Commission Reference: 2015/D003-D006



PUBLIC INQUIRY REPORT

A5 WESTERN TRANSPORT CORRIDOR ROAD SCHEME NEWBUILDINGS TO AUGHNACLOY

Report by

Commissioners A Beggs, D Hannon and D O'Neill

Date of Report: 24 May 2017

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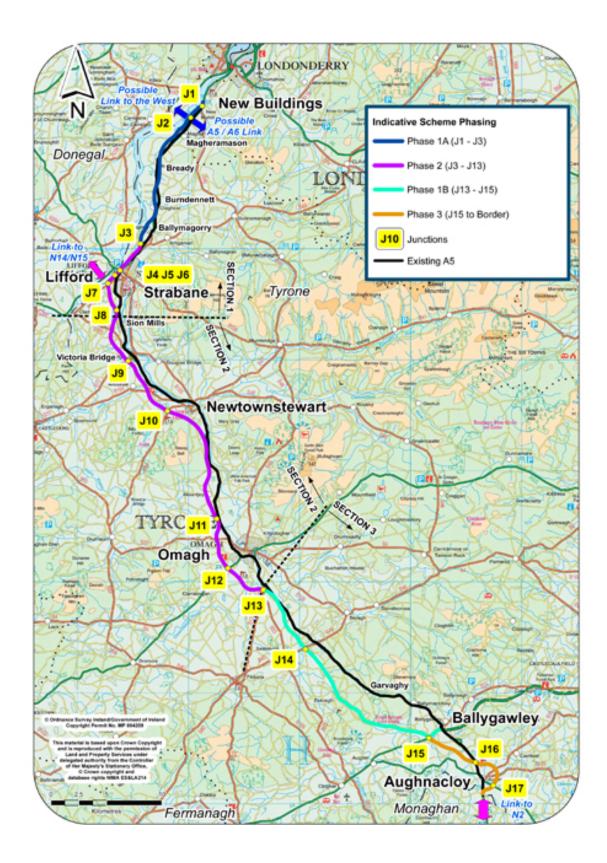
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We would also like to thank all the participants for their assistance and courtesy throughout the inquiry.

Plan Showing the Proposed Scheme's Phases & Sections



Source: a5wtc.com

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BACKGROUND TO THE REPORT

Introduction

- In 2011 public inquiries were held into the A5 Western Transport Corridor (A5WTC) Roads Scheme. The subsequent Inspectors' Report was presented to the then Department of Regional Development (DRD) in February 2012, and recommended that the A5WTC scheme should proceed subject to a number of recommendations.
- 2. The then Minister concurred with the main recommendations and in July 2012 he announced the making of the Direction Order, Vesting Orders and the intention to proceed with the Scheme.
- 3. Following a Judicial Review into that decision the High Court quashed the Direction Order and Vesting Orders in April 2013. This was on the basis that an Appropriate Assessment under the Habitats Directive into the effect of the Scheme on the River Foyle and River Finn Special Areas of Conservation was not carried out.
- 4. A new Environmental Statement, draft Direction Order, draft Vesting Orders and Stopping-up of Private Accesses Orders were subsequently prepared and advertised for comment.

Appointment of the Commission

- 5. On 14 April 2016, the DRD appointed the Planning Appeals Commission (PAC) to hold the necessary public inquiries in respect of the A5WTC Roads Scheme hereafter referred to as either the Proposed Scheme or the Scheme. The DRD has since been superseded as the appointing body by the Department for Infrastructure (DfI) hereafter referred to as the Department.
- 6. The Commission's terms of reference were to hold inquiries into the:
 - Environmental Statement;
 - Notice of Intention to make a Direction Order;
 - Notices of Intention to make Vesting Orders prepared by the Department for the Proposed Scheme together with opinions expressed in relation thereto; and
 - Notice of Intention to Make a Stopping-up of Private Accesses Order and opinions expressed thereto.

The Inquiry

- 7. While there were 4 separate inquiries, the proceedings were run together so that participants experienced the process as a single event.
- 8. A pre-inquiry meeting was held on 29 June 2016 in the Strule Arts Centre, Omagh. The primary purpose of the meeting was to outline the various steps in process including the relevant procedures and arrangements for submitting evidence. There was also discussion on the scope of the inquiry.
- 9. The inquiry opened on the 4 October 2016. A session held on the 12 October sought to identify the Departmental policy underlying the scheme and to consider whether, and to what extent, such policy limited the scope of the inquiry. Following this, the Commission decided that in order to facilitate an open and fully inclusive inquiry there would be sessions considering broader strategic issues, namely the need / justification for the Proposed Scheme, alternatives to an offline dual carriageway and the economic impact of the Proposed Scheme. Additional time was allowed for the submission of evidence on these issues.
- 10. For ease of administration the site specific sessions were planned around the 3 sections of the Proposed Scheme rather than its proposed phasing. Consequently, the inquiry comprised 5 main elements, the dates and locations of which were as follows:
 - General Issues 4-7, and 10-12 October 2016, Strule Arts Centre Omagh.
 - Section 1 New Buildings to Sion Mills, 18-19 October 2016, Everglades Hotel, Londonderry.
 - Section 2 Sion Mills to South of Omagh, 25-26 October 2016, Fir Trees Hotel, Strabane.
 - Section 3 South of Omagh to Aughnacloy, 8-11 November 2016, Strule Arts Centre, Omagh.
 - Strategic Issues Need / Justification / Alternatives to a Dual Carriageway / Economic Impacts / - 12-14 December 2016 at Corick House Hotel, Clogher.

Participation in the Inquiry

11. Inevitably a wide range of professionals are involved in developing complex schemes. It is in the interests of openness and fairness that they are present at any inquiry to address their fields of expertise and be subject to questioning. The use of technology is an inevitable part of a modern inquiry and having a number of people working in the background (in the same venue) for the Department is not unreasonable in itself. Further to this, after

the first day of proceedings the Department (correctly in our view to reduce any perception of inequality) stopped sending a live feed of proceedings offsite from the inquiry location to their offices.

- 12. It is understandable that other participants faced with a well resourced team can perceive an 'inequality of arms', particularly if they are unrepresented. Allied to this are the concerns expressed about the length of time spent at an inquiry and the lack of funding to engage professional advice and/or having such representation at the inquiry. These costs can be considerable. However, the general expectation is that parties meet their own expenses and the legislative provisions under which these inquiries are being held make no provision for the public funding of parties.
- 13. The Commission believes it is important to facilitate public participation in the inquiry process. We endeavoured to arrange sessions in relatively accessible locations close to the A5 corridor and throughout its length. The inquiry sessions were run on a round table discussion basis to facilitate participation, and latitude was given to parties to allow them to appear, present their case, make points and ask questions. Negotiations between parties were facilitated and encouraged where possible, and timetables altered accordingly.
- 14. We are satisfied that all parties were given a fair, full and appropriate opportunity to participate in accordance with the resources available to them. In this context there has been no violation of people's human rights to participate in the process.
- 15. Lists of those who participated in the pre-inquiry meeting and the inquiry sessions are obtainable on request from the Commission.

Site Visits

16. Following the inquiry a range of accompanied and unaccompanied site visits were also carried out to allow us to clarify our understanding of the representations and the nature of affected areas.

The Report

17. Part 1 of the Report considers general and strategic matters, and to avoid repetition these issues are reported on a topic basis rather than with reference to specific representation numbers. Given this, and the often interrelated nature of topics, responses to particular concerns will be found throughout this part of the Report. Issues raised by consultee responses are also contained within Part 1 under the relevant topics. The elements of representations dealing with site specific matters for the three sections of the Proposed Scheme are reported on in Part 2.

- 18. The Report's contents are guided both by the written representations received and those points made at the inquiry. As such we do not consider, for example, every element of the Environmental Statement (ES) or other documents before us. Many of the representations only contained broad statements of support and objection and, where this was the case in depth consideration was not possible. Where no grounds of support or objection were given no comment is made. As the Report is the work of three Commissioners individual writing styles will be apparent to some degree.
- 19. In relation to the additional written representations received for the inquiry sessions that took place on the 12th-14th December 2016 we have disregarded those elements which sought to raise new issues, or to reopen topics where discussion at the inquiry on the relevant matter had already taken place and been closed. Our written advice to the parties prior to these submissions being made was clear such elements were to be avoided. Ample opportunity had been given for parties to submit their cases in advance of the relevant topics. However, all representations received by the Commission have been passed to Transport NI.
- 20. At the 12 December 2016 session the Department and Alternative A5 Alliance (AA5A) agreed to the submission (by 9 January 2017) of a joint statement from their respective expert transportation witnesses. The submission was finally received on the 30 January 2017 with the Commission's consent. It comprised two draft versions of the joint statement and it is acknowledged that the Department did not have time to review the last of these. The disagreement between these parties as to the extent and provision of information to be provided to the AA5A to assist in the preparation of the statement is acknowledged. We make no comment on that disagreement again ample opportunity was provided for evidence to be presented on the relevant matters. Instead we consider whether the cases as presented are persuasive.
- 21. The Report makes no comment on matters pertaining to the 2011 inquiry, or actions that evolved out of it, unless they have a relevance to the situation as it stands. For example, as we are only considering the draft Vesting Orders before us we have no locus to comment on whether procedures were carried out properly in relation to the modification of earlier and now defunct Vesting Orders. On occasion we were directed to evidence and transcripts related to the 2011 inquiry. Where provided to us such evidence has been reflected on, though with some caution. The evidential context of the Proposed Scheme has changed to an extent since 2011, the full information before the 2011 Inspectors is not before us, and the parties whose evidence was quoted were not all present at and/or made no representations to this current inquiry.

Commission Reference: 2015/D003-D006

Background

- 22. Many parties raised issues of compulsory purchase and the right to compensation for land lost or adversely affected by the Proposed Scheme. Concerns revolved around what would be compensated for, what considerations came into play in establishing compensation levels and when compensation would be paid. Dealing with this complex area of law throughout what has been a protracted process has caused frustration and angst amongst people. However, compensation matters fall to be considered by the Department of Finance's Land and Property Services (LPS) under the "Compensation Code" which is made up of Acts of Parliament, case law and established practice. Such matters, including any scope for discretionary payments or top up payments, therefore lie beyond our remit to address.
- 23. Generally no comment is made on the sincerity of advice or evidence provided by professionals, expert witnesses, and Government Departments or Agencies. Whoever they represented it is assumed that such parties carried out their duties diligently.
- As our remit is focused on the Proposed Scheme submissions to the effect that transportation infrastructure provision in NI should be planned and overseen in a different manner to the present governmental and departmental arrangements, is outwith our locus to comment on. Also, the upgrading of roads in the Republic of Ireland, by themselves or as alternatives to the proposed Scheme in whole or part, is a matter for the Irish Government and also beyond our locus.

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Part 1: General and Strategic Issues

1.1 The Proposed Scheme

- 1.1.1 The Proposed Scheme would provide for the construction of a mainly Category 6 dual carriageway running for some 85 kilometres between New Buildings and the N2 highway in the Republic of Ireland (ROI) at the Moy Bridge border crossing south of Aughnacloy. To allow for a transition from a dual carriageway to single carriageway a 1.2km length of single northbound carriageway leading from Junction 2 to Junction 1 at New Buildings is proposed. Similarly to allow for a transition between carriageway standards the final 1.2km of road between Junction 17 and the A5 at Moy Bridge would be single carriageway.
- 1.1.2 On implementation of the Proposed Scheme the existing A5 would become a 'B' class road. Notwithstanding this, there is an obligation in the Roads (NI) Order 1993 for the Department to maintain the road network. It would be for the Department to secure the funding for the maintenance of both the existing A5 and the various elements of the Proposed Scheme beyond their anticipated design life.
- 1.1.3 Some objectors contended that the Proposed Scheme was a different one to that considered at the 2011 public inquiry, and we accept that at the present inquiry various parties slipped in and out of terminology such as 'the previous' or 'the present scheme'. However, while the 2012 decision to approve a dual carriageway was quashed by the Courts the Scheme was not abandoned by the Department, though a period of uncertainty as to whether it would proceed arose. While reinstatement works took place where preliminary works for the Scheme as originally approved had been undertaken, there is no indication that the Scheme was ever formally dropped.
- 1.1.4 As noted later in this report a very different approach to phasing has now been taken and a new draft Direction Order, draft Vesting and Stopping Up of Private Accesses Orders have been progressed. Nevertheless, the plans before us appear substantially similar to those before the 2011 public inquiry notwithstanding changes in, for example, vesting lines, the number and size of Sustainable Urban Drainage Scheme (SuDS) ponds and to numbers of overbridges etc. The time between inquiries has allowed for designs to be modified and refined in order to address certain concerns, more recent roads standards and advances in knowledge. The different phasing has caused minor alignment changes to cater for the interim higher traffic flows at discreet locations. Additionally, a number of changes, such as the retention

of the Tullyvar Roundabout arose from recommendations made by the Inspectors following the 2011 public inquiry. Also, there was the opportunity to update the Environmental Statement to provide more up to date baseline data and surveys.

1.1.5 All-in-all, the Proposed Scheme is not a new one, but a further iteration of the one before the 2011 public inquiry.

1.2 Policy Context

- 1.2.1 The A5 Western Transport Corridor (A5WTC) is part of the comprehensive Trans European Network (TEN). Regulation (EU) No 1315/2013 includes a requirement for general priority to be given to measures necessary for removing bottlenecks particularly at cross border flows on such networks. However, while the document seeks provision of high quality roads on the network there is nothing compelling any upgrade of the A5WTC to be by way of a dual carriageway solution.
- 1.2.2 The importance of the A5WTC was highlighted by its identification as a Key Transport Corridor (KTC) in the now superseded 'Shaping Our Future: Regional Development Strategy for Northern Ireland 2025' (RDS 2025).
- 1.2.3 The now superseded *Regional Transportation Strategy 2002-2012* (RTS 2012), a daughter document of the RDS 2025, provided illustrative transport schemes to give readers an understanding about the likely scale and type of improvements that might be implemented under assumed budgetary constraints. With regard to funding for the strategic road network, it was envisaged that subject to full assessment and statutory procedures it would focus on inter-urban routes with the development of high quality dual carriageways and removal of bottlenecks where lack of capacity causes undue congestion. This chimes with the stated aim of the Department at the inquiry that all KTCs should eventually be to dual carriageway standard. The illustrative Strategic Highway Improvements along the A5, as identified in the document, however indicated bypasses and selective road widening.
- 1.2.4 Thus, whatever the longer term aim, the focus at this stage was on upgrading the A5 with carriageway improvements and bypasses as well as a plan to link it with the N14/15 at Strabane, as indicated by the *Regional Strategic Transport Network Transport Plan 2015* (RSTN-TP) published in 2005. This plan though indicated that, due to traffic growth, in the latter part of its Plan period it will be necessary to plan the dualling of further sections of KTCs (beyond those already in the Plan) for implementation after 2015, subject to economic appraisals and budgetary decisions.
- 1.2.5 A change in focus for the A5WTC was signalled with the 17th July 2007 meeting of the North South Ministerial Council (NSMC) where the Irish Government's intention to contribute financially to major roads programmes in NI was indicated. This included providing dual carriageway standard on routes within NI serving the North West Gateway and on the Eastern Seaboard Corridor from Belfast to Larne. The NI Executive confirmed its acceptance in principle to taking forward the projects.
- 1.2.6 Following this the *Northern Ireland Programme for Government 2008-2011* contained a commitment to progress plans to extend dual carriageways on

routes including the Western Corridor (A5). The document pointed to infrastructural deficits in key areas including roads, and the subsequent impacts on the ability to attract investment - particularly to where the deficit is greatest.

- 1.2.7 With the *Investment Delivery Plan (IDP) for Roads 2008* the principle of a dual carriageway along the full Western Corridor (A5) was incorporated into a delivery document via a planned Strategic Road Improvement (SRI) Programme.
- 1.2.8 The Regional Development Strategy 2035 (RDS 2035) was published in 2012. Given its provision of an overarching strategic spatial framework and strategic guidelines there is potential for specific proposals to meet some of its aims, but to be discordant with others. However, these aims are not mutually exclusive. So, while the Proposed Scheme would have implications for the aim of, for example, reducing our carbon footprint it complies with the aim of improving connectivity to enhance the movement of people, goods, energy and information between places.
- 1.2.9 The RDS's Regional Guidance indicates that to underpin economic growth NI needs a modern and sustainable economic infrastructure, and that decision makers have to balance economic growth and environmental impacts. There is a focus on larger urban centres and regional gateways taking advantage of their locations on the regional transport network (of which the A5 is part). To deliver a balanced approach to transport infrastructure one of the specified points is to maximise the Regional Strategic Transport Network (RSTN) which enhances accessibility to towns and helps to build an integrated regional economy, facilitates tourist travel and reduces where possible unsuitable traffic into towns.
- 1.2.10 The document's Spatial Framework Guidance looks to develop a strong North West. It refers to enhancing transport linkages across the Region particularly between Londonderry, Strabane and Donegal, to and from the air and sea ports and the distribution of traffic from and between transport corridors. Strabane's close relationship with Lifford is noted and it is indicated that their locational advantage will be further strengthened when the A5 linking Dublin and Omagh to Strabane and Londonderry is improved. It is advised that this will create the potential for an economic corridor from Aughnacloy to North Donegal. Also, Economic Corridors based on the RSTN are identified as having a fundamental role to play in regional growth, and that the accessibility of the road network between cities and towns will open up opportunity for economic development across NI.
- 1.2.11 So, while the RDS 2035 is strong on sustainability, balanced development, regions, economic hubs, and modal shift the Proposed Scheme in principle falls within its strategy.

