

# **Great Yarmouth Third River Crossing**

## **Application for Development Consent Order**

---

---

### **Document 6.2: Environmental Statement Volume II: Technical Appendix 7A: Legislation, Policy and Guidance**

---

#### **Planning Act 2008**

#### **The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (“APFP”)**

APFP regulation Number: 5(2)(a)

Planning Inspectorate Reference Number: TR010043

Author: Norfolk County Council

Document Reference: 6.2 – Technical Appendix 7A

Version Number: 0 – Revision for Submission

Date: 30 April 2019

---

---

<b>CONTENTS</b>	<b>PAGE No.</b>
<b>Tables.....</b>	<b>ii</b>
<b>1 Legislation, Policy and Guidance.....</b>	<b>1</b>
<b>References.....</b>	<b>14</b>

## Tables

Table 1.1: Summary of Legislation .....	1
Table 1.2: Summary of Policy .....	4
Table 1.3: Summary of Guidance.....	10

# 1 Legislation, Policy and Guidance

1.1.1 Table 1.1 to 1.3 summarise the applicable legislation, policy and guidance to Chapter 7: Noise and Vibration.

*Table 1.1: Summary of Legislation*

Legislation	Summary	Chapter Reference
<b>The Control of Pollution Act 1974 (CoPA)</b>  <b>(Ref 7A.1)</b>	<p>The CoPA enables Local Authorities to implement measures to control the noise from construction sites and prevent the occurrence of disturbance to surrounding residents (section 60 - Control of noise on construction sites).</p> <p>Furthermore, section 61 (Prior consent for work on construction sites) provides a method by which a contractor can seek consent to undertake construction works in advance of their commencement.</p>	<p>Chapter 7: Noise and Vibration conforms with the act by promoting the control of noise and vibration mitigation.</p> <p>See Section 7.8.</p>
<b>The Environment Protection Act 1990 (as amended) (EPA)</b>  <b>(Ref 7A.2)</b>	<p>Section 79 of the EPA (Statutory nuisances and inspections), contains a definition of what constitutes a 'statutory nuisance' with regard to noise and places a duty on Local Authorities to detect any such nuisances within their area. Section 79 also considers 'best practicable means' with reference to mitigation measures, which is defined as steps <i>"reasonably practical having regard, among other things, to local conditions and circumstances, to the current state of technical knowledge and to the financial implications"</i>.</p>	<p>Chapter 7: Noise and Vibration conforms with the act by giving context and identifying measures for the effective management and mitigation of noise and vibration.</p> <p>See Section 7.8.</p>

Legislation	Summary	Chapter Reference
<p><b>Noise Insulation Regulations 1975 (as amended 1988) (NIR)</b> <b>(Ref 7A.3)</b></p>	<p>The NIR were made under powers inferred by Section 20 of Part II of the Land Compensation Act 1973 (LCA). Regulation 3 of the NIR imposes a duty upon the overseeing Highways Authority to undertake or make a grant in respect of the cost of undertaking noise insulation works for dwellings and other places used for residential purposes near a new road or an additional carriageway. To qualify, four criteria must all be fulfilled at 1m in front of the most exposed door or window of an eligible room in the façade of a property:</p> <ul style="list-style-type: none"> <li>- Level - The highest total traffic noise level expected within the first fifteen years use of the road (the 'Relevant Noise Level') must be predicted to be not less than the Specified Level of 68 dB(A) <math>L_{A10,18h}</math>. Predicted noise levels of 67.5 dB <math>L_{A10,18h}</math> and above are rounded up to 68 dB <math>L_{A10,18h}</math>;</li> <li>- Increase - The Relevant Noise Level in the design year, or within any other year between the year before the highway construction works commenced and the design year, must be at least 1 dB(A) greater than that immediately before construction commenced (the 'Prevailing Noise Level');</li> <li>- Contribution - Noise from traffic on the road for which</li> </ul>	<p>Chapter 7: Noise and Vibration provides an indicative count of dwellings that may be eligible for noise insulation.</p> <p>See Section 7.8.</p>

