis-used railway will be stopped up. Paragraph not used.~~

3.25.9 Heading above Paragraph 3.6.4 ‘~~Other Pedestrian, Cyclist and Equestrian Measures~~’ should be replaced by ‘Pedestrian, Cyclist and Equestrian Measures’.

3.25.10 Paragraph 3.6.4, fourth bullet point under ‘In Portishead’ should read:

~~“Parallel pedestrian and cycling paths between Portishead station and Trinity School bridge Vale Pond and Tansy Lane; and”~~

3.25.11 Below paragraph 3.6.6, delete the references to

~~Located in Part 2 of Appendix 16.1 – Figure 3-9: Trinity bridge General Arrangement (sheet 1)~~

and replace with Figure 3.9 Not used.

~~Located in Part 2 of Appendix 16.1 – Figure 3-9: Trinity bridge General Arrangement (sheet 2)~~

and replace with Figure 3.10 Not used.

3.25.12 Table 3.2 *Description of proposed maintenance and emergency access points*, delete the references to

~~MEA-2 Portishead, Trinity bridge Pedestrian emergency access point~~

3.25.13 Paragraph 4.10.18, should read:

~~“4.10.18 Table 4.20 summarises the flows captured in Portishead. The data captured ~~confirms the importance of~~ shows the use of the permissive route across the disused line between Trinity Primary School to the north and the residential area (Galingale Way) to the south with over 150 NMU two-way movements recorded in the school morning peak and over 200 two-way movements during school afternoon/evening peaks. The scheme would result in pedestrians having to make an around 700m diversion during the construction phase, via existing roads Tansy Lane and Quays Avenue. An alternative means of access has therefore been proposed as part of the overall scheme in the form of a bridge over the railway linking Trinity Primary School and Galingale Way new shared-use paths parallel to the railway line between Galingale Way and Tansy Lane and this will be an almost 500m diversion.”~~

3.25.14 Table 8.1 is revised to remove reference to Trinity Primary School Bridge.

**Table 3.1: Construction Compounds**

| Ref | Name                               | Location  | Main Purpose  | Access   |
|-----|------------------------------------|---|---|--|
| C16 | Portishead Station                 | Portishead on the sites of new station car parks (both A on eastern side of the realigned Quays Avenue and B to the west of Quays Avenue) | For construction of Portishead Station <del>and Trinity bridge.</del><br><del>There is potential to use as a laydown area for Trinity bridge, subject to space availability</del> | Access off Portbury Hundred, Wyndham Way and Quays Avenue. The majority of the deliveries will be on standard HGVs |
| TB  | <del>Trinity bridge</del> Lay down |   | As required combined with use of Portishead station compound  | As Portishead station compound   |

3.25.15 Table 8.2 *Construction Compound facilities, working hours and timescales* is amended in the first and second rows as follows.

**Table 3.2: Construction Compound facilities, working hours and timescales**

| No. | Name                               | Car Parking                      | Storage          | Welfare facilities                  | Working hours and Timescales  |
|-----|------------------------------------|----------------------------------|------------------|-------------------------------------|---|
| C16 | Portishead Station Site Compound   | Main compound to provide parking | Material storage | Welfare facilities and site offices | There is likely to be a construction presence here for the duration of the project, from the outset of the construction due to works at Quays Avenue through to completion of Portishead Station <del>and Trinity bridge</del><br><br>Mainly daytime working 6am to 6pm, although due to programme constraints some night time working may be necessary |
| TB  | <del>Trinity bridge</del> Lay down | None                             | Lay down area    |                                     | Similar to Portishead main station compound   |

3.25.16 Paragraph 8.4.8 is modified as follows.

~~“8.4.8 Access to the proposed Trinity bridge is through a residential area, so will need to take into account on-street parking and the potential presence of pedestrians (particularly children associated with the adjacent primary school). The increase in traffic volumes is likely to result in some level of inconvenience for residents. Paragraph not used.”~~

3.25.17 Paragraph 8.5.1, first bullet point should be deleted.

“8.5.1 The scheme will have an impact on a number of local and designated pedestrian and cycling paths in the vicinity of the scheme. This will result in a number of these routes requiring a temporary diversion for a period of time during the construction phase at the following locations:

- ~~Trinity bridge: The construction of the footbridge will result in pedestrians having to make a diversion during the construction phase, crossing the railway line at a point close to the east of the current route, shown in Figure 8.4.”~~

3.25.18 Below paragraph 8.6.2 delete the reference to:

~~“Located in Part 4 of Appendix 16.1 – Figure 8-4: Diversion at Trinity bridge”~~  
and replace with “Figure 8-4: ~~Diversion at Trinity bridge~~. Not used.”

3.25.19 In Table 9.3 *Walking and cycling measures*, delete the reference to Trinity Primary School.

| Location                          | Measure   | Rationale   |
|-----------------------------------|---|---|
| <del>Trinity Primary School</del> | <del>Provision of a bridge compliant with the Equalities Act 2010</del> | <del>The current permissive path will be severed by the scheme. The construction of a disabled compliant bridge would formalise this main pedestrian and cycling route to and from Trinity Primary School</del> |

3.25.20 In Table 10.1 *Infrastructure measures to be implemented*, delete the reference (the whole line) to:

| Ref          | Area                  | Location                          | Measure   |
|--------------|-----------------------|-----------------------------------|---|
| <del>6</del> | <del>Portishead</del> | <del>Trinity Primary School</del> | <del>Provision of a bridge compliant with the Equalities Act 2010</del> |

And replace reference 6 contents with “Not used”.

3.25.21 In Table 11.2 *Infrastructure measures to be implemented*, delete the reference (the whole line) to:

| Ref          | Area                  | Location                          | Measure   |
|--------------|-----------------------|-----------------------------------|---|
| <del>6</del> | <del>Portishead</del> | <del>Trinity Primary School</del> | <del>Provision of a bridge compliant with the Equalities Act 2010</del> |

and replace reference 6 contents with “Not used.”

### Appendix 16.1 Transport Assessment – Figures

3.25.22 The Environmental Statement Appendix 16.1 Transport Assessment (Part 2 of 18) – Figures Vol 1 [APP-156] is amended as set out below.

3.25.23 Page 2 – delete the text:

~~The latest Trinity Footbridge plans are contained within documents 2.15-2.17.~~

and replace with “Blank Page”.

3.25.24 The List of Figures, should read:

~~“Figure 3-9: Trinity Pedestrian Footbridge General Arrangement (sheet 1)  
Not used~~

~~Figure 3-10: Trinity Pedestrian Footbridge General Arrangement (sheet 2)  
Not used”~~

- 3.25.25 Delete the Figure 3-9 Trinity Pedestrian Footbridge General Arrangement (sheet 1) and replace with a blank page noted as “Figure 3-9 Not used”
- 3.25.26 Delete the Figure 3-10 Trinity Pedestrian Footbridge General Arrangement (sheet 2) and replace with a blank page noted as “Figure 3-10 Not used”
- 3.25.27 The Environmental Statement Appendix 16.1 Transport Assessment (Part 4 of 18) – Figures Vol 3 [APP-158] is amended as set out below.

3.25.28 The List of Figures, should read:

“Figure 8-4: ~~Diversion at Trinity Bridge~~ Not used”

3.25.29 Delete the Figure 8-4: (Diversion at Trinity Bridge) and replace with a blank page noted as “Figure 8-4 Not used”.

### Appendix 16.1 Transport Assessment – Appendix A

- 3.25.30 The Environmental Statement Appendix 16.1 Transport Assessment (Part 5 of 18) - Appendix A: TA Scoping Report & Meeting Notes [APP-159] is amended as set out below.
- 3.25.31 Section 1 – Scoping Report, Part 2.3 (MetroWest Phase 1), delete the fourth bullet point:

- ~~“A new fully accessible pedestrian bridge linking to Trinity Primary School in Portishead.”~~

3.25.32 Section 1 – Scoping Report, Part 4.9.4 (Severance and Public Right of Way (PRoWs), the third paragraph should read:

“There is one permissive pedestrian crossing of the dis-used railway line to Trinity Primary School, authorised by the land owner North Somerset Council. There are also a number of informal crossings which are more akin to dog walking tracks, some of which require traversing ditches to use them. All these crossings will have to be closed by the scheme to meet railway safety requirements. ~~In respect of the permissive crossing to Trinity Primary School, a fully accessible pedestrian bridge is proposed.~~ A new route from Galingale Way to Tansy Lane for Trinity School will be provided using new shared used paths parallel with the new railway line and via Quays Avenue.”

3.25.33 Section 1 – Scoping Report, Part 4.9.4 (Severance and Public Right of Way (PRoWs), the fourth paragraph should read:

“Moor Lane at Portishead is regarded as a byway on railway records and previously served the council’s tip. Rights to the crossing are held by Bristol City Council. The informal route at Moor Lane – formerly an access road – is unsurfaced, not fully accessible, bounded by vegetation and with poor natural surveillance. Therefore, the intention is to utilise the ~~crossing near the Trinity Primary School~~ paths parallel with the new railway line and via Quays Avenue to cater for these movements.”

## Appendix 16.1 Transport Assessment – Appendix K - CTMP

3.25.34 The Environmental Statement Appendix 16.1 Transport Assessment (Part 15 of 18) - Appendix K: CTMP [APP-169] is amended as set out below.

3.25.35 Paragraph 2.1.5, fourth bullet point should be deleted:

- ~~“Construction of a new pedestrian footbridge close to Trinity Primary School.”~~

3.25.36 Table 2.1 (Components of construction works), delete the reference (the whole row) to Trinity Bridge:

| Component                 | Transport and Access  | Indicative scheduling and duration   |
|---------------------------|---|--|
| <del>Trinity Bridge</del> | <del>Footbridge could be prefabricated off site and delivered by road or rail in sections. This will be confirmed by the Contractor ahead of construction</del> | <del>Careful integration of this work with track works to the disused line will be required. Works to the culvert and drainage system will need to be complete before the bridge. This also depends on a number of assumptions such as ground conditions and environmental constraints. Based on indicative methodology the duration is approximately 6-12 months, works will primarily be during the day time, although possibly also including night-time works as there is the potential for 24 hour working.</del> |

3.25.37 Table 4.1 is revised to remove reference to Trinity Primary School Bridge.

**Table 4.3: Construction Compounds**

| Ref | Name                               | Location  | Main Purpose  | Access   |
|-----|------------------------------------|---|---|--|
| C16 | Portishead Station                 | Portishead on the sites of new station car parks (both A on eastern side of the realigned Quays Avenue and B to the west of Quays Avenue) | For construction of Portishead Station <del>and Trinity bridge.</del><br><del>There is potential to use as a laydown area for Trinity bridge, subject to space availability</del> | Access off Portbury Hundred, Wyndham Way and Quays Avenue. The majority of the deliveries will be on standard HGVs |
| TB  | <del>Trinity bridge</del> Lay down |   | As required combined with use of Portishead station compound  | As Portishead station compound   |

3.25.38 Table 4.2 *Construction Compound facilities, working hours and timescales* is amended in the first and second rows as follows.

**Table 4.4: Construction Compound facilities, working hours and timescales**

| No. | Name                               | Car Parking                      | Storage          | Welfare facilities                  | Working hours and Timescales   |
|-----|------------------------------------|----------------------------------|------------------|-------------------------------------|--|
| C16 | Portishead Station Site Compound   | Main compound to provide parking | Material storage | Welfare facilities and site offices | <p>There is likely to be a construction presence here for the duration of the project, from the outset of the construction due to works at Quays Avenue through to completion of Portishead Station <del>and Trinity bridge</del></p> <p>Mainly daytime working 6am to 6pm, although due to programme constraints some night time working may be necessary</p> |
| TB  | <del>Trinity bridge</del> Lay down | None                             | Lay down area    |                                     | Similar to Portishead main station compound  |

## 3.26 Environmental Plans

- 3.26.1 The label for the Trinity Primary School Bridge on the Environmental Master Plan Sheet 2 is removed [REP06-055].



## SECTION 4

# Summary and Conclusions

4.1.1 It can be concluded with confidence that:

- the DCO Scheme will have no material impact on the ability of the Government to comply with its carbon budgets; and
- the direct, indirect and cumulative emissions of the DCO Scheme will not give rise to any likely significant effects in respect of climate, either in respect of emissions or vulnerability to climate change. In relation to paragraphs 5.17 and 5.18 of the NPSNN, the information provided in Chapter 14 of the ES, in response to and in this response demonstrates that the scheme will not materially affect the ability of the Government to meet its carbon budgets. Any increase in carbon emissions that may arise in consequence of the DCO Scheme is not a reason to refuse development consent pursuant to paragraph 5.18 of the NPSNN.

4.1.2 The removal of Trinity Primary School Bridge would result in the following changes to the assessment of likely significant environmental effects:

- The significance of the effect of removal of the Bridge on visual impacts on residential property in Galingale Way and Peartree Field, Portishead will reduce from large adverse to moderate adverse during the operational impacts after 1 year and after 15 years.
- The significance of the effect of removal of the Bridge on visual impacts on residential property No. 6 Holmlea, Portishead will reduce from large adverse to slight adverse during the operational impacts after 1 year and after 15 years.
- The significance of the effect of removal of the Bridge on visual impacts on residential property on Tansy Lane, Portishead will reduce from large adverse to moderate adverse after 15 years.
- The significance of the effect of removal of the Bridge on visual impacts on Trinity Anglican Methodist Primary School, Marjoram Way, will reduce from large adverse to moderate adverse during construction. The magnitude of the impact will reduce from major to moderate adverse 1 year after opening.
- A change from a positive differential effect on the age, disability and pregnancy/maternity protected characteristic groups to replace the existing permissive at-grade crossing with a pedestrian and cycle bridge to a slight adverse (differential) effect, due to the net increase in journey length of about 450 m compared with the existing permissive at-grade crossing during the operation phase.



**ch2m.**<sup>SM</sup>

## **ES Addendum No. 2 - Version 2b**



# MetroWest+

## Portishead Branch Line (MetroWest Phase 1)

**TR040011**

**Applicant: North Somerset District Council**

**Addendum to the Environmental Statement**

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure)**

**Regulations 2009, regulation 5(2) (a)**

**Planning Act 2008**

**Author: CH2M**

**Date: September 2021**





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## Document history

|  |   |
|--|---|
| <b>Project</b>                                 | Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme |
| <b>Planning Inspectorate Scheme Reference</b>  | TR040011  |
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| <b>Applicant</b>                               | North Somerset District Council   |
| <b>Lead Author</b>                             | CFF at CH2M   |

| <b>Version</b> | <b>Date</b> | <b>Status of Version</b>  |
|----------------|-------------|---|
| 01             | 26/8/2021   | Matters relating to carbon budgets and cumulative effects                             |
| 02             | 20/9/2021   | Matters relating to the removal of Trinity Primary School pedestrian and cycle bridge |



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# Acronyms and Abbreviations

|                         |   |
|-------------------------|---|
| dB                      | Decibel   |
| dB(A)                   | 'A' weighted decibel  |
| dB L <sub>Aeq,16h</sub> | Sound pressure (L), A-weighted equivalent continuous noise level (Aeq) over 16 hours (16h), measured in decibels (dB) |
| CEMP                    | Construction Environmental Management Plan  |
| CTMP                    | Construction Traffic Management Plan  |
| DCO                     | Development Consent Order   |
| ES                      | Environmental Statement   |
| GHG                     | Greenhouse gas  |
| kv                      | kilovolt  |
| LOAEL                   | Lowest Observed Adverse Effect Level  |
| MtCO <sub>2e</sub>      | Megatonnes of carbon dioxide equivalent   |
| m                       | metre   |
| mm/s                    | millimetre per second   |
| NO <sub>2</sub>         | Nitrogen dioxide  |
| NPSNN                   | National Policy Statement for National Networks   |
| NSIP                    | Nationally significant infrastructure project   |
| PPV                     | Peak Particle Velocity  |
| RIS2                    | Road Investment Strategy 2  |
| SOAEL                   | Significant Observed Adverse Effect Level   |
| t                       | tonne   |
| WPD                     | Western Power Distribution  |



## SECTION 1

# Introduction

- 1.1.1 The Secretary of State has requested further information in his letter of 13 August 2021 on the Environmental Statement of the Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme (the DCO Scheme) regarding:

*Item 1 - Request for an update to the environmental information*

- a) the scheme's compliance with the sixth carbon budget as set out in the Carbon Budget Order 2021 including an assessment of the impact of the scheme on the carbon budgets, and
- b) building on paragraph 18.3.13 in Chapter 18 of the Applicant's Environmental Statement, the direct, indirect and cumulative likely significant effects of the scheme with other existing and/or approved projects on climate, including greenhouse gas emissions and climate change adaptation; which should be set in light of the requirements contained in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations 2017) and in light of paragraphs 5.17 and 5.18 of the National Policy Statement for National Networks.

*Item 3 - Trinity Primary School Bridge*

- 1.1.2 In Item 3 of the same letter, the Secretary of State also noted the matters raised at the Examination regarding Trinity Primary School Bridge and advised that he is minded to remove the bridge (Work Number 7) from the proposed Order.
- 1.1.3 In subsequent correspondence dated 17 August, the Secretary of State noted that in respect of Item 3 in his letter of 13 August, the plans requested together with any consequential changes should be provided by 20 September. The Applicant considers that these consequential changes include editorial changes to the Environmental Statement to remove references to the Trinity Primary School Bridge and where appropriate revise the impact assessment of the permanent closure of the permissive at-grade crossing over the disused railway near the school.
- 1.1.4 This addendum to the Environmental Statement presents the Applicant's consolidated response to the Secretary of State regarding the matters raised in Items 1 and 3 of his letter dated 13 August 2021 and is additional information for the purposes of the EIA Regulations 2017 for the Secretary of State to examine with other environmental information when reaching a reasoned conclusion that is up-to-date at the time he makes the decision as to whether to grant development consent for the DCO Scheme pursuant to Regulation 21 of the EIA Regulations 2017.



## SECTION 2

# Carbon Budget and Cumulative Effects

## 2.1 Carbon Budget

2.1.1 The Environmental Statement Chapter 7 Air Quality and Greenhouse Gases [REP6-074] and Appendix 7.5 Climate [REP6-113] are amended as set out below.

2.1.2 The ES Chapter 7 paragraphs 7.2.10 and 7.2.11 [REP6-074] are amended and a new paragraph 7.2.11A added to describe the carbon budget values, including the Sixth Carbon Budget. The revised text is provided below.