- 1.2.12 The 2011-15 Programme for Government (PfG) gave a Key Commitment to progress the upgrade of key road projects to reduce journey times, but did not specifically refer to the A5.
- 1.2.13 Ensuring a Sustainable Transport Future: A New Approach to Regional Transportation (New Approach) was published in 2012 to replace the RTS 2012 and aims to achieve the RDS 2035's transportation vision. The document recognises the need to complete the work identified in the current RSTN-TP and the SRI Programme.
- 1.2.14 In November 2015, the Irish Government, through *A Fresh Start: The Stormont Agreement and Implementation Plan* reaffirmed its commitment to investing in infrastructure to support North-South co-operation to help unlock the full potential of the island economy. It was indicated that the A5 Road project is of major strategic importance to the North-West. The Irish Government committed to providing funding to ensure that Phase 1 of the A5 scheme could commence as soon as practical. The NI Executive and the Irish Government agreed that, subject to the necessary statutory procedures, construction of the first section of the route, i.e. New Buildings to north of Strabane (Phase 1a), would commence in 2017 with a view to completion by 2019.
- 1.2.15 While a number of the above documents are superseded they allow for a wider understanding as to the background of current documents and the Proposed Scheme. We were invited by objectors to disregard documents which had not been subject to Strategic Environmental Assessment, and advised of the duty of organs of the state to annul the unlawful consequences of a breach of EU law. However, while a number of the above documents have not been subject to SEA, in the absence of a direction from the courts stating otherwise such documents retain presumptive validity. The RDS 2035 was subject to an environmental report under the Strategic Environmental Assessment Directive, as was the New Approach document. While objectors claimed the relevant SEAs did not address a dual carriageway solution to the A5, again the documents retain presumptive validity.
- 1.2.16 At the inquiry the evidence was that the next Programme for Government (PfG) is unlikely to make reference to the A5WTC. The AA5A invited us to take a view on what such an omission meant for the Scheme as the PfG is to set out priorities that the Executive will pursue and the most significant actions it will take to address them. We note that the pledge of office has a commitment to operate within the framework of such a programme. However, the document remains in draft form and in the absence of any clear governmental or departmental confirmation it would be rash to conclude that the policy context or inter-governmental approach to upgrading the A5 corridor has changed. While some reference was made to the West Tyrone Area Plan 2019 Issues Paper published in 2005, no weight is given to this -

with the transfer of planning functions to Councils in 2015 work on the Plan ceased.

Conclusion

- 1.2.17 While it was alleged that pursuing the Proposed Scheme was out of step with the thrust of UK transport policy, in essence the NI policy framework sets out a need to upgrade the A5WTC which is seen as having a fundamental role in contributing to sustainable economic and development goals in both NI and ROI. We have no reason to conclude that the A5 corridor exhibits what the Department called a degree of stubborn economic deprivation. Generally contributors to the inquiry, while opposing the Proposed Scheme, accepted that there was an infrastructural imbalance west of the Bann and that an upgrading of the A5 corridor was necessary and would bring benefits.
- 1.2.18 Since July 2007 there has been an intergovernmental agreement between the NI Executive and the Irish Government to provide a dual carriageway along the A5WTC though the exact route it should take was left open. The reasoning behind this governmental policy approach is unknown, as is the extent to which consideration was given, if any, to other options in coming to it. Given the present economic situation and impacts of the proposed Scheme we understand why many question this political decision. However, as Commissioners it is not our role to decide on the merits of governmental policy (or indeed budget priorities) which would have been formulated taking into account political considerations. Our role is to understand such policy and give it appropriate weight in the context of the evidence provided to us.

1.3 Justification for the Proposed Scheme

- 1.3.1 The first four objectives for the Proposed Scheme, as stated in its Environmental Statement (ES), accord with the thrust of the policy context set out in the last chapter. The final objective however looks to how the Scheme is to be achieved as opposed to what it is to achieve. The objectives are:
 - to improve road safety;
 - to improve the road network in the west of the Province and North/South links;
 - to reduce journey travel times along the A5WTC;
 - to provide improved overtaking opportunities for motorists along the A5WTC; and
 - to develop the final proposals in light of safety, economic, environmental, integration and accessibility considerations.

Traffic Flows

- 1.3.2 The joint submission from the expert transport witnesses for the Department and AA5A is considered as broadly presenting those parties final position on the matters of traffic forecasting and modelling, and the implications of this for the economic assessment of the Proposed Scheme. The AA5A considered that the issue of alternatives to the Proposed Scheme could not be divorced from the forecasting modelling and appraisal. Their contention was not concerning the modelling and forecasting for the Proposed Scheme in isolation, but the view that the economic analysis of the scheme was partial given the lack of options appraisal.
- 1.3.3 Whether the Minister should consider alternative proposals is addressed in the following chapter. In this chapter the Proposed Scheme is considered on its own. In that regard it was not disputed that the industry software used by the Department in their assessment was an appropriate model to assess a highway scheme albeit in isolation from potential alternatives. The Department presented a comparison of the traffic forecasts in the ES with the traffic flows provided at the 2011 inquiry. The ES forecast uses a different base year due to the updated survey date and a different inter-peak period timing. However, both sets of figures are broadly similar. Some variation would be expected given updated surveys and the nature of making predictions over lengthy time periods. There is no sound reason to conclude that the Department's assessment, the only detailed one before us, has not been carried out in conformity with current guidance and best practice for a major highway scheme on its own.
- 1.3.4 The Department confirmed that their modelling had recognised that road improvements do have a tendency to cause additional (induced) traffic, for

example, where drivers make new trips or divert from other modes etc. The modelling however has indicated that induced or generated traffic would be very unlikely to occur for a scheme of this nature.

- 1.3.5 In any such modelling there are inherent uncertainties which could feed through into other assessments such as the level of air quality and C02 emissions. However, the model used contains enormous quantities of detailed information and we are satisfied that the validation of the data was carried out in conformity with the relevant Transport Analysis Guidance. This does not guarantee that all uncertainty has been eliminated, but there is insufficient evidence to indicate that the underlying data is flawed to the extent that a precautionary approach should be taken when considering the Scheme's impacts.
- 1.3.6 Objectors contended that the proposed Scheme could not be justified by the traffic flows along its length. It was also pointed out that traffic flows would remain well below the level at which congestion on it would occur even at the design year of 2041. The *Design Manual for Roads and Bridges* (DMRB) sets out standards relating to the design, assessment and operation of roads. It sets out a range of traffic flows over which a dual carriageway standard is likely to be economically justified. The range for a dual carriageway in its opening year is between an Annual Average Daily Traffic (AADT) flow of 11,000 to 39,000. The Department's forecasts indicate that in the year of completion, 2028, the Proposed Scheme over its length would have flows exceeding the 11,000 AADT level, except for its Phase 3 between Ballygawley and Augnacloy. Indeed at one point along Phase 3 AADT traffic levels would be about 6,700 vehicles in the opening year.
- 1.3.7 However, as the range of flows are only a starting point in design and economic assessment it is only logical that other factors be weighed into the consideration of what standard of carriageway is finally proposed. In regard to Phase 3, its value to the overall linking of north to south and the safety aspect of having a consistency of a dual carriageway are relevant.

Impacts upon Trip Times

1.3.8 Objectors contended that few vehicles would benefit from the full length of the Scheme and that short distance movements would predominate, with long distance trips (including trips with origins and/or destinations significantly removed from the A5) accounting for some 10-15% of trips. It was also noted that a significant proportion of long distance traffic would be attributable to intra ROI traffic transiting NI with respect to sites south of Strabane. The Department estimated that only about 500 vehicles a day would benefit from the full 22-27 minute time saving the Proposed Scheme would provide on journeys between Londonderry and Aughnacloy.

- 1.3.9 However, it is inappropriate to focus on longer distance traffic or traffic going from one end of the Proposed Scheme to the other. It has to be considered in the overall connectivity of the settlements served and the interconnecting routes such as the existing A5. The Proposed Scheme would cater for both long and short journeys of various kinds strategic and local. The Department's figures show that there would be a variety of time savings achieved, such as 30,000 vehicles a day experiencing a journey saving of 2-4 minutes, and 12,000 vehicles saving 4-6 minutes. About 134,000 trips per day would be quicker than they would be if the Scheme were not built. Against this a substantial number of journeys, some 25,000, would experience additional delays, though these would be largely in the range of 0-2 minute delays.
- 1.3.10 The Scheme would also cause an additional 2 minutes travel time for northbound traffic travelling between New Buildings and Craigavon Bridge at peak hours as additional traffic arrive at the single carriageway bottleneck at New Buildings earlier. These delays, also considered later in this Report, have to be seen in the context of the overall improvement in transport connections along the A5 Corridor which would be of benefit to Londonderry even though the Proposed Scheme would not extend into it. In the other direction journeys are likely to benefit from traffic exiting quicker from New Buildings.
- 1.3.11 It was claimed that there was no evidence of significant congestion in the A5 corridor in the Department's figures throughout the assessment period. However, there is congestion along the existing A5 a number of parties referred to, and we experienced significant congestion at Strabane and Omagh as well as general delays behind slow moving vehicles and delays at junctions. Also, with the forecast increase in traffic, journey times are likely to deteriorate during peak travel times. Without the Scheme in place the Department predicts an increase in journey times along the existing A5 of 6% from 2013 to 2028 and 9% by 2041. As averages these figures conceal the variation that would be experienced for certain journeys.
- 1.3.12 The Proposed Scheme is forecast to reduce traffic on the existing A5 to varying degrees approximately 20%-90% depending upon whether the section of road would be urban or non urban. The proportional relief is highest for inter-urban sections between the major centres. Thus, a substantial proportion of traffic would divert to the A5WTC to the relief of the existing A5 and some other parallel roads.
- 1.3.13 The Proposed Scheme would also provide shorter and more reliable journey times for a majority of users including local businesses. Longer distance bus services, such as Goldliner Services, would also be diverted away from

towns along the existing A5 allowing for the future development of such services to assist in modal change.

Road Safety

- 1.3.14 Significant stretches (38%) of the existing A5 do not comply with current road design standards, such as where overtaking and stopping sight distances fail to meet modern requirements. Carriageway widths vary throughout and on occasion fail to meet current standards in terms of road or verge widths, or by virtue of the absence of a hard strip. Other areas of potential road user conflict arise from the mix of 'two and one' and single carriageways, the presence of numerous junctions and accesses, and the presence of businesses and schools on or close to the road.
- 1.3.15 The existing A5 has a low accident rate compared to the UK average, though the potential for conflict would increase with the forecast general increase in traffic levels. It is accepted that most accidents are caused by driver error inattention, driving too close to other vehicles and drink driving etc. However, single carriageways have generally higher accident rates than dual carriageways whose design minimises opportunities for drivers to make errors. It is borne in mind that the dual carriageway upgrade of the A4 has led to a much lower accident rate.
- The Proposed Scheme would provide significant safety benefits. For 1.3.16 example, drivers would benefit from a consistency in carriageway and an absence of right turns and individual access points. Traffic would be diverted from the more complex driving environments of settlements. Consequently driver frustration, which can build up over the course of a journey, would be likely to reduce. While the Proposed Scheme could be used by horses, cyclists or pedestrians, as it is not designed to cater for them, such use would While, tractors and other slow vehicles may use a dual carriageway the overtaking lane would facilitate passing and more local vehicles such as tractors are likely in general to remain on the existing A5. The use of 1m lay-by strips is not judged to be a significant safety issue as sufficient overtaking opportunity remains in the event of breakdowns.
- 1.3.17 The reduction in traffic using the existing A5 would be likely to result in faster traffic speeds there. However, such a reduction in traffic would also provide faster journeys and less resulting frustration. The existing A5 and side roads in its vicinity would be likely to become safer for all road users. Also, the Proposed Scheme would not preclude future improvements on the existing A5 to assist safety. In relation to that, by itself the Scheme offers little for nonmotorised users (NMUs), but the Department have committed to producing a strategic masterplan for cycling and walking along the A5 Corridor. would seek to examine the impact upon and identify potential new opportunities for active and sustainable travel infrastructure, such as cycling

routes; new links between walking, cycling and public transport; opportunities for urban cycling networks in the Omagh and Strabane areas, and the examination of the potential opportunities deriving from the Strategic Plan for Greenways. Discussions have been held with the charity SUSTRANS on this issue, and the masterplan should assist in addressing concerns about safety for NMU's using the existing A5 should the Scheme go ahead.

- 1.3.18 While there was debate over accident figures and their causes we have little reason to doubt the Department's assessment. The national accident rates in the COBALT (Cost and Benefit to Accidents Light Touch) analysis carried out by the Department predicted a reduction of 2,246 accidents on all the roads in the study area (not just those in the immediate vicinity of the A5) over the 60 year appraisal period. The analysis predicts a reduction of 22 fatal casualties, 330 fewer serious casualties and 2,722 fewer slight casualties over the period. These figures were not seriously challenged. The reduction in the socio-economic costs of accidents would be significant.
- 1.3.19 While elements of the Proposed Scheme are elevated, where for example flood plains are crossed, we do not see the route as one particularly exposed to high winds which would significantly raise safety or travel delay issues.

Severance and Driver Stress

- 1.3.20 The Proposed Scheme would transect the local road network in approximately 100 locations. In 17 instances the local road would be stopped up without provision for the realignment or introduction of new linking roads. Inevitably this would lead to severance of communities. However, the Proposed Scheme, by using over and under bridges, would keep the majority of side roads open and the majority of settlements would remain relatively accessible to and from the proposed junctions.
- 1.3.21 Where road closures would lead to diversions and alternative road crossings increased journey lengths of 40 metres to 2.1km would occur. We accept the findings of the ES that in most such cases there would be a negligible increase in journey time. Where greater inconvenience occurs the additional journey times and frustration experienced have to be considered against those areas where a reduction of severance would occur. For example the reduction in traffic levels along the existing A5 and removal of through traffic from settlements would improve safety and connectivity. Taking the Scheme as a whole the degree of severance is not as severe as objectors consider and we have no reason to dispute the findings of the ES in relation to it.
- 1.3.22 With more consistent and shorter journey times and a safer roads environment stress for those using the Proposed Scheme would be generally low, other than at New Buildings where the level would be higher. We, accept the Department's conclusion that levels of driver stress would remain

moderate to high for most sections of the existing A5. A degree of additional driver stress would be likely to arise from the additional delays caused travelling between New Buildings and Craigavon Bridge. However, as existing levels of stress are probably moderate to high here the proposal would be unlikely to change either these levels significantly, or change the findings of the ES in relation to driver stress generally.

Economic Considerations

- 1.3.23 Evidence submitted referred to a *Major Scheme Business Case* (MSBC) 2012 which led to the then Department of Finance and Personnel confirming its approval for what was then Phase 1 of the Scheme. However, we prefer to concentrate on the figures provided for this inquiry. While the MSBC is to be updated in 2017 as part of the governance arrangements for the Scheme it is for the Department to decide in the first instance on whether any consultation is required on this.
- 1.3.24 The Department's submitted *Economic Appraisal Report* of November 2016 clarified and made corrections to an earlier report. However, parties had the opportunity to comment on these changes and there is no reason to set aside the Appraisal's findings because of the corrections.
- 1.3.25 The Appraisal assesses benefits expected to accrue as a result of the Proposed Scheme against the capital costs of construction. It considers savings from journey time and vehicle operating costs, the costs of increased carbon emissions and an assessment of accident benefits in the A5 study area. The Appraisal calculated the Proposed Scheme's Benefit Cost Ratio (BCR) to be 1.88. Under the 2013 *Value for Money Advice Note* published by the Department for Transport a medium return is seen as having a BCR of 1.5 to 2. This return of 1.88 may appear modest in relation to road schemes of a similar scale, but it remains a positive ratio.
- 1.3.26 In relation to the methodology used the base year chosen is unlikely to have impacted upon the BCR result and we are not persuaded that undue benefits have been attributed to weekend, night-time or holiday period traffic movements. The Appraisal has not considered enhanced economic activity that might arise from induced traffic essentially traffic generated by the Scheme. However, the traffic forecasts show no evidence that the Proposed Scheme would stimulate any substantial increase in such traffic.
- 1.3.27 The concerns raised that the model system and software do not appear to allow the ready extraction of detailed validated data on matters such as current journey distances and trip purposes etc. are understood. Such information would assist in validating trip profiles etc. and assist in any critique of economic appraisal findings. However, we have commented on the acceptability of the underlying model data previously and do not judge

that the broad findings of the assessment are flawed. Overall we are content that the Appraisal, albeit for the Proposed Scheme on its own, has been carried out in accordance with the relevant guidance.

- 1.3.28 A Technical Note of October 2016 considering Wider Economic Benefits (Wider Impacts) was also presented to the inquiry. It considers 'agglomeration benefit' - an increase in 'effective density', which boosts and increases productivity. Transport schemes can bring this about by improving accessibility between areas of employment. The Note advises that the value of the agglomeration benefit of the scheme (appraised over 60 years) is £112.2m. It also refers to an increase in output in markets with imperfect competition, a benefit calculated by adding a value worth 10% of the time savings to business users from the conventional transport appraisal – which had been estimated by Mouchel. This figure (£70.1m) is not reported in the Note and was not raised at the inquiry sessions, but it is found in the Department's Theme Report: Economic Assessment posted on the A5WTC Despite the flagging up of the figure's existence and its being website. publically available, inquiry participants would not necessarily have been aware of it. We have no reason to doubt that the figure was properly arrived at under WebTAG guidance, but it should have been more clearly reported. Nevertheless, it would not be prudent to just set that figure aside, and on that basis the Wider Impacts of the Proposed Scheme would be £182.3m.
- 1.3.29 The nature of the A5 corridor with its rural areas and smaller towns such as Omagh and Strabane is acknowledged, and the possibility of the Scheme encouraging longer commuter trips is recognised. However, with the improved linkages between what are reasonably sized settlements in a NI context the calculated Wider Impacts appear feasible. Of the Wider Impacts reported in the Technical Note 42% would accrue to NI and 58% to the ROI. If the benefit to County Donegal is added to the benefit to NI, then 72% of the benefit accrues to this combined area. Given the policy thrust and overall sources of funding for the upgrading of the A5 corridor this should not be seen as a negative. Also, notwithstanding the wider geographical spread of the Wider Impacts the study still suggests that a substantial amount of it would accrue to the A5 Corridor.
- These reports however only go so far, and there are a number of 1.3.30 considerations which are hard to place a monetary value against. Some impacts, such as those upon landscape, have to be weighed against any benefits in a more subjective manner once the particular effects are understood.
- The Proposed Scheme as it gets older would require maintenance, but it is 1.3.31 anticipated that the cost is likely to be modest. The Scheme would represent 85km of road out of a total road network of some 25,000km. In addition the

reduction of traffic on the existing A5 would be likely to reduce maintenance costs there.

- 1.3.32 There is a general policy thrust in documents such as the RDS 2035 towards supporting rural communities, the rural economy, agriculture and land productivity. The Scheme, given its largely rural route would cause a negative impact on land productivity as land lost to it cannot be replaced. However, as noted later in this Report, in a NI context this loss of land is unlikely to be significant. Any loss of agricultural land would be reflected in land values, but at a local level the loss of land and severance would lead to a loss of productivity and impact upon farm income and jobs. Given the evidence before us it is not possible to predict the extent of this on the local economy, but it is unlikely that there would be an undue impact on the wider agri-food industry.
- 1.3.33 The reduced traffic along the existing A5 would cause a loss of passing trade to businesses along it. This trade would be likely to relocate elsewhere along the corridor, benefiting other businesses and communities. However, businesses and jobs are likely to be lost and the complex links between local businesses and communities are recognised. For example, where businesses close, people may have to travel further to obtain certain services or work. While some objectors quoted the potential for the loss of 120 jobs it is not clear where this figure came from. Against this the majority of business in the A5 Corridor are likely to benefit from improved access, due to congestion relief and shorter journey times, which benefit customers, suppliers, staff and inter-company communication. This is likely to enable businesses to stay in the A5 corridor and assist new business start ups. Some existing businesses might also adapt to the new situation.
- 1.3.34 Both objectors and the Department referred us to a study before the 2011 inquiry which indicated that the scheme would lead to the creation of some 260 jobs. This figure is not in the current economic reports and as such it is treated with caution. Overall though, we would not see the impact on smaller businesses and more permanent jobs as being economically negative in terms of the corridor as a whole. Indeed the benefits of the Scheme would assist in supporting the rural community and economy as well as the settlements such as Londonderry, Strabane and Omagh.
- 1.3.35 There would be a short term benefit for firms involved in construction and associated suppliers, and the benefit of this to local (including NI) firms would depend upon the nature of the contractors and sub contractors. It is accepted though that construction presents a useful, if temporary economic boost.