Legislation	Summary	Chapter Reference
	<p>the Regulations apply must contribute at least 1.0 dB LA10,18h to the Relevant Noise Level; and</p> <ul style="list-style-type: none"> <li>Locality - The property under consideration must be within 300m of the Scheme.</li> </ul> <p>The Regulations apply only to qualifying eligible rooms, which include living rooms and bedrooms affected by road traffic noise.</p>	
<p><b>Environmental Noise (England) Regulations 2006 (S.I. 2006/2238)</b> <b>(Ref 7A.4)</b></p>	<p><i>Defra has prepared action plans for major roads following strategic noise mapping. The Environmental Noise (England) Regulations (Statutory Instruments 2006/2238, Regulation 15(1)(e) require that action plans should "...apply in particular to the most important areas as established by strategic noise maps..."</i>, and to this end Defra has identified noise important areas (NIAs or noise "hot-spots") that are where 1% of the population are affected by the highest noise levels from major roads according to the results of the strategic noise mapping. This approach has been taken because people residing in these areas are likely to be at the greatest risk of experiencing a significant adverse effect to health and quality of life because of their exposure to road traffic noise.</p>	<p>Chapter 7: Noise and Vibration identifies the noise level change and significant effects at dwellings within Noise Important Areas inside the operational noise study area.</p> <p>See Section 7.8.</p>
<p><b>Directive 2002/49/EC of the European Parliament – Assessment and</b></p>	<p>This is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State</p>	<p>Chapter 7: Noise and Vibration identifies the noise level change and the</p>

Legislation	Summary	Chapter Reference
<b>management of environmental noise (better known as the Environmental Noise Directive - END)</b> <b>(Ref 7A.5)</b>	<p>and at EU level. To pursue its stated aims, the END focuses on three action areas:</p> <ul style="list-style-type: none"> <li>The determination of exposure to environmental noise;</li> <li>Ensuring that information on environmental noise and its effects is made available to the public;</li> <li>Preventing and reducing environmental noise where necessary and preserving environmental noise quality where it is good.</li> </ul> <p>It is through the requirements of this Directive that the locations of NIAs have been determined.</p>	<p>significant effects at dwellings within Noise Important Areas inside the operational noise study area.</p> <p>See Section 7.8.</p>

Table 1.2: Summary of Policy

Policy	Summary	Chapter Reference
<b>National Policy Statement for National Networks 2014 (NN NPS)</b> <b>(Ref 7A.6)</b>	<p>Published by the Department for Transport, the NN NPS was designated for use by the Secretary of State in January 2015. It provides planning guidance for promoters of nationally significant infrastructure projects on the road and rail networks.</p> <p>Paragraph 5.189 of the NN NPS states where a development is subject to EIA and significant noise effects are likely to arise from the Scheme, the applicant should include a noise assessment which details the noise and vibration baseline, sensitive receptors, predictions of changes in baseline with the Scheme and mitigation measures.</p>	<p>Chapter 7: Noise and Vibration conforms with the NN NPS by promoting the management of noise and vibration impacts through effective mitigation.</p> <p>All road traffic noise predictions have been completed in accordance with the calculation methodology presented in CRTN (1988) and Annex 4</p>

Policy	Summary	Chapter Reference
	<p>For operational noise, paragraph 5.191 states that effects on human receptors ‘should be assessed using the principles of the relevant British Standards and other guidance’ and that ‘prediction of road traffic noise should be based on the method described in the Calculation of Road Traffic Noise’ (1988). For the prediction and assessment of construction noise, it is stated that ‘reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies’.</p> <p>The NN NPS goes on to state in paragraph 5.193 that developments must be undertaken in accordance with the statutory requirements for noise and that due regard must be given to the relevant sections of the NPSE and the NPPF.</p> <p>Paragraph 5.195 states that the <i>“Secretary of State should not grant development consent unless satisfied that the proposals will meet the following aims, within the context of Government policy on sustainable development:</i></p> <ul style="list-style-type: none"> <li>▪ <i>avoid significant adverse impacts on health and quality of life from noise as a result of the new development;</i></li> <li>▪ <i>mitigate and minimise other adverse impacts on health and quality of life from noise from the new development; and</i></li> <li>▪ <i>contribute to improvements to health and quality of life through</i></li> </ul>	<p>of DMRB HD 213/11.          See Section 7.8.</p>