“7.2.10 In 2011 (the latest figures available at the time of the assessment), the UK's progress against its Climate Change Act targets was a reduction of 29.1% (i.e. 549 Megatonnes CO<sub>2</sub>e abbreviated to MtCO<sub>2</sub>e) from 1990 levels excluding the effects of emissions trading<sup>4, 5</sup>. In terms of overall UK emissions, transport accounted for 135 MtCO<sub>2</sub>e (25%) and rail for 4 MtCO<sub>2</sub>e (less than 1%).

7.2.11 Carbon budgets were introduced as part of the Climate Change Act 2008. At the time of assessment, the first four, five-year budgets had been set in law from 2008 to 2027. Since the time of assessment, the fifth<sup>1</sup> and sixth<sup>2</sup> carbon budgets have been set in law to cover the two budget periods that span 2028 to 2037. The budgets are split into traded and non-traded carbon. A limit on UK carbon emissions is imposed for each five-year period. The budgets are prepared by the Committee on Climate Change, which was set up under the Climate Change Act as an independent evidence-base advisory body to the UK Government and Parliament, advises on setting and meeting carbon budgets. The Third Carbon Budget (2010) was accepted by Parliament and covers the period 2018 to 2022, setting out that annual UK emissions should be reduced to around 509 MtCO<sub>2</sub>e (a 37% reduction relative to 1990 baseline levels). By 2025, in accordance with the Fourth Carbon Budget, The key recommendations for the budget include:

the need for the UK to be on a pathway to at least an 80% cut in GHG below 1990 levels by 2050, with maximum 2050 emissions of 160 MtCO<sub>2</sub>e; and by 2025, annual UK emissions should be reduced to around 390 MtCO<sub>2</sub>e (a 50% reduction relative to baseline levels). The Fifth Carbon Budget sets the annual emissions limit at 345 MtCO<sub>2</sub>e (a 57% reduction relative to 1990 baseline levels).

7.2.11A The Sixth Carbon Budget for 2033 to 2037, set by the Carbon Budget Order 2021, which took effect on 24 June 2021, sets the limit for annual UK emissions at 965 MtCO<sub>2</sub>e over the Sixth Carbon Budget's five year period (i.e. 193 MtCO<sub>2</sub>e per annum). This represents a reduction in

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<sup>1</sup> The Carbon Budget Order 2016

<sup>2</sup> The Carbon Budget Order 2021

annual emissions to 2035 of 78% from 1990 levels. The Sixth Carbon Budget is the first budget to take account of the UK Government's 2050 net zero target."

- 2.1.3 A new paragraph 7.6.40A is added to Chapter 7 Air Quality and Greenhouse Gases [REP6-074] to include a worst-case calculation of regional greenhouse gas emissions, showing <0.001% contribution to the Sixth Carbon Budget emissions.

"7.6.40A This assessment was undertaken prior to the release of the Sixth Carbon Budget for 2033 to 2037. In the absence of available data for this time period, the total emissions for the period 2033 to 2037 is reasonably approximated to be 6,040 tonnes CO<sub>2</sub>e i.e. the annual rail CO<sub>2</sub> emissions for 2021 multiplied by five to represent the five year budget period. This equates to less than 0.001% of the Sixth Carbon Budget. This calculation assumes constant rail emissions per year, as per Table 7.16, and that there will be no offset of rail emissions associated with reduced road transport emissions in future years. This is a worst-case assumption that accounts for projected reductions in road transport emission factors and does not take into account the Department for Transport's plan, published on 14 July 2021, titled "Decarbonising Transport: A Better, Greener Britain", which sets out the path to achievement of a net zero emission rail network by 2050 through measures that include:

- delivery of a net zero railway network by 2050, with sustained carbon reductions in rail along the way, and aiming to remove all diesel-only trains (passenger and freight) from the network by 2040
- an ambitious, sustainable, and cost-effective programme of electrification guided by Network Rail's Traction Decarbonisation Network Strategy
- supporting the development of battery and hydrogen trains and deploying them on the network as it decarbonises. Also using technology to clean up diesel trains until they can be removed altogether
- building extra capacity on the rail network to meet growing passenger and freight demand and support significant shifts from road and air to rail
- working with industry to modernise fares ticketing and retail to encourage a shift to rail and cleaner and greener transport journeys
- improving rail journey connectivity with walking, cycling and other modes of transport
- introducing a rail freight growth target
- incentivising the early take up of low carbon traction for rail freight.

It is concluded that the DCO Scheme will not have a material impact on the government's ability to comply with the carbon budgets"

- 2.1.4 In the Environmental Statement Appendix 7.5 Climate [REP6-113], paragraph 1.7.6 is updated and a sixth bullet and final sentence is added.

"1.7.6 The Climate Change Act 2008 (2050 Target Amendment) Order 2019 increased the UK's commitment to cut greenhouse gas emissions from 80% to 100%, compared with 1990 levels by 2050 known as "net zero").

Emission reductions will be delivered through a system of five year carbon budgets that set a trajectory to 2050. The following budgets have been made:

- 1st carbon budget (2008 to 2012) of 3,018 MtCO<sub>2</sub>e;
- 2nd carbon budget (2013 to 2017) of 2,782 MtCO<sub>2</sub>e;
- 3rd carbon budget (2018 to 2022) of 2,544 MtCO<sub>2</sub>e;
- 4th carbon budget (2023 to 2027) of 1,950 MtCO<sub>2</sub>e; and
- 5th carbon budget (2028 to 2032) of 1,765 MtCO<sub>2</sub>e; and
- 6th carbon budget (2033 to 2037) of 965 tCO<sub>2</sub>e.

In accordance with the Climate Change Act 2008 the Climate Change Committee will continue to advise successive UK governments on setting and meeting subsequent carbon budgets and preparing for climate change.”

- 2.1.5 In the Environmental Statement Appendix 7.5 Climate [REP6-113], a new paragraph 1.7.8A is added relating to the worst-case calculation (as per point b above).

“1.7.8A The Sixth Carbon Budget was set in law after the climate assessment was undertaken for the DCO Scheme and is the first carbon budget to be published since the net zero target was set in 2019. However, the worst-case contribution of the DCO Scheme to GHG emissions is estimated to be 6,040 tCO<sub>2</sub>e in total for the budget period of 2033 to 2037 (see paragraph 7.2.12 in the core assessment), equivalent to <0.001% of the Sixth Carbon Budget.”

## 2.2 Cumulative Effects

- 2.2.1 The assessment of direct, indirect and cumulative likely significant effects of the DCO Scheme with other existing and/or approved projects on climate, including greenhouse gas emissions and climate change adaptation, is to be undertaken in light of the requirements contained in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and in light of paragraphs 5.17 and 5.18 of the National Policy Statement for National Networks (NPSNN).
- 2.2.2 The direct emissions of the DCO Scheme comprise emissions into the atmosphere from direct fuel consumption by construction vehicles and diesel locomotives. Emissions from construction vehicles are considered in Appendix 7.1 to the Environmental Statement [REP6-113] in the context of air quality. Emissions from construction vehicles and from diesel locomotives are considered in Appendix 7.5 to the Environmental Statement [REP6-113] in the context of climate.
- 2.2.3 Indirect emissions from the DCO Scheme are those resulting from the consumption of electricity for the operation of the DCO Scheme and embodied carbon emissions resulting from the construction of the DCO Scheme. These have been identified and assessed in Appendix 7.5 Climate to the Environmental Statement [REP6-113].

- 2.2.4 Cumulative effects on air quality (including emissions of NO<sub>x</sub>, PM<sub>10</sub> and CO<sub>2</sub>) of the DCO Scheme with other existing and/or approved projects are assessed at Section 7.3 of Chapter 7 Air Quality and Greenhouse Gases [REP6-074], in Chapter 18 In-Combination and Cumulative Effects [APP-113] of the Environmental Statement and Appendix 18.2 [APP-191] of the Environmental Statement. The Transport Assessment used in the modelling of effects in these assessments includes traffic generated by committed developments. The other projects are detailed in the Transport Assessment in Appendix 16 [APP-160] of the Environmental Statement. As explained in Chapter 7 Air Quality and Greenhouse Gases [REP6-074] of the Environmental Statement, the assessment of cumulative effects also considers other projects not incorporated into the traffic model (see paragraphs 7.3.52 – 7.3.53).
- 2.2.5 The vulnerability of the DCO Scheme to climate change is assessed in Appendix 7.5 Climate [REP6-113], which draws on information presented in the Flood Risk Assessment [APP-076 to 092].
- 2.2.6 The UK Carbon Budgets, which provide the context in which emissions from road and rail nationally significant infrastructure projects (NSIP) should be considered, are by their nature cumulative as they encompass emissions across the UK's different economic sectors. In the recent case of R (Transport Action Network) v Secretary of State for Transport and Highways England (2021) EWHC 2095 (Admin) the High Court recognised that there are different pathways forward and that, for each of the carbon producing sectors with their different carbon reduction strategies moving at different rates, there is scope for UK governments to make policy adjustments to keep the UK on track to net zero.
- 2.2.7 The High Court also confirmed that the only cumulative targets against which the cumulative assessment of emissions could be made were the carbon budgets (para 140). The Court noted that there was no reason to question the judgement reached by the Department for Transport that the contribution made by emissions from all of the projects included in the Department's Road Investment Strategy 2 (RIS2) over the period assessed (to the end of the Fifth Carbon Budget) was de minimis (paras. 147 and 159). The predicted emissions of the DCO Scheme are no greater than/less than each of the individual road schemes that together make up RIS2.<sup>3</sup>

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<sup>3</sup> Note the Court listed five RIS2 projects. Information about the predicted emissions for each is set out below:

(1) Lower Thames Crossing (14.5 miles of new dual carriageway): Preliminary modelling results presented in the Preliminary Environmental Information Report (<https://protect-eu.mimecast.com/s/c67jC48gpuEKRPKHxi-ov?domain=highwaysengland.citizenspace.com>) suggests an increase of 62,587 tonnes of carbon dioxide equivalent emissions in the opening year);

(2) A66 Northern Trans-Pennine: 18 miles of dual carriageway to replace a single carriageway; Scoping Report of June 2021 (predicted carbon emissions not yet published but Scoping Report lists sources and states that it is not expected that construction and operation emissions will compromise the ability of the UK to meet its carbon reduction targets): [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010062/TR010062-000025-TR010062%20-%20Scoping%20Report%20\(Part%201%20of%2011%20-%20Main%20Report%20&%20Appendices\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010062/TR010062-000025-TR010062%20-%20Scoping%20Report%20(Part%201%20of%2011%20-%20Main%20Report%20&%20Appendices).pdf)

2.2.8 The current NPSNN was issued in 2014 and predates the Government's legal commitment to net zero, the 10 Point Plan for a Green Industrial Revolution, the new Sixth Carbon Budget and the new, more ambitious policies outlined in the Transport Decarbonisation Plan. In a Ministerial Statement issued on 22 July 2021 the Secretary of State for Transport advised that a review of the NPSNN will begin later in 2021 this year, to be completed no later than Spring 2023. "While the review is undertaken, the NPS remains relevant government policy and has effect for the purposes of the Planning Act 2008. The NPS will, therefore, continue to provide a proper basis on which the Planning Inspectorate can examine, and the Secretary of State can make decisions on, applications for development consent."

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(3) A46 Newark bypass: converting 3 miles of single carriageway to dual carriageway; it was announced on 16 September 2021 that there has been a delay in announcing the preferred route: <https://highwaysengland.co.uk/our-work/east-midlands/a46-newark-bypass/>

(4) A417 Air Balloon: 3.6 miles of dual carriageway to replace single carriageway; Environmental Statement Chapter 14, Table 14-16 predicts 190,224 tonnes of Carbon Dioxide equivalent in the opening year: [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010056/TR010056-000221-6.2 Environmental Statement - Chapter 14 - Climate.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010056/TR010056-000221-6.2%20Environmental%20Statement%20-%20Chapter%2014%20-%20Climate.pdf)

(5) M60/M62/M66 Simister Junction Interchange: new loop structure to provide free-flow roads at busy junction (used by around 90,000 vehicles a day): <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiOjMb3xoTzAhX9QEEAHeeoCIEQFnoECAkQAQ&url=https%3A%2F%2Fhighwaysengland.co.uk%2Ffour-work%2Fnorth-west%2Fm60-junction-18-simister-island-interchange%2F&usg=AOvVaw2dV9ApI595OO5WheoAe4P5>





## SECTION 3

# Trinity Primary School Pedestrian and Cycle Bridge

## 3.1 ES, NonTechnical Summary

3.1.1 The ES, NonTechnical Summary [REP6-066], Paragraph 2.2.3 is modified to remove reference to the Trinity Primary School Bridge.

“2.2.3 The associated development works comprise:

- a new railway station at Portishead;
- car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue ~~and a new foot and cycle bridge near Trinity Primary School;~~”

3.1.2 The final bullet in paragraph 5.2.2 is modified to remove reference to the Trinity Primary School Bridge and associated paths.

- ~~“A new bridge linking to existing paths and Trinity Primary School (B on Figure 3) and temporary lay down area opposite Tansy Lane during construction.”~~

3.1.3 Paragraph 4.5.14 is deleted.

~~“4.5.14 — The new pedestrian and cycle bridge in Portishead would be a prominent feature in the residential area near Tansy Lane and Trinity Primary School (see Photomontage 1). Paragraph not used”~~

3.1.4 Photomontage 1 is deleted, together with its listing in the contents sheet.

3.1.5 Paragraph 4.9.13, first bullet is modified to remove reference to the Bridge.

“4.9.13 Temporary and permanent land-take will be required from:

- land used by the local community on the north and south side of the railway corridor for construction activity and new foot and cycle paths approaches to build the new Trinity Primary School Bridge; and”

## 3.2 ES, Chapter 3 Scheme Development and Alternatives

3.2.1 ES Chapter 3 [REP6-070] Table 3.2 *Summary of alternatives considered for specific scheme elements* is modified as follows.

**Table 3.2: Summary of alternative considered for specific scheme elements**

| Option Description                          | Option Consideration   | Outcome   |
|---|--|---|
| Portishead and Pill Station platform length | The initial design brief was for a 105 m (4 train carriages) platform. Following technical | The outline (GRIP 3) design brief in 2016 was amended to include 130 m (5 train |

**Table 3.2: Summary of alternative considered for specific scheme elements**

| Option Description            | Option Consideration   | Outcome   |
|-------------------------------|--|---|
|                               | <p>engagement during the outline design (GRIP 3) in 2016 it was decided it would be appropriate to make provision for 5 coach trains.</p> <p>There are no environmental or planning designations on this land, except for the preservation of this corridor for the railway in previous Local Plans.</p> <p>Ecological surveys identified the presence of protected species, for example Great Crested Newts. However, suitable mitigation measures would have to be put in place regardless of the length of platform, and the presence of protected species would not materially affect the platform length option.</p> <p>In the future, longer trains could affect operational noise levels. This is taken into account in the noise impact assessment, as the opening year scenario assumes a three car train and the future year scenario assumes a five car train. With a <u>2 m high, 200 m long absorptive acoustic barrier along the southern boundary of between Portishead Station and Trinity Primary School Bridge</u>, the assessment concluded that there were no likely significant effects on noise during operations.</p> | <p>carriages) platforms. This will be retained for the revised proposals for the one train per hour service.</p>  |
| Trinity Primary School Bridge | <p>The existing permissive pedestrian/cycle crossing over the railway will have to be closed for safety reasons. The crossing is highly used and any diversion route via Quays Avenue (realigned) would</p>  | <p>A bridge <del>was</del> proposed and indicative details were set out in a non-statutory public consultation in June 2015. The footbridge <del>was been</del> designed with low gradient ramps for use by people with</p> |

**Table 3.2: Summary of alternative considered for specific scheme elements**

| Option Description | Option Consideration  | Outcome   |
|--------------------|---|---|
|                    | <p>increase the walking distance by about <del>600</del>700 m during construction and almost 500 m during operation (450 m net excluding the distance of the original crossing).</p> <p>The option to close the crossing and require pedestrians to use the footpaths around the station was not taken forward given the high usage of this crossing, primarily by school children.</p> <p>This site is unsuitable for a subway due to the poor ground conditions, high water levels, and utilities in the area. There were also concerns about public safety.</p> <p>A foot and cycle bridge is a feasible option. However, this does have landscape / visual impacts given the height of the structure and the long ramps to achieve a suitable gradient for equality groups.</p> | <p>reduced mobility. The visual impact <del>was been</del> softened with landscaping. <u>The proposals for the Trinity Primary School Bridge were presented in the ES and submitted in the DCO Application.</u></p> <p><u>The need for the bridge and the environmental effects were considered during the Examination. Following this, the Secretary of State has advised that he is minded to remove the Trinity Primary School Bridge from the DCO Scheme.</u></p> |

### 3.3 ES, Chapter 4 Description of the Scheme

- 3.3.1 The ES Chapter 4 [REP6-072] subheading “Trinity Primary School Bridge and associated new paths” and paragraphs 4.5.39 to 4.5.57 are modified or deleted from the ES to reflect the removal of Trinity Primary School Bridge (Work No. 7) and electrical supply cables (Work No. 7E) and the amalgamation of footpaths (Work Nos. 7A and 7C).

#### “~~Trinity Primary School Bridge and associated n~~New paths connecting the station and residential areas to the east”

“4.5.39 A new combined pedestrian and cycle overbridge is proposed to link residential areas on the south the railway to the residential areas to the north of the railway and Trinity Primary School, also on the north side of the railway. The existing permissive at-grade crossing over the disused railway will be closed permanently. replaced by the new bridge, referred to as the Trinity Primary School Bridge. N New foot and cycle path routes to Quays Avenue, parallel to the railway will be provided. The existing access routes

linking with the surrounding residential area will be altered and improved, from Galingale Way to the Trinity Primary School Bridge on the south side and from Tansy Lane to the Trinity Primary School Bridge on the north side.”

“4.5.40 During construction the open space to the north of the disused railway and south of Tansy Lane may be used as a temporary construction compound. The new bridge will be built on approximately the same alignment as the existing crossing and a temporary crossing over the railway will be provided nearby during construction.”

“4.5.41 Trinity Primary School Bridge will be pre-fabricated off site and delivered in sections. The vegetation on site will be removed and excavation works will be undertaken for the associated piling and foundation works. The embankment on the north side will be built up and drainage ditches will be infilled or culverted as required. A piling mat and crane pad will be constructed to provide a stable platform for the pile driver and crane. Piles will be driven into the ground using a pile driver and the crane will be used to construct the bridge piers and install the pre-fabricated bridge sections. Paragraph not used.”