1.3.36 There were some concerns that the Scheme with its links to the A4 and M1 and onwards to Belfast would ease access to and direct commuters and economic benefits to the Belfast area and encourage further congestion there. This may happen with such an improvement to general transport links, but we are not persuaded that it would be to a significant extent. Again the Scheme would improve links to Dublin and its airport, but in the absence of an economic assessment indicating otherwise it is judged that there is unlikely to be a significant adverse impact upon Derry City Airport.

Phasing

- 1.3.37 The issue of whether certain phases of the Proposed Scheme are likely to proceed, or should proceed is addressed later in this Report. However, here we address the justification for the Scheme should certain phases not proceed. If any part of the Scheme were not constructed then its wider benefits would not be fully realised, and the balance of positive and negative impacts would alter. There is no detailed evidence before us as to the impact of certain phases not proceeding. However, Phases 1a, 1b and 2 are to our minds the most important elements of the Scheme as together they would assist the linkages between County Donegal, Londonderry, Omagh and Strabane, and the A4/M1 Corridor. It is judged that the benefits stemming from these Phases alone are likely to be strategic and substantial in a Northern Ireland context. Though, if any of these phases did not proceed then there would be questions as to the overall justification for the Scheme.
- 1.3.38 In terms of Phase 3, it would carry significantly less traffic than the other Phases. We have also considered the nature and length of the existing A5 from the Border to Ballygawley. Overall, the benefits that this segment of the Scheme would provide are likely to be much less than the other Phases. Accordingly, in our view should Phase 3 of the Scheme not proceed it would be unlikely to lead to a fundamental diminution of the Scheme's benefits.

Conclusion

1.3.39 The Proposed Scheme would achieve the first 4 objectives set out in the ES. In terms of the economic impact it would achieve significant benefits. Objectors considered these benefits as modest, and the lack of induced traffic would by itself lend credence to the suggestion that the Scheme would add little additional stimulus to the economy of the A5 corridor. However, the figures should be seen in the light of the existing lower economic performance in the area generally. Also, infrastructure by itself is only one element of delivering economic growth. Infrastructure needs to be in place to facilitate growth and the Proposed Scheme would allow for that opportunity along the corridor. The Scheme therefore aligns with the policy thrust set out in the previous chapter.

- 1.3.40 Currently it would be uninformed speculation to try to weigh in the impacts of Brexit on the benefits the Proposed Scheme.
- 1.3.41 We conclude that the Scheme's benefits would be of major public significance.

1.4 Alternatives to an Offline Dual Carriageway

- 1.4.1 Objectors contended that robust conclusions on the soundness of the Proposed Scheme and the value for money it presents could only be reached if a detailed comparison with other schemes was undertaken. In that regard we bear in mind the significant cost of the Scheme and its impacts on the environment etc which are considered later in this Report.
- 1.4.2 A number of documents such as the best practice guide The Green Book -Appraisal and Evaluation in Central Government and the Northern Ireland Guide to Expenditure appraisal and Evaluation (NIGEAE) were referred to at the inquiry. Their thrust is towards undertaking an appraisal of other options to ensure value for money and satisfying public accountability. We also note references in documents such as the RTS to full assessment of schemes, and we were directed to assessments relating to the development of road proposals in England. Objectors contended that under these documents alternatives to the Proposed Scheme should have been assessed. However, we see nothing to suggest that this could have been a binding obligation on the Department in the particular circumstances arising here - given the governmental policy direction towards a dual carriageway it was not reasonably open to the Department to undertake an appraisal of other options. Nevertheless, and whether necessary or not, undertaking such an appraisal may have allayed many concerns as to the robustness of the case being made for the Scheme.
- 1.4.3 While our remit relates to the Proposed Scheme it remains appropriate to consider those representations suggesting that there might be alternative transport schemes that would better address the travel and traffic demands projected for the A5 corridor and that could be competitive in terms of economic appraisal. The level of information before us does not allow for a detailed comparison, but the limitations of objectors to work up alternatives are acknowledged. Nevertheless, were it judged that other Schemes should be considered in more detail then, as suggested by the generality of the AA5A's case, a more comprehensive analysis of the Scheme and its performance against alternatives would be warranted.

Upgrading the Existing A5

- 1.4.4 Many representations advocated a mix of measures to upgrade the existing A5, such as creating more stretches of wide single carriageway (WS2+1) road that is two lanes of travel in one direction and a single lane in the opposite direction with bypasses around settlements aligned with park and ride, and improved bus provision. Junction improvements could also be part of such an approach.
- 1.4.5 The unchallenged evidence from the Department is that the current standards for such carriageways in the DMRB, dating from 2008, are

significantly different to earlier standards. While some carriageways have been constructed since 2008 to those earlier standards these (including the A5 Tullyvar Road) were at an advanced stage in their development when the new standards were published. In the case of the Tullyvar Road the contract had been awarded and it was recognised that the construction cost would provide benefits for road users for a minimum of 6 years. While it would be for any detailed assessment to confirm, we are not persuaded that promoting anything but limited deviations from DMRB standards is appropriate on safety grounds. The standards for carriageways in NI are also different to those in the ROI which are therefore of little relevance.

- 1.4.6 Any bypass elements would be likely to retain the positive and negative impacts, and indeed costs of the Proposed Scheme where it bypasses settlements. They would also dissipate the platooning of vehicles that occurs on the existing road.
- 1.4.7 The DMRB advises that WS2+1s can be a more effective solution than other single carriageway roads options at flows up to 25,000 AADT. On the basis of the traffic forecasts for the existing A5 the use of such carriageways could be possible. Accepting this, we also bear in mind the number of shorter distance movements that the Proposed Scheme would cater for, and the forecast traffic flows that it would accommodate. There is no reason to doubt that the Scheme's volume capacities along its length would be below the 80% at which congestion could be expected considerably below in some stretches (as little as 5%).
- 1.4.8 A WS2+1 option would probably result in fewer landscape and visual impacts and the possibility of fewer ecological impacts that those engendered by the Proposed Scheme. However, balanced against this would be the greater impact of noise and air pollution for sensitive properties along the existing A5 as traffic remained on it. Water run-off from the existing road going into watercourses without first benefitting from settlement in SuDS ponds would also remain in areas where the road was not upgraded.
- 1.4.9 Using WS2+1 carriageways would increase overtaking opportunities and deliver journey time and safety benefits. However, this would have to be balanced against the scope for increased driver confusion resulting from the reduction of carriageway continuity. Overtaking opportunities would also be limited to those stretches of road where there were two lanes in the direction of travel.
- 1.4.10 Additionally whether currently used or not, the extent of existing accesses from properties and fields onto the A5 must be acknowledged. Under current standards they could not have direct access onto a WS2+1 carriageway. Thus, connector roads would be required to collect traffic from properties and

side roads that could no longer access the A5. So, as well as causing greater severance along the existing A5 a WS2+1 carriageway could potentially involve a greater landtake than a similar length of offline dual carriageway and consequently add to costs. With a WS2+1 road the DMRB also advises that the design should encourage Non Motorised Users (NMUs) to use routes segregated from the main carriageway. Overall, the standards set out in the DMRB, such as a minimum of 30% of the length of the road improvement in each direction to provide overtaking opportunities, indicate that providing WS2+1 carriageways for selected areas of the A5 would not be a straightforward process.

- 1.4.11 Also, road closures and diversions to allow construction works to continue safely would add to costs and delays. Extra costs are also likely to arise from minimising impacts upon nearby properties on or close to the road and from dealing with utilities alongside or under it. A WS2+1 carriageway also has considerable scope to entail the demolition of more than the 8 properties that are to be demolished under the Proposed Scheme.
- 1.4.12 The introduction of WS2+1 carriageways could be directed to more rural areas to avoid built up locations and areas where greater numbers of accesses exist, and a scheme could be designed to meet any available budget. Such a partial approach to improving the A5 is indeed likely to involve less landtake than the Proposed Scheme's full length dual carriageway with its various impacts, such as on farm productivity. However, such an approach, even with other associated measures such as park and ride schemes, could only ever be a complicated and piecemeal way to deal with the varying issues affecting the existing road over its length. All-in-all, we are not persuaded that such an approach would deliver similar benefits in terms of the wider economic benefit, journey time savings, reliability of journey time and safety benefits provided by the Proposed Scheme.

The Railway Alternative

- 1.4.13 A number of representations promoted the reinstatement of a railway, possibly in phases, along or close to the route of former lines and allied to other measures such as fare tariffs, selected improvements to the existing road network and improvements to public transport and cycling facilities.
- 1.4.14 The thrust of policy documents towards sustainability, environmental protection, and modal shift is acknowledged, and the concept of an integrated transport system to achieve such aims is attractive. Large parts of the population do not have access to cars, and railways can increase the attractiveness of areas accessible to stations which can themselves become focal points. While the majority of former track beds are in private ownership many lengths of the former railway routes remain discernible on the ground. Generally the cost of constructing non-electric railway lines is in the region of £10m per mile and it is interesting that old railway timetables compared quite

favourably to modern bus timetables. There is also potential for fewer landscape, visual, and ecological impacts than those engendered by the Proposed Scheme. The exact benefits or otherwise of such an approach to other issues such as noise impacts would require more detailed consideration. As for CO₂ emissions per passenger from a non-electrified line, we accept that this would vary depending upon passenger numbers and could compare quite favourably with many vehicles.

- 1.4.15 Any railway however would be focussed on passenger traffic. The *Railway Investment Prioritisation Strategy* (RIPS) of 2014, indicates that whilst moving freight on to rail and off road is a key objective of EU and UK Transport Policy rail freight only becomes commercially viable when transporting large volumes of goods over longer distances distances of greater than 300km was the figure quoted by the Department at the inquiry. The evidence was that that there had been little interest in the island for developing freight services. Heavy vehicles servicing businesses would therefore be likely to remain on the existing A5 whether upgraded or not.
- 1.4.16 Also, while the successful example of the revived Borders Railway in Scotland was referred to there is little to suggest that population density, commuter and tourist levels in and between Londonderry, Omagh and Strabane would sustain a railway option. The low population density in the wider rural area means that getting people onto the network would be problematic, especially as the lines and stations would be unlikely to come into the hearts of settlements but skirt their edges. The use of park and rides and bus links etc. could be used to address this. Nevertheless, we are not persuaded that a volume of traffic could be achieved to make railways reasonably cost effective to construct or manage even over relatively short and more populous stretches of the A5 Corridor. It would again also engender a piecemeal approach to the problems affecting the existing A5 over its length.
- 1.4.17 Overall, a railway approach, in whole or part, or as part of a multi modal scheme is unlikely to deliver similar benefits to the Proposed Scheme. We also bear in mind the RIPS approach to investigating extensions of the existing railway network. This has referred to extensions along the road network on the A6 and either the M1/A4 or A3/A29 corridors as possibly providing more affordable and viable options, particularly given the significant number of commuters currently utilising the A6 and A4 corridors.

Conclusions

1.4.18 A number of representations asked us not to recommend in favour of the Orders unless and until alternatives to the Proposed Scheme have been properly assessed by the Department. The above alternatives would fall within the strategy and aims of documents such as the RDS 2035, and at the least go some way towards meeting the objectives for the Proposed Scheme. However, and in accounting for the level of detail before us, we are not

persuaded that the suggested alternatives (alone or in combination with others) are reasonably capable of achieving the same scale of benefits as the Proposed Scheme. Given this and in the context of the policy background to the Scheme there is insufficient justification to recommend that a full options appraisal of such alternatives would be warranted at this stage.

1.4.19 On this basis we continue to consider the Proposed Scheme on its own. Also, the above conclusions would not change whether or not Phase 3 is retained as part of the Scheme.

1.5 Scheme Phasing

- 1.5.1 Since the original public inquiry the anticipated financing of the project has altered considerably with the Irish Government announcing in November 2011 the deferral of its £400 million contribution to fund major roads programmes in NI. Thus, the anticipated construction of the Proposed Scheme, and any benefits it provides, in full over a relatively short timescale is not presently feasible.
- 1.5.2 The present situation is that the NI Executive's Budget 2016-2017 agreed an indicative funding package of £229 million for the scheme up to financial year 2020/21. This is inclusive of a £75m contribution from the Irish Government referred to in the *Fresh Start Agreement*. In such a situation it is inevitable that the Proposed Scheme would need to be planned on the basis of phased works over a longer period. Also, in order to progress design and development of the new draft statutory orders and Environmental Statement certain working assumptions relating to the phasing and timeframe for the project's construction had to be considered.
- 1.5.3 The proposal is to phase the works as follows:
 - Phase 1a from New Buildings to the north of Strabane (Junctions 1-3) with an anticipated construction period of 2017 to 2019;
 - Phase 1b from south of Omagh to Ballygawley (Junctions 13-15) with an anticipated construction period of 2017 to 2019;
 - Phase 2 from north of Strabane to south of Omagh (Junctions 3-13)
 with an anticipated construction period of 2021 to 2023; and,
 - Phase 3: Ballygawley to the Border at Aughnacloy (Junctions 15-17)
 with a purely indicative construction period of 2026 to 2028 referred to.
- 1.5.4 It is proposed that the Scheme would commence with Phase 1a and Phase 1b in the period 2017 to 2019. It is expected that Phase 1a will account for £150m of the existing £229m budget with the remaining £79m being used to start (not complete) Phase 1b.
- 1.5.5 Beyond this it will be for the NI Executive to make money available in future budgets. In this context we understand the uncertainty voiced by many as to whether and when the Scheme would be completed, as we do not know where Phase 1b would start or how much of it might be completed with existing funds. If there were any overspends the Executive would have to fund these as well. While a number of representations referred to the potential impacts of Brexit it would presently be groundless speculation to consider what impact that may have, though it does not appear that the

Proposed Scheme is dependent upon any European Union (EU) funding. Overall though, in acknowledging the longstanding commitment of the Executive and Irish Government to the Proposed Scheme as a whole, if this commitment remains, the timescales for Phases 1 and 2 (or close to them) appear deliverable.

- 1.5.6 However, as regards Phase 3, the situation is unchanged from the Inspector's Report into the 2011 Public Inquiry which recommended that this element of the Proposed Scheme should be postponed until details of the link with the N2 had been clearly identified. Accordingly, no Orders are presently proposed for this phase of the Proposed Scheme which is in effect being held in abeyance. We remain unaware of a firm commitment from the Irish Government in relation to the N2 improvement scheme or the funding for its construction. In this context the more distant and purely indicative dates for the delivery of Phase 3 remain no more than a possibility.
- 1.5.7 This uncertainty over the N2 scheme is different to the situation with the A5/N14/N15 Strabane/Lifford Link road, which would provide a strategic connection with the A5 at the proposed Junction 7 at Strabane. There is no sound reason to dispute the Department's evidence that the Irish Government is committed to opening this link concurrently with the Proposed Scheme.
- 1.5.8 If the Environmental Impact Assessment (EIA) or indeed any Appropriate Assessment (AA) are out of date by the time the relevant Phases are brought forward for construction then a further EIA or AA can be undertaken in connection with the process for making Vesting Orders.

The Logic of the Proposed Phasing

- 1.5.9 The section from New Buildings to Strabane (Phase 1a) is one of the heavier trafficked sections of the existing A5 route and the Proposed Scheme would allow for a number of small settlements to be bypassed. This element of the road would assist in improving access between Londonderry and Strabane with its cross border links.
- 1.5.10 The dualling of the section from Ballygawley to Omagh (Phase 1b) is an obvious continuation of the A4 dualling project which would improve access between Omagh (a Main Hub in the Regional Development Strategy 2035) and Belfast.
- 1.5.11 A number of representations considered that Phase 2 (Junctions 3-13) of the Scheme was more of a priority, or that at least the bypass elements of the Scheme around Strabane (Junctions 3-8) and Omagh (Junctions 11-13) should have been priorities. In considering this it is recognised that, notwithstanding previous improvements such as the Omagh throughpass and Strabane bypass, there are high traffic volumes and subsequent traffic delays

at these points. Objectors noted that this was the stretch of the A5 with most fatalities in recent years. However, there are issues to be overcome if Phase 2 were to be built first.

- 1.5.12 To form Junctions 3 and 13 at either end of Phase 2 would also require lands covered by the draft Vesting Orders for Phase 1a and Phase 1b. Nevertheless, while there are undoubted complexities in this we see no reason that these could not be overcome in a reasonable timescale. Of more concern are the practical difficulties.
- 1.5.13 In terms of the bypass elements of the Proposed Scheme we acknowledge the Department's concern that more land than identified in the current draft Vesting Orders may be required to tie the bypasses in appropriately with the existing A5, thereby increasing overall costs. In engineering terms the embankments of the Omagh bypass are dependent upon material from cuttings to accommodate the Proposed Scheme north of Junction 11. The alternative is to import material and this again would raise construction costs. In terms of traffic impacts it is accepted that Strabane presently acts as a throttle on traffic along the existing A5, slowing it down. The bypass on its own would allow traffic through Strabane quickly promoting a more continuous flow of traffic in areas like Ballymagorry exacerbating any existing problems, for example, where people are trying to exit driveways unto busy areas of road. The Department advised that the Omagh bypass would create similar problems
- 1.5.14 Overall, the Proposed Scheme is not designed to easily accommodate Also, given the length of Phase 2 as a whole we are not persuaded that it could be fully completed with the current budget available, while under the current phasing Phase 1a is likely to be completed. On that basis the proposed phasing is the most logical approach in the circumstances.