Policy	Summary	Chapter Reference
	<p><i>the effective management and control of noise, where possible”.</i></p> <p>The NN NPS also confirms that for most national network projects, the relevant Noise Insulation Regulations would apply.</p>	
<p><b>National Policy Statement for Ports 2012 (PNPS)</b> <b>(Ref 7A.7)</b></p>	<p>The PNPS sets out the Government’s strategy for new port infrastructure to meet current and future needs. It determines the approach planning decision-makers should take with respect to ports and port infrastructure proposals.</p> <p>The PNPS requires an applicant to assess the noise generating aspects of a development on the marine and terrestrial environment including noise sensitive areas and noise sensitive species which has been informed by the existing marine and terrestrial noise environment. These assessments should then identify any measures that are included to mitigate the effects of noise.</p>	<p>Chapter 7: Noise and Vibration conforms with the PNPS by promoting the management of noise and vibration impacts through effective mitigation.</p> <p>Effects on ecological receptors are considered in Chapter 8: Nature Conservation.</p>
<p><b>Noise Policy Statement for England 2010 (NPSE)</b> <b>(Ref 7A.8)</b></p>	<p>The NPSE was published in March 2010 by the Department for Environment Food and Rural Affairs (Defra) and is the overarching statement of noise policy for England. It applies to all forms of noise other than occupational noise, with paragraph 1.6 setting out the long-term vision of Government noise policy which is to <i>“promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development”</i>.</p> <p>The Explanatory Note to the NPSE introduces three concepts for use in the assessment of noise in England:</p>	<p>Chapter 7: Noise and Vibration conforms with the NPSE through the consideration of health effects through the adoption of NOEL, LOAEL and SOAEL.</p> <p>The primary source for defining significance is the NPSE in conjunction with DMRB HD 213/11.</p> <p>See Section 7.4.</p>

Policy	Summary	Chapter Reference
	<ul style="list-style-type: none"> <li>· NOEL - No Observed Effect Level - This is the level below which no effect can be detected and below which there is no detectable effect on health and quality of life due to noise.</li> <li>· LOAEL - Lowest Observable Adverse Effect Level - This is the level above which adverse effects on health and quality of life can be detected.</li> <li>· SOAEL - Significant Observed Adverse Effect Level - This is the level above which significant adverse effects on health and quality of life occur.</li> </ul> <p>None of these three levels are defined numerically in the NPSE. For the SOAEL, the NPSE makes it clear that the noise effect level is likely to vary depending upon the noise source, the receptor, and the time of day and day of the week. The need for more research to investigate what may represent a SOAEL for noise is acknowledged, and the NPSE asserts that not stating specific SOAEL values provides policy flexibility in the period until further evidence and guidance is published. This chapter sets out the approach to defining the NOEL, LOAEL and SOAEL for this Scheme in line with current best practice and guidance.</p>	
<b>National Planning Policy Framework 2018 (NPPF)</b> <b>(Ref 7A.9)</b>	<p>The NPPF sets out the following generic guidance relating to noise, which supports the long-term vision of the NPSE.</p> <p>Under section 15 Conserving and enhancing the natural environment, paragraph 170, it is stated that <i>“Planning policies and decisions</i></p>	<p>Chapter 7: Noise and Vibration conforms with the NPPF by identifying the likely noise and vibration effects at sensitive receptors that occur during the construction and</p>

Policy	Summary	Chapter Reference
	<p><i>should contribute to and enhance the natural and local environment by:</i></p> <p>e) <i>preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans”</i></p> <p>Under section 15, paragraph 180, it is stated that <i>“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:</i></p> <p>a) <i>mitigate and reduce to a minimum potential adverse impact resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life60;</i></p> <p>b) <i>identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason”</i></p>	<p>operation of the Scheme.</p> <p>Health effects are considered by the application of noise and vibration LOAEL and SOAEL.</p> <p>In addition, this chapter promotes the management of noise and vibration impacts through effective mitigation.</p> <p>See Section 7.8.</p>

Policy	Summary	Chapter Reference
	<p>Reference number 60 in the above quotation points to the Explanatory Note to the NPSE.</p>	
<p><b>East Inshore and East Offshore Marine Plans (EIEOMP)</b> <b>(Ref 7A.10)</b></p>	<p>Marine Plans are implemented as a requirement of the Marine and Coastal Access Act 2009. The plans provide for the application or clarification of national planning policy in relation to coastal areas.</p> <p>Aspects of noise and the impact on people are addressed under Objective 6 as part of consideration of its effects on marine animals.</p> <p>Objective 6: <i>“To have a healthy, resilient and adaptable marine ecosystem in the East marine plan areas.”</i></p>	<p>Chapter 7: Noise and Vibration conforms with the EIEOMP by promoting the management of noise and vibration impacts through effective mitigation. During construction works, the mitigation measures to control and reduce noise and vibration emissions to ecological receptors will be included within the Outline CoCP (document reference 6.16) will be followed. Mitigation measures will include the adoption of the measures set out in the JNCC (2010). Effects on ecological receptors are considered in Chapter 8: Nature Conservation.</p>