#### **~~Work Number 7: A combined pedestrian and cycle overbridge~~**

“4.5.42 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4). Paragraph not used.”

“4.5.43 *Location:* South west of Trinity Primary School, Portishead Paragraph not used.”

“4.5.44 *Detail:* The new bridge is designed with staircases and ramps to provide step free access over the railway. A zig-zag ramp arrangement will be provided on both sides of the railway (with a gradient of 1:15) as well as staircases. Solid parapets 1.8 m high will be provided over the Portishead Branch Line while open parapets and handrails will be provided on the staircases and ramps. The whole structure is likely to be made of steel painted in a neutral colour. The overall height of the structure will be approximately 8.5 m above rail level to accommodate future electrification as required by Network Rail. A temporary crossing will be provided nearby during the construction of the bridge. Paragraph not used.”

“4.5.45 *Key elements:*

- ~~Pedestrian and cycle bridge including steps and ramps;~~
- ~~Lighting;~~
- ~~Signage;~~
- ~~Surface water drainage;~~
- ~~Fencing; and~~
- ~~Hardstanding. Paragraph not used.~~

#### **Work Numbers 7A, and 7B and 7C: New paths to connect Portishead Station to the Village Quarter, Portishead**

“4.5.46 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4).”

“4.5.47 *Location:* North and south of the Portishead Branch line, between Quays Avenue and Trinity Primary School.”

~~“4.5.48 *Detail:* A network of paths will be provided between Quays Avenue, Phoenix Way and the Trinity Primary School Bridge New paths will be provided to the north and south of the new railway corridor to link with the existing permissive paths between Galingale Way and Tansy Lane either side of the existing permissive at-grade crossing over the disused railway line which will be closed. The new paths will become public rights of way and maintained by the local highway authority.”~~

~~“4.5.49 *Key elements:*~~

- ~~• Hardstanding to form new combined pedestrian and cycle paths;~~
- ~~• Lighting;~~
- ~~• Signage;~~
- ~~• Surface water drainage;~~
- ~~• Fencing and~~
- ~~• Landscaping.”~~

#### **Work Number 7D: Temporary construction compound, Tansy Lane, Portishead**

~~“4.5.50 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4).”~~

~~“4.5.51 *Location:* North of the Portishead Branch line, south of Tansy Lane and west Trinity Primary School.”~~

~~“4.5.52” *Detail:* A small temporary compound will be established on the land between the disused railway and Tansy Lane to be used for the works to construct the new bridge to connect Tansy Lane and Galingale Way railway, network of new paths and Portishead Station.”~~

~~“4.5.53 *Key elements:*~~

- ~~• Temporary fencing;~~
- ~~• Storage of materials plant and machinery.”~~

#### ~~**Work Number 7E: Electrical supply cables to Work No. 7**~~

~~“4.5.54 *Plan reference(s):* Works Plan Sheet 1 (DCO Document Reference 2.3) and General Arrangement Plans Sheet 1 (DCO Document Reference 2.4). Paragraph not used”~~

~~“4.5.55 *Location:* North of the Portishead Branch line and south of Tansy Lane. Paragraph not used”~~

~~“4.5.56 *Detail:* Electrical supply cables are required to power the lighting on the new Trinity School Bridge. Paragraph not used”~~

~~“4.5.57 *Key elements:*~~

- ~~• Permanent electricity supply cables Paragraph not used”~~

3.3.2 Paragraph 4.5.283 is modified to remove reference to the Trinity Primary School Bridge.

~~“4.5.283 *Between Portishead Station and Trinity Primary School Bridge* An acoustic barrier 200 m long and 2 m high close timber boarded fence will be installed along the south side of the railway by Portishead Station~~

(see Work Number 5). The acoustic fence will be separate to the Network Rail security fence which will be located approximately 1 m inward of the acoustic fence. To the east, the existing fencing will be removed and replaced with paladin fencing. On the north side of the railway, the existing palisade fencing will be retained between the station and the end of the platforms for security purposes and continue as paladin fencing.”

## 3.4 ES, Chapter 9 Ecology and Biodiversity

3.4.1 The ES Chapter 9 [REP6-078] Paragraph 9.6.6 is modified to remove reference to the construction of Trinity Primary School Bridge as follows.

“9.6.6 At Portbury Wharf Nature Reserve, the existing noise level at the most representative survey location for the pools and lagoons used by SPA and Ramsar-qualifying birds is 46 dB  $L_{Aeq,16h}$  (Table 7.103 of ES Appendix 13.7, DCO Document Reference 6.25). The noise levels generated by construction activities in the vicinity of the reserve are shown in Tables 13.19 and 13.20 of ES Chapter 13 (DCO Document Reference 6.16). The works at Portishead Station are sufficiently distant (900 m) and attenuated by housing that there will be no discernible increase in noise at the pools. Construction of the haul route is the noisiest activity associated with the construction of the Sheepway compound (Table 13.20 in ES Chapter 13, DCO Document Reference 6.16), with a highest noise level of 68 dB  $L_{Aeq,16h}$  at 50 m from the source of the noise. Given that the pools are 650 m from the compound, the noise levels are likely to be lower than levels found to cause disturbance of wetland birds (Cutts et al., 2013). The activities most likely to cause disturbance of birds using the pools and lagoons, due to noise levels and distance are the ballasting, tamping and lining works required for construction of the line (650 m from the pools and lagoons) and percussive (hammer) piling for approximately two weeks for the construction of the Trinity Primary School Bridge (500 m from the pools and lagoons). The predicted combined (baseline and construction) noise at the pools and lagoons is 49 dB  $L_{Aeq,12h}$  from Ballasting/Tamping/Lining works and 49 dB  $L_{Aeq,12h}$  from percussive (hammer) piling works at Trinity Primary School Bridge (Table 7.103 of ES Appendix 13.7, DCO Document Reference 6.25). ~~These are~~ This is lower than levels found to cause disturbance of wetland birds (Cutts et al., 2013) and therefore no impacts on SPA and Ramsar-qualifying birds are anticipated.”

3.4.2 Paragraph 9.7.8 is modified as follows:

“9.7.8 The landscape proposals are summarised as follows:

- Permissive crossing of the railway line by South of Trinity Primary School Bridge – woodland planting to reinforce existing planting on the north side of the line and vegetation retained south of the line;”

## 3.5 ES, Chapter 11 Landscape and Visual Impact Assessment

3.5.1 The ES Chapter 11 Landscape and Visual Impact Assessment [APP-106] is amended as set out below.

3.5.2 Paragraph 11.6.34 is revised as below.



~~“11.6.34 Construction traffic would use the new highway to gain access to the track. bringing in the Trinity Primary School Bridge components with larger lorries and cranes moving in the landscape.”~~

3.5.3 Paragraph 11.6.39 is revised as below.

~~“11.6.39 There would be the temporary loss of open space at Tansy Lane as the area would be used as a construction site. of the Trinity Primary School Bridge. Construction of bridge foundations including the piling and associated piling rig, and the use of cranes to lift and position the bridge components would be intrusive in the local landscape due to their height.”~~

3.5.4 Paragraph 11.6.134 is revised as below.

~~“11.6.134 The introduction of movement associated with the passenger trains and the new Trinity Primary School Bridge would add new elements to the landscape. The bridge would be a new relatively large-scale feature in the small-scale open landscape between the houses at Tansy Lane and Trinity Primary School.”~~

## 3.6 ES, Chapter 13 Noise and Vibration

3.6.1 The ES Chapter 13 Noise and Vibration [REP6-082] is amended to remove reference to construction noise in particular as a result of percussion piling for the foundations as set out below.

3.6.2 The last bullet in paragraph 13.6.4 is deleted.

~~“13.6.4 The Portishead area would be exposed to noise from the following construction activities:~~

- ~~• Construction compound at the site of the proposed car park and a lay down area alongside the railway line by Tansy Lane~~
- ~~• Realignment of Quays Avenue~~
- ~~• Car park construction~~
- ~~• Station construction – piled foundations, building and platform~~
- ~~• Railway line construction works~~
- ~~• Construction of the Trinity Primary School Bridge.”~~

3.6.3 Paragraph 13.6.12 is deleted.

~~“13.6.12 The construction of Trinity Primary School Bridge is expected to take approximately a year allowing for settlement, perhaps six months for the actual construction works. During this time the highest noise levels would be from the percussive piling. The closest receptors to this activity are at 25 m from the works and noise levels could be up to 77 dB(A) for short periods of time. The duration of the piling work is likely to be no longer than two weeks. Paragraph not used.”~~

3.6.4 The last row in Table 13.19 referring to Trinity Primary School Bridge is deleted.

**Table 3.19: Predicted noise levels from construction activities in Portishead**

| Location of works / work areas                           | Highest expected noise level at the closest receptor, L <sub>Aeq</sub> dB | Activity associated with highest noise level <sup>1</sup> | Distance to closest receptor, m | Effect level <sup>2</sup> |
|--|---|---|---------------------------------|---------------------------|
| Compound construction                                    | 72  | Haul road construction                                    | 20                              | LOAEL                     |
| Compound operation, including laydown area at Tansy Lane | 62  | Vehicle movements   | 20                              | LOAEL                     |
| Utility diversions                                       | 73  | Cutting road surface                                      | 30                              | LOAEL                     |
| Road realignment   | 83  | Pavement works  | 15                              | SOAEL                     |
| Car park construction                                    | 68  | Earthworks  | 30                              | LOAEL                     |
| Station construction – building and platform             | 78  | Vegetation clearance and platform construction            | 25                              | SOAEL                     |
| Station construction – piling                            | 73  | Percussive piling   | 25                              | LOAEL                     |
| Railway line works                                       | 83  | Tamping and lining  | 15                              | SOAEL                     |
| <del>Trinity Primary School Bridge</del>                 | <del>77</del>   | <del>Percussive piling</del>                              | <del>25</del>                   | <del>SOAEL</del>          |

<sup>1</sup> Some work areas have more than one activity. These are shown in detail in Appendix 13.7 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25).

<sup>2</sup> These are in terms of daytime predicted noise level.

3.6.5 Paragraphs 13.6.49 and 13.6.50 are amended to remove reference to Trinity Primary School Bridge and the renumbering of locations where high levels of vibration are predicted.

“13.6.49 Potential impacts from vibration are considered in those locations where there is the potential for activities which could generate high levels of vibration. Given that no contractor has been appointed and the construction methodology not finalised, such activities have been examined at ~~seven~~six locations and the worst case possible piling method has been assumed.”

“13.6.50 The first of these is at Portishead station, where percussive (or hammer) piling may be required for the new platform foundations. ~~At the Trinity Primary School Bridge, percussive (or hammer) piling is required to create secure foundations for the structure in order to take the vertical load of the structure itself. The third~~second~~ and fourth~~third~~~~ of the locations where



vibration generating activities could take place is the construction of the walls at Hardwick Cutting for the Pill station works and the embankment stabilisation works at Mount Pleasant. These works take the form of kingpost piling, where H-section piles are inserted using a percussive hammer attachment on a large excavator to create uprights into which are slotted concrete or steel planks to ensure earthworks retention. The ~~fifth~~<sup>fourth</sup> location of possible piling is at the Avon Road bridge, where a vibratory piling method may be required for bridge foundation works. Along the Avon Road embankment, the ~~sixth~~<sup>fifth</sup> location of possible percussive piling, small piles may be required for the bank stabilisation works. Finally, along the line from Portishead to Pill, vibratory compaction could be used where works are required in the vicinity of existing structures or on the main earthworks themselves in order to ensure a finished trackbed that will not settle further and be subject to subsequent maintenance works.”

- 3.6.6 Table 13.23 *Predicted levels of vibration from selected activities* is amended by the deletion of the row for Trinity Primary School Bridge.

**Table 13.23: Predicted levels of vibration from selected activities**

| Location   | Distance to closest receptor, m | PPV <sup>1</sup> , mm/s | Effect level <sup>2</sup> |
|--|---------------------------------|-------------------------|---------------------------|
| Portishead station (percussive piling)                       | 25                              | 0.4                     | LOAEL                     |
| <del>Trinity Primary School Bridge (percussive piling)</del> | <del>25</del>                   | <del>0.4</del>          | <del>LOAEL</del>          |
| Hardwick Cutting (percussive piling)                         | 20                              | 0.5                     | LOAEL                     |
| Mount Pleasant (percussive piling)                           | 15                              | 0.8                     | LOAEL                     |
| Avon Road bridge (vibratory piling)                          | 20                              | 1.2                     | SOAEL                     |
| Avon Road embankment (percussive piling)                     | 20                              | 0.4                     | LOAEL                     |
| Railway line works (vibratory compaction)                    | 15                              | 1.7                     | SOAEL                     |

<sup>1</sup> PPV is defined as the maximum instantaneous positive or negative peak of the vibration signal. It is specified in millimetres per second (mm/s). It is important to note that the PPV refers to the movement within the ground of molecular particles and not surface movement.

<sup>2</sup> Only applicable to the assessment against impacts on human receptors. See Table 2.7 of Appendix 2 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25).

- 3.6.7 Paragraph 13.6.54 regarding vibration during construction of Trinity Primary School bridge is deleted.

~~“13.6.54 The closest receptors to the Trinity Primary School Bridge are the dwellings in Holmlea and Tansy Lane. Using the scale presented in Table 2.6 of Appendix 13.2 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25), this predicted level of 0.4 mm/s PPV is below the level where building damage may occur and would be classed as a negligible impact. Examining the impact on humans using Table 2.7 of Appendix 13.2 in the ES Volume 4 Technical Appendices (DCO Document Reference 6.25), the predicted level of vibration would be just above the level where “vibration might be just perceptible in residential environments” and would be classed as a minor impact and a **slight adverse** significance of effect, which is not significant in relation to the EIA Regulations 2017. Paragraph not used.”~~

### 3.6.8 Paragraph 13.7.6

“13.7.6 Alongside Peartree Field, a noise barrier has been included within the design in order to mitigate likely significant adverse operational environmental effects at this location. This barrier extends from the western end of the platform at Portishead Station ~~and finishes at the Trinity Primary School Bridge~~ for 200 m along the southern side of the railway (see the General Arrangement Plans Sheet 1 in DCO Document Reference 2.4 and the Environmental Masterplan in DCO Document Reference 2.53). The barrier will be 2 m high and absorptive to avoid reflections to the opposite side where there are sensitive receptors in Tansy Lane. With this barrier, and taking into account the change in alignment of Quays Avenue, the impact for the dwellings closest to Quays Avenue would be a reduction in noise of just over 1 dB(A) in the short term. With the overall noise level below the SOAEL this would result in a **slight beneficial** significance of effect. In the future assessment year, the decrease in noise is predicted to be just under 1 dB(A), which using the long term impact scale would also be a **slight beneficial** significance of effect. However, for the majority of dwellings directly to the south of the proposed station at Portishead, there would be an impact of just under 1 dB(A). With the overall noise level below the SOAEL this would result in a **slight adverse** significance of effect, which is not a significant effect in relation to the EIA Regulations 2017. In the future assessment year, the increase in noise is predicted to be at worst 1.3 dB(A), which using the long term impact scale would be **slight adverse** significance of effect and not a significant effect in relation to the EIA Regulations 2017.”

### 3.6.9 Table 13.26 is amended to remove reference to the Trinity Primary School Bridge.

Table 13.26: Summary of the assessment of the DCO Scheme on noise and vibration receptors

| Aspect and control measures embedded in the DCO Scheme  | Receptors  | Impact  | Environmental Mitigation   | Residual Effects   |
|---|--|---|--|--|
| <b><i>Operation activities</i></b>  |  |   |  |  |
| Operation of the new stations, the rail services, and the changes in road traffic distribution. | Nearby sensitive receptors, which would include dwellings and schools.<br><b>Value: High</b> | Increased noise level as trains pass.<br><b>Magnitude: Minor to Major adverse</b> | A 2 m high, 200 m long absorptive noise barrier to the south of Portishead Station from the western end of the station platform <del>to the Trinity Primary School Bridge</del> .<br>A 2.4 m high, 55 m long reflective noise barrier alongside the Old Station House, Portbury. | <b>Magnitude: Minor adverse</b><br><b>Significance of Effect: Slight adverse</b><br><b>Significance for EIA legislation: Not significant</b> |

## 3.7 ES, Chapter 14 Socio-economics and Economic Regeneration

- 3.7.1 The ES Chapter 14 [APP-109] Table 14.2 *Summary of consultation responses* is amended to explain that although the DCO Application was submitted with the proposal to build the Trinity Primary School Bridge and, following discussion on the Bridge during the examination, the Secretary of State has advised that he is minded to remove this structure from the DCO Scheme.

**Table 14.2: Summary of consultation responses**

| <b>Organisation and date</b>  | <b>Summary of response</b>  | <b>Consideration within ES</b>   |
|---|---|--|
| <b><i>Informal Micro-consultation on DCO Scheme Boundary (22 June to 3 August 2015)</i></b> |   |  |
| North Somerset Local Access Forum   | A bridge between Galingale Way and Trinity Primary School preferred over footpath only option. The length of diversion required for the footpath (c. 600 m) only option unacceptable for young children. The bridge should also be suitable for cyclists. | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u> |
| <b><i>Formal Stage 1 Consultation (22 June to 3 August 2015)</i></b>                        |   |  |
| Transport Focus   | Trinity Primary School Bridge: The proposals to replace the current unofficial footpath over the disused track may concern some in the local community and careful consideration of this proposal is essential.   | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out proposals for Trinity Primary School Bridge. The bridge has been designed with low gradient ramps for accessibility and connects into the existing network of paths. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the</u>                            |

Table 14.2: Summary of consultation responses

| Organisation and date | Summary of response   | Consideration within ES   |
|-----------------------|---|---|
| British Horse Society | A bridge between Galingale Way and Trinity Primary School preferred over footpath only option. The length of diversion required for the footpath (c. 600 m) only option unacceptable for young children. The bridge should also be suitable for cyclists. | <p><u>Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u></p> <p><u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7)-sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u></p> |

## 3.8 ES, Chapter 15 Soils, Agriculture, Land Use and Assets

- 3.8.1 The ES Chapter 15 [REP6-084] Paragraphs 15.4.42 and 43 in the baseline section are modified to remove reference to Trinity Primary School Bridge.
- 15.4.42 There are four Western Power high voltage electricity cables along the south side of railway corridor into the centre of Portishead. The locations of the cables have been confirmed on site with Western Power Distribution ("WPD") ~~and should not be affected by the location of the Trinity Primary School Bridge.~~ Consideration of utilities ~~sh~~would still be taken during detailed design of the ~~Trinity Primary School Bridge,~~ acoustic fence, highway works and car park.
- 15.4.43 The ~~existing permissive at-grade crossing over the railway proposed Trinity Primary School Bridge~~ is located close to the high voltage electricity cables and a drainage ditch on the south side of the railway corridor and a Wessex Water foul sewer and 11 kv voltage electricity cable along the north side of the railway corridor. The drainage ditch is culverted across the high voltage cables and under the railway corridor and continues westwards along the north side of the railway corridor. At this location, residential areas lie to the north and the south of the railway corridor. ~~and the proposed bridge will replace a~~ The permissive at-grade crossing over

the railway, which is heavily used by adults and schoolchildren. ~~The bridge will connect with open space and footpaths on either side of the crossing used for informal recreation.~~ Site investigations and site meetings with Wessex Water and WPD have been carried out to establish the location and depth of these services. The information collected will be reviewed during detailed design to minimise impacting these utilities and to avoid health and safety issues for the workforce and the local community.”