Extending Phase 1a Southwards

- 1.5.15 Phase 1a would finish north of Strabane at the proposed Junction 3 where it links with the existing A5 and Woodend Road. One representation sought to extend Phase 1a south of this towards the Strabane Canal or beyond the proposed Junctions 4 and 5. This it was claimed would provide relief to the heavily trafficked Derry Road where, at times, a constant stream of traffic makes it difficult for vehicles to exit side accesses and for pedestrians to cross the road.
- The current budget if redirected from Phase 1b could allow for such an 1.5.16 extension of Phase 1a. However, to create the necessary temporary junction near the Strabane Canal crossover point would involve an additional land take and cost. Also, the works would be temporary, and as we see the construction dates for Phase 1b and Phase 2 respectively as still feasible we are not persuaded that relatively short lived abortive works would be of value.

There is also the possibility that by placing a junction here people going to, for example, Donemana may still come off at this junction to use the Derry Road.

- 1.5.17 The construction of Junctions 4 and 5 involves building a complex and expensive junction structure as the road at this point has to rise above the flood plain and elevate to prepare to cross the River Mourne. This is combined with the presence of an enlarged existing roundabout, and two new roundabouts to allow access to the Three Rivers development site. Even a phased building of part of the proposed carriageways would involve an initially torturous route for users, split vesting orders and health and safety issues. There would also be a need to avoid conflict between contractors and road users due to working alongside a live carriageway with tight retaining walls and height differences. The complexities involved would put costs up.
- 1.5.18 We question the soundness of building such a junction structure to end Phase 1a, as such a construction would sit better with a continuation of the Scheme across the river. That would also have funding implications. All-in-all, we accept that it is logical to terminate Phase 1a at Junction 3 as proposed.

Bringing Forward the Timing of the Aughnacloy Bypass

1.5.19 One representation sought to bring forward the construction of this element of Phase 3 (Junction 16 to the Border) to provide relief to the village of Aughnacloy from through traffic. However, no detailed case was provided to back up why this element of the Scheme should be given particular priority. We make no recommendation in relation to this matter.

Phasing and Blight

- 1.5.20 Those affected by the Proposed Scheme will be left with varying degrees of uncertainty over a period of years due to the proposed phasing. Many concerns we heard included people being unable to make investment decisions on farms and others being unable to sell land. Even if a relatively small area of land is affected this can have implications for entire holdings, for example where mortgages are sought. We acknowledge that such situations are stressful and could feed into related health issues. However, until a vesting order is finally made (when works are about to start) the only recourse available is the use of blight legislation. Concerns were raised that this complex and time consuming process would not cover everybody depending upon the nature of their interest in affected land.
- 1.5.21 Nevertheless, it is not uncommon for major schemes, or elements of them, to only progress many years after they may have been approved, and in relation to Phases 1 and 2 we have already concluded that there is

reasonable certainty as to these being developed on or close to the indicated timescales.

- 1.5.22 While no Orders are presently being brought forward for Phase 3 it remains an overshadowing presence for those along its identified route. This is exacerbated by the complete lack of certainty as to when works on the N2 might commence. While the date of 2026-28 for Phase 3 is purely indicative it is a considerable period of time away, and the wait could be longer. Prolonging such uncertainty over such a period of time without good reason would be unacceptable. Against this there are the NI Executive and Irish Government commitments to funding the A5WTC to consider. Also, this Phase's contribution to the overall context of the aim to improve connectivity between Dublin, Londonderry and Donegal is acknowledged, as are its other benefits as discussed earlier. Additionally, were Phase 3 to be removed from the Proposed Scheme altogether, the route currently proposed would remain a strong option were it ever to be resurrected as a separate proposal.
- 1.5.23 However, all-in-all the extent of uncertainty regarding Phase 3 outweighs the benefits of retaining it as part of the Proposed Scheme. Phase 3 therefore should not just be postponed, but removed as part of the Scheme altogether. This would not prevent this segment of the route being brought forward in the future under a different proposal.

Recommendation:

That the Phase 3 segment (Ballygawley to the Border at Aughnacloy) should be removed from the Proposed Scheme altogether.

1.5.24 Given our conclusions on Phases 1 and 2 we are satisfied that these elements of the Scheme are not dependant on Phase 3.

Conclusion

1.5.25 Whilst we have recommended that Phase 3 be removed from the Proposed Scheme the Minister may take an alternative view. Accordingly, on the basis that an alternative view may be taken we continue to consider representations in relation to Phase 3 issues and, where necessary, make recommendations on them.

1.6 Alternative Major Offline Dual Carriageway Alignments, Linkage with the A4, Extent of the Scheme at New Buildings, Junction & Bridge Design

1.6.1 The Environmental Statement details the alternative alignments considered at three stages during the planning, design and assessment of the Proposed Scheme. The Preliminary Options Report, Mouchel (2008), Preferred Options Report, Mouchel (2009) and Alternatives Discussion Paper, Mouchel (2010) were also placed before the inquiry. Where objections have sought more significant alterations to alignments we have considered these in this section of the report. More limited alternative alignments are considered under the site specific representations.

Ballygawley to Aughnacloy - Alternative Route

- 1.6.2 The upgrading of the existing A5, Tullyvar Road was proposed as an alternative to the Scheme's route road between Ballygawley and Aughnacloy. However, while the recent improvements to Tullyvar Road are acknowledged, significant reconstruction would be required to bring the road up to current dual carriageway standards. For example, with no direct private accesses or gaps in the central reserve an alternative means of local access would have to be provided if the existing A5 were to be used and this would most likely be in the form of new parallel collector roads. Keeping the existing A5 separate from the Proposed Scheme would enable local access to be maintained, and disruption during construction minimised.
- 1.6.3 As regards the Lisginny Rath we are content with the Department's assertion that it will not be affected by the Scheme and protected from construction works. As no draft vesting line has been published for this stretch of road, the need for the rath to be included within the vesting line can be reassessed at the time the relevant orders come forward.
- 1.6.4 Given the detail in the earlier mentioned documents there is no sound reason to conclude that other consultants would have supported another alternative route to the one now proposed.

Alternative Linking of the Proposed Scheme to the A4

1.6.5 The Scheme proposes a new at-grade roundabout (J15) to provide for all-movements access between the dual carriageway and the A4, Annaghilla Road. The section of the A4 which runs north-east to the existing A4 / A5 Annaghilla Road would be upgraded to dual carriageway between these roundabouts. One representation however suggested that there should be a grade separated off line route connecting the A4 to the Scheme to remove local through traffic. However, in the absence of detailed evidence to the

contrary we are not persuaded that such an approach would be more effective or practical than what is proposed.

The Proposed Route at Bready

1.6.6 It was queried why the Proposed Scheme involved cutting into Sollus Hill to the East of Bready. However, there are a number of factors which merit this route as opposed to one to the west. To the east of Bready is the Foyle floodplain which the route would have to be built above. A route here would also come closer to areas used by wintering swans and geese. Additionally the area has also been identified by the Proposed Scheme's assessment team as the Bready Ancestry Heritage Identity Area (HIA) – an area in this case with palaeo-environmental potential including buried archaeological remains. Thus, notwithstanding the impacts created by the route to the east of Bready we accept that it is the most logical option.

The Extent of the Scheme at New Buildings.

- 1.6.7 A number of objectors questioned why the proposed Scheme stopped at New Buildings as in doing so it will not solve the traffic issues in Londonderry. Indeed it would allow vehicles to reach the bottleneck of a single carriageway at New Buildings faster and cause up to an additional 2 minutes to be added unto travel times from New Buildings to Craigavon Bridge where there is already significant congestion. The potential for additional driver frustration and the potential for delays to traffic travelling to facilities such as Altnagelvin Hospital are recognised. Whether amended traffic light timings at Craigavon Bridge would assist in mitigating the situation significantly is to our minds doubtful.
- 1.6.8 However, there is insufficient evidence to demonstrate that additional journey times to Altnagelvin would provide a significant threat to health. Also, given the information in the ES's Air Quality Assessment resultant changes in pollution concentrations in the area would be at worst slight and local air quality impacts would not be significant. The time delays also need to be balanced against the overall time savings produced by the Scheme and considered earlier in this Report. Traffic would also exit quicker from New Buildings and reduce conflict points in the settlement itself. So, while the Scheme stops here it still assists in fulfilling the aim of improving transport connections along the A5WTC. Also, practically the existing A5 north of the proposed Junction 1 provides restricted scope for a dual carriageway due to the juxtaposition of the River Foyle, built developments, amenity / recreational lands, and general topography.
- 1.6.9 Other representations sought for Phase 1 to terminate at the proposed Junction 2. However, this would mean that New Buildings would be the only settlement not to be bypassed and this would result in traffic continuing along the already congested village main street with implications for safety and

journey times. It is acknowledged that the dwellings between Junctions 1 and 2 such as those at Edgewater would have busy roads to both their front and back. However, despite this impact it remains more logical to extend the Scheme to Junction 1 to remove non-local traffic from the existing A5. While traffic seeking to access local properties and businesses such as those at New Buildings Industrial Estate and the busy Duncastle Road would remain on the existing A5, the reduction in through traffic would facilitate ease of access to existing properties and businesses. Modelling shows that the proposed Junction 1 would remain within its design capacity thereby limiting the desire for people to use the existing A5 as a rat run.

- 1.6.10 Some parties contended that there were various opportunities in the urban envelope to allow for example, road widening and junction enhancement of the existing A5 through New Buildings. However, given the nature of the area we are not persuaded that there is scope to provide the scale of benefits that the Proposed Scheme would bring. Opportunities to carry out road improvements from New Buildings to the Craigavon Bridge would be best considered as part of future studies. In 2010 consultants for TNI considered how to distribute traffic into and around Londonderry in their *Improved Roads Linking around Londonderry Review of Strategic Road Network*. It is logical that any future progression of this review would address a number of the traffic issues affecting the City.
- 1.6.11 Some parties sought for the Proposed Scheme to bypass New Buildings to the settlement's east and referred to the potential for improved access to areas such as Altnagelvin Hospital. However, the 2010 review referred to above confirmed the benefits of a future A5/A6 link between Drumahoe and New Buildings with the most preferable place to locate the southernmost junction of the link being at proposed Junction 2. While only at the concept stage it would be logical to allow this future scheme to be the vehicle to address improved linkages around the eastern side of New Buildings and beyond. We are satisfied that the Proposed Scheme would not prejudice this future A5/A6 link, or its possible extension across the River Foyle.
- 1.6.12 Overall the Proposed Scheme from between Junctions 1 and 2 is logical, justified and stands independently from future proposals as it would cater for a substantial flow of traffic moving to or from the City Centre. It is also accepted that the proposed transition via at-grade roundabouts from a northbound dual carriageway at Junction 2 to a 1.2km length of single carriageway leading to Junction 1 allows for a safe termination of the dual carriageway.

Design of Junctions 1 and 2

1.6.13 As the capacity assessments for Junctions 1 and 2 show that they would operate within capacity up to the design year of 2041 there is no reason to consider alternative light controlled intersections at these junctions.

The Design of Junction 5 and the River Finn Crossing

- 1.6.14 This junction, with its associated flyovers and river crossings would cause a significant change of character at the River Finn which acts as a foil to Lifford and Strabane at this point. On the approach from Lifford the Proposed Scheme would be a prominent feature as seen from the town's waterfront, and it would reinforce the sense of separation between Strabane and the river. While the bridge structure would appear in parallel with the existing A5 Mourne Crossing, it would be higher and more conspicuous.
- 1.6.15 However, while a landmark bridge in design terms would be welcomed, it is not evident that the funds for this are available. A design of the type shown in the Department's indicative plans would be acceptable on the basis that its impacts would be little different to the existing bridge. Also, it would not unacceptably detract from the landscape context of Strabane. Proposed woodland and scrub planting along the embankments would assist in mitigating the impact of the structures by eventually softening the impact of the earthworks and close views of the traffic.
- 1.6.16 There was a concern that this junction would require buses to use 5 roundabouts to leave and rejoin the Proposed Scheme, and that this would impact upon accessibility and journey times. However, given the complex road arrangements to be catered for, and the need to span the river we are not persuaded that a simpler layout is available. Also, it is not thought that the delays would be unacceptable, especially when the Proposed Scheme overall would mean public transport services along the A5 corridor benefitting from improved access, reduced congestion and shorter, safer and more reliable journey times.

The Design of Junction 7

1.6.17 This junction, which would be part of the link across the river to the N14/15 in the ROI is accepted as being required to be an at-grade roundabout because of the three main arms which would access it. This is because of the need to have an abrupt change of direction for the Proposed Scheme at this point close to the River Finn.

Junction 11

1.6.18 In relation to one concern, there are no plans, current or proposed for Junction 11 to become a development hub. Future developer interest would be subject to the relevant planning process.

The Need for and Design of Junction 16

- 1.6.19 Junction 16 would connect the Proposed Scheme with the existing A5 (Tullyvar Road) and Loughans Road by using an overbridge with a roundabout at each end. A number of representations considered this limited access junction to be unnecessary and/or too elaborate. While local community representations led to the inclusion of the junction we see considerable logic in its placement as it would assist access to (and support) Aughnacloy and local businesses to a much greater extent than just relying upon Junction 17 alone. This benefit outweighs the inconvenience that the Scheme would cause for users of the Tullyvar Road and Loughans Road. As the junction only has two slip roads rather than the normal four, this reduces land take while catering for the Proposed Scheme's dominant flows of traffic. Forecast flows for the year of opening (2028) show that 39% of the A5WTC northbound flow would join at Junction 16 and that 40% of the south bound flow would leave at Junction 16.
- 1.6.20 Alterative large oval roundabouts would involve greater land take south of the mainline, but less impact north of the mainline. Such roundabouts however can generate high circulating speeds which create operational difficulties. Reducing the size of the northern roundabout would involve a substandard alignment and, while this would reducing the land take at the roundabout, an additional and greater land take along one of its approach roads would be required.

Conclusion

1.6.21 We make no recommendations in relation to representations raising the above matters.

1.7 Environmental Assessment – General Matters

- 1.7.1 The Proposed Scheme is Environmental Impact Assessment (EIA) development as defined in Directive 2011/92/EU (the EIA Directive) and The Roads (NI) Order 1993. The Environmental Statement was prepared by the Department to comply with the Directive, and the Roads Order as amended by the Roads (EIA) Regulations (NI) of 1999 and 2007. While the newly amended EIA Directive, 2014/52/EU is to be transposed into national legislation by 16 May 2017 the Proposed Scheme is necessarily considered under the existing legislative context.
- 1.7.2 The aim of EIA is to ensure that the decision maker when deciding whether to approve a project which is likely to have significant effects (positive or negative) on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process. An Environmental Statement (ES) sets out a developer's own assessment of the likely environmental effects of the proposed development.
- 1.7.3 Case law indicates that it is unrealistic to expect an ES to always contain the full information about the impact of a project. To do so would obscure principal issues with a welter of detail. It only need cover the main effects or likely significant effects. Also, the EIA Directive and Roads Order are worded to recognise that an ES may be deficient in some areas and they make provision through publicity and consultation processes for deficiencies to be identified. The resulting environmental information of which the ES is but a part should provide the decision maker with as full a picture as possible.

Relationship Between EIA and Appropriate Assessment

- 1.7.4 An appropriate assessment (AA) is part of the Habitats Regulations Appraisal (HRA) process. It is required under the Habitats Directive 92/43/EEC where projects are likely individually or cumulatively to have a significant effect on sites of European importance for nature conservation and biodiversity. An AA should determine the potential effects of a project upon the integrity of such sites and provide and analyse sufficiently precise information to allow the decision maker to conclude whether a project will adversely affect the site/s integrity in the light of the best scientific knowledge in the field.
- 1.7.5 Since the Court ruling of April 2013 on the matter of AA the Department has prepared 4 draft AA reports. These are for the River Foyle and River Finn Special Areas of Conservation (SACs), and other SACs and Special Protection Areas (SPAs) in the vicinity of the Proposed Scheme. A public consultation exercise on these drafts was undertaken in 2014. The responses received, and any issues arising out of the present public inquiry process are to be taken into consideration in informing the final AA reports.

At the inquiry the Department also advised that they would undertake a second consultation prior to the Minister (as the competent authority under the Habitats Directive) making any decision on whether to proceed with the Scheme and the relevant Statutory Orders. We are aware that this consultation commenced in April 2017.

- 1.7.6 While the EIA process imposes procedural obligations it does not dictate the result of the decision making process. The AA has a much narrower focus. So, while an EIA can overlap with an AA in its consideration of issues such as flora and fauna they must not be confused with each other. The conclusions on both processes must be distinguishable from one another and reported on separately.
- 1.7.7 While an AA can be included within an ES it does not, as is the case here, have to be. However, the draft reports to inform the AA have been presented to assist this inquiry, and the Department advised that the work undertaken on the HRA process has fed into the EIA process. In this context any concerns raised by us over the robustness of the ES would have implications for the relevant elements of the AA.

What Should be Included in the ES?

- 1.7.8 Objectors considered that the ES omitted to address certain matters. The purpose of an EIA is to look at relevant impacts on the environment. The terms 'environmental' and 'environment' can be commonly understood to relate to the surroundings or conditions in which people live or operate.
- 1.7.9 Under Annex IV of the EIA Directive ESs should include a description of the development and refer to its physical characteristics and its physical effects such as emissions. It also requires a description of the aspects of the environment likely to be significantly affected by the development including, in particular population, fauna, flora, soil, water, air climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors. It further requires reference to the likely significant effects on the environment resulting from, for example, the existence of the development and the emission of pollutants. Additionally, the thrust of selection criteria referred to in Annex III of the Directive dwells on the physical characteristics and effects of the development. The overall emphasis is therefore on identifying physical impacts.
- 1.7.10 So, while the Directive refers to 'population' within the aspects of the environment which are to be described, this in our view allows for the consideration of issues such as health effects. The concept of socioeconomic justifications being part of an ES sits uncomfortably with the Directive, as do suggestions that the ES should look at how the Proposed Scheme would impact on travel choice or act as a barrier to modal shift in

transport choices. Indeed, there is nothing in the EIA Directive or the 1993 Roads Order which would require an ES to address such matters or other non-directly related environmental topics no matter how well intentioned or seemingly convenient. Such topics may be important to any overall consideration of a project, but they have no significant part in an EIA, and to include them would dilute the ES's purpose.

- 1.7.11 While the ES includes a chapter entitled 'Need for the Scheme', this is in effect a brief summary of the policy background to the Proposed Scheme, and a commentary on the nature of the existing A5 road. With nothing in the Directive implicitly or explicitly advising that evidence of need should be included in an ES there is no requirement for the ES to have gone further.
- 1.7.12 The EIA Directive requires an outline of the main alternatives studied by the proposer and an indication of the main reasons for the choice made, taking into account environmental effects. However, this wording does not require alternatives not considered by the proposer to be covered, no matter how desirable it may seem to do so. The decision to consider only alternative route alignments for a dual carriageway in the ES is therefore reasonable.
- 1.7.13 Some parties questioned why Phase 3 of the Proposed Scheme should be part of the ES when there is no firm timescale for its implementation. However, and notwithstanding our recommendation in relation to Phase 3, it is appropriate for the EIA process to consider all three construction phases as Annex IV of the EIA Directive requires a description of the physical characteristics of the whole project and the land-use requirements during the construction and operational phases.
- 1.7.14 Given the purpose of the ES, its failure to either reference the 2011 public inquiry as a potential form of consultation, or the Court's quashing of the 2012 decision to approve a dual carriageway scheme is of little relevance.
- 1.7.15 As the EIA process focuses on the Proposed Scheme it cannot address unsubstantiated allegations that potential suppliers of construction products are poorly regulated.