Policy	Summary	Chapter Reference
<b>Great Yarmouth Local Plan: Core Strategy 2013 – 2030</b> <b>(Ref 7A.11)</b>	Policy CS9 of the GYLP ‘Encouraging well-designed, distinctive places’ references noise as follows: <i>“High quality, distinctive places are an essential part in attracting and retaining residents, businesses, visitors and developers. As such, the Council will ensure that all new developments within the borough:</i>  <i>f) Seek to protect the amenity of existing and future residents, or people working in, or nearby, a proposed development, from factors such as noise, light and air pollution and ensure that new development does not unduly impact upon public safety.”</i>	Chapter 7: Noise and Vibration conforms with the policy by promoting the management of noise and vibration impacts through effective mitigation.  See Section 7.8.

Table 1.3: Summary of Guidance

Guidance	Summary	Chapter Reference
<b>Calculation of Road Traffic Noise 1988 (CRTN)</b> <b>(Ref 7A.12)</b>	The former Department of Transport/Welsh Office technical memorandum CRTN sets out a standardised method for the calculation of noise from road traffic.  The factors which may influence road traffic noise levels can be divided into three groups: <ul style="list-style-type: none"> <li>• Road related factors - gradient and surface type;</li> <li>• Traffic related factors - flow, speed and the proportion of heavy goods vehicles; and</li> <li>• Propagation factors – the distance between the road and the receptor location and either the type of ground cover between the road and receptor location or the</li> </ul>	The road traffic noise propagation calculations in Chapter 7: Noise and Vibration are completed in line with CRTN.  See Section 7.4

Guidance	Summary	Chapter Reference
	<p>presence of screening (i.e. barriers or buildings).</p> <p>The propagation of noise is also covered in CRTN and can influence the noise levels that would be experienced at receptor locations. Assumptions relating to the factors that affect the propagation of noise from the Scheme are set out in Section 7.8.</p>	
<p><b>Design Manual for Roads and Bridges HD 213/11 2011 (DMRB HD 213/11)</b> <b>(Ref 7A.13)</b></p>	<p>The DMRB HD 213/11 sets out a methodology for assessing road traffic noise and vibration.</p> <p>Paragraph 4.2 of HD 213/11 states <i>"in terms of permanent impacts, a change of 1 dB(A) in the short-term (e.g. when a project is opened) is the smallest that is considered perceptible. In the long-term, a 3 dB(A) change is considered perceptible. Such increases in noise should be mitigated if possible"</i>.</p> <p>The primary source for defining significance is DMRB HD 213/11 in conjunction with the NPSE.</p>	<p>The road traffic noise calculations and assessment methodology are completed in line with DMRB HD 213/11.</p> <p>See Section 7.4 for further details of how DMRB HD 213/11 has been applied to the assessment of traffic noise from the Scheme, and the method for defining significance.</p>
<p><b>World Health Organisation (WHO) Environmental Noise Guidelines for the European Region 2018 (ENG)</b> <b>(Ref 7A.14)</b></p>	<p>The ENG details noise levels associated with health effects. The ENG supersedes the WHO Guidelines for Community Noise (1999) (Ref 7A.14) and WHO Night Noise Guidelines for Europe (2009) (Ref 7A.15).</p> <ul style="list-style-type: none"> <li>For road traffic, the ENG (on page 30) <i>"strongly recommends reducing noise</i></li> </ul>	<p>The adopted daytime threshold value for the LOAEL is based on guidance contained within the ENG.</p> <p>See Section 7.4.</p>

Guidance	Summary	Chapter Reference
	<p><i>levels produced by road traffic below 53 dB L<sub>den</sub>, as road traffic noise above this level is associated with adverse health effects.”</i></p> <ul style="list-style-type: none"> <li><i>and... “strongly recommends reducing noise levels produced by road traffic during night-time below 45 dB L<sub>night</sub>, as night-time road traffic noise above this level is associated with adverse effects on sleep.”</i></li> </ul>	
<p><b>BS 5228-1: 2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites. Part 1: Noise (BS 5228-1)</b> (Ref 7A.15)</p>	<p>BS 5228-1:2009+A1:2014 provides guidance on the measurement, prediction and assessment of construction noise and recommends basic methods of noise control where there is a need to protect persons working or living near, and those working on, construction and open sites.</p>	<p>The construction noise calculations and method of assessment are completed in line with BS 5228-1:2009+A1:2014. See Section 7.4 and 7.8.</p>
<p><b>BS 5228-2: 2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites. Part 2: Vibration (BS 5228-2)</b> (Ref 7A.16)</p>	<p>BS 5228-2:2009+A1:2014 provides basic recommendations for vibration control where work on construction and open sites generates significant levels of vibration. It includes advice on methods for measuring, predicting and assessing its potential effect on people and buildings. The standard provides a database of historic vibration measurement results for a range of different construction working activities.</p>	<p>The construction vibration calculations and method of assessment are completed in line with BS 5228-2:2009+A1:2014. See Section 7.4 and 7.8.</p>
<p><b>BS 6472-1:2008 Guide to Evaluation of Human Exposure to Vibration in Buildings. Part 1: Vibration</b></p>	<p>BS 6472-1:2008 provides guidance on the methods to assess the effects of environmental vibration on people in residential and other</p>	<p>BS 6472-1:2008 provides the source information for the assessment of significance regarding</p>