- 3.8.2 Paragraph 15.5.8 is modified to remove reference to the Trinity Primary School Bridge.

“15.5.8 The DCO Scheme has been designed to minimise the impact of land acquisition or occupation on adjoining land-ownership and property. A relatively small amount of permanent land acquisition is required, primarily to facilitate access, for example maintenance and emergency access to Pill Tunnel eastern portal ~~and the approaches to Trinity Primary School Bridge~~ and the new car parks. More extensive areas of temporary land occupation are required during the construction phase, for access and construction compounds for offices, storage of materials and spoil, and plant.”

- 3.8.3 Paragraph 15.6.18 is modified to explain the background to remove the Trinity Primary School Bridge from the DCO Scheme and provide an assessment of the absence of the bridge on land used by the community.

“15.6.18 Permanent and temporary land acquisition or occupation ~~was identified will be required~~ on the north and south side of the proposed Trinity Primary School Bridge ~~to for construction construct the access ramps and connecting footpaths, and protect the pond on the south side of the railway from construction activities.~~ Residents and pedestrians may use this space for walking through the residential area or informal recreation. Land known as The Vale on the south side of the disused railway is designated as Local Green Space. ~~Some of the land will become public rights of way, so will change in status but remain available to the public. As a local resource, the land in this area is given a low value and the temporary and permanent land acquisition is very small with a negligible magnitude of impact, resulting in a~~ **neutral** ~~significance of effect. As the Secretary of State is minded to remove the bridge from the DCO Scheme, there will be no change to the use of this~~ land.”

- 3.8.4 The second bullet in Paragraph 15.6.36 is deleted to remove reference to Trinity Primary School Bridge.

“15.6.36 The footprint of the former railway line largely defines the extent of the DCO Scheme within the Green Belt. The outward expansion of development mainly consists of works outside the Green Belt, comprising:

- the highway modifications, new station and car parks in Portishead;
- ~~Trinity Primary School Bridge and links to local paths;~~
- the restoration of the southern platform for Pill station, new station entrance, and new car park and associated maintenance compound; and
- highway modifications to improve traffic queuing on Winterstoke Road across the Ashton Vale Level Crossing and into the Ashton Vale Industrial Estate.”

- 3.8.5 Table 15.11 *Summary of the assessment of the DCO Scheme on soils, agriculture, land use and assets* is modified to delete reference to Trinity Primary School Bridge.

**Table 15.11: Summary of the assessment of the DCO Scheme on soils, agriculture, land use and assets**

| Aspect and control measures embedded in the DCO Scheme   | Receptors   | Impact   | Environmental Mitigation | Residual Impact   |
|--|---|--|--------------------------|---|
| <b><i>Loss of Land Used by the Community</i></b>   |   |  |                          |   |
| <p>Temporary and permanent land-take to Trinity Primary School Bridge.<br/>Replacement of the informal crossing with a new pedestrian and cyclist bridge, realignment of paths, and landscaping.</p> | <p>Amenity grassland and shrubs<br/><b>Value: Low</b></p> | <p>Temporary diversion of crossing.<br/><b>Magnitude: Negligible</b></p> | <p>N/A</p>               | <p><b>Magnitude: Negligible</b><br/><b>Significance of Effect: Neutral.</b><br/><b>Significance for EIA legislation: Not significant.</b></p> |



## 3.9 ES, Chapter 16 Transportation, Traffic, and Non-Motorised Users

- 3.9.1 A new foot and cycle bridge ('Trinity Footbridge', Work No. 7) was proposed for the informal and non-public right of way across the current disused railway line to connect Tansy Lane to Galingale Way. The bridge would need to be high enough to give safe clearance over the railway line and include accessible access ramps on both sides. As it would have been a structure of a significant size and scale, concerns were raised at the Examination by nearby residents about the size and scale of the structure, visual intrusion, and disturbance. The Secretary of State has noted the matters raised at the Examination and advised that he is minded to remove Trinity Footbridge from Work No. 7 from the proposed order.
- 3.9.2 As the existing informal and non-public right of way at-grade crossing over the disused railway at this point will no longer be available, pedestrians and cyclists will use the new paths that will run parallel to the railway line between Galingale Way / Vale Pond and Tansy Lane via Portishead station area and the realigned Quays Avenue. This diversion is almost 500 metres distance in total (450 m net after considering the permissive at grade crossing over the railway). During construction, until the new paths are available, the diversion will be longer, at around 700m, as it will follow existing roads Galingale Way and Tansy Lane.
- 3.9.3 The ES Chapter 16 Transport, Access and Non-Motorised Users [APP-111] is amended as set out below.
- 3.9.4 Table 16.3 (Summary of consultation responses on traffic and transport and how/where these have been addressed within the ES), the fourth paragraph for the organisation Sustrans under the heading 'Consideration within the ES' should be deleted "~~A new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the TA).~~"
- 3.9.5 Table 16.3 (Summary of consultation responses on traffic and transport and how/where these have been addressed within the ES), the second paragraph for the organisation Public under the heading 'Consideration within the ES' should be read "Table 16.8 outlines the infrastructure measures to be provided as part of the DCO Scheme including provisions for cyclists/pedestrians. Provision of bicycle parking facilities at the stations is discussed in Section 16.7 and a new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the TA, ES Appendix 16.1, DCO Document Reference 6.25)".
- 3.9.6 Table 16.3 (Summary of consultation responses on traffic and transport and how/where these have been addressed within the ES), the fourth paragraph for the organisation Transport Focus under the heading 'Consideration within the ES' should be deleted "~~A new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the TA).~~"
- 3.9.7 Table 16.8 (Infrastructure measures to be implemented), delete the contents of measure reference 6 (the whole line) to:

| Ref | Area       | Location               | Measure  | Type of measure         | Rationale   | Time-scale       | Responsible     |
|-----|------------|------------------------|--|-------------------------|---|------------------|-----------------|
| 6   | Portishead | Trinity Primary School | Provision of a bridge compliant with the Equalities Act 2010 | Integral part of scheme | To formalise the crossing point across the railway and to provide access to and from the primary school | Prior to opening | Scheme Promoter |

3.9.8 and the reference 6 should read 'not used'.

## 3.10 ES, Chapter 18 In combination and cumulative effects

3.10.1 The ES Chapter 18 [APP-113] Table 18.1 *In-combination effects during construction* and Table 18.2 *In-combination effects during operation* are modified to remove reference to Trinity Primary School Bridge and associated impacts.

Table 18.1 In-combination effects during construction

| Receptor   | Chapter                                    | Residual effect reports in the topic chapter  | Assessment of in-combination effects  |
|--|--|---|---|
| Properties on Peartree Field (south of the proposed station) | Chapter 13 Noise and Vibration             | Daytime noise: Slight adverse<br>Night time noise (if works take place at night): Slight adverse<br>Daytime vibration: Slight adverse from vibratory compaction of new railway line | <b>Temporary <u>very large to large</u> adverse</b> – Properties at this location will experience noise and vibration effects during construction of the station, <del>Trinity Primary School Bridge</del> and the railway line. The works will also produce dust and emissions from plant/vehicles. Views from 6 properties will be <u>very largely</u> adversely affected by construction activities associated with the station, access for works to the tracks to the east and the proposed acoustic barrier immediately north of Peartree Field, with the largest effect being experienced from the upper stories of the properties. |
|  | Chapter 7 Air Quality and Greenhouse Gases | Slight adverse  |   |
|  | Appendix 11.3 Visual Impact Assessment     | <u>Very large to large</u> adverse  |   |

| <b>Table 18.1 In-combination effects during construction</b>  |  |   |  |
|---|--|---|--|
| <b>Receptor</b>   | <b>Chapter</b>                             | <b>Residual effect reports in the topic chapter</b>   | <b>Assessment of in-combination effects</b>  |
| Tansy Lane (north of proposed station)  | Chapter 13 Noise and Vibration             | Daytime noise: Slight adverse<br>Night time noise (if works take place at night): Slight adverse<br>Daytime vibration: Slight adverse from <del>bridge piling</del> and from vibratory compaction of new railway line | <b>Temporary <u>very</u> large adverse</b> – Properties at this location will experience noise and vibration effects during construction of the station, <del>Trinity Primary School Bridge</del> and the railway line. The works will also produce dust and emissions from plant/vehicles. Views will be adversely affected by construction features such as temporary fencing and lighting, heavy machinery, piling rigs and crane, and <u>construction compound</u> for the <del>Trinity Bridge components</del> . Vegetation clearance will also open up the view. |
|   | Chapter 7 Air Quality and Greenhouse Gases | Slight adverse  |  |
|   | Appendix 11.3 Visual Impact Assessment     | <u>Very</u> Large adverse   |  |
| Properties on Holmlea Road and Tydeman Road (south of railway line)<br>Community land – amenity grassland and shrubs in this area | Chapter 13 Noise and Vibration             | Daytime noise: Slight adverse<br>Night time noise (if works take place at night): Slight adverse<br>Daytime vibration: Slight adverse for <del>bridge piling and</del> vibratory compaction of new railway line       | <b>Temporary <del>moderate</del><u>large</u> adverse</b> – Properties at this location will experience noise and vibration effects during construction of the railway line. <del>Properties on Holmlea Road will also experience noise and vibration effects during construction of Trinity Primary School Bridge.</del> The works will also produce dust and emissions from plant/vehicles. There will be glimpsed views of construction features during summer as they will be well  |

**Table 18.1 In-combination effects during construction**

| <b>Receptor</b> | <b>Chapter</b>                                     | <b>Residual effect reports in the topic chapter</b> | <b>Assessment of in-combination effects</b>  |
|-----------------|--|---|--|
|                 | Chapter 7 Air Quality and Greenhouse Gases         | Slight adverse                                      | screened by vegetation, but partial views during winter months when vegetation is more sparse. <del>Residents of this road may also be affected by the loss of amenity land during the construction of Trinity Primary School Bridge. A temporary replacement crossing will be in place during construction.</del> |
|                 | Appendix 11.3 Visual Impact Assessment             | <del>Moderate</del> <u>Large</u> adverse            |  |
|                 | Chapter 15 Soils, Agriculture, Land Use and Assets | Neutral   |  |

**Table 18.2: In-combination effects during operation**

| <b>Receptor</b>              | <b>Chapter</b>                             | <b>Residual effect reported in chapter</b> | <b>Assessment of in-combination effects</b>   |
|------------------------------|--|--|---|
| <b><i>Portishead</i></b>     |  |  |   |
| Properties on Peartree Field | Chapter 13 Noise and Vibration             | Slight adverse                             | <b>Large adverse</b> – Properties at this location will experience noise effects from the operation of the railway (the proposed noise barrier will reduce noise levels at this location) and emissions from trains. These properties will experience small increase in NO <sub>2</sub> associated with the scheme, but the air quality would still be well below the Air Quality Objectives. Six properties will experience a large adverse effect of changed views from the |
|                              | Chapter 7 Air Quality and Greenhouse Gases | Negligible                                 |   |
|                              | Appendix 11.3 Visual Impact Assessment     | Large adverse                              |   |

**Table 18.2: In-combination effects during operation**

| Receptor  | Chapter                                    | Residual effect reported in chapter                                     | Assessment of in-combination effects   |
|---|--|---|--|
| Properties further back from Portishead Station and railway line on South side (i.e. behind Peartree Field) | Chapter 13 Noise and Vibration             | Slight adverse  | upper storeys, with the introduction of proposed 10 m high lighting columns, <del>Trinity Primary School Bridge</del> , fencing and passenger trains. Properties not affected by these changes in views would experience a smaller in-combination effect.<br><br><b>Minor adverse</b> – Properties further away will experience lower noise effects from the operation of the railway and emissions from trains and road traffic. Residents will experience changed views with the introduction <u>of Trinity Primary School Bridge and associated night-time lighting at the new station</u> , fencing and occasional glimpsed views of passenger trains. Views will improve over time as planting matures. |
|   | Chapter 7 Air Quality and Greenhouse Gases | Negligible  |  |
|   | Appendix 11.3 Visual Impact Assessment     | Slight adverse  |  |
| Tansy Lane  | Chapter 13 Noise and Vibration             | Slight adverse  | <b>Large to Moderate adverse</b> – Properties on Tansy Lane will experience noise effects from the operation of the railway and emissions from trains. Residents will have direct views of <del>Trinity Primary School Bridge</del> , the railway line and associated fencing and passenger trains. There will be oblique views to the station and platform. Some visual screening <u>will be provided by reinforcing vegetation along the railway boundary proposed trees and planting</u> . Whilst a line of tree planting is proposed north of the bridge to help screen the new bridge, due to the proximity of the receptors,   |
|   | Chapter 7 Air Quality and Greenhouse Gases | Negligible  |  |
|   | Appendix 11.3 Visual Impact Assessment     | <u>Large adverse in Year 1 reducing to Moderate adverse by Year 15.</u> |  |

Table 18.2: In-combination effects during operation

| Receptor   | Chapter                                    | Residual effect reported in chapter | Assessment of in-combination effects   |
|--|--|-------------------------------------|--|
|  |  |                                     | <del>and associated massing and lighting of the bridge, there will still be a large adverse impact.</del>  |
| Further back from Portishead Station and railway line on North side (i.e. north of Tansy Lane) | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Slight adverse</b> – Properties on this road will experience noise effects from the operation of the railway and emissions from trains.   |
|  | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |  |
| Holmlea and Tydeman Road   | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Slight adverse</b> – Properties on these roads will experience noise from the operation of the railway and emissions from trains. Residents will have direct, oblique or upper storey views of <del>Trinity Primary School Bridge</del> , the railway line and associated fencing and passenger trains. There will be oblique views to the station and platform from some properties.   |
|  | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |  |
|  | Appendix 11.3 Visual Impact Assessment     | Slight adverse                      |  |
| Trinity Primary School   | Chapter 13 Noise and Vibration             | Slight adverse                      | <b>Moderate adverse</b> – Trinity Primary School will experience noise from the operation of the railway and emissions from trains. There will be open views of <del>Trinity Primary School Bridge, its associated fencing and passing passenger and freight trains</del> , which are well screened by vegetation in places. Views will improve over time as <u>additional planting establishes itself along the school boundary</u> . <del>As proposed planting establishes to the south west of the School, views to Trinity Primary School Bridge will be partially screened. In addition, whilst views of occasional</del> |
|  | Chapter 7 Air Quality and Greenhouse Gases | Negligible                          |  |
|  | Appendix 11.3 Visual Impact Assessment     | Moderate adverse                    |  |

**Table 18.2: In-combination effects during operation**

| Receptor | Chapter | Residual effect reported in chapter | Assessment of in-combination effects  |
|----------|---------|-------------------------------------|---|
|          |         |                                     | <p>passenger trains will be filtered by additional planting to the southern boundary of the School, new features such as lighting on the bridge, and proposed fencing, will be visible and detract from the tranquillity of existing views.</p> |



## 3.11 ES, Appendix 1.2 Compliance with the EIA Regulations, Schedule 4

- 3.11.1 The ES Appendix 1.2 [APP-125] Table 1 is modified to remove reference to Trinity Primary School Bridge.

**Table 1: Compliance of the ES with the requirements of the EIA Regulations**

| Part 1, Schedule 4   | ES   |
|--|--|
| (d) an estimate, by type and quantity, of expected residues and emission (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases. | <p>Residues and emissions during construction and operation</p> <p>...</p> <ul style="list-style-type: none"> <li>Light. Lighting arrangements for the new stations and car parks are discussed in Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7). The lighting design for Pill Station is provided in the ES Appendix 9.18 (DCO Document Reference 6.25). See also, Portishead Station Platform Lighting and Lighting Control Layout (DCO Document Reference 2.14), <del>Lighting Scheme for Trinity Primary School Bridge Plan as shown on drawing S054 Trinity Footbridge Proposed Electrical Layout General Arrangement (DCO Document Reference 2.17)</del>, S050 Pill Station Lighting Proposed: Electrical Layout Plan (DCO Document Reference 2.20), Portishead Station Car Park Layout, Landscaping and New Boulevard and Access Plan (DCO Document Reference 2.38), Pill Station Car Park, and PSP Layout, Landscaping, Lighting and Access Plan (DCO Document Reference 2.42). Changes in light levels have not been estimated.</li> </ul> |

## 3.12 ES, Appendix 1.3 A summary of works required for the DCO Scheme

- 3.12.1 The ES Appendix 1.3 [APP-125] Table 1 is amended to remove Works No. 7 and 7E and combine 7A with 7C.