The ES and its Relationship with an Iterative Process

1.7.16 A concern was raised that there should be no reference to anything in draft form in the ES and its Non Technical Summary (NTS). However, road schemes such as the Proposed Scheme are necessarily iterative. Planning and design evolve in response to environmental and other considerations. For example, while road alignments, specimen designs and contract frameworks are initially set out, contractors have the scope to develop these. Thus, within the framework of what is permissible under any statutory approval, innovative or better approaches to design, construction and

environmental impact and mitigation measures are encouraged. Accordingly references to draft documents or vesting lines reflect an acceptance that logical changes may follow a public inquiry - perhaps in the form of recommendations or as a result of new technology. There is nothing in the EIA Directive or Roads Order preventing such an approach. What is important is that if statutory approvals are given on the foot of environmental information, a lesser standard or more harmful environmental impacts should not be subsequently accepted.

1.7.17 Therefore there is no issue with the ES and its NTS referring to, for example, draft vesting lines. The Vesting Orders necessarily remain in draft form until confirmed. Likewise, in principle, the provision in the ES of a draft Silt Management Plan (SMP) and Construction Environmental Management Plan (CEMP) is appropriate as they set a baseline to assist a decision under the EIA process. If for some reason the Scheme alters in the future then not only would relevant legal procedures in relation to the Orders have to be pursued, but consideration would also have to be given to whether any new EIA was required.

Non Technical Summary (NTS)

- 1.7.18 The EIA Directive and the 1993 Order require a NTS of the information in an ES to be provided. There is no set format for a NTS, but it is generally taken to be a document setting out an overview in non-technical language of the main findings of the scheme it relates to. Given earlier comments on the relationship between the EIA and AA there is no sound reason that the NTS has to refer to the AA.
- 1.7.19 In this case the original NTS accompanying the ES, published on the 16 February 2016, did not accurately reflect the findings of the main body of the ES. The Department having been made aware of this by an observant commentator re-consulted on the ES and a revised NTS which was published on the 18 April 2016 the consultation period was extended to 2 June 2016.
- 1.7.20 There were concerns that once the inaccurate information in the original NTS was issued people's perceptions may be hard to change. However, the Department acted correctly in issuing the revised NTS, re-advertising the ES (pointing out the reason for the re-advertisement) and extending the consultation period. While people and the press may not have picked up the full reasoning behind the changes the required advertisement and consultation procedures were fulfilled.
- 1.7.21 Accordingly, the revised NTS differs from the original. The element of the NTS referring to ecology and nature conservation has been adequately expanded to reflect the findings of the ES in relation to the main impacts on these aspects. Unlike the original NTS this part of the document does not

refer directly to construction procedures being specified in contractor's method statements. However, it clearly cross references to proposed mitigation measures relating to the road drainage and water environment which focus on the release of sediments and pollution during construction. One of these proposed mitigations is the agreement of method statements with NIEA prior to commencement of works. We consider the point adequately covered in the NTS.

- 1.7.22 The element of the NTS considering Construction Environmental Management also refers to the adoption and implementation by contractors of a CEMP and SMP. The draft documents relating to these are in the ES, and for reasons considered earlier this is an acceptable approach. The issue of reference to draft vesting lines has also been considered earlier.
- 1.7.23 One party considered that the revised NTS and ES did not include construction compounds, raw materials and the transportation of raw materials. However, the NTS and the ES do refer to site compounds, to excavated material and to imported and exported material. In the absence of further detail from the party concerned we cannot guess as to any deeper concern.
- 1.7.24 Overall the revised NTS meets its purpose.

Advertisement of the ES

1.7.25 There was a concern that the re-advertisement of the ES was misleading in that it could be read as referring to a draft ES for which there is no provision for in legislation. However, the re-advertisement's heading clearly states "Environmental Statement: Notice of Publication". Also, while the first sentence of the advert refers to the "consultation period on the draft statutory orders and environmental statement for the A5WTC", a normal reading of those words does not suggest that the ES is a draft document. The advertisement read in the round does not suggest that the ES was a draft version.

Conclusion

1.7.26 No recommendations are made in relation to the above matters.

1.8 Air Quality, Emissions & Climate Change

- 1.8.1 The Department undertook an air quality assessment to examine the potential impacts of the Proposed Scheme on air quality at a local and regional level during the Scheme's construction and operational phases.
- 1.8.2 Chapter 8 of the ES, its appendices and figures set out a detailed explanation of the methodology used in the assessment and its findings. While the Department's expert witness on air quality was not present when the dust deposition receptors were placed at the various scheme specific locations there is no sound reason to conclude that the methodology set out in the ES was not carried out correctly. The measured data from the receptors was analysed by an accredited laboratory at Newcastle University and is set out in ES Appendix 8B. The receptor locations used are different from those used for the ES's noise assessment, however as the disciplines employ different methodologies this is not unusual. While there are inherent uncertainties in any modelling exercise appropriate base line monitoring and verification was carried out. There is no alternative technical evidence before the inquiry and no reason to conclude that the assessment's findings were not conservative.

Local Air Quality

- 1.8.3 The assessment investigated nitrogen dioxide (NO₂) and particulate matter known as PM₁₀ (matter less than 10 micrometers in diameter) two of the principal pollutants associated with vehicular emissions. Legislation has established limit values for these pollutants that are not to be exceeded relative to the protection of human health.
- 1.8.4 With the Proposed Scheme implemented it was concluded that many more sensitive receptors in the vicinity of the existing A5, the wider road network and the Proposed Scheme would experience a slight improvement in concentrations of NO₂ and PM₁₀ than would be subject to a slight worsening. The Scheme would not result in new exceedances of the NO₂ limit values at any sensitive receptor (eg dwellings and schools), and it was predicted that there would be no exceedances of the PM₁₀ limit values either with or without the Scheme in place.
- 1.8.5 Exceedances of the NO₂ limit value that would occur without the Proposed Scheme in place are predicted to be removed or reduced in magnitude with the Scheme in operation. The vast majority of sensitive receptors are predicted to remain substantially below the NO₂ and PM₁₀ limit values with the Proposed Scheme in operation. Given the higher numbers of receptors predicted to experience a slight improvement in concentrations of these pollutants, the ES concludes that local air quality impacts would be generally beneficial and that this would not constitute a significant environmental effect.

- 1.8.6 Concern was raised over PM_{2.5} (fine particulate matter less than 2.5 micrometers in diameter) which have greater health impacts than PM10. However, the Department advised that the PM₁₀ measurements capture all particles, and that PM_{2.5} is assessed as a fraction of the PM₁₀ measured. As the PM₁₀ assessments for the Proposed Scheme do not exceed 20 micrograms per cubic metre (the value limit is 40 micrograms per cubic metre) it was advised that the level of fine particulate matter is not a concern in relation to the Proposed Scheme. There is no technical evidence to suggest otherwise.
- 1.8.7 The Department's expert witness was aware of the Lancaster University paper relating to nano-particles which can end up in the body and brain. We have no reason to doubt his judgement that there is no clear link between traffic and occurrence of particles identified in the persons studied in that paper. It is possible that those particles could be related to, for example, industrial emissions in the urban areas of study. Nano-particles are not judged to be an issue of significant concern.
- 1.8.8 Some parties had concerns about whether account had been taken of revelations that vehicle manufacturers have falsified vehicle diesel emissions. The Department advised that real life monitoring of NO₂ had already indicated higher actual emissions than those predicted, and that the assessment took account of a Highways Agency interim advice note advising the use of uplifted NO₂ levels.
- 1.8.9 It is accepted that long term impacts of air pollution can impact upon health and place significant financial burdens on society. Objectors referred to academic studies on the issue. However the Scheme would move traffic away from numerous sensitive receptors, such as residences, schools, on or close to the existing A5. Given this and our above conclusions we are not persuaded that the Proposed Scheme would have significant health impacts at a local level. We accept the ES conclusions in relation to local air quality.

Regional Air Quality

1.8.10 The assessment of impacts related to regional air quality involved a comparison of annual emissions of specified exhaust gases emitted by traffic associated with the existing and Proposed Scheme road network. It considered carbon dioxide (CO₂), hydrocarbons, particulate matter (PM₁₀) and nitrogen oxides (NOx). The results, based on the information provided in the ES, demonstrate that there would be an increase in total exhaust emissions with the Proposed Scheme in place. The ES indicates that these increases would be very slight, equating to less than 1% of total regional emissions in Northern Ireland from the road transport sector.

Climate Change

- 1.8.11 The impacts of global warming and the contribution of CO₂ emissions to it are well publicised, and concerns were raised with respect to the Proposed Scheme's increased CO₂ emissions. The evidence is that they would be greater by some 28,263 tonnes in the opening year for the fully completed Scheme, and 36,525 tonnes in 2041. The ES correctly concludes that this would constitute a significant environmental effect.
- 1.8.12 Some (un-quantified) reduction in emissions could be expected as less traffic would use the existing A5 where conditions generally make driving less efficient than a dual carriageway. Nevertheless, the increased emissions jar with the UK wide objective of addressing climate change, and the legally binding targets set by the Climate Change Act 2008 to reduce emissions by 80% by 2050. The NI Executive, in its Programme for Government (2011-2015) has set a target of continuing to work towards a reduction in 1990 greenhouse gas emission levels by at least 35% by 2025. This is a lower target than those set for Scotland and Wales, reflecting the larger share of emissions from difficult to reduce sectors such as agriculture. It is also acknowledged that following the Paris agreements, a law mandating a 100% cut has been proposed.
- 1.8.13 The Carbon Plan (HM Government 2011) referred to by one party sets out how the UK will achieve decarbonisation. It sets out that the transport system (including roads) will need to emit less carbon than today while continuing its vital role in enabling economic growth. This suggests that some balancing of competing aims is required. The Plan sets out sectoral plans, with one strand being that by 2050 nearly every car and van will be an ultra-low emission vehicle. To what extent this would reduce emissions is debateable, and the power for such vehicles would still have to come from some source whether environmentally friendly or not. However, it is reasonable to expect that innovation will reduce roads emissions significantly and the Proposed Scheme's emissions would equate to less than 1% of NI's road transport sector emissions. In addition, the majority of designated ecological sites are predicted to experience a decrease in the deposition of Nitrogen on the operation of the Proposed Scheme.

Emissions From Loss of Bog Habitat

1.8.14 This impact was not referred to in the ES, but it is recognised that the ES already indicates that CO₂ emissions would already be significant. As such the omission is not critical. The inquiry was advised that there would be a one off worst case scenario of 80,000 tonnes of CO₂ being released into the atmosphere from the loss of, or dewatering of, bog habitat. However measures proposed to recreate wetlands with input from NIEAs Natural Environment Division may reduce this amount.

1.8.15 Methane is 20 times more potent than CO₂ as a greenhouse gas, and bogs are naturally a high source of methane gas emissions as it is emitted by living matter. Thus, a loss of bog habitat would reduce methane emissions, though there is no evidence to quantify such an impact. In this context methane emissions are not seen as having a significant impact.

Construction Phase Impacts

- 1.8.16 The assessment concluded that in light of the relatively low number of additional vehicles using potential routes on existing roads, and existing low concentrations of the two key traffic-related pollutants (NO₂ and PM₁₀), there would be no significant impact associated with such emissions during construction. Also, emissions from construction traffic would be temporary.
- 1.8.17 A number of construction activities would generate and disperse dust. However, proven measures focused on controlling and suppressing dust generation have been included in the environmental commitments detailed in the ES. These measures would become a mandatory part of the construction contracts and would be incorporated into the CEMPs. The measures would include channels for communication for registering concern should people perceive dust to be a nuisance. It is accepted that with appropriate mitigation measures, dust nuisance during construction would be unlikely to be a significant issue.

Air Quality and Designated Sites

1.8.18 Emissions and dust impacts on certain sensitive natural environments are considered in the chapter of this Report dealing with Ecology and Nature Conservation.

Conclusion

1.8.19 No recommendations are made in respect of the above matters. The negative impacts identified in relation to regional air quality and increased carbon emissions weigh against the Proposed Scheme.

1.9 Cultural Heritage

1.9.1 The impacts on archaeological and built heritage assets and their settings, as well as impacts on the wider historic landscape are contained in detail in Chapter 9 of the ES.

Archaeology

1.9.2 The Department for Communities – Historic Environment Division (HED) advised that their concerns were largely resolved by the Department's comments on their original representations. HED advised that they had a good working relationship with TNI and there is a Prosperity Agreement in place between them aimed at implementing a proactive approach to locating, avoiding or scientifically excavating archaeological sites during the early development stages of road schemes. The Department has given commitments on a number of issues such as the need to assess the Carricklee battle site west of Strabane and to agree subsequent mitigation measures with HED.

Recommendation:

That the Department's commitments to the Department for Communities – Historic Environment Division (HED) in relation to cultural heritage matters be fulfilled.

- 1.9.3 The Historic Monuments Council (HMC) referred to the ES's conclusion that the overall assessment of the impact of the Proposed Scheme on archaeological assets would be slight to moderate adverse. They contended that an overall moderate adverse impact would be more realistic, but having considered the assessment there was insufficient reasoning provided for us to concur with this contention.
- 1.9.4 While standing stones and Bronze Age burials were generally assigned a low value in the ES, the Department contended that this was based upon their current state of preservation. There was no detailed argument to contest this judgement.
- 1.9.5 The potential for Mesolithic remains are adequately considered within paragraph 9.5.37 of the ES. The identified Areas of Potential which may contain such remains are presented within Table 9.2 and marked as alluvium sites that is river banks, lake shores and coastal areas which Mesolithic hunter-gathers chose for occupation.
- 1.9.6 The Department recognised that the ES's Table of Archaeological Assets (Table 9.6) could have had clearer labelling with site names rather than just giving a site reference. We find that this could also equally apply to other tables in Chapter 9. Overall though, these are not critical omissions.

- 1.9.7 The mitigation strategy is to identify archaeological remains early to reduce risk of finding such remains during the construction phase. This mitigation, involving trail trenching is to be carried out in accordance with the *Director of Engineering Memorandum: Management of Archaeological Investigations in Major Road Improvement Schemes DEM 156/15* (DEM). The HED considers that the DEM provides a robust approach. The Department confirmed that trial trenching would be carried out along all sections of the Proposed Scheme where it was not completed prior to the 2013 Court decision quashing the then Direction Order and Vesting Orders. It was clarified that the Feddan/Drumcorke site has been fully excavated, and the Gort/Errigal site would be subject to open area excavation where not already excavated. This approach is acceptable.
- 1.9.8 The following paragraphs deal with specific archaeological sites.

Errigal Keerogue and Harry Avery's Castle

1.9.9 While these monuments were omitted from ES Table 9.6 a discussion of the Proposed Scheme's impact at these sites (and proposed mitigation) is supplied in ES Appendix 9E. The omission is therefore not critical.

Lurgan Boy Wedge Tomb

1.9.10 Drawings were submitted to show that redesigns to balancing ponds would avoid impacting upon this Tomb.

Recommendation:

That the balancing ponds be redesigned to avoid impacting upon the Lurgan Boy Wedge Tomb.

Lisdoart Rath

1.9.11 Drawings were submitted to show that the fenceline at this part of the route could be revised to avoid the rath, so avoiding the need for Scheduled Monument Consent (SMC).

Recommendation:

That the Scheme's fenceline be repositioned to avoid Lisdoart Rath.

Strabane Canal

1.9.12 The plans in the ES and NTS adequately identify the canal route. The Proposed Scheme would, close to where the existing A5 crosses and severs the line of the Strabane Canal, also cross an overgrown stretch of this Scheduled Monument. The existing towpath further north would remain unaffected. HED accepted that the canal could not be avoided without a major detour affecting an Area of Outstanding Natural Beauty (AONB) and Strabane Glen. The full impacts/details remain to be considered with a Scheduled Monuments Consent (SMC) application but HED were hopeful of a resolution involving preserving the canal bed in situ with an embankment

over it. While there would be some natural settlement with the canal beneath the road, this would be within acceptable engineering tolerances. It was judged that the same mitigation would be required even if the Scheduled area of the canal was avoided and this would affect more properties than the proposed route. Given the relatively small part of the canal that would be affected close to the existing A5 it is of limited value for restoration as part of the overall canal route. The impact on the canal would not weigh significantly against the Scheme.

Dunalong Fort

1.9.13 The inquiry heard that this fort has already been investigated in some detail and the site is to be preserved in situ.

Lisgenny Road Rath

1.9.14 The Department confirmed that this rath would not be directly impacted upon by the Proposed Scheme.

Historic Buildings

1.9.15 The following paragraphs consider individual historic buildings raised in representations.

Castletown House, Urney Road, Strabane

1.9.16 It is acknowledged that Policy BH10 of *Planning Policy Statement 6* (PPS6) indicates a presumption in favour of retaining listed buildings such as this. However, the Proposed Scheme needs to be located within this narrow corridor along the banks of the River Finn, which is the optimum location to achieve connectivity with County Donegal and to reduce other effects such as environmental impacts. Given this, and the overall justification for the Proposed Scheme there would be an exceptional reason why the building could not be retained. The building would be recorded prior to its demolition.

Gate Lodge, Urney Road, Strabane

1.9.17 The Department provided detailed drawings in relation to the deep cuttings proposed to the east and west of this building. The impacts on the setting of the building are considered unavoidable, but acceptable in the context of the Scheme.

Magheramason Mill

1.9.18 This derelict mill, a site of local importance included in the Sites and Monument's Record would be close to the Proposed Scheme. It is to be recorded and retained whereas the adjacent farm house and farm buildings would be demolished. However, the principle relationship between the mill and the Blackstone Burn would not be impacted upon. While the setting and quiet ambience of the site would be significantly reduced, planting would assist the situation to an extent. We are satisfied that construction carried

out under a CEMP would not directly impact on the mill as a site of local importance. The impacts are not unacceptable in the context of the Scheme.

Bready Covenanter Church

1.9.19 The ES's indication that the Scheme's impact on this Listed Grade B church would be slight is accepted. The road would be situated in a cutting about 70 metres away and undue disturbance would be unlikely. The use of trees to assist in landscaping the Scheme at this point would be acceptable in the overall landscape setting.