Guidance	Summary	Chapter Reference
<b>Sources other than Blasting (BS 6472-1)</b> (Ref 7A.17)	environments. The Standard is primarily concerned with vibration generated by permanent or long-term sources, such as railways or industry, and cross-references to the guidance contained within BS 5228-2:2008 for the assessment of vibration from construction sites.	human response to vibration. See Section 7.4.
<b>BS 7445: Description and Measurement of Environmental Noise (BS 7445-1:2003 and BS 7445-2:1991)</b> Part 1 (Ref 7A.18) Part 2 (Ref 7A.19)	BS 7445-1:2003 defines the basic quantities to be used for the description of noise and describes basic procedures for the determination of these quantities. BS 7445-2:1991 describes methods for the acquisition of data to enable a description of environmental noise.	Noise measurements were undertaken based on the guidance in BS 7445-2:1991. See Section 7.5.
<b>BS 4142: Methods for rating and assessing industrial and commercial sound (2014)</b> (Ref 7A.20)	BS 4142:2014 describes methods for rating and assessing industrial or commercial sound. It enables the effects on people nearby to be assessed and the associated risks to be minimised.	The 'Rating Noise Level' is calculated following the guidance set out in BS 4142:2014. See Sections 7.4 and 7.8.



## References

- Ref 7A.1: HM Government (1974), Control of Pollution Act 1974.
- Ref 7A.2: HM Government (1990), Environmental Protection Act 1990.
- Ref 7A.3: HM Government (1975, as amended 1988), The Noise Insulation Regulations 1975, as amended 1988).
- Ref 7A.4: HM Government (2006), The Environmental Noise (England) Regulations 2006.
- Ref 7A.5: The European Parliament and the Council of the European Union (2002), Directive 2002/49/EC relating to the assessment and management of environmental noise (the Environmental Noise Directive (END)).
- Ref 7A.6: Department for Transport (2014), National Policy Statement for National Networks.
- Ref 7A.7: Department for Transport (2012), National Policy Statement for Ports.
- Ref 7A.8: Department for Environment, Food and Rural Affairs (2010), Noise Policy Statement for England.
- Ref 7A.9: HM Government (2018), National Planning Policy Framework.
- Ref 7A.10: HM Government (2014). East Inshore and East Offshore Marine Plans
- Ref 7A.11: Great Yarmouth Local Plan: Core Strategy 2013 – 2030.
- Ref 7A.12: Department of Transport and Welsh Office (1988), Calculation of Road Traffic Noise.
- Ref 7A.13: The Highways Agency, Scottish Government, Welsh Assembly Government and the Department for Regional Development Northern Ireland (2011), Design Manual for Roads and Bridges, Volume 11, Section 3, Part 7, HD 213/11 revision 1. Noise and Vibration.
- Ref 7A.14: World Health Organisation (2018), Environmental Noise Guidelines for the European Region.
- Ref 7A.15: The British Standards Institution (2014), BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Part 1: Noise.
- Ref 7A.16: The British Standards Institution (2014), BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Part 2: Vibration.
- Ref 7A.17: The British Standards Institution (2008), BS 6472: Guide to evaluation of human exposure to vibration in buildings. Part 1: Vibration sources other than blasting.
- Ref 7A.18: The British Standards Institution (2003), BS 7445-1:2003 Description and measurement of environmental noise – Part 1: Guide to quantities and procedures.
- Ref 7A.19: The British Standards Institution (1991), BS 7445-2:1991 Description and measurement of environmental noise – Part 2: Guide to the acquisition of data pertinent to land use.

Ref 7A.20: The British Standards Institution (2014), BS 4142:2014 Methods for rating and assessing industrial and commercial sound.