**Table 1: A Summary of Works Required for the Portishead Branch Line (MetroWest Phase 1) DCO Scheme**

| <b>Works No.</b> | <b>Description of the DCO Scheme Work No.</b>  | <b>Permanent or Temporary</b> | <b>Inside or Outside Operational / Disused Railway Boundary</b> | <b>Current Land Use</b>   |
|------------------|--|-------------------------------|---|---|
| <del>7</del>     | <del>A public foot and cycle track bridge over the railway to the south west of Trinity Primary School, Portishead.<br/>Work No. 7 includes: connections to cycle tracks, lighting, drainage, signage, fencing and hardstandings.</del>  | <del>Permanent</del>          | <del>Inside and outside the disused railway boundary</del>      | <del>Disused railway land, highway land and open space.</del>                                   |
| 7A               | A public foot and cycle path from Phoenix Way, Portishead to connect with the new foot and cycle bridge (Work No. 7 and Work No. 7C) south of Tansy Lane, Portishead and north of Work No. 1.<br><br>Work No. 7A includes: signage, drainage, lighting, fencing and landscaping. | Permanent                     | Inside and outside the disused railway boundary                 | Highway land  |
| 7B               | A public foot and cycle track from the new Quays Avenue, Portishead, to connect with the new foot and cycle bridge (Work No. 7) to the north of Galingale Way and to the south of Work No. 1.<br><br>Work No. 7B includes: signage, drainage, lighting, fencing and landscaping. | Permanent                     | Outside the disused railway boundary                            | Shrubs and trees and crossing of existing Quays Avenue  |
| <del>7C</del>    | <del>A public foot and cycle track from the new foot and cycle bridge (Work No. 7) north to Tansy Lane, Portishead.<br/>Work No. 7C includes: signage, drainage, lighting, fencing and landscaping.</del>  | <del>Permanent</del>          | <del>Outside the disused railway boundary</del>                 | <del>Permissive footpath and open space – amenity grass with occasional shrubs and trees.</del> |

**Table 1: A Summary of Works Required for the Portishead Branch Line (MetroWest Phase 1) DCO Scheme**

| <b>Works No.</b> | <b>Description of the DCO Scheme Work No.</b>  | <b>Permanent or Temporary</b> | <b>Inside or Outside Operational / Disused Railway Boundary</b> | <b>Current Land Use</b>                         |
|------------------|--|-------------------------------|---|---|
| 7D               | A temporary construction compound to the south of Tansy Lane, Portishead and to the north of Work No. 1. | Temporary                     | Outside the disused railway boundary                            | Public open space comprising amenity grassland. |
| <del>7E</del>    | <del>Underground electrical supply cables connecting from Work No. 7 to Tansy Lane, Portishead.</del>    | <del>Permanent</del>          | <del>Crosses over the disused railway</del>                     | <del>Disused railway.</del>                     |

### 3.13 ES, Appendix 4.2 Master Construction Environmental Management Plan

3.13.1 The ES Appendix 4.2 [REP6-110] Table 3.1 *Summary of current and proposed construction compounds* is modified to remove reference to Trinity Primary School Bridge.

**Table 3.1 Summary of current and proposed construction compounds**

| Place Name                       | Location  | Land Use                         | Proposed Principal Construction Use Subject to Detailed CEMP                            |
|----------------------------------|---|----------------------------------|---|
| Portishead Station Site Compound | Portishead on site of new station car parks A and B       | Urban highways, railway corridor | To facilitate construction of new station <del>and Trinity Primary School Bridge.</del> |
| Tansy Lane; Portishead           | <del>Trinity Primary School Bridge</del><br>Lay Down Area | Open space                       | Storage of materials <del>and assembly for Trinity Primary School Bridge.</del>         |

### 3.14 ES, Appendix 4.3 Schedule of Mitigation

3.14.1 The ES Appendix 4.3 [REP6-111] Table 1 is revised by deleting row 11.5 and modifying 13.3 and 14.1, as set out in Table A1 below. Furthermore, with the removal of Requirements 19 and 33, some of the requirements have been renumbered. A separate, updated Schedule of Mitigation has been provided to the Secretary of State to clarify these points.

Table A1

| Schedule of Mitigation |   |   |           |  |  |   |   |
|------------------------|---|---|-----------|--|--|---|---|
| ES Chapter Ref.        | Potential Impact  | Embedded Measures   | Phase     | Mitigation measures  | Monitoring of Likely Significant Effects | Securing mechanism  | Draft Requirement from the DCO  |
| 13.3                   | Increased ambient noise levels from the railway through Portishead. | No embedded measures.<br><b>Significance of Effect:</b><br>Significant  | Operation | Provide an acoustic barrier approximately 210 m long, 2 m high from the start of the proposed line at the new Portishead station <del>to Trinity Primary School Bridge</del> . This will screen the properties in Pear Tree Field from the adverse impacts. This barrier will be absorptive to avoid reflections to the receptors to the north of the line.<br><b>Significance of Effect:</b><br>Not significant | N/A                                      | DCO Requirement 256 (Permanent acoustic fencing).             | <b>Permanent acoustic fencing Requirement 256</b> (see 11.9 above).             |
| 14.1                   | Ease of access to and from the stations.                            | Design of step free access to Portishead Station.<br>Designation of parking spaces for disabled drivers close to Portishead and Pill stations.<br>Re-design of the bus stop and kerb close to Pill Station.<br>Design of shallow gradient ramps for <del>the Trinity School Bridge</del> , Pill station, and (if used) the Pedestrian and Cycle Ramp between Ashton Vale Road and Ashton Road.<br><b>Significance of Effect:</b><br>Not significant | Operation | None.<br><b>Significance of Effect:</b><br>Not significant   | N/A                                      | DCO Requirement 4 (Submission and approval of detail design). | <b>Submission and approval of detail design Requirement 4</b> (see 11.4 above). |

## 3.15 ES, Appendix 4.5 Major Accidents and Disasters

3.15.1 The ES Appendix 4.5 [APP-129] is modified to remove reference to the Trinity Primary School Bridge, in particular in relation to working near utilities.

3.15.2 Paragraph 2.4.19 is modified as follows.

~~“2.4.19 The disused railway corridor in Portishead proposed Trinity Primary School Bridge is located close to four Western Power Distribution (“WPD”) high voltage electricity cables and a drainage ditch on the south side of the railway corridor and a Wessex Water foul sewer and 11 kv voltage electricity cable along the north side of the railway corridor. The locations of the high voltage electricity cables have been confirmed on site with WPD and should not be affected by the location of the Trinity Primary School Bridge. The drainage ditch is culverted across the high voltage cables and under the railway corridor and continues westwards along the north side of the railway corridor. At this location, residential areas lie to the north and the south of the railway corridor and the proposed bridge will replace a permissive at-grade crossing over the railway which is heavily used by adults and schoolchildren. The re is bridge will connect with open space and footpaths on either side of the crossing used for informal recreation. Site investigations and site meetings with Wessex Water and WPD have been carried out to establish the location and depth of these services. The information collected will be reviewed during detailed design to minimise impacting these utilities and to avoid health and safety issues for the workforce and the local community.”~~

3.15.3 Paragraph 3.2.3 is modified to remove reference to the Trinity Primary School Bridge.

~~“3.2.3 The Associated Development works include:~~

- ~~• a new railway station at Portishead;~~
- ~~• car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue and a new bridge near Trinity Primary School;”~~

3.15.4 Table 4 *Further assessment of potential major accidents and disasters* is modified to remove text concerning the risk of construction of Trinity Primary School Bridge to utilities and health and safety of the workforce.

~~“Severance or damage to high voltage electricity cables, drainage ditches, foul sewer, and 11 kv voltage electricity cable during the construction of the proposed Trinity Primary School Bridge and associated paths.”~~

## 3.16 ES, Appendix 5.1 Scoping Opinion, Additional Matters

3.16.1 The ES Appendix 5.1 [APP-130] Table 1 *Scoping Opinion (Additional Matters)* is modified to remove reference to Trinity Primary School Bridge. The bridge was designed with sufficient height to allow passive provision for overhead line electrification at a future date. No other new structures will be built over the railway line. The removal of the bridge creates severance and

users of the permissive at-grade crossing over the railway would have to divert along new footpaths and around Portishead station.

**Table 1: Scoping Opinion (Additional Matters)**

| Summary of Response   | Consideration within the ES   |
|---|---|
| <b>Section 3 EIA Approach and Topic Areas</b>   |   |
| <p>Paragraph 2.46</p> <p>The potential impacts of these works (overhead line electrification) should be described and assessed in the ES.</p>   | <p>There are no plans to electrify the railway, so no description or assessment has been provided in the ES.</p> <p><del>Provision for electrification has been provided for new structures (Trinity Primary School Bridge) in compliance with current Network Rail policy.</del></p> <p>There has been no assessment of the need for modifications to existing structures (such as the four tunnels and bridges) to accommodate overhead line electrification.</p>   |
| <p>Statutory Body Response – Portishead Town Council</p> <p>The Town Council raised the following concerns and questions:</p> <ul style="list-style-type: none"> <li>• Substantial on street parking will be lost in the vicinity of the Healthy Centre on Harbour Road when the scheme goes ahead. Can parking provisions be made for visitors to the health centre?</li> <li>• To include provisions for cyclists using the trains.</li> <li>• Concern for the structure of the sloped footbridge (by Trinity school) for wheelchair users.</li> <li>• Arranging parking provisions for construction traffic to eliminate already congested on-street parking, particularly in The Vale.</li> <li>• Introduce a minibus around the Town linked to the train times.</li> </ul> <p>Displaced parking. Drivers wishing to avoid parking charges park in local residential roads for free causing a nuisance.</p> | <p>The ES Chapter 16: Transport, Access and Non-Motorised (DCO Document Reference 6.19) users covers matters relating to street parking</p> <p>The provisions for cyclists using the trains is a matter for the train operating company and outside the scope of the DCO Scheme.</p> <p>The <del>accessibility of Trinity Primary School Bridge is considered in Appendix 14.1 Equality Impact Assessment (DCO Document Reference 6.25).</del> <u>was designed for mobility impaired users with low gradient ramps. However, the Secretary of State has advised that he is minded to remove the bridge, which will result in the severance of the permissive at-grade crossing of the railway. The severance would be mitigated through the provision of new footpaths along the railway corridor to Portishead station.</u></p> <p>Minibus services lie outside the scope of the DCO Scheme.</p> |

## 3.17 ES, Appendix 5.2 Changes in Scheme Design

- 3.17.1 The ES Appendix 5.2 [APP-130] Table 1 Changes in Scheme Design and Implications for the Scoping Opinion is modified to explain the proposed change in design to remove Trinity Primary School Bridge post DCO Examination.



**Table 1: Changes in Scheme Design and Implications for the Scoping Opinion**

| <b>DCO Scheme Design Assumed in the Scoping Report</b>  | <b>Changes in Scheme Design between scoping and PEI</b>  | <b>Changes in DCO Scheme between PEI and the ES</b>   | <b>Implications for the Scoping Opinion</b>   |
|---|--|---|---|
| <b>Portishead Station, Car Parks and Highway Modifications</b>  |  |   |   |
| <p>The railway station to comprise a canopy structure sheltering the station building and part of the single platform.</p> <p>Platform to be 100 metres long for passive provision of a four-car train.</p> <p>Highway modifications to relocate Quays Avenue to the west of the new station.</p> <p>Two new car parks for 200 spaces.</p> <p>A combined pedestrian and cycle path linked to the town centre along the rest of the disused railway.</p> | <p>The station to comprise a canopy structure sheltering the station building and part of the platform. The station to include ticketing, waiting area, and public toilets.</p> <p>No material change to the highway modifications. Development of design details such as bus waiting facilities, taxis, and disabled parking.</p> <p>Platform to be 130 metres long for provision of a five car train. CCTV, public announcement system, a communications mast and lighting on the platform.</p> <p>Two new car parks, one north of the station and one to the west with provision for 250 parking spaces.</p> <p>A combined pedestrian and cycle link to the town centre</p> | <p>Work No. 2 and 2A Diversion of Quays Avenue and highway drainage to The Cut.</p> <p>Work No. 3 a pedestrian and cycle path from Harbour Road to Portbury Ditch (“the boulevard” feature).</p> <p>Work No. 4 new car park B south of Harbour Road and east of Portbury Ditch with 200 spaces plus 6 disabled spaces.</p> <p>Work No. 5 a new railway station at Portishead.</p> <p>Work No. 6 a new permanent car park A between Portishead Station and Phoenix Way with 54 spaces plus 13 disabled spaces.</p> | <p>The design for Portishead Station and surrounds is largely as described.</p> <p>Provision has been made for a five-car train in the future, which would be more efficient at delivering increased services compared with re-designing the scheme for a half hourly service.</p> <p>The operational noise assessment assumes five carriage trains in the future year assessment scenario.</p> <p>The description of the DCO Scheme with the design iterations remains materially the same as the proposed development that was the subject of the Scoping Opinion.</p> <p><b><u>Post-Examination Changes in the DCO Scheme</u></b></p> <p><u>The Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme. There are no implications for the Scoping Opinion. The implications for the assessment of likely significant</u></p> |

**Table 1: Changes in Scheme Design and Implications for the Scoping Opinion**

| <b>DCO Scheme Design Assumed in the Scoping Report</b>  | <b>Changes in Scheme Design between scoping and PEI</b>  | <b>Changes in DCO Scheme between PEI and the ES</b>   | <b>Implications for the Scoping Opinion</b>   |
|---|--|---|---|
|   | <p>along the disused railway (“the boulevard” feature).<br/>                     New footpaths linking the station along both the north and south side of the railway to a new bridge near Trinity School.<br/>                     Highway and car park drainage to The Cut and Portbury Ditch.</p>   |   | <p><u>environmental effects are provided in this Addendum to the ES.</u></p>  |
| <b>Trinity Primary School Bridge and associated footpaths</b>   |  |   |   |
| <p>A new bridge over the railway to replace the current permissive crossing over the disused railway line.<br/>                     Zig-zap ramp on both sides of the bridge.<br/>                     Steel painted in a neutral colour.<br/>                     Structure height about 6.2 metres.</p> | <p>A new combined pedestrian and cycle bridge and links to the existing path network.<br/>                     Zig zag ramp (gradient 1:15) to be accessible for disabled users.<br/>                     Solid parapets 1.8 metres high over the railway and open parapets and handrails on the staircases and ramps.<br/>                     Steel painted in a neutral colour.</p> | <p>Works Nos. 7, 7A-7E a new foot and cycle bridge over the railway, new paths to connect with the existing network, a temporary construction compound off Tansy Lane and a temporary path over the railway during construction of the new bridge.<br/> <u>Material design changes</u><br/>                     To reduce land-take from open space the land contouring and landscaping</p> | <p>The Trinity Primary School Bridge is a large structure in a residential area. The modifications to the design do not affect the need for a landscape and visual impact assessment as required by the Scoping Opinion.<br/> <u>Post-Examination Changes in the DCO Scheme</u><br/> <u>The Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme, removing Works Nos. 7, 7A-7E. There are no implications for the Scoping Opinion. The implications for the</u></p> |

**Table 1: Changes in Scheme Design and Implications for the Scoping Opinion**

| <b>DCO Scheme Design Assumed in the Scoping Report</b> | <b>Changes in Scheme Design between scoping and PEI</b>   | <b>Changes in DCO Scheme between PEI and the ES</b> | <b>Implications for the Scoping Opinion</b>  |
|--|---|---|--|
|  | Structure height about 8.5 metres over the railway to allow for future overhead line electricity gauge clearance. | works have been scaled back.                        | <u>assessment of likely significant effects are provided in this Addendum to the ES.</u> |

## 3.18 ES, Appendix 7.1 Construction Dust Assessment

3.18.1 The ES Appendix 7.1 [REP6-112] paragraph 3.1.4, modify the second bullet to remove reference to construction of Trinity Primary School Bridge.

“3.1.4 The Associated Development works comprise:

- a new railway station at Portishead;
- car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue ~~and a new pedestrian and cycle bridge near Trinity Primary School;~~”

3.18.2 Modify paragraph 3.2.2 to remove reference to the construction of Trinity Primary School Bridge.

“3.2.2 Early re-alignment of Quays Avenue would release land for a temporary construction compound within what will become the car park in front of the new station and provide access to the railway corridor to re-build the railway ~~and new footpaths either side of the railway corridor—the new pedestrian/cycle crossing near Trinity Primary School, and the new station~~”.

3.18.3 Modify paragraph 3.2.3, 2<sup>nd</sup> bullet, to remove reference to the construction of Trinity Primary School Bridge.

- “**Earthworks:** The Portishead station construction site surface, including Quays Avenue and Phoenix Way roundabout and the associated construction compounds, is around 30,000 m<sup>2</sup>. The surrounding soil type is assumed to be moderately dusty and excavation activities expected in the carpark ~~and Trinity Primary School Bridge~~ construction plans include the use of up to two 25 t excavators and two 20t bulldozers<sup>4</sup>. In addition, 5-10 heavy earth moving vehicles are assumed to be active during construction activities. The areas outside the protected vegetation zones will be de-vegetated to facilitate the works. Considering there is no available information relating to the total material, and following a conservative approach, the magnitude of dust emissions from earthworks is considered to be **large**.”

3.18.4 The edits do not change the assessment.

## 3.19 ES, Appendix 9.12 Habitats Regulations Assessment

3.19.1 The ES Appendix 9.12 [REP6-120] Habitats Regulations Assessment [REP6-063] is amended to address the removal of Trinity Primary School Bridge and the associated adverse effects of construction noise on bird life associated with European sites.

3.19.2 Paragraph 3.2.8 is removed.

“3.2.8 ~~A new combined pedestrian and cycle bridge and associated paths are proposed to link residential areas in Portishead between the south~~

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<sup>4</sup> As reported in the Construction Plan Categorised List

~~and north sides of the railway in the vicinity of Trinity Primary School.”~~  
Paragraph not used

3.19.3 Paragraph 3.2.9 is modified as follows:

“3.2.9 Temporary construction compounds are proposed at the sites of the two new car parks to construct the station and railway and on land between Tansy Lane and the railway ~~to construct Trinity Primary School Bridge.”~~

3.19.4 Paragraph 5.3.9 is modified to remove the first bullet as follows:

“5.3.9 The anticipated works which could cause impacts on qualifying features at Portbury Wharf Nature Reserve are outlined below:

- ~~• Construction of the Trinity Primary School Bridge, which involves percussive piling, approximately 500 m from the pools and lagoons”~~

3.19.5 Paragraph 6.3.14 is modified as follows:

“6.3.14 The activities most likely to cause disturbance of birds using the pools and lagoons, due to noise levels and distance are the ballasting, tamping and lining works required for construction of the line (650 m from the pools and lagoons) ~~and percussive (hammer) piling for approximately two weeks for the construction of the Trinity Primary School Bridge (500 m from the pools and lagoons)~~. The predicted combined (baseline and construction) noise at the pools and lagoons is 49 dB  $L_{Aeq,12h}$  from Ballasting/Tamping/Lining works ~~and 49 dB  $L_{Aeq,12h}$  from percussive (hammer) piling works at Trinity Primary School Bridge~~ (Table 7.103 of ES Appendix 13.7, DCO Document Reference 6.25). ~~These are~~ This is lower than levels found to cause disturbance of wetland birds (Cutts *et al.*, 2013, see paragraph 5.3.15 above) and therefore no impacts on SPA and Ramsar-qualifying birds are anticipated.”