Conclusion

1.9.20 The above recommendations are made on the basis that the Scheme is to proceed. The negative impacts on cultural heritage identified weigh against the Scheme.

1.10 Landscape

- 1.10.1 Chapter 10 of the ES sets out the detail as to how the landscape effects were identified. There is no persuasive argument that the appropriate methodology, as set out in documents such as the Highways Agency's Interim Advice Note (IAN) 135/10, was not adhered to.
- 1.10.2 The ES, as required, looks at the related but separate concepts of the landscape impacts and visual impacts of the Scheme as well as mitigation measures. For those unfamiliar with such concepts the difference can seem nebulous, but landscape impact relates to the general fabric, character and quality of the landscape while visual impacts are the effects on people of the changes and whether opportunities to enjoy views may be improved or reduced.
- 1.10.3 The ES concludes that on establishment of mitigation planting (Year 15 after opening), landscape impacts would be neutral for 2% of the route, slightly adverse for 63%, moderately adverse for 28% and highly adverse for 6%. As regards the visual impacts assessment the ES indicates that there would be beneficial effects on the views experienced by 77 households and adverse effects on views for 1,328 properties, with the nature of visual impact varying from property to property. This significant and widespread negative impact is borne in mind, and where representations raised concerns about views from individual properties these are considered in Part 2 of this report.
- 1.10.4 Given the Proposed Scheme's scale it is logical that only selected locations for photomontages were included in the ES. Nevertheless, while we are not persuaded that there has been any attempt to hide impacts, more photomontages would have assisted an understanding of the Proposed Scheme's impacts, particularly in relation to public areas. Nevertheless, from the evidence before us and site visits conclusions have been reached on the matters raised.
- 1.10.5 Smaller areas with their own identifiable character and ambiance combine to form larger character areas. Thus, the decision in the ES to subdivide Landscape Character Zones (LCZ's) as detailed in the Northern Ireland Landscape Character Assessment (2000) into Landscape Character Sub-Zones (LCSZ's) allows for a logical finer grain assessment of landscape character. To look at smaller areas than those chosen would make the ES unwieldy.
- 1.10.6 A number of representations referred simply to the impacts of the Proposed Scheme cutting through the Foyle Valley, Mourne and Strule Valleys and County Tyrone in general. At that general level we acknowledge the findings of the ES, our following remarks on more detailed concerns raised and the

marked impact that would occur to both the wider landscape and more localised landforms and their individual landscape components.

The Foyle Valley

- 1.10.7 In relation to the Foyle Valley the Proposed Scheme from New Buildings to Strabane would, because of topography and the need to rise above the flood plain, be built largely upon an embankment. This would add to its visibility in the landscape. While the embankments would be built on a flood plain detailed Ground Investigation Reports (GIRs) have been undertaken and, while contractors may have to adapt to site specific conditions, significant changes to the embankments are unlikely.
- 1.10.8 The landscape in the vicinity of New Buildings is designated within the Derry Area Plan 2011 (DAP) as an Area of High Scenic Value (AoHSV). The photomontages in the ES from the west bank of the River Foyle give an appropriate feel for the existing landscape. The Proposed Scheme, by running along the river margin would have a detrimental effect on this sensitive landscape, fragmenting the existing large open field pattern. The use of shallow cuttings, low embankments and landscaping would reduce this impact and we agree with the ES's conclusion that in the overall setting of the valley with its buildings and a backdrop of hills the impact of the Scheme on the character of the landscape would be moderately adverse. We also broadly agree with the ES's conclusions in terms of visual impacts at this point. However, from certain views from across the river, and from the river itself, the impact is likely to be significantly adverse in the road's opening year. This impact however would reduce to moderately adverse as planting takes effect as viewers' eyes would be drawn to moving traffic and the strong linear feature of the road so close to the River Foyle.
- 1.10.9 At Bready the Scheme involves a deep cutting on the western facing slopes of Sollus Hill / Gortmonly Hill which defines the eastern edge of the broad valley landscape at this point. The proposed mitigation, including the profiling of the larger eastern slope and its apex would help create a more natural transition between the existing hill slope profile and the cutting. Planting and landscaping would also try to reflect the current form and relationship of the hill to the surrounding area. Nevertheless, as the ES advises, the cutting would erode the inherent qualities and value of this part of the broader valley area. We agree with the ES that the impact on landscape character would be moderately adverse. In terms of visual impacts they would, dependent upon location, range from moderately adverse to large adverse - as is noted in the ES. From areas of the hill itself used by walkers, vegetation and topography would assist in reducing the visibility of the cutting and overall the visual impacts of the road. However, significant landscape and visual impacts would remain in varying degrees dependent upon location.

- 1.10.10 The Proposed Scheme from Bready to Strabane would for most of its length be located farther west into the Foyle floodplain than the existing A5, creating a strong linear feature cutting through the landscape of the tributary valleys of the Burn Dennet and Glenmornan River. It would therefore act as a new transition point between the tributary valley and broad floodplain. From areas in the vicinity of McKeans Moss there would be an awareness of the Scheme, but no direct impacts on the Moss itself, and the proposal would have a moderate adverse impact on landscape character at this point.
- 1.10.11 South of Ballymagorry, the road would occupy the easternmost fringe of the Foyle floodplain with impacts on landscape character being largely limited to a contained corridor, defined by mature vegetation along the former Strabane Canal and the existing A5. We agree with the ES that there would be a limited impact on the valley landscape and floodplain and that vegetation would provide a strong sense of definition between the canal and road. The proposed Junction 3 would however remain a prominent feature, fragmenting the local landscape between Ballymagorry and north Strabane. We agree with the assessments of the landscape impacts and visual impacts as set out in the ES.

The Mourne and Strule River Valleys

1.10.12 A number of representations referred only generally to landscape impacts on these areas. However, we find no reason to disagree with the ES's findings in relation to these valleys. In addition we also acknowledge the Northern Ireland Environment Agency's - Natural Environment Division (NED) view that the route would impinge on a fairly narrow 'sliver' of land (east of Bessy Bell) at the edge of the Sperrin Area of Outstanding natural Beauty (AONB). They advised that the overall impact on the AONB would, on balance, be relatively minor in nature, and that the proposed A5 transport corridor would not have a significant regional impact on the landscape and features contained therein.

General Impacts on Rural Amenity

1.10.13 As well as the direct physical impacts upon the landscape and the various local and general views thereof, there would also be an inevitable loss of solitude and rural amenity. Individually and cumulatively where people are aware of such losses - whether they live locally, have strong local connections or are visitors, there can be an understandable strong emotional impact. However, we are not persuaded that there would be significant health impacts in general. Also, despite the impacts we are not persuaded that the Proposed Scheme would result in a significant impact on tourism generally, especially as the Proposed Scheme would assist to some degree in improving access along the corridor.

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Conclusions

1.10.14 No recommendations are made in relation to the above issues. The adverse landscape and visual impacts weigh significantly against the Proposed Scheme.

1.11 Ecology and Nature Conservation

- 1.11.1 In relation to the generalised concerns about impacts upon ecology and nature conservation we refer to the considerable detail within Chapter 11 of the ES, its associated figures, its appendices and the draft AA reports. While some parties referred to issues with the original ES before the 2011 inquiry, this is not before us.
- 1.11.2 The Department advised that the 'Red Listing' process referred to by some objectors, is a non-legal process adopted by some nations to determine which species require protection. Species in NI however are protected by legislation such as the *Wildlife (NI) Order 1985* as amended and the *Conservation (Natural Habitats etc.) Regulations 1995* as amended.
- 1.11.3 There is no compelling evidence that relevant Natura 2000 sites in the ROI have been omitted from the ES. While one objector considered that further Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) should be designated, this is beyond the scope of the inquiry. Also, looking at the documents before the inquiry, the ES has had regard to the correct SPA and SAC boundaries.
- 1.11.4 One concern was that there should be a habitat inventory of the Foyle Valley and the River Foyle and Tributaries SAC similar to that in Table 4.1 of the draft report for the AA relating to the Lough Neagh Ramsar sites. However that table, and the similar ones in the other draft AA reports, set out the habitats and species identified as the primary reason for each site's selection as an internationally designated site. Thus, they contain differing information information which is also not pertinent to non-internationally designated areas. Where specific concerns were raised regarding habitats or species they are considered below. Otherwise we refer to the considerable detail on habitats and species before the inquiry which was in general not seriously challenged. There is no need for a further inventory of habitats to be undertaken for the purposes of the EIA.
- 1.11.5 It is noted that the Department provided detailed clarification, comments and commitments to NIEA Natural Environment Division (NED) on a number of issues including bog habitats, woodlands, habitat management plan provision, planting tables, otter holts and badger crossings. These clarifications, some of which are referred to in more detail later, resolved NEDs initial concerns and we recommend that the commitments made be undertaken.

Recommendation:

That the Department fulfil the commitments made to NIEA's Natural Environment Division

Whooper Swan and Greylag Geese

- 1.11.6 The Proposed Scheme would not impact directly on the Lough Foyle, Lough Swilly, Lough Neagh and Lough Beg SPAs. However, it is within and in close proximity to the Foyle floodplain where Whooper Swan and Greylag Geese forage. The foraging habitat in the ROI west of the river would be unaffected.
- 1.11.7 We are satisfied that the sampling methodology for the foraging habitat was correctly carried out the Department advised that it was agreed with the Royal Society for the Protection of Birds (RSPB) for the counts in 2009-2010 and repeated in 2013-2014. While the latter survey showed fewer birds on the subject lands the Department advised of the RSPB's suggestion that this may be due to them using sites elsewhere with a greater availability of food. Notwithstanding this, the ES correctly concludes that the floodplain is important to the survival and maintenance of the conservation status of both species within the surrounding designated sites.
- 1.11.8 There are some transposing and reporting errors in the ES. The Department's amended Figure 11.68 is acknowledged, as is the fact that the percentage of Whooper Swan using Grange Foyle as a feeding ground was overstated in ES Chapter 11 the correct figure is in the ES Appendices. However, as this led to a higher level of consideration being given to this species than should have been the case it is not a significant issue. Additionally, while a percentage of the total Irish wintering population for Whooper Swan was reported in the ES, no such calculation has been undertaken. The RSPB did not respond to these points which were clarified in the Department's comments on their representation. Given this and in considering the amended data we are satisfied that the conclusions of the ES are not altered. However, the Department should ensure that the correct figures are included and appropriately considered in any final AA report.

Recommendation:

That the Department ensure that the correct plans, tables and figures in relation to Whooper Swans are included in, and appropriately considered in any final Appropriate Assessment report.

- 1.11.9 Some 40ha (2%) of the total foraging habitat in the Dunnalong, Thornhill and Grange Foyle areas would be lost. However, none of this land was utilised by swans or geese in either survey period, and there is no sound reason to conclude that there would be a detrimental impact on either species use of the Foyle Floodplain or on the species themselves in the context of the SPAs with which they are associated.
- 1.11.10 South of Bready the Proposed Scheme would direct a substantial volume of traffic away from foraging areas used by Whooper Swans close to the existing A5. North of Bready traffic would come closer to foraging areas at closest about 150m. However, the experience from the Toome Bypass

development was not disputed. Here Whooper Swans quickly habituated to traffic movements and noise. Also, studies show that Greylag Geese tend to avoid coming within 100m of roads. There is no expert evidence to challenge the ES's conclusion that traffic movement and noise would not displace the species from their foraging habitat.

- 1.11.11 Construction works would generally be more than 250m away from the foraging habitat. The realignment of Donagheady Road would bring works within 50m of an area of recorded foraging, but these would be separated from foraging birds by the existing A5. The link road between Ash Road and Drumenny Road would involve work within 200m of a part of an area where Whooper Swans were recorded in 2009-2010, however this distance is judged sufficient to prevent disturbance.
- 1.11.12 At two locations construction would involve noise levels above that associated with general plant and vehicle activity. At Bready, the cutting at Gortmonly Hill would involve the breaking out of rock, though blasting is unlikely to be necessary. However, the cutting is 500m from the closest recorded Whooper Swans and over 1km from the closest Greylag Geese. Piling would be required for bridge abutments at the Burn Dennet River 500m from the closest recorded Whooper Swans and over 2.5km from the closest recorded Greylag Geese.
- 1.11.13 We agree with the intention noted in the ES to limit any blasting to exclude the period between October and March when the birds are present. The proposed requirement for trial breaking out and piling to be monitoring by an appropriately qualified ecologist is also supported. Should such trials indicate detrimental disturbance, activities would be suspended until the birds have left the area.
- 1.11.14 Overall, construction activities would not result in displacing the two species from their foraging habitat associated with the Foyle Floodplain, or the SPAs with which they are associated.

River Foyle and Tributaries SAC and ASSI, Owenkill River SAC and ASSI, River Finn SAC

- 1.11.15 The concerns expressed related largely to the potential impact the Proposed Scheme would have upon species dependant on these and associated watercourses. The ES considers the matter in detail, and there is a crossover with the section of this Report dealing with Road Drainage and the Water Environment.
- 1.11.16 The Water Framework Directive (WFD) identifies a requirement for suspended solids levels to be kept below 25mg/l for fish species to thrive. The Loughs Agency, also stipulated a requirement for a maximum increase of 10mg/l of total suspended solids (TSS) during construction where there would be spawning and nursery habitats for Atlantic Salmon.

- 1.11.17 The construction mitigation measures to achieve these thresholds were discussed with the Loughs Agency, for example the use of ponds during construction to contain sediment. Such measures would be a mandatory requirement of contract specific SMPs which would have to be prepared and agreed with the Loughs Agency prior to the commencement of works and incorporated into CEMPs for the construction contracts. A draft SMP approved by the Loughs Agency, and a CEMP were part of the ES and would provide a baseline template for contractors. There is no evidence to suggest that the construction techniques or mitigation measures agreed with NIEA or the Loughs Agency are unusual or untested. The final CEMP is to be submitted to NIEA's Water Management for consultation prior to the commencement of pre-construction or construction works. Similarly Method Statements for works in, near or liable to affect waterways will be submitted to NIEA for consultation prior to commencement of the relevant works.
- 1.11.18 Contractors would be required to ensure that all aggregates and fills would be regularly tested for suitability. Contaminated materials would be rejected, and there is no indication that materials from the Cavanacaw gold mine would be used. Materials will also be screened to prevent invasive species being introduced.
- 1.11.19 No certainty can be given that accidents would not happen during or after construction works, and we acknowledge that during the upgrade of the A4 the pollution of water courses occurred during a high density rainfall event. However, the Department advised that lessons learned from the incident were employed successfully on the A8 upgrading such as the need to keep abreast of weather forecasts and the need for more detailed CEMPs. Also, a comprehensive range of mitigation measures are contained in ES Chapter 16. Pollution response plans would also be required as part of any CEMP.
- 1.11.20 While TNI, the Loughs Agency and NIEA monitor works and discharges to the water environment for compliance, there is an onus on contractors to carry out works correctly using experienced personnel and an Environmental Manager is to be appointed. The CEMPs would also require specific method statements and risk assessments to be carried out. It is also reasonable to assume that the various contractors and monitoring bodies would seek to carry out their duties assiduously.
- 1.11.21 The Department also advised that, as required by NIEA's Water Management Unit, an Environmental Liaison Group would be set up preconstruction. This group would involve TNI, contractors, NIEA, and other environmental stakeholders. This would assist in identifying potential issues early both during and following construction works.

Recommendation:

That prior to construction commencing an Environmental Liaison Group be established to include all relevant environmental stakeholders.

- 1.11.22 All-in-all, it is unlikely that potential impacts associated with accidental spillage would have a significant effect on the primary or qualifying habitats, Atlantic salmon and supporting spawning, nursery and resting habitats within the SACs.
- 1.11.23 A number of outfalls would ultimately discharge into the Foyle and Tributaries SAC, the River Finn SAC, or tributaries and headwaters eventually feeding into watercourses within the SACs. The management of the risk of sediments or other pollutant release associated with run-off has been built into the proposed drainage design following discussions with NIEA and the For example, the use of SuDS. Loughs Agency. The results of the Highways Agency Water Risk Assessment Tool (HAWRAT) is reported in detail in the ES appendices. This shows that all the relevant discharges would be under the WFD threshold. The HAWRAT requires the selection of the most appropriate area of the UK to determine an appropriate level of rainfall. There is no reason to believe that the tool is not conservative as it assumes a constant supply of sediment will be washed from roads during use and that all such sediment is deposited in the receiving watercourse.
- 1.11.24 The highest risk of a serious pollution event occurring was assessed by the Department as being at just less than a 0.1% chance in any given year (1 in 1100 year return period). This risk is substantially lower than the 1 in 200 year return period (0.5% chance of happening in any given year) recognised in the DMRB as the level at which consideration should be given to further mitigation measures. Notwithstanding this, the design for all drainage outfalls provides for the introduction of a valve / penstock prior to discharge to facilitate routine or emergency maintenance of the drainage network. This would also serve to provide a facility for closing off any of the drainage catchments as part of the emergency Pollution Response Plan.
- 1.11.25 It is concluded that there would not be any significant environmental effects relative to discharge of sediments and other pollutants associated with road related run-off in the context of the SACs.
- 1.11.26 No works are proposed within the Owenkillew River SAC and ASSI. At the Foyle and Tributaries SAC open span bridges would cross the Mourne and Derg Rivers and there would be drainage outfalls into the Foyle, Finn and Derg Rivers. The construction of open span structures would not require work in the watercourses or disturbance to primary habitat. Overall there would be a small loss of some 0.04ha of bankside vegetation, none of which

would be habitat cited as a primary or qualifying reason for the SAC's designation. This would not be an impact of note.

- 1.11.27 There would be the temporary and permanent loss of habitats on salmonid watercourses. However, there is no technical evidence to dispute the ES's conclusion that the 2% total loss of marginal and bankside habitat would have a small and non-significant impact on the total habitat and the habitat along each watercourse.
- 1.11.28 Mitigation would involve minimising in-stream habitat loss by using preplanted coir rolls of suitable native emergent and marginal vegetation. In addition suitable bankside planting would be undertaken which would in some instances enhance habitats. Habitat lost to watercourse diversions would be re-established in the new channels by replicating bed and channel characteristics and by planting habitat to reinstate the ecological characteristics of the original watercourse. Contracts will require such work to be completed prior to the closure of the diverted channels.
- Where culverts are proposed on watercourses eventually feeding into the 1.11.29 SAC watercourses, a precautionary approach has been adopted – assuming they are of importance to Atlantic Salmon they have been designed as box culverts. The Department has agreed with Inland Fisheries DAERA's request for the use of low flow channels with baffles within culverts for watercourses falling under their jurisdiction to assist fish passage. Where culverts impact on habitat their bases would be embedded, gravels and boulders introduced and provision made for natural sedimentation etc. The invert of each culvert would be buried below natural bed level and backfilled with appropriate bed material to allow the natural bed level to be maintained.
- 1.11.30 No sound reason has been presented to dispute the ES's conclusion that fragmentation and obstruction associated with the Proposed Scheme would not have a significant effect on Atlantic salmon as a qualifying species for the SACs. The Loughs Agency are the statutory body charged with among other things the conservation, protection and development of inland fisheries within the Foyle system. In commenting on the ES they had no objection in principle to the proposed development and were pleased to see that due consideration has been given to fish species, including Altlantic Salmon during the construction phase of the project.

Recommendation:

That the detailed design of the Scheme includes Low Flow Culverts at the locations agreed with Inland Fisheries DAERA.

Harm to Atlantic salmon as a result of noise, vibration and lighting was 1.11.31 referred to. The likeliest impacts would arise during construction activities. However these activities would not involve blasting or piling within watercourses. Mitigation measures have been agreed with Loughs Agency where abutment foundations would be constructed. The range of measures, depending upon location, include works being carried out in May to September to avoid the salmonid migration period, the use of Continuous Flight Auger piles or drilled piles which do not produce significant vibration and soft start methods of pilling to allow fish to move away.

1.11.32 Night working in the vicinity of watercourses identified as being of salmonid interest would not generally be allowed. Where emergency works outside of daylight hours were necessary lighting would be positioned / cowled to minimise light spill onto the watercourse and the duration would be kept to a minimum. There is no evidence to suggest that the normal operation of the Proposed Scheme, or lights at junctions for example would disturb salmoid species. We are satisfied that noise, vibration and lighting would not have a significant impact upon salmonid species.

Impacts upon Other Designated Areas

- 1.11.33 The data in the ES shows that background Nitrogen Oxide (NO_X) concentrations in relation to all designated sites (SACs and ASSIs) are well below the EU limit value of 30 micrograms per cubic meter (µg.m-3). At this level guidelines indicate that a significant effect is unlikely.
- 1.11.34 The United Nations Economic Commission for Europe (UNECE) have identified a critical load for nitrogen deposition on sensitive habitats. The critical load of 5-10 kg per hectare per year (ha⁻¹yr⁻¹) is the exposure to one or more pollutants below which significant harmful effects on sensitive elements of the environment do not occur according to present knowledge.

Tully Bog SAC and ASSI

- 1.11.35 In terms of air quality the ES identifies that with the Proposed Scheme in place NO_X concentrations at all locations of the SAC will be well below the EU limit value. Nitrogen deposition would be 20.4 kg N ha⁻¹yr⁻¹ on the SAC's eastern boundary a 0.02kg increase over the level were the Proposed Scheme not to proceed. This is a low increase on a small proportion of the SAC, and detailed field surveys show a lack of competitive species on the bog surface to take advantage of such increased nitrogen levels. There is no reason to dispute the ES's view that the flora assemblage would not be expected to alter. Thus, the increase in nitrogen deposition would not have a significant effect on the SAC.
- 1.11.36 As the construction working areas would be some 100m 200m away and generally upwind from Tully Bog the risk of dust deposition having a material impact on the bog would be very low. Given this and construction management measures, construction related dust would not have a significant effect on the site.

1.11.37 Where the proposed works would extend below the level of Tully Bog - areas of soft ground needing to be removed and replaced with sound material - the excavation is not expected to be more than 2m deep. Given this, distance and the temporary nature of the works, the impact upon the groundwater regime is expected to be negligible. There is no evidence to dispute the ES's conclusion that the Proposed Scheme is not expected to affect the area's hydrological regime either by increasing or decreasing the output of water.

McKean's Moss ASSI

- 1.11.38 This ASSI comprises lowland raised bog surrounded by birch and willow woodland. The ES adequately explains the reasons for the designation. Noise disturbance from the Proposed Scheme would be inevitable, but there is no evidence to show that this would have any significant impact upon ecology.
- 1.11.39 The ES appendices indicate that the air quality for the entire ASSI was modelled. Chapter 11 of the ES itself mistakenly refers to Tully Bog NO_X concentrations, but looking at the appendices the concentrations (as advised by the Department at the inquiry) appear to be well under the EU limit value with the Proposed Scheme in place.
- 1.11.40 The Proposed Scheme's nitrogen deposition rates would be in the order of 16.51 Kg N ha⁻¹ yr⁻¹ on the ASSI's eastern boundary compared to 16 Kg should it not be implemented. So, with or without the Scheme the critical load for the habitat is substantially exceeded. However, the increase is relatively low per se, and would affect only a small part of the ASSI where there is a lack of competitive species to take advantage of the increased nitrogen levels. The flora assemblage is not expected to alter and nitrogen deposition would not constitute a significant effect on the ASSI.
- 1.11.41 As the Proposed Scheme is some 100m east of the Moss, and cut into a slope above its level there would be no direct impact upon it. Given the distance involved, prevailing winds and construction management measures dust deposition during construction would not have a significant impact.
- 1.11.42 The moss is at 2m AOD where groundwater is close to ground level. The Proposed Scheme would be benched into an existing sand and gravel bank at about 8m AOD. We conclude that water will continue to find its way through the drift geology to the bog and that there would be no significant effect on the ASSI's hydrological regime. The Department confirmed that there would be no untreated discharges to the Moss.

Strabane Glen

1.11.43 Strabane Glen, lies some 200m south-west of the existing A5 and 475m from the Proposed Scheme. At this distance the ES unsurprisingly concludes that

dust deposition is low and would not have a significant effect on the site's integrity. The difference with the Proposed Scheme in terms of nitrogen deposition is 0.03 kg N ha⁻¹yr⁻¹ in the opening year. We do not see this as being of significance given the already high exceedance of the critical load recorded in the area.

Strabane Nature Reserve

1.11.44 About 1.3ha (43%) of the reserve would be taken for the construction of the Proposed Scheme, which would provide for the introduction of 0.7ha of wet woodland adjacent to the site. The net loss (0.6ha) of the nature reserve is significant.

Otters, Badgers and Other Mammals.

- 1.11.45 No detailed argument was provided to challenge the conclusions of the ES in relation to otters and badgers. NIEA are content with the proposed mitigation measures.
- 1.11.46 Whilst the road will provide a barrier to fauna in general, the Proposed Scheme provides for agricultural underpasses, badger tunnels and otter ledges/tunnels which would serve to reconnect suitable habitat either side of the road. Also, all the major watercourses within the Foyle catchment have clear-span structures which provide for suitable and safe passage beneath the Proposed Scheme.

Reed Bed Habitat

1.11.47 There would be a temporary loss of reed bed near New Buildings for the construction of drainage outfalls. However, reed bed will be allowed to recolonise and there is no sound reason to dispute the Department's view that this re-colonisation would take 1 to 2 years when construction works have finished.

Ancient Woodland, Woodland & Hedgerows

- 1.11.48 The Proposed Scheme would involve the loss of 0.6ha of long-established woodland which cannot be replaced or mitigated. However, we note the commitment of TNI to endeavour to reduce the loss of such woodland during detailed design and the commitments to compensatory planting close to and reflecting the species composition of the existing woodlands. TNI have also committed to minimising gaps between planting blocks and existing woodlands as far as possible.
- 1.11.49 The Scheme would lead to the loss of 2.9ha of broadleaf woodland and 142ha of semi-natural broadleaf woodland. While this loss is unfortunate the Scheme would appropriately create 122ha of native broadleaved woodland to provide partial compensation for the loss.

1.11.50 About 170km of species poor hedgerow and 7km of species rich hedge would be lost, but this would be compensated for by the creation of over 190km of species rich hedge, nearly half of which would include trees. It is accepted that the residual impact would be positive within the immediate vicinity of any location, but an aggregate significant effect at a local scale.

Bog

There would be a loss of approximately 7ha of modified bog and a further 1.11.51 7ha would be at increased risk of impacts through degradation in air quality and changes to drainage regimes. All bogs within the construction area are deteriorating and without conservation action are likely to succeed to scrub or grassland habitats over the coming decades. The Proposed Scheme would be very likely to accelerate this decline, and such habitats cannot be re-However, the Department has indicated that there will be no dewatering of raised bogs. Measures to remove the potential for remnant bog habitat being dewatered have been identified with NIEA. Department has also committed, in order to mitigate for the loss of bog habitat, to seek agreement with landowners to re-wet remnant bog habitats with measures such as blocking of drainage channels. NIEA consider this adequate compensation for bog loss, though they request a particular commitment that a raised bog will be restored at chainage 62000-62400 as it is the most active bog surface in the scheme corridor.

Recommendation:

That the Department seek agreement with the landowners to restore the raised bog at chainage 62000-62400.

Landscaping / Planting in General

1.11.52 Concerns over replacement planting were raised and we accept that some of the planted areas along the improved A4 can appear like a monoculture. The Department however committed to using native species and improving biodiversity in line with the character of each area where appropriate. It was confirmed that it was standard practice to screen and treat material to remove invasive species if necessary.

Recommendation:

That as the detailed design of planting schemes progress the Department use native species and seek to improve biodiversity along the route of the Proposed Scheme.

General Disturbance

1.11.53 Some objectors raised broad points about disturbance to fauna in general by reason of noise. This broad concern is accepted and the level of disturbance and its impacts would vary, but there is no detailed evidence to demonstrate that the impacts would be unacceptable overall.

Conclusion

- 1.11.54 The above recommendations are made on the basis that the Proposed Scheme is to proceed.
- 1.11.55 The Minister remains the competent authority under the Habitat Regulations, but on the basis of the information before us there is no obvious reason to conclude that the Proposed Scheme would adversely affect European sites, species or habitats.
- 1.11.56 Nevertheless, it is accepted that the ecology and nature impacts overall do not meet the general thrust of policy set out in documents like the RDS 2035 which aim to protect and enhance the environment. Notwithstanding the mitigation measures and efforts to create some level of enhancement, the negative impacts weigh against the Proposed Scheme.

1.12 Geology and Soils

- 1.12.1 The ES investigated the impacts of the Proposed Scheme on statutory and non-statutory geological sites, evaluated the risks associated with existing areas of contamination and assessed existing ground conditions to determine the suitability of soils to be re-used within the works. The assessment judged that there would be no significant impacts on geology and soils.
- 1.12.2 The assessment shows that construction works are likely to involve the disturbance of some 26 potentially contaminated sites, and following concerns about contaminated land from NIEA Waste Management (NIEA WM) preliminary Risk Assessments were provided. NIEA WM supported the Department's intention to:
 - Carry out a Generic Quantitative Risk Assessment (GQRA) and remediation strategy if potential contaminated material is identified during construction.
 - Review the need for further risk assessments during the detailed design stage.
 - Carry out updated GQRAs for some sites at the detailed design stage
- 1.12.3 NIEA WM recommended that all further risk assessments should follow the UK technical framework as described in the Model Procedures for the Management of Land Contamination (CLR11). Where unacceptable risks are identified a remediation strategy shall be developed to provide remedial objectives/criteria and measures to manage all identified unacceptable risks. The strategy should also present the criteria to be employed to verify that all unacceptable risks have been appropriately managed.

Recommendation:

That all risk assessments follow the Model Procedures for the Management of Land Contamination (CLR11). Where unacceptable risks are identified a remediation strategy shall be developed as required by NIEA Waste Management.

1.12.4 The Department confirmed that only where soils are "Greenfield", or where "brownfield" soils are demonstrated not to have viable pollutant linkage and unacceptable risk is it intended to reuse material within the Scheme. Contaminated soils are to be remediated under the appropriate waste management regime or disposed to a suitably licensed landfill by a registered carrier. The Department confirmed that the management of contaminated land and waste will be carried out in compliance with environmental regulations in force and consultation/ cooperation with NIEA. Where it is intended to retain contaminated ground within the Scheme to minimise disposal to landfill NIEA WM indicate that measures may be required for the

reuse of potentially contaminating materials which should be considered through the remedial strategy.

Recommendation:

That where it is intended to retain contaminated ground within the Scheme measures for the reuse of potentially contaminating materials should be considered through the remedial strategy.

1.12.5 Areas on the route of the Scheme contain Potato Cyst Nematode (PCN). Affected soils cannot be moved without a licence from DAERA. Where soils are to remain on any affected area measures can be taken to avoid carrying the infection to clean agricultural land.

Recommendation:

That the Department liaise with DAERA in relation to the safe disposal and replacing of soils affected with Potato Cyst Nematode, and the prevention of its spread.

Conclusion

1.12.6 The above recommendations are made on the basis that the Scheme is to proceed. The impacts on geology and soils would not weigh against the Proposed Scheme.

1.13 Noise & Vibration

- 1.13.1 The ES considered in detail noise and vibration impacts during the construction and operational phases of the Proposed Scheme. As there was no significant challenge to the methodology used we have no reason to judge that the assessment is not robust.
- 1.13.2 The ES concluded that there would be no significant environmental effects associated with construction related noise. However, a number of access routes used by construction traffic would be likely to exceed threshold levels in BS 5221. It concluded that taking mitigation into account there would be no significant effects associated with construction-related vibration. Taking mitigation into account, there would be 765 and 1,835 receptors subject to major and moderate long-term increases in traffic related noise respectively a significant environmental effect. Some 27 residential receptors could potentially be subject to significant levels of airborne vibration associated with vehicles using the route.
- 1.13.3 As a number of objectors noted in general terms the Proposed Scheme would also mean traffic noise becoming a more generally significant factor in the environment in what are a number of presently relatively quite rural areas. Clearly, the general ambiance of rural areas would be eroded to varying degrees.
- 1.13.4 It is acknowledged that the World Health Organisation (WHO) in its Guidelines for Community Noise identifies that a steady continuous outdoor sound level of 55dB is a level not to be exceeded to protect the majority of people from being seriously annoyed during the daytime on outdoor living areas. This is approximately equivalent to the long-term traffic noise level of 58dB LA10,18h in excess of which the Department has considered noise mitigation measures, such as acoustic fencing, for individual properties unless such measures would have no discernible effect upon noise levels.
- 1.13.5 Where there is an increase in noise level of at least 1 decibel due to traffic using the road and the resulting noise level for the design year (or for any intervening year if the noise level is higher) is equal to or exceeding 68dB the *Noise Insulation Regulations (NI) 1995* allow for certain residential properties to qualify for an offer of noise insulation. A number of properties though, while suffering a significant diminution of amenity would be unable to avail of this legislation as they do not quite meet the qualifying noise level. While it is not clear to us why this particular noise level was chosen for the Regulations it remains a statutory condition which will have been arrived at after due consideration. Noise is also a factor which may be considered in any claims for compensation.

1.13.6 Representations regarding noise impacts upon individual properties are considered in the site specific elements of this report. However, notwithstanding the above comments, in site specific circumstances where the increased noise impacts are judged to be unduly severe we have recommended noise insulation measures even if anticipated noise levels are below the 68dB level in the 1995 *Noise Insulation Regulations*. Broadly this has been used in circumstances where existing traffic generated noise levels at a dwelling, or other sensitive building, are anticipated to increase by over 15dB.

Conclusion

1.13.7 No recommendations are made in relation to the above matters. The negative impacts of noise and vibration weigh against the Proposed Scheme.

1.14 Effects on all Travellers

- 1.14.1 The assessments under Chapter 14 of the ES focused on impacts on journeys undertaken by pedestrians, cyclists and equestrians; users of local roads either for recreation or to access facilities used by communities; and an evaluation of driver stress relative to the existing A5 and the Proposed Scheme.
- 1.14.2 Most general concerns raised in relation to these matters have been considered in Chapter 1.3 of this Report considering the Justification for the Proposed Scheme. We do not repeat these here.
- 1.14.3 In relation to one concern it is not clear to what degree the Proposed Scheme would act as a barrier to modal shift and we are unaware of there being a robust methodology to assess this. However, as noted earlier the Scheme's improvement in travel times would open up opportunities to improve bus services. The Department's commitment to produce a strategic master-plan for cycling and walking along the A5 Corridor is also acknowledged and it is recommended that this should be carried out.

Recommendation:

That the Department produce a strategic master-plan for cycling and walking along the A5 Corridor.

Conclusions

1.14.4 The above recommendation is made on the basis that the Scheme is to proceed. The ES's concluded that the impacts on new severance, the relief of severance and changes in levels of driver stress would not be significant relative to the EIA Directive and Regulations. We do not disagree with this assessment. The overall impacts on all travellers would not weigh significantly against the proposed Scheme.

1.15 **Community & Private Assets (including Agriculture)**

- The ES's Chapter 15 'Community and Private Assets' considered impacts 1.15.1 from the loss of community and private assets including dwellings and businesses. Concerns raised in relation to individual sites are considered under the site specific sections of this Report.
- The main concerns raised by objectors under this chapter of the ES involved 1.15.2 the consideration of the loss of agricultural land and the assessment of the land take and severance on the future operational efficiency of farms. In relation to this concern it is noted that Volume 15 of the DMRB relating to the economic assessment of road schemes in Scotland does not apply in NI. Instead the relevant methodology, as noted in the ES, is set out in DMRB Volume 11 where it considers environmental assessment techniques.

Agricultural Land Quality

- The Proposed Scheme will lead to the loss of 1,150ha of agricultural land, of 1.15.3 which 900ha will be permanently lost.
- 1.15.4 We agree with the objector who noted that the ES, in initially identifying the agricultural land capability of the affected lands, did not adequately explain the six grades of land classification adopted by the former Department of Agriculture and Rural Development (DARD) - now the Department of Agriculture Environment and Rural affairs (DAERA). It is not a readily found classification. However, the omission is not critical as the ES does go on to refer to higher grade and lower grade land. It also advises that grade 2 and 3A represents higher quality land which can reasonably be considered more productive and versatile land.
- 1.15.5 There is no sound reason to conclude that the procedure to establish the capability of the land affected or the impacts of the Proposed Scheme on that land was not carried out in accordance with the DMRB methodology relevant to NI which requires the involvement of DAERA (or its predecessor department's) at the various stages of the process. While the conclusions of the ES in relation to this issue are based on the subjective judgement of the document's compilers we were advised by the Department that DARD had agreed with those conclusions.
- 1.15.6 The ES therefore reasonably sets out the loss of land in relation to the amount of land of each grade at a national (NI) level and a county level - the DMRB requires a consideration on the national agricultural interest.
- 1.15.7 The ES concludes that the loss of 143ha of Grade 2 land and 555ha of grade 3A land would not constitute a significant environmental effect. This would be a reasonable conclusion at the national level where 0.3% of such land would be lost. But we also bear in mind the impacts at a county level. It is

agreed that the areas of grade 2 and 3A land required in County Londonderry (8.1 hectares) would be a slight adverse impact. The amount of grade 2 and 3A land required in County Tyrone would respectively amount to 137.4ha (0.59% of the total grade 2 land in the county) and 552.4ha (0.75% of the total grade 3A land in the county). It is accepted that higher grade agricultural land is a particularly scarce resource in County Tyrone, but given the percentages we do not believe that the ES has understated the importance of this land by advising that the Proposed Scheme would have a moderate adverse impact at a County Tyrone Level.