3.19.6 Paragraph 8.4.55 1<sup>st</sup> bullet is modified as follows:

“8.4.55 The landscape proposals are summarised as follows:

- ~~• South of Trinity Primary School Bridge~~ Permissive crossing of the railway line by Trinity Primary School – woodland planting to the north and vegetation retained south of the line;”

3.19.7 Evidence supporting the screening assessment in Matrix D3 (Severn Estuary SPA) of Annex D is modified as follows:

a) Pill Marshes and the adjacent intertidal section of the River Severn are currently subject to a range of noise and visual disturbance, including the freight rail traffic, M5 traffic and dog walkers. The noise model indicates an existing noise level at the SPA at Pill of 59 dB  $L_{Aeq,16h}$  (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). Construction activities will generate additional noise (Table 6.4 of this HRA) but given the low numbers of birds and existing noise levels and visual disturbance, there is not predicted to be LSE on SPA birds. At Portbury Wharf Nature Reserve, the SPA qualifying bird species shelduck and gadwall were recorded using the wetland areas in the northern part of the reserve which is approximately 650 m north of the DCO Scheme. The existing noise level at the most representative survey location for the pools/lagoons is 46 dB  $L_{Aeq,16h}$  (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). The

construction activities most likely to cause disturbance of birds at the pools is considered in paragraph 6.3.13 of this HRA. The predicted noise at the pools/lagoons where SPA/Ramsar birds are most likely to occur considering both the existing and predicted noise levels is 49 dB LAeq,12h from Ballasting/Tamping/Lining works and 49 dB LAeq,12h from percussive (hammer) piling works at Trinity Primary School Bridge (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). This is lower than levels found to cause disturbance of wetland birds (paragraph 5.3.15 of this HRA) and therefore no LSE.

3.19.8 Evidence supporting the screening assessment in Matrix D4 (Severn Estuary Ramsar) of Annex D is modified as follows:

f) Pill Marshes and the adjacent intertidal section of the River Severn are currently subject to a range of noise and visual disturbance, including the freight rail traffic, M5 traffic and dog walkers. The noise model indicates an existing noise level at the Ramsar boundary at Pill 59 dB LAeq,16h (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). Construction activities will generate additional noise (Table 6.4 of this HRA), but given the low numbers of birds and existing noise levels and visual disturbance, there is not predicted to be a LSE on Ramsar birds. At Portbury Wharf Nature Reserve, the Ramsar species shelduck, gadwall, teal and pintail were recorded using the wetland areas in the northern part of the reserve which is approximately 650 m north of the DCO Scheme. The existing noise level at the most representative survey location for the pools/lagoons is 46 dB LAeq,16h (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). The construction activities most likely to cause disturbance of birds at the pools is considered in paragraph 6.3.13 of this HRA. The predicted noise at the pools/lagoons where SPA/Ramsar birds are most likely to occur considering both the existing and predicted noise levels is 49 dB LAeq,12h from Ballasting/Tamping/Lining works and 49 dB LAeq,12h from percussive (hammer) piling works at Trinity Primary School Bridge (Table 7.103 of ES Appendix 13.7 (DCO Document Reference 6.25)). This is lower than levels found to cause disturbance of wetland birds (paragraph 5.3.15 of this HRA) and therefore no LSE.

## 3.20 ES, Appendix 11.3 Visual Impact Assessment

3.20.1 The ES Appendix 11.3 Visual Impact Assessment [REP6-123] is amended as set out below.

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No.                     | Location                                      | Existing View   | Construction Impacts   | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-------------------------|---|---|--|---|--|
| <b>HIGH SENSITIVITY</b> |   |   |  |   |  |
| 1                       | Footpath backing onto Wyndham Way Retail Park | Views generally looking northeast/southwest along the footpath with views east towards the disused line screened by Sainsburys and to some extent by the vegetation on the site of the proposed main car park | Part of the path would need to be closed during construction to allow for the improved connection between the proposed main station car park, over the rhine and west towards the town centre. More open views across the site of the main car park with the loss of the vegetation and longer views down the site to the station building construction and compound that would serve the construction of the new station <del>and Trinity Primary School Bridge</del> . Piling rigs and cranes would be seen in the middle distance.<br>Magnitude: major adverse<br>Significance: large adverse | More open views generally with a long view east over the main car park with its new trees and lighting towards the station building, consisting of a canopy structure extending over a new station building and the buffer stop enclosure wall. The new station design includes an external GSM-R mast and communications mast. <del>In the middle distance the upper part of the new Trinity Primary School Bridge will be visible crossing the railway behind the station.</del><br><br>Magnitude: moderate adverse | More open views generally with a long view east over the main car park towards the station building, with the new trees alongside the footway/cycleway on the south side of the car park forming a new landscape feature. This would also partially screen views towards the station building <del>and Trinity Primary School Bridge beyond</del> .<br><br>Magnitude: moderate adverse<br><br>Significance: moderate adverse |



**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location      | Existing View  | Construction Impacts   | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|---------------|--|--|---|--|
| 2   | The Vale Park | Views north to the line mostly screened by trees and other vegetation around the balancing pond. Some glimpsed views in the winter months. | Glimpsed view of construction activity associated with the construction of the line and <del>new Trinity Primary School Bridge</del> , which is well screened by vegetation. Construction features include heavy machinery, temporary fencing and lighting and piling rigs <del>cranes visible over the trees for a limited during the construction of the bridge</del> . Partial views through vegetation in winter months and screened by vegetation during the summer months.<br>Magnitude: minor adverse<br>Significance: slight adverse | Significance: moderate adverse<br><br>Glimpsed view of the reconstructed railway line, <del>the Trinity Primary School Bridge</del> and passenger trains, which are well screened by vegetation. Partial views through vegetation in winter months, likely to be to the moving trains <del>and the top of the bridge and</del> screened by vegetation during the summer months.<br>Magnitude: minor adverse<br>Significance: slight adverse | Glimpsed view of the reconstructed railway line, its associated fencing and passenger trains, <del>and the Trinity Primary School Bridge</del> , which are well screened by existing vegetation. Partial views through vegetation in winter months and dense screening during the summer months.<br>Magnitude: minor adverse<br>Significance: slight adverse |



**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                   | Existing View   | Construction Impacts   | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|----------------------------|---|--|---|--|
| 3a  | Peartree Field, Portishead | Residential receptors on the stretch of Peartree Field that runs along the boundary of the disused line ( <u>Nos. 1 to 11, 6</u> properties affected), are orientated north with upper storey views over intervening vegetation to the disused line, Wessex Water pumping station, and properties on Tansy Lane beyond. | During construction there will be open upper storey views of construction activities on the station area compound and of the station construction with piling rigs and cranes, <del>and including construction of Trinity Primary School Bridge more oblique in the view.</del> Some screening at ground floor from existing retained vegetation but with views through.<br>Magnitude: major adverse<br>Significance: very large adverse | Though some of the existing vegetation to the north will be retained, the introduction of the new station directly opposite <del>and the Trinity Primary School Bridge</del> will form a new feature in upper storey views. Views to proposed lighting columns, will further detract from views north, especially at night. Glimpsed views towards the station building and roof tops of stationary/moving trains.<br><br>Magnitude: major adverse<br><br>Significance: large adverse | Upper storey views to the Station <del>and Trinity Primary School Bridge</del> , with the lighting columns, associated fencing, and passenger trains. <del>will be</del> Some news towards pedestrians on the new path partially screened by existing vegetation.<br><br>Magnitude: major adverse<br><br>Significance: large adverse |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                                   | Existing View   | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years  |
|-----|--|---|---|---|---|
| 3b  | Galingale Way / Peartree Field, Portishead | Pocket of residential receptors accessed from the south by Galingale Way and to the west by Peartree Field afford oblique upper storey views over intervening vegetation to the disused line and beyond to Houses on Tansy Lane with glimpsed / filtered winter views of Trinity Anglican Methodist Primary school. | <p>Whilst some vegetation will be retained during construction, upper storey oblique views will be possible of the <del>new bridge</del> and station construction and associated works, including fencing / temporary lighting. Views will be disrupted by the introduction of tall construction machinery such as piling rigs and cranes, with some glimpsed views of construction activities north west towards the highway works and compound at Portishead Station.</p> <p>Magnitude: major adverse<br/>Significance: large adverse</p> | <p>There will be filtered summer and winter views <del>North East to from the newly constructed Trinity Primary School Bridge, in particular the ramp and steps of the bridge which are located approximately 7—8 m from the boundary of the nearest residential receptor. Operational lighting on the bridge will be a detractor in views</del> <u>occasional upper storey windows of occasional glimpses</u> views of passing trains <del>will be possible through gaps in the ramp and existing vegetation.</del></p> <p>Magnitude: <del>major adverse</del> <u>moderate adverse</u></p> | <p>There will be filtered summer and winter views <del>North East to from the newly constructed Trinity Primary School Bridge, in particular the ramp and steps of the bridge which are located approximately 7—8 m from the boundary of the nearest residential receptor. Operational lighting on the bridge will be a detractor in views.</del> <u>occasional upper storey windows of occasional glimpses</u> views of passing trains <del>will be possible through gaps in the ramp and existing vegetation.</del></p> <p>Magnitude: moderate adverse<br/>Significance: <del>large adverse</del> <u>moderate adverse</u></p> |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                         | Existing View  | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|-----|----------------------------------|--|---|---|--|
| 3c  | Holmlea\Tydeman Road, Portishead | Houses on the stretch of Holmlea and Tydeman Road that back onto the boundary of the disused railway with filtered (by existing vegetation) upper storey winter views into the disused railway line immediately north and towards the Trinity Anglican Methodist Primary School / other residential properties to the north and northeast. | Filtered upper storey winter views of activity associated with the construction of the line, which is well screened by vegetation. Construction features include heavy machinery fencing and temporary lighting. <del>More oblique views towards the construction of Trinity Primary School Bridge.</del> No. 6 Holmlea faces towards the <u>bridge railway</u> construction in close proximity with views partially filtered to some degree by existing vegetation.<br>Magnitude: major adverse<br>Significance: large adverse | <p data-bbox="1368 331 1637 432">Significance: <del>large</del> <u>adverse moderate</u> <u>adverse</u></p> <p data-bbox="1368 464 1688 1238"><del>Filtered upper storey oblique views to Trinity Primary School Bridge to the north west, with its associated lighting at night detracting from existing views.</del> Upper storey filtered views of the reconstructed railway line, its associated fencing and passing trains. No. 6 Holmlea faces towards the <u>bridge railway</u> with views filtered to some degree by existing vegetation but with views through to the lighting.</p> <p data-bbox="1368 1254 1621 1326">Magnitude: minor adverse</p> | <p data-bbox="1722 464 2078 1126"><del>Filtered upper storey oblique views to Trinity Primary School Bridge to the north west, with its associated lighting at night detracting from existing views.</del> Upper storey filtered views of the reconstructed railway line, its associated fencing and passing trains. No. 6 Holmlea faces towards the <u>bridge railway</u> with views filtered to some degree by existing vegetation but with views through to the lighting.</p> <p data-bbox="1722 1142 1973 1214">Magnitude: minor adverse</p> <p data-bbox="1722 1230 1995 1302">Significance: slight adverse</p> |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                                      | Existing View  | Construction Impacts  | Operational Impacts after 1 year   | Operational Impacts after 15 years  |
|-----|---|--|---|--|---|
| 5   | Residential Buildings, Tansy Lane, Portishead | View south from residential properties across front gardens and open grassland towards railway line and associated vegetation. | Direct view, in close proximity, of construction activity associated with the construction of railway line <u>and</u> station <u>and new Trinity Primary School Bridge</u> . View of construction features such as fencing and temporary lighting, heavy machinery, piling rigs, <u>and crane and lay down area for bridge components</u> . In addition, vegetation removal will contribute to the change in view by opening it up.<br>Magnitude: major adverse<br>Significance: very large adverse | Significance: slight adverse<br><del>(No 6 – major adverse/large adverse)</del><br>Direct view, in close proximity, of the <del>new Trinity Primary School Bridge</del> , as well as of the reconstructed railway line, its associated fencing and passenger trains. Oblique views to station and platform. The proposed tree planting would not offer any screening at this stage.<br>Magnitude: major adverse<br>Significance: large adverse | <del>(No 6 – major adverse/large adverse)</del><br>Direct view, in close proximity, of the <del>new Trinity Primary School Bridge</del> , as well as of the reconstructed railway line, its associated fencing and passenger trains. Oblique views to station and platform. Some limited screening provided by proposed trees.<br>Magnitude: <del>major</del> <u>moderate</u> adverse<br>Significance: <del>large</del> <u>moderate</u> adverse |

**MEDIUM SENSITIVITY**

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No. | Location                           | Existing View  | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years  |
|-----|------------------------------------|--|---|---|---|
| 45  | Commercial Buildings, Serbert Road | Views north from the back of the buildings towards the adjacent disused line and beyond to buildings along Harbour Road. | <p>View north and east towards the Quays Avenue compound to the north east, serving the construction of <del>Trinity Primary School Bridge</del> and the Portishead Station as well as the view of construction activity associated with the new highway layout. Views to the construction of the station main car park and station. View east of station construction features such as heavy machinery including piling rigs and cranes, associated temporary fencing and lighting, vegetation removal and construction traffic.</p> <p>Magnitude: major / moderate adverse</p> <p>Significance: large adverse</p> | <p>Whilst formal boulevard style planting is proposed to the north of the receptors, views to the proposed carpark will remain fairly open until the boulevard planting can establish and provide intermittent screening. Views further north and east include the associated highway works, the car parking, new Portishead Station building <del>and the Trinity Primary School Bridge more obliquely</del>. Additional features include proposed lighting columns in the car parks in addition to lighting on <del>Trinity Primary School Bridge</del> and Portishead station.</p> | <p>Views north and east towards the main car park and station, as well as vertical features such as lighting are only partially filtered by the formal boulevard tree planting due to proximity.</p> <p>Magnitude: moderate adverse</p> <p>Significance: moderate adverse</p> |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| No.                    | Location  | Existing View  | Construction Impacts  | Operational Impacts after 1 year  | Operational Impacts after 15 years   |
|------------------------|---|--|---|---|--|
| 46                     | Trinity Anglican Methodist Primary School, Marjoram Way | Open views south from the grounds to the railway line. | <p>Open view of construction activity associated with the construction of the line and new Trinity Primary School Bridge. Construction features include heavy earth moving machinery, temporary fencing and lighting, piling rigs and cranes used to lift the bridge into place.</p> <p>Magnitude: <del>major adverse</del> <u>moderate adverse</u></p> <p>Significance: <del>large adverse</del> <u>moderate adverse</u></p> | <p>Magnitude: moderate adverse</p> <p>Significance: moderate adverse</p> <p>Open view of the reconstructed railway line, Trinity Primary School Bridge, its associated fencing and passing passenger trains, with view west to the station building.</p> <p>Magnitude: <del>major adverse</del> <u>moderate adverse</u></p> <p>Significance: moderate adverse</p> | <p><del>As proposed planting establishes to the south west of the School, views to Trinity Primary School Bridge will become partially screened. Whilst Views of occasional passenger trains will become filtered by new planting to the southern boundary of the School, new features such as lighting on the bridge, and proposed fencing, will be visible.</del></p> <p>Magnitude: moderate adverse</p> <p>Significance: moderate adverse</p> |
| <b>LOW SENSITIVITY</b> |   |  |   |   |  |

**Table 1: Summary of Visual Receptors and Views along the Portishead to Pill Section**

| <b>No.</b> | <b>Location</b> | <b>Existing View</b>   | <b>Construction Impacts</b>  | <b>Operational Impacts after 1 year</b>  | <b>Operational Impacts after 15 years</b>  |
|------------|-----------------|--|--|--|--|
| 52         | Harbour Road    | View south towards the line partially screened by existing vegetation. | <p>Direct open views to the highways on Harbour Road with traffic management and works in close proximity.</p> <p>View south towards the construction of the station main car park the station construction and Trinity Primary School Bridge beyond, as well as vegetation removal to the east.</p> <p>Magnitude: major adverse</p> <p>Significance: moderate adverse</p> | <p>View of the new highway layout. View south towards the station main car park and the station as well as features such as lighting and new planting. Planting is not yet dense enough to provide substantial screening.</p> <p>Magnitude: moderate adverse</p> <p>Significance: slight adverse</p> | <p>View south towards the station main car park and the station and vegetation which is mature and established, providing screening in summer months and open view in winter months.</p> <p>Magnitude: moderate adverse</p> <p>Significance: neutral adverse</p> |

## 3.21 ES, Appendix 11.4 Photomontages Technical Report

- 3.21.1 This section describes the changes to the photomontages presented in the Environmental Statement Appendix 11.4, Photomontages Technical Report [REP6-123] as a result of the removal of Trinity Bridge. New photomontages have not been prepared.
- 3.21.2 Photomontage 1: The existing trees behind the existing hedge in the foreground would still be removed to allow for the construction of the station and footpath thereby opening up the view to the buildings beyond on the north side of the railway. To the right of the photomontage, the top of the bridge rail handrail would no longer be within the view.
- 3.21.3 Photomontage 2: The bridge would be removed from the view as well as the proposed individual trees. The view would show the existing grass foreground with the proposed path running through it. The proposed fence would be partially screened by some of the existing vegetation where it is possible to retain it. New planting would not be visible in the short term but would establish to provide visual screening of the proposed fence, track and passing trains once it has become established, much as the existing vegetation does in the existing view. New scattered trees would provide high level screening in the longer term. The houses on the southern side of the track would still be exposed due to the loss of existing vegetation.
- 3.21.4 Photomontage 3: No change
- 3.21.5 Photomontage 4: No change
- 3.21.6 Photomontage 5: The bridge would be removed from the view as well as the proposed individual trees between camera position and bridge. The view would show the existing path and grass in the foreground with the proposed fence behind. The fence would be partially screened by some of the existing vegetation where it is possible to retain it. New planting would provide visual screening of the proposed fence, track and passing trains once it has become established. New scattered trees would provide high level screening in the longer term.
- 3.21.7 Photomontage 6: The proposed bridge would be removed from the view with the proposed fence line visible in the gap between the existing vegetation in the view.

## 3.22 ES, Appendix 13.7 Construction Plant List

- 3.22.1 The ES Appendix 13.7 Construction Plant List [APP-153] is revised to remove calculations for the construction of Trinity Primary School Bridge, which will not now be built.
- 3.22.2 Table 7.24 *Trinity Primary School Bridge – Foundations*, Table 7.25 *Trinity Primary School Bridge – Piling* and Table 7.26 *Trinity Primary School Bridge – Erection* are deleted, as the bridge will not now be constructed.
- 3.22.3 Table 7.107 is modified to remove input parameters for calculations of vibration for percussion piling for Trinity Primary School Bridge, which would not now be constructed.



- 3.22.4 Table 7.103 is modified to remove the prediction noise levels at the Portbury Wharf Nature Reserve due to percussion piling at Trinity Primary School Bridge.

## 3.23 ES, Appendix 14.1 Equality Impact Assessment

- 3.23.1 The ES Appendix 14.2 Equality Impact Assessment [APP-154] is revised to remove the Trinity Primary School Bridge and assess the impact of the permanent closure of the permissive at-grade crossing over the railway corridor on protected characteristic groups.
- 3.23.2 Table 3.1 is amended to remove the reference to Trinity Primary School Bridge.

**Table 3.1. Location of Lower Super Output Areas within the Study Area**

| LSOA code                                       | Scheme component   | Area                  |
|---|--|-----------------------|
| <b>Local Study Area</b>                         |  |                       |
| North Somerset<br>001G (part),<br>003D and 003E | Proposed Portishead Station, <u>and</u><br>Portishead construction compound <u>and</u><br><del>proposed bridge to Trinity Primary<br/>School</del> | Central<br>Portishead |

- 3.23.3 Paragraph 4.1.21 is modified to remove reference to the Trinity Primary School Bridge.
- “4.1.21 The Trinity Primary School is located off Marjoram Way ~~near the proposed Bridge~~ and a playground is located on The Vale (south of railway line) in Portishead. Busy Bees Nursery is located on Serbert Road in Portishead (south of the proposed station).”
- 3.23.4 Paragraph 4.4.15 is modified to remove reference to the proposed Trinity Primary School Bridge and mention the new footpaths along the railway. The heading to the subsection is also renamed to “Portishead Trinity Primary School Bridge Crossing”
- “4.4.15 The re-opened railway line will sever this footpath and will be replaced with new foot and cycle paths along the southern and northern boundaries of the railway corridor around Portishead Station ~~a new foot and cycle bridge.~~”
- 3.23.5 Table 5.1 *Summary of consultation responses* is modified to explain that while the DCO Application included Trinity Primary School Bridge, this was removed from the DCO Scheme post-Examination.

**Table 5.1: Summary of consultation responses**

| Organisation and date  | Summary of response                                | Consideration within ES                                 |
|--|--|---|
| <b>Informal micro-consultation on DCO Scheme Boundary (22 June to 3 August 2015)</b> |  |   |
| North Somerset<br>Local Access Forum   | A bridge between Galingale Way and Trinity Primary | <u>Proposals for Trinity Primary School Bridge were</u> |

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b>   | <b>Summary of response</b>   | <b>Consideration within ES</b>  |
|--|--|---|
|  | School preferred over footpath only option. The length of diversion required for the footpath (c600 m) only option unacceptable for young children. The bridge should also be suitable for cyclists. | <u>presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u>   |
| <b><i>Formal Stage 1 Consultation (22 June to 3 August 2015)</i></b> |  |   |
| Transport Focus  | The proposals to replace the current unofficial footpath over the disused track may concern some in the local community and careful consideration of this proposal is essential                      | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out proposals for Trinity Primary School Bridge. The bridge has been designed with low gradient ramps for accessibility and connects into the existing network of paths. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u> |
| British Horse Society  | A bridge between Galingale Way and Trinity Primary School preferred over footpath only option. The length of diversion required for the footpath (c600 m) only                                       | <u>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7)</u>  |

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b> | <b>Summary of response</b>  | <b>Consideration within ES</b>  |
|------------------------------|---|---|
|                              | option unacceptable for young children. The bridge should also be suitable for cyclists.  | <del>sets out the proposals for the bridge which will be suitable for pedestrians and cyclists. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</del>  |
| Sustrans                     | The alignment of the ramps on the proposed bridge between Marjoram Way and Galingale Way adds significantly to the distance for walkers and cyclists. Ramp alignments which run north / south would avoid this. As considerable spoil could be generated by the development, perhaps this could be used to build earthwork ramps. | <del>Proposals for Trinity Primary School Bridge were presented in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) sets out proposals for Trinity Primary School Bridge. The bridge has been designed with a ramp as well as stairs to prevent discrimination against people with reduced mobility and is compliant with the Equality Act 2010. The positioning of ramps north / south (rather than east / west along the railway corridor) would require additional permanent land take from "open space" within the residential area which would be more visually intrusive and would in turn require the Council to provide exchange land for the loss of open space. The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to</del> |

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b>                                       | <b>Summary of response</b>   | <b>Consideration within ES</b>  |
|--|--|---|
| Public   | Concerns regarding pedestrian cycling infrastructure within the wider area and opportunities to enhance infrastructure within the general areas, Quays Avenue, Tansy Lane, Galingale Way, Conference Avenue and on routes to Pill. | <p><del>remove Trinity Primary School Bridge from the DCO Scheme.</del></p> <p>Sections 16.4 and 16.6 of Chapter 16 Transport, Access and Non-Motorised Users (DCO Document Reference 6.19) outline the existing transport situation and the impacts of the DCO Scheme on the area surrounding the stations. Table 16.8 in Chapter 16 outlines the infrastructure measures to be provided as part of the DCO Scheme including provisions for cyclists/pedestrians. Provision of bicycle parking facilities at the stations is discussed in section 16.7 <del>and a new bridge will connect Tansy Lane to Galingale Way (Section 3.6 of the Transport Assessment).</del></p> |
| <b>Stage 2 Formal Consultation (23 October to 4 December 2017)</b> |  |   |
| General public   | Trinity Primary School Bridge. The bridge is required as the walk around the station is too long for people of reduced mobility / elderly / pushchairs, etc.   | The DCO Scheme includes <del>sd</del> a bridge for pedestrians and cyclists to replace the current crossing over the disused railway. This is described in Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7) and on the Plan S051 Trinity Footbridge Proposed General Arrangement (Sections) in DCO Document Reference 2.8.3.  |
| 3.23.6   | The subheading and paragraph 6.1.16 are modified to remove reference to Trinity Primary School Bridge and introduce the new footpath connections to Portishead station.  |   |

~~“Trinity Primary School Bridge~~

~~“6.1.16 A new cycle and pedestrian bridge will be built over the railway. The bridge has been designed with a ramp as well as stairs to prevent discrimination against people with reduced mobility and is compliant with the Equality Act 2010. The gradient is 1:15 and is 2.5 m wide. There are also landing and turning areas on the ramps and the stairs. The existing permissive at-grade crossing over the railway corridor will be closed permanently and pedestrians and cyclists will be able to use a short diversion provided by new footpaths on the south and north sides of the railway corridor via Portishead Station.”~~

- 3.23.7 Paragraph 7.3.2 is modified to remove reference to the Trinity Primary School Bridge and also the Ashton Vale ramp which was removed from the DCO Scheme during the examination.

~~“7.3.2 The DCO Scheme provides benefits for most of the protected characteristic groups by providing a safe and reliable means of transport. The DCO Scheme would lead to positive effects for age and disability groups resulting from the design of the urban realm around Portishead to facilitate pedestrian movements, the step-free access to the station, and the low gradient of the ramps for Trinity Primary School Bridge, the ramp at Pill station, and the pedestrian and cycle ramp at Ashton Vale.~~

- 3.23.8 Tables 7.1 and 7.2 are modified to show the revised assessment of the closure of the permissive crossing during construction and operation.

**Table 7.1: Initial Assessment of the Construction Impacts on the Protected Characteristic Group**

| Project component  | Age  | Disability   | Gender                | Religion/belief        | Gender reassignment / sexual orientation |
|--|--|--|-----------------------|------------------------|--|
| Trinity Primary School Bridge Severance of the <u>permissive at-grade crossing</u> | During construction of the bridge, a temporary crossing will be provided, which may be closed intermittently. During these occasions <u>The permissive crossing will be closed and diversions</u> will route pedestrians and cyclists westwards around the station site and back towards Trinity School (see DCO Document Reference 2.34 Diversion Route for Pedestrians and Cyclists). This may particularly affect school children attending the Trinity Primary School due to increased walking distances and journey times. This is assessed to have a <u>permanent short-term, intermittent, minor negative</u> | People with reduced mobility, including those on wheelchairs/mobility cars would also experience longer routes between the north and south side of the railway line during the intermittent closures <u>following the closure of the temporary crossing. This is assessed to have a permanent minor negative effect on people with reduced mobility.</u> | No significant effect | No significant effect. | No significant effect.                   |

**Table 7.1: Initial Assessment of the Construction Impacts on the Protected Characteristic Group**

| Project component  | Age | Disability | Gender | Religion/belief | Gender reassignment / sexual orientation |
|--|-----|------------|--------|-----------------|--|
| <p>(differential) effect for the age protected characteristic group.<br/>                     NSDC and the contractors will liaise with the school before and during the construction works.<br/>                     School children should be informed about the construction proposals and taught about the risks and measures they should take to keep safe.</p> |     |            |        |                 |  |

**Table 7.2: Initial Assessment of the Operational Impacts on the Protected Characteristic Group**

| Project component   | Age  | Disability   | Gender                 | Religion/belief        | Pregnancy/maternity   | Sexual orientation/<br>Transgender |
|---|--|--|------------------------|------------------------|---|------------------------------------|
| Trinity Primary School Bridge<br><u>Severance of the permissive at-grade crossing</u> | The new pedestrian and cycle bridge incorporates a low gradient ramp in addition to stairs. It will provide a safe and accessible path for travel, although the route along the ramps is longer than the existing crossing at grade. A positive differential effect is predicted. <u>The closure of the crossing would result in a journey of an additional 450 m along footpaths around the station, which could make the journey more challenging for the elderly and very young. A minor negative (differential) effect is predicted.</u> | The new pedestrian and cycle bridge incorporates a long gradient ramp in addition to stairs. It will provide a safe and accessible path for travel, although the route along the ramps is longer than the existing crossing at grade. A positive differential effect is predicted. <u>The closure of the crossing would result in a journey of an additional 450 m along footpaths around the station, which could make the journey more challenging for mobility impaired. A minor negative (differential) effect is predicted.</u> | No significant effect. | No significant effect. | The bridge crossing will be designed with appropriate surfaces, suitable for parents and guardians travelling with buggies and pushchairs. <u>The closure of the crossing would result in a journey of an additional 450 m along footpaths around the station, which could make the journey more challenging for pregnant women and women with prams and pushchairs. A minor negative (differential) effect is predicted.</u> | No significant effect.             |



## 3.24 ES, Appendix 14.2 Health Impact Assessment

- 3.24.1 The ES, Appendix 14.2 Health Impact Assessment [APP-154] is revised to remove the Trinity Primary School Bridge and assess the impact of the permanent closure of the permissive at-grade crossing over the railway corridor on health determinands.
- 3.24.2 Table 2.1 in the HIA is revised to remove reference to Trinity Primary School Bridge.

**Table 3.1: Location of Lower Super Output Areas within the Study Area**

| LSOA code                                       | Scheme component  | Area                  |
|---|---|-----------------------|
| <b><i>The DCO Scheme</i></b>                    |   |                       |
| North Somerset<br>001G (part),<br>003D and 003E | Proposed Portishead Station, <del>and</del><br>Portishead construction compound <del>and</del><br><del>proposed bridge to Trinity Primary School.</del> | Central<br>Portishead |

- 3.24.3 Table 5.1 in the HIA is amended as shown below.

**Table 5.1: Summary of consultation responses**

| <b>Organisation and date</b> | <b>Summary of response</b>   | <b>Consideration within the ES</b>   |
|------------------------------|--|--|
| General public               | Trinity Primary School Bridge. The bridge is required as the walk around the station is too long for disabled / elderly / pushchairs, etc. | <p><del>The DCO Scheme includes a bridge to replace the informal crossing over the disused railway. This is described</del><br/> <u>Proposals for Trinity Primary School Bridge were presented</u> in the ES Chapter 4 Description of the Proposed Works (DCO Document Reference 6.7). <u>The need for the bridge and associated impacts were discussed during the DCO examination. Subsequently the Secretary of State has advised that he is minded to remove Trinity Primary School Bridge from the DCO Scheme.</u></p> |

## 3.24.4 Paragraph 6.1.7 is amended as follows:

“6.1.7 The changes in noise levels due to the operation of the DCO Scheme, including the train movements, idling in the stations, and the noise from the PA systems have been considered and mitigation proposed where required. The DCO Scheme includes a 200 m long 2 m high absorptive noise barrier in Portishead on the south side of the railway corridor extending east from Portishead station and Trinity Primary School Bridge to reduce the effects of operational noise on residents. The DCO Scheme will follow Network Rail standards on noise levels from public address systems to address noise impact at station platforms (and potentially to lineside neighbours).”

## 3.24.5 Paragraph 7.1.1 is modified to reflect closure of the permission crossing.

“7.1.1 The assessment of the effects of the DCO Scheme during construction is set out in Table 7.1 below. Effects that are significant in relation to the EIA Regulations 2017 are deemed to be moderate or larger, or as indicated in the text. The following significant effects have been identified:

- short term peak construction noise levels, especially when occurring at night,
- potential effect of vibration on humans in residential receptors within 15 m of line works due to vibratory compaction and within 20 m of the works at the Avon Road Bridge piling site,
- safety of pedestrians and cyclists using footpath / cycling diversions following closure of the permissive at-grade crossing during the construction of Trinity Primary School Bridge, and
- access to services and safety of pedestrians and cyclists in Pill during construction.”

## 3.24.6 In Table 7.1 the row relating to the construction of the Trinity Primary School Bridge is modified to remove reference to the high noise levels associated with piling and focussing on the severance caused by closure of the permissive crossing.

| <u>Site</u>   | <b>Health determinand altered</b> | <b>Significance of Effect</b>   |
|---|-----------------------------------|---|
| <u>Severance of the permissive crossing Trinity Primary School Bridge</u><br>Enabling works:<br>Close existing crossing, <u>and</u><br>vegetation | Noise and vibration               | <del>The SOAEL is predicted to be exceeded for the noisiest activity – piling works – during the day-time at the nearest properties about 25 m from the construction works. Piling noise would exceed the UAEL for night-time works.</del><br>Sensitivity = High<br>Magnitude = Negative<br>Significance = Short term significant adverse effect. |

| <u>Site</u>  | Health<br>determinand<br>altered    | Significance of Effect   |
|--|-------------------------------------|--|
| <p><del>clearance, utility diversions</del></p> <p><u>Construction of new footpaths to the south and north of the railway corridor</u></p> <p><del>Excavation for piling and foundation works</del></p> <p><del>Build up earth bank to north and allow to settle</del></p> |                                     | <p><del>The application of Best Practical Means would be expected to reduce the construction noise levels and assist with reducing the predicted temporary significant effects. The contractor will review the construction noise assessment, confirm proposed mitigation and residual noise, and seek a S61 agreement with the local authority. These measures would be sufficient to reduce the significance to no significant adverse effect.</del></p> <p><del>There are no significant adverse effects from vibration.</del></p>  |
| <p><del>Piling works</del></p> <p><del>Pre-fabricate bridge off site and deliver in sections by road or rail, assembly of bridge,</del></p> <p><del>Drainage works</del></p> <p><del>Lighting</del></p> <p><del>Finishing works.</del></p>                                 | <p><b>Crime and safety</b></p>      | <p>The presence of large numbers of pedestrians in proximity to the construction site along the railway corridor could pose health and safety risks, particularly for school children who may be less aware of the dangers. Construction traffic on the local highway may pose safety risk to school children who will access Trinity Primary School from various routes near the site. Diversion of pedestrians/cyclists to re-aligned Quays Avenue potentially increasing conflict between construction activities and pedestrians (including children) and cyclists.</p> <p>Mitigation = <del>During construction of the bridge, a temporary crossing will be provided, which may be closed intermittently. During these occasions diversions will route pedestrians and cyclists westwards around the station site and back towards Trinity School (see DCO Document Reference 2.34 Diversion Routes for Pedestrians and Cyclists Plans).</del></p> <p>The CEMP to include measures for pedestrian and cyclist safety, security of construction sites, and the CTMP.</p> <p>Sensitivity = High</p> <p>Magnitude = Moderate</p> <p>Significance = Short term, slight negative but not significant effect.</p> |
|  | <p><b>Access to green space</b></p> | <p><del>During construction, a temporary crossing will be provided close to the informal crossing over the railway, which may be</del></p>   |

| <u>Site</u> | <b>Health<br/>determinand<br/>altered</b> | <b>Significance of Effect</b>  |
|-------------|---|--|
|             |   | <p><del>closed intermittently. During these occasions</del> diversions will route pedestrians westwards around the station site and back towards Trinity School (see DCO Document Reference 2.34 Diversion Routes for Pedestrians and Cyclists Plans), which is a short distance to the Portbury Wharf Nature Reserve. Some groups, such as families with young children, the elderly and disabled may be reluctant to use <u>the diversions</u> due to the increased length of the route. Some residents along Galingale Way will experience increases in pedestrian movement along their quieter roads. The proposed works will alter current visual character of the area.</p> <p>Sensitivity = Low-high<br/>Magnitude = Minor negative<br/>Significance = Short term neutral to slight negative but not significant effect</p> |

3.24.7 Table 7.2 is modified to remove reference to the construction of Trinity Primary School Bridge and assess the severance caused by closure of the permissive crossing on health determinands during operation.

**Table 7.2: Summary of health impacts along the DCO Scheme during the operations phase**

| <b>Site</b>  | <b>Health<br/>determinand<br/>altered</b> | <b>Significance of the effect</b>   |
|--|---|---|
| <p><b>Portishead Station</b></p> <p>Hourly service<br/>0600 to 2300<br/>Monday to<br/>Saturday and 0900<br/>to 1900 on<br/>Sundays.</p> <p>Or, an hourly plus<br/>service with a train<br/>every 45 minutes<br/>during morning and<br/>afternoon peak;</p> <p>Traffic circulation;</p> | <p>Noise and<br/>vibration</p>            | <p>With mitigation the ambient noise levels for lineside neighbours will increase slightly, but with distance and intervening screening by properties, the noise increases fall to negligible levels. The health impact could range from annoyance to sleep disturbance, dependent on the age and health condition of receptors and the noise insulation properties of buildings.</p> <p>Mitigation = <u>A 200 m long 2 m high absorptive acoustic barrier on south side of the railway between the Portishead station and Trinity Primary School Bridge.</u></p> <p>Sensitivity = High</p> |

**Table 7.2: Summary of health impacts along the DCO Scheme during the operations phase**

| Site   | Health determinand altered  | Significance of the effect   |
|--|---|--|
| <p>Pedestrian movements to and from the station;<br/>New permanent lighting at the car parks, station, and platform.</p> |   | <p>Magnitude = Minor negative<br/>Significance = Slight adverse effect, not significant<br/>There are no significant adverse effects from vibration.</p>   |
| <p><b>Closure of permission crossing near Trinity Primary School Bridge</b></p>  | <p>Access to services<br/>Access to green space, open spaces, and physical activity</p> | <p>The new bridge will replace the existing crossing. Low gradient ramps will be provided in addition to stair cases for people with reduced mobility. The bridge permanent closure of the permissive crossing will result in a longer crossing due to the ramps on either side- <u>journey of about 450 m.</u><br/>Sensitivity = High<br/>Magnitude = Minor negative<br/>Significance = Neutral to slight negative but not significant effect</p> |
|  | <p>Townscape and quality of the local environment</p>                                   | <p>Although the proposals will permanently alter the landscape, the proposed landscaping near Tansy Lane would help to soft the appearance of the structure in time and therefore the proposals may have a slight negative impact on the sense of well-being for the immediate adjoining neighbours.<br/>Sensitivity = Low-medium<br/>Magnitude = Negligible<br/>Significance = Slight negative but not significant effect</p>                     |
|  | <p>Townscape and quality of the local environment</p>                                   | <p>Although the proposals will permanently alter the landscape, the proposed landscaping near Tansy Lane would help to soft the appearance of the structure in time and therefore the proposals may have a slight negative impact on the sense of well-being for the immediate adjoining neighbours.<br/>Sensitivity = Low-medium<br/>Magnitude = Negligible<br/>Significance = Slight negative but not significant effect</p>                     |

**Table 7.2: Summary of health impacts along the DCO Scheme during the operations phase**

| Site | Health<br>determinand<br>altered | Significance of the effect |
|------|----------------------------------|----------------------------|
|------|----------------------------------|----------------------------|

## 3.25 ES, Appendix 16.1 Transport Assessment

### Main Report

- 3.25.1 The Environmental Statement Appendix 16.1 Transport Assessment (part 1 of 18) [APP-155] is amended as set out below.
- 3.25.2 The List of Figures, should read and the figures deleted:  
 Figure 3-9: ~~Trinity Bridge General Arrangement (sheet 1)~~ Not used  
 Figure 3-10: ~~Trinity Bridge General Arrangement (sheet 2)~~ Not used  
 Figure 8-4: ~~Diversion at Trinity Bridge~~ Not used
- 3.25.3 The second bullet point in the description of ‘the Associated Development Works’ in the Glossary of terms should read:  
 “Car parks, pedestrian / cycle / highway infrastructure at Portishead including re-alignment of Quays Avenue and widening of the shared use path on the west side of Quays Avenue ~~and a new bridge near Trinity Primary School;~~”
- 3.25.4 Table 2.2 (Assessment of the TA against the NPS) NPS reference 2.9 key issues, second bullet point should read:  
 “Provide a safe link ~~by means of a bridge~~ between Trinity Primary School and the residential land to the south of the line by means of new shared-use paths parallel to the railway line and along Quays Avenue.”
- 3.25.5 Table 3.1 (MetroWest Phase 1 Proposed Engineering Works) Work Number 7 should read:  
 “~~A combined pedestrian and cycle overbridge to the south west of Trinity School, Portishead~~ Not used”
- 3.25.6 Paragraph 3.3.3 should read:  
 “To support movement and circulation around the station, there are a number of enhancements to the pedestrian and cycling environment. A toucan crossing across Quays Avenue is proposed which will link the new bus stops that are planned to the south west of the station site. The crossing is also aligned with a new shared use path which will provide the principal pedestrian and cyclist access from the station towards the town centre. The station will also link with proposed footpaths connecting with ~~the Trinity Primary School crossing (proposed overbridge, refer to section 3.6.1)~~ along both the north and south side of the railway.”
- 3.25.7 Heading above Paragraph 3.6.2 ‘~~Portishead Trinity Bridge~~’ should be deleted.
- 3.25.8 Paragraphs 3.6.2 and 3.6.3 are deleted as follows.

~~“3.6.2 To the east of the new station at Portishead is a permissive footpath across the line that provides one of the main access routes to the Trinity Anglican Methodist Primary School from the residential areas on the south side of the railway. The re-opened railway line will sever this footpath and as a result, a new pedestrian and cycle bridge will be constructed to the southwest of the primary school over the Portishead Branch Line Railway as shown in Figures 3.9 and 3.10. This bridge will be designed to comply with the Equalities Act 2010 so it is suitable for disabled users as well as cyclists and will connect Tansy Lane on the north side of the line to Galingale Way on the south side. Paragraph not used.~~

~~“3.6.3 While the bridge will be accessible for cyclists, its proposed width at 3m means cyclists will be expected to dismount when using it. The existing permissive at grade crossing over the dis-used railway will be stopped up. Paragraph not used.~~

3.25.9 Heading above Paragraph 3.6.4 ‘~~Other Pedestrian, Cyclist and Equestrian Measures~~’ should be replaced by ‘Pedestrian, Cyclist and Equestrian Measures’.

3.25.10 Paragraph 3.6.4, fourth bullet point under ‘In Portishead’ should read:

~~“Parallel pedestrian and cycling paths between Portishead station and Trinity School bridge Vale Pond and Tansy Lane; and”~~

3.25.11 Below paragraph 3.6.6, delete the references to

~~Located in Part 2 of Appendix 16.1 – Figure 3-9: Trinity bridge General Arrangement (sheet 1)~~

and replace with Figure 3.9 Not used.

~~Located in Part 2 of Appendix 16.1 – Figure 3-9: Trinity bridge General Arrangement (sheet 2)~~

and replace with Figure 3.10 Not used.

3.25.12 Table 3.2 *Description of proposed maintenance and emergency access points*, delete the references to

~~MEA-2 Portishead, Trinity bridge Pedestrian emergency access point~~

3.25.13 Paragraph 4.10.18, should read:

~~“4.10.18 Table 4.20 summarises the flows captured in Portishead. The data captured ~~confirms the importance of~~ shows the use of the permissive route across the disused line between Trinity Primary School to the north and the residential area (Galingale Way) to the south with over 150 NMU two-way movements recorded in the school morning peak and over 200 two-way movements during school afternoon/evening peaks. The scheme would result in pedestrians having to make an around 700m diversion during the construction phase, via existing roads Tansy Lane and Quays Avenue. An alternative means of access has therefore been proposed as part of the overall scheme in the form of a bridge over the railway linking Trinity Primary School and Galingale Way new shared-use paths parallel to the railway line between Galingale Way and Tansy Lane and this will be an almost 500m diversion.”~~

3.25.14 Table 8.1 is revised to remove reference to Trinity Primary School Bridge.



**Table 3.1: Construction Compounds**

| Ref | Name                               | Location  | Main Purpose  | Access   |
|-----|------------------------------------|---|---|--|
| C16 | Portishead Station                 | Portishead on the sites of new station car parks (both A on eastern side of the realigned Quays Avenue and B to the west of Quays Avenue) | For construction of Portishead Station <del>and Trinity bridge.</del><br><del>There is potential to use as a laydown area for Trinity bridge, subject to space availability</del> | Access off Portbury Hundred, Wyndham Way and Quays Avenue. The majority of the deliveries will be on standard HGVs |
| TB  | <del>Trinity bridge</del> Lay down |   | As required combined with use of Portishead station compound  | As Portishead station compound   |

3.25.15 Table 8.2 *Construction Compound facilities, working hours and timescales* is amended in the first and second rows as follows.

**Table 3.2: Construction Compound facilities, working hours and timescales**

| No. | Name                               | Car Parking                      | Storage          | Welfare facilities                  | Working hours and Timescales  |
|-----|------------------------------------|----------------------------------|------------------|-------------------------------------|---|
| C16 | Portishead Station Site Compound   | Main compound to provide parking | Material storage | Welfare facilities and site offices | There is likely to be a construction presence here for the duration of the project, from the outset of the construction due to works at Quays Avenue through to completion of Portishead Station <del>and Trinity bridge</del><br><br>Mainly daytime working 6am to 6pm, although due to programme constraints some night time working may be necessary |
| TB  | <del>Trinity bridge</del> Lay down | None                             | Lay down area    |                                     | Similar to Portishead main station compound   |

3.25.16 Paragraph 8.4.8 is modified as follows.

~~“8.4.8 Access to the proposed Trinity bridge is through a residential area, so will need to take into account on-street parking and the potential presence of pedestrians (particularly children associated with the adjacent primary school). The increase in traffic volumes is likely to result in some level of inconvenience for residents. Paragraph not used.”~~

3.25.17 Paragraph 8.5.1, first bullet point should be deleted.

“8.5.1 The scheme will have an impact on a number of local and designated pedestrian and cycling paths in the vicinity of the scheme. This will result in a number of these routes requiring a temporary diversion for a period of time during the construction phase at the following locations:

- ~~Trinity bridge: The construction of the footbridge will result in pedestrians having to make a diversion during the construction phase, crossing the railway line at a point close to the east of the current route, shown in Figure 8.4.”~~

3.25.18 Below paragraph 8.6.2 delete the reference to:

~~“Located in Part 4 of Appendix 16.1 – Figure 8-4: Diversion at Trinity bridge”~~  
and replace with “Figure 8-4: ~~Diversion at Trinity bridge~~. Not used.”

3.25.19 In Table 9.3 *Walking and cycling measures*, delete the reference to Trinity Primary School.

| Location                          | Measure   | Rationale   |
|-----------------------------------|---|---|
| <del>Trinity Primary School</del> | <del>Provision of a bridge compliant with the Equalities Act 2010</del> | <del>The current permissive path will be severed by the scheme. The construction of a disabled compliant bridge would formalise this main pedestrian and cycling route to and from Trinity Primary School</del> |

3.25.20 In Table 10.1 *Infrastructure measures to be implemented*, delete the reference (the whole line) to:

| Ref          | Area                  | Location                          | Measure   |
|--------------|-----------------------|-----------------------------------|---|
| <del>6</del> | <del>Portishead</del> | <del>Trinity Primary School</del> | <del>Provision of a bridge compliant with the Equalities Act 2010</del> |

And replace reference 6 contents with “Not used”.

3.25.21 In Table 11.2 *Infrastructure measures to be implemented*, delete the reference (the whole line) to:

| Ref          | Area                  | Location                          | Measure   |
|--------------|-----------------------|-----------------------------------|---|
| <del>6</del> | <del>Portishead</del> | <del>Trinity Primary School</del> | <del>Provision of a bridge compliant with the Equalities Act 2010</del> |

and replace reference 6 contents with “Not used.”

### Appendix 16.1 Transport Assessment – Figures

3.25.22 The Environmental Statement Appendix 16.1 Transport Assessment (Part 2 of 18) – Figures Vol 1 [APP-156] is amended as set out below.

3.25.23 Page 2 – delete the text:

~~The latest Trinity Footbridge plans are contained within documents 2.15-2.17.~~

and replace with “Blank Page”.

3.25.24 The List of Figures, should read:

~~“Figure 3-9: Trinity Pedestrian Footbridge General Arrangement (sheet 1)  
Not used~~

~~Figure 3-10: Trinity Pedestrian Footbridge General Arrangement (sheet 2)  
Not used”~~

- 3.25.25 Delete the Figure 3-9 Trinity Pedestrian Footbridge General Arrangement (sheet 1) and replace with a blank page noted as “Figure 3-9 Not used”
- 3.25.26 Delete the Figure 3-10 Trinity Pedestrian Footbridge General Arrangement (sheet 2) and replace with a blank page noted as “Figure 3-10 Not used”
- 3.25.27 The Environmental Statement Appendix 16.1 Transport Assessment (Part 4 of 18) – Figures Vol 3 [APP-158] is amended as set out below.

3.25.28 The List of Figures, should read:

“Figure 8-4: ~~Diversion at Trinity Bridge~~ Not used”

3.25.29 Delete the Figure 8-4: (Diversion at Trinity Bridge) and replace with a blank page noted as “Figure 8-4 Not used”.

### Appendix 16.1 Transport Assessment – Appendix A

- 3.25.30 The Environmental Statement Appendix 16.1 Transport Assessment (Part 5 of 18) - Appendix A: TA Scoping Report & Meeting Notes [APP-159] is amended as set out below.
- 3.25.31 Section 1 – Scoping Report, Part 2.3 (MetroWest Phase 1), delete the fourth bullet point:
- ~~“A new fully accessible pedestrian bridge linking to Trinity Primary School in Portishead.”~~

3.25.32 Section 1 – Scoping Report, Part 4.9.4 (Severance and Public Right of Way (PRoWs), the third paragraph should read:

“There is one permissive pedestrian crossing of the dis-used railway line to Trinity Primary School, authorised by the land owner North Somerset Council. There are also a number of informal crossings which are more akin to dog walking tracks, some of which require traversing ditches to use them. All these crossings will have to be closed by the scheme to meet railway safety requirements. ~~In respect of the permissive crossing to Trinity Primary School, a fully accessible pedestrian bridge is proposed.~~ A new route from Galingale Way to Tansy Lane for Trinity School will be provided using new shared used paths parallel with the new railway line and via Quays Avenue.”

3.25.33 Section 1 – Scoping Report, Part 4.9.4 (Severance and Public Right of Way (PRoWs), the fourth paragraph should read:

“Moor Lane at Portishead is regarded as a byway on railway records and previously served the council’s tip. Rights to the crossing are held by Bristol City Council. The informal route at Moor Lane – formerly an access road – is unsurfaced, not fully accessible, bounded by vegetation and with poor natural surveillance. Therefore, the intention is to utilise the ~~crossing near the Trinity Primary School~~ paths parallel with the new railway line and via Quays Avenue to cater for these movements.”

## Appendix 16.1 Transport Assessment – Appendix K - CTMP

3.25.34 The Environmental Statement Appendix 16.1 Transport Assessment (Part 15 of 18) - Appendix K: CTMP [APP-169] is amended as set out below.

3.25.35 Paragraph 2.1.5, fourth bullet point should be deleted:

- ~~“Construction of a new pedestrian footbridge close to Trinity Primary School.”~~

3.25.36 Table 2.1 (Components of construction works), delete the reference (the whole row) to Trinity Bridge:

| Component                 | Transport and Access  | Indicative scheduling and duration   |
|---------------------------|---|--|
| <del>Trinity Bridge</del> | <del>Footbridge could be prefabricated off site and delivered by road or rail in sections. This will be confirmed by the Contractor ahead of construction</del> | <del>Careful integration of this work with track works to the disused line will be required. Works to the culvert and drainage system will need to be complete before the bridge. This also depends on a number of assumptions such as ground conditions and environmental constraints. Based on indicative methodology the duration is approximately 6-12 months, works will primarily be during the day time, although possibly also including night-time works as there is the potential for 24 hour working.</del> |

3.25.37 Table 4.1 is revised to remove reference to Trinity Primary School Bridge.

**Table 4.3: Construction Compounds**

| Ref | Name                                      | Location  | Main Purpose  | Access   |
|-----|---|---|---|--|
| C16 | Portishead Station                        | Portishead on the sites of new station car parks (both A on eastern side of the realigned Quays Avenue and B to the west of Quays Avenue) | For construction of Portishead Station <del>and Trinity bridge.</del><br><del>There is potential to use as a laydown area for Trinity bridge, subject to space availability</del> | Access off Portbury Hundred, Wyndham Way and Quays Avenue. The majority of the deliveries will be on standard HGVs |
| TB  | <del>Trinity bridge</del> <u>Lay down</u> |   | As required combined with use of Portishead station compound  | As Portishead station compound   |

3.25.38 Table 4.2 *Construction Compound facilities, working hours and timescales* is amended in the first and second rows as follows.

**Table 4.4: Construction Compound facilities, working hours and timescales**

| No. | Name                               | Car Parking                      | Storage          | Welfare facilities                  | Working hours and Timescales  |
|-----|------------------------------------|----------------------------------|------------------|-------------------------------------|---|
| C16 | Portishead Station Site Compound   | Main compound to provide parking | Material storage | Welfare facilities and site offices | <p>There is likely to be a construction presence here for the duration of the project, from the outset of the construction due to works at Quays Avenue through to completion of Portishead Station and Trinity bridge</p> <p>Mainly daytime working 6am to 6pm, although due to programme constraints some night time working may be necessary</p> |
| TB  | <del>Trinity bridge</del> Lay down | None                             | Lay down area    |                                     | Similar to Portishead main station compound   |

## 3.26 Environmental Plans

- 3.26.1 The label for the Trinity Primary School Bridge on the Environmental Master Plan Sheet 2 is removed [REP06-055].



## SECTION 4

# Summary and Conclusions

4.1.1 It can be concluded with confidence that:

- the DCO Scheme will have no material impact on the ability of the Government to comply with its carbon budgets; and
- the direct, indirect and cumulative emissions of the DCO Scheme will not give rise to any likely significant effects in respect of climate, either in respect of emissions or vulnerability to climate change. In relation to paragraphs 5.17 and 5.18 of the NPSNN, the information provided in Chapter 14 of the ES, in response to and in this response demonstrates that the scheme will not materially affect the ability of the Government to meet its carbon budgets. Any increase in carbon emissions that may arise in consequence of the DCO Scheme is not a reason to refuse development consent pursuant to paragraph 5.18 of the NPSNN.

4.1.2 The removal of Trinity Primary School Bridge would result in the following changes to the assessment of likely significant environmental effects:

- The significance of the effect of removal of the Bridge on visual impacts on residential property in Galingale Way and Peartree Field, Portishead will reduce from large adverse to moderate adverse during the operational impacts after 1 year and after 15 years.
- The significance of the effect of removal of the Bridge on visual impacts on residential property No. 6 Holmlea, Portishead will reduce from large adverse to slight adverse during the operational impacts after 1 year and after 15 years.
- The significance of the effect of removal of the Bridge on visual impacts on residential property on Tansy Lane, Portishead will reduce from large adverse to moderate adverse after 15 years.
- The significance of the effect of removal of the Bridge on visual impacts on Trinity Anglican Methodist Primary School, Marjoram Way, will reduce from large adverse to moderate adverse during construction. The magnitude of the impact will reduce from major to moderate adverse 1 year after opening.
- A change from a positive differential effect on the age, disability and pregnancy/maternity protected characteristic groups to replace the existing permissive at-grade crossing with a pedestrian and cycle bridge to a slight adverse (differential) effect, due to the net increase in journey length of about 450 m compared with the existing permissive at-grade crossing during the operation phase.

**ch2m.**<sup>SM</sup>