1.15.8 Comment on the Proposed Scheme's impact upon land productivity and the agri-food industry are considered earlier in this report.

Agricultural Impact Assessment (AIA)

- 1.15.9 An AIA report has been undertaken for each of 314 individual farms affected by the Proposed Scheme and these are included in the ES. Here we consider the generality of the AIAs and how they were undertaken.
- 1.15.10 The purpose of an AIA is to identify the likely impact that the land take and severance arising from the proposed scheme would have on management practice and the capacity of individual farms to operate productively. The significance of impacts is assessed relative to the overall scale of the farm business and its management rather than a detailed assessment of farm value and pecuniary impacts.
- 1.15.11 The DMRB does not set out a standardised methodology for such an assessment. However, the identification of farms and the range of information gathered, as explained in Chapter 15 of the ES, to inform the AIAs was appropriate. We note that the assessor visited affected farms himself with the only fields not walked being those of farms slightly affected by the Proposed Scheme. Additionally, while the assessor provided his own impact ratings and significance criteria for the assessment these appear reasonable and there was no compelling argument otherwise.
- 1.15.12 The AIAs consider conacre land and issues of bio-security as recommended by the Inspectors in their report following the 2011 inquiry. However, given earlier references to the land classification adopted by DARD in the ES it is odd that the AIAs have not referred to these land classifications for the sake of consistency. Nevertheless, we accept that these classifications are not always in common use in NI, and that the assessor is experienced and qualified to determine what is and is not good quality land.
- 1.15.13 There were concerns that the AIAs were out of date and not reviewed since the 2011 public inquiry. However, ES Chapter 15 sets out the considerable lengths to which the Department went to collect updated information. This included letters in August and November 2013 to landowners, and meetings

held between May and July 2014. As the opportunity for feedback was presented the Department cannot be blamed for some parties, for whatever reason, not responding to them. We are also satisfied that the assessor is familiar with changes in farming practices, and we acknowledge his comment that while farm prices have changed the nature of land use has not altered significantly. In any event, given the purpose of the AIAs, the ES concludes that the impact of the Proposed Scheme would have a significant environmental effect. Updating the AIAs now would be unlikely to change this assessment downwards.

1.15.14 Many concerns revolved around fears that Land and Property Services (LPS) would use the AIAs in assessing compensation payments, and given what the AIAs look at we understand how they could, albeit incorrectly, be seen as having an economic purpose - particularly when the term 'viability' is used in the impact ratings. The Department advised that in some cases it may assist LPS to refer to the AIA of an individual farm, but only to provide additional factual information such as the size and extent of the overall land ownership or the nature of the land use. While that may be appropriate in some cases, the AIAs are necessarily a snapshot of time and caution must be exercised in using something prepared under the auspices of an EIA for another purpose. Even new AIAs could have a limited shelf life as changes to a farm could happen relatively quickly in terms of, for example, herd numbers. This need for caution in using the AIAs must be reiterated to LPS.

Recommendation:

That Land and Property Services be advised that the use of the Agricultural Impact Assessments prepared for the purposes of an Environmental Impact Assessment have limited value, if any, outwith that purpose.

- 1.15.15 It is noted that the assessor for the AIAs is also used by LPS in assessing compensation claims. It is not unusual for professionals to wear several hats or be employed by several departments for different purposes and there is no reason to think that the Department were acting as judge, jury and executioner in relation to the AIA process.
- 1.15.16 Overall, the carrying out again of a full AIA process is not warranted. Concerns relating to particular impacts of the Proposed Scheme on individual farms are considered in the elements of this report dealing with site specific issues.

Conclusion

1.15.17 The above recommendation is made on the basis that the Proposed Scheme is to proceed. The negative impacts identified by the ES in relation to community and private assets weigh against the Proposed Scheme.

1.16 **Road Drainage & the Water Environment**

- 1.16.1 The Proposed Scheme involves a substantial interaction with floodplains and surface waters. The ES advised however that the significance of the impacts on surface water and flooding would be no greater than a slight adverse effect when taking account of mitigation measures across the Proposed Scheme.
- 1.16.2 Chapter 16 and its appendices cover the *Water Framework Directive* (WFD) in some detail. It concludes that the Proposed Scheme would have no more than a slight adverse impact on surface water and groundwater resources at the WFD catchment and groundwater body level. Thus, there would be no adverse effect leading to a deterioration in WFD status, prevention of the attainment of target status for any waterbody, or prevention of attainment of WFD objectives in the local waterbody or other waterbodies within the same catchment. As such no derogation is required under the WFD.
- 1.16.3 The Proposed Scheme's overall impacts were evaluated as not significant, and while some objectors thought the ES was understating the risks no substantive challenge on this point materialised.
- 1.16.4 The potential for sediment release into watercourses affecting ecology, particularly salmonids, has been considered in Chapter 1.11 of this report.

Flood Risk Assessment

- 1.16.5 One representation questioned whether hydrological modelling had been carried out. The modelling and its results have been carried out in some detail for the purpose of a Flood Risk Assessment (FRA). However, while this document has informed the ES it is not part of, or appended to it. We would normally expect such information to be part of an ES. However, the ES and its associated figures and appendices did report on the issue of flood risk in detail. The conclusions of the ES on the Scheme's impacts are also acknowledged. Minor environmental effects do not bring a development within the scope of the EIA regime. Additionally, and in any event, the ES directs readers to the FRA, making them aware of its existence and what it contained. It was open to parties to comment on the ES, and ask the Department for the relevant FRA information during the relevant consultation period. The draft FRA of October 2015 was placed on the Department's A5 website as a core document before the inquiry. Also, there has been no substantive challenge to the contents of the FRA or its findings in relation to flooding. So, while the FRA is not part of the ES its omission is not critical in the context of the EIA process.
- The draft 2015 FRA and the Proposed Scheme in relation to flooding issues, 1.16.6 have both evolved out of earlier draft FRA's of 2011 and 2012. Rivers

Agency had no reason to disagree with the conclusions of these earlier assessments, and for the 2012 assessment they were satisfied that it demonstrated that the development will not be at risk of flooding in events of less than 1 in 100 year fluvial return period and in events of less than a 1 in 200 year coastal return period where appropriate. They were also satisfied that there will be no increase in flood risk elsewhere as a consequence of the Scheme. The draft 2015 FRA, which has not yet been submitted to the Rivers Agency uses the latest accepted methodology. The results though remain largely unchanged from the earlier assessments.

Loss of Floodplain

1.16.7 There will be some loss of floodplain storage capacity where floodplains are crossed. Areas of lost capacity have been identified and compensatory storage would be provided by re-profiling adjacent land. At specific locations, for example the Foyle floodplain, compensatory storage would not be appropriate as the flood risk is influenced by tidal movements/surges and the flooding mechanism is dominated by the floodplain's ability to convey flow; therefore the influence of storage is reduced and mitigation such as incorporating large connectivity structures into the Proposed Scheme has been agreed with Rivers Agency. As the flood compensation areas have been designed to account for the location of attenuation ponds there is no sound reason to believe that such ponds would compromise flood attenuation. The above approach is acceptable.

Climate Change

1.16.8 It was queried whether the Scheme took account of climate change. It was explained by the Department that a 20% addition to rainfall was factored into assessments to allow for climate change in line with 2009 UK Climate Projections (UKCP09). Sea level increases and wave action due to climate change were also factored in. As a result of this substantial additional freeboard levels have been allowed for in the Scheme's design on top of the standard freeboard levels applied above the 1:100 and 1:200 flood event levels for fluvial and coastal flood areas respectively. In discussion with Rivers Agency significant freeboards have also been allowed for on top of the relevant flood event levels in relation to structures such as culverts and attenuation ponds, whether within and outwith flood plains. These freeboards minimise the potential for accidental blockage. Issues regarding climate change have been adequately covered.

Drainage Components

1.16.9 While some parties questioned why there were differences in the drainage designs from what was before the 2011 inquiry, it was logical that the Proposed Scheme was looked at afresh following the quashing of the Minister's 2012 decision to proceed with the Scheme. The use of the latest methodology has led to changes, such as difference in the numbers of

proposed attenuation ponds (also known as retention ponds) and, notably, while the first ES advised that the Scheme would require a derogation under the Water Framework Directive, no such derogation would now be required.

While some parties judged that insufficient drainage information was 1.16.10 provided, the ES details the use of appropriately sized culverts, clear span structures, watercourse diversions, connectivity structures to maintain floodplains and compensatory water storage. The locations of these are identified on the maps accompanying the ES Chapter 16. The detail in Appendix 16D related to the Water Framework Directive is also referred to. Chapter 6's appendices contained detailed schedules of culverts and flood compensation area details, and the draft Stage 3 Scheme Assessment Reports, a core document, also details specific engineering features.

Road Drainage

- The discharge of all road related run-off would be to existing surface 1.16.11 watercourses and would involve Sustainable Drainage Systems (SuDS) designs to avoid and / or mitigate the potential impacts of traffic related pollutants on receiving surface waters. In essence the collection and conveyance of water from the carriageways would involve a combination of concrete lined channels, swales and grassed channels within the roadside verge or central reserve which is then piped to outfalls. In most instances, attenuation ponds have been introduced prior to discharge via the proposed outfalls. The swales, grassed channels and attenuation ponds would intercept suspended solids, sediment-bound pollutants and dissolved copper and zinc run-off.
- 1.16.12 The management of routine runoff and accidental spillage during operation has been reported on in detail in the ES. It found that routine runoff sediment from carriageway discharges would be very small in terms of percentage contributions to local baseline river sediment conditions. As noted in Chapter 1.11 of this Report the release of sediments passed the HAWRAT assessment and the results of this are in the ES.
- 1.16.13 A number of general concerns were raised about various components of the SuDS schemes. However, there is no evidence to show that they, including attenuation ponds have not been designed in accordance with the SuDS Manual (2015) (CIRIA C753) to accept all flows from the Scheme with a controlled discharge to a suitable receiving watercourse. The ponds, allowing for pollutant removal by sedimentation, have been designed to allow for a permanent pool to be retained with additional volume provided allowing water to rise and fall in response to rainfall events. The use of flow control devices responding to rainfall events will also be used. The ponds are designed to control discharge rates and maintain existing flow to the receiving watercourses where appropriate. During rainfall the build-up of pollutants on

the road is generally washed off the road first, with the runoff from the first 10mm of rain often the most seriously polluted. The ponds aim to detain the first inflows for the longest period and allow subsequent inflows (when the level of the pond is higher) to flow out at a quicker rate.

- 1.16.14 Whilst concerns were raised about the construction of such ponds it is reasonable to assume that best practice and appropriate materials etc will be utilised by a contractor, and that supervisors will carry appropriate monitoring. While contractors will base construction on a specimen design they may develop this, though changes would have to be assessed by the Scheme's drainage designer. Also, where ground may be softer than anticipated we are satisfied by the Department's explanation that liners are a common technique used to assist the construction.
- 1.16.15 We are also satisfied that an Operation and Maintenance Plan will be developed on the basis of current reference documents, and that TNI will determine the maintenance regime for each pond once constructed to maintain its operational efficiency beyond the anticipated design life. Overall, we see no need for independent monitoring of such ponds, or indeed other drainage components during construction or maintenance.
- 1.16.16 Discharge to an adjacent suitable watercourse would be via appropriate outfall structures designed in accordance with the DMRB. proposed drainage infrastructure discharges below the water level in the receiving watercourse, particularly if it is tidal, non-return valves will be used to eliminate the potential for a backup of flows.
- 1.16.17 A number of concerns were raised in relation to health and safety aspects of ponds. However, as ponds will be fenced off there is unlikely to be a significant danger to those in their vicinity. Also, we do not see it as inevitable that ponds would attract vermin such as rats if properly maintained.
- 1.16.18 We accept that with the construction of the Proposed Scheme there would be a significant improvement to the current situation as all discharges from existing A5 are going into the Foyle River with hardly any treatment.

Mitigation Measures

1.16.19 An objection briefly referred to relevant mitigation techniques having been omitted from the ES or inadequate details given. However, given the above conclusions and the water quality mitigation measures comprehensively considered in Chapters 16 and 18 of the ES we are satisfied that appropriate consideration has been given to mitigation techniques, including SuDS and in relation to contaminants and sediments. The ES has also considered groundwater abstractions. Reference is also made to the draft CEMP and SMP appended to the ES.

Conclusion

1.16.20 No recommendations are made in relation to the above matters. The impacts upon road drainage and the water environment would not weigh significantly against the Proposed Scheme.

1.17 Interactions and Cumulative Effects

- 1.17.1 One representation was of the view that other road schemes should have been included in Chapter 17 of the ES which dealt with interactions and cumulative effects.
- 1.17.2 Article 5(3) of the EIA Directive requires the ES to provide "the data required to identify and assess the main effects which the project is likely to have on the environment" read together with Annex IV footnote 1, this suggests that sufficient information must be provided about any other scheme which is anticipated to have cumulative effects in combination with the development under consideration.
- 1.17.3 In this regard the matters considered by this Chapter of the ES do extend beyond matters of landscape character and nature conservation. With regard to existing roads, these already contribute to the environmental baseline data in areas such as for example air quality and traffic levels. The Department also confirmed that traffic generated by already approved, but uncompleted, schemes was also included within the future scenario traffic assessments. As such the cumulative effects for air quality are an inherent part of the Air Quality Assessment considered in the ES. Nevertheless, it would have been good practice to also clarify that this was the case in Chapter 17 of the ES.
- 1.17.4 In regard to future proposals case law supports the contention that an ES need only consider reasonably foreseeable actions. In this case the future development of an A5/A6 link or other road developments around Londonderry are contained only in a consultant's preliminary study documents and are not part of any plan or programme. On that basis we do not see them as reasonably foreseeable projects for inclusion in this ES. While the A5 and A6 do eventually connect in Londonderry the proposed A6 dual carriageway to Londonderry scheme remains some distance from the Proposed Scheme. As such we are not persuaded that the A6 dual carriageway has a sufficient functional link or interdependence with the A5 Scheme that would require its cumulative impacts to be considered in the ES.
- 1.17.5 No recommendations are made in relation to the representation.

Conclusions

1.17.6 It is acknowledged that the ES advises that the Proposed Scheme in association with other proposals would be likely to have a cumulative impact on landscape character and nature conservation. This must weigh against the proposal.

1.18 Consultation

- 1.18.1 Chapter 3 of the ES and its associated appendices set out what has been an extensive consultation process. This has informed the planning, design and assessment of the Proposed Scheme from its inception, through the first public inquiry to the present. This has included a series of public exhibitions liaison with statutory consultees and other organisations and discussions with affected parties and landowners. Transport NI also established a dedicated project website (www.a5wtc.com) to support the overall consultation strategy. A 0845 telephone information line has been operated as a facility for receipt of public enquiries.
- 1.18.2 While some people were disappointed with the information available and answers given at exhibitions, such events are not best placed by themselves to give a full picture of the situation or responses to questions. They are however a significant opportunity to raise awareness.
- 1.18.3 Also, while some parties found documents and plans hard to understand, we are content that reasonable opportunities were presented for people to seek clarification from the Department. It is accepted that some communication issues may have arisen; that some people's queries were not answered to their satisfaction, or that an appropriate standard of service to some individuals may not have been provided. However, we see nothing to suggest that critical flaws have arisen in the consultation process.
- 1.18.4 Landowners not directly affected by the Proposed Scheme, but adjacent to or close to it were not contacted by the Department. However, given the general publicity around the Proposed Scheme we are satisfied that contact with such parties should not be automatic. Nevertheless, and while we make no recommendation on the matter, the discretion for contact with such parties remains should it be considered necessary. Where people directly affected by earlier iterations of schemes were subsequently not affected by later iterations it would have assisted openness and consultation to advise them of such changes directly.
- 1.18.5 The £2,000 cost of purchasing the ES was prohibitive. However, given the scale of the Proposed Scheme it is inevitable that it would be a large document (6,000 pages). Giving out such a document at a reduced cost would have considerable implications for the public purse if it were to become widely requested. While not everyone may have access to computers the placing of all the ES documents on a dedicated and relatively easily navigated website for the A5 scheme was appropriate. The document was also made available at a number of offices in both NI and the ROI. It is reasonable that copies of the ES left in libraries should not have been removed from the library as this would have denied others the chance to

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access the document. The Department's efforts to make the ES publicly available were appropriate.

Conclusion

1.18.6 While many people were dissatisfied by it and its outcomes the consultation process since the inception of the Scheme has been comprehensive and appropriate. No recommendations are made in respect of the above matters.

1.19 Conclusion on the Environmental Statement and Impacts of the Proposed Scheme

- 1.19.1 In the context of the representations made and, subject to aforementioned recommendations, the Environmental Statement has adequately considered the environmental issues likely to arise if the Proposed Scheme were implemented.
- 1.19.2 As previous chapters indicate the Proposed Scheme has significant adverse impacts. These need to be weighed together against its significant benefits. While many representations contended otherwise, on the basis of the evidence before us, the cumulative negative impacts do not weigh against the Proposed Scheme being progressed and the various Orders being made. Accordingly, there is deemed to be a clear public interest in the Proposed Scheme proceeding. This conclusion remains whether or not Phase 3 is retained as part of the Proposed Scheme.

Part 2: Site Specific Representations

2.1 Introduction

- 2.1.1 This Part of the Report considers only the site specific matters raised in representations. Part 1 of this Report considers on a topic by topic basis the general and strategic matters raised in representations such as the justification for the Proposed Scheme, ecology and landscape issues, and general concerns relating to the Agricultural Impact Assessment and its applicability.
- 2.1.2 An index of site specific representations can be found at the start of the Report and the following sections follow the inquiry reference numbers in numerical order as well as referring to the name/s of those who made the representation.
- 2.1.3 As noted in the Background to the Report matters relating to what may be compensatable impacts and the level of such compensation fall to be considered by the Department of Finance's Land and Property Services (LPS) and lie beyond our remit.
- 2.1.4 The Department are prepared to carry out accommodation works during the Scheme's construction to facilitate adjoining land owners and to reduce the impact that may arise from the Scheme. Such works can only be carried out by agreement with the landowner, though there is no legal obligation on the Department to carry out such works. The Department advised of their intention to honour previous agreements made with landowners affected by Phases 1a and 1b. After the inquiry they intend to contact those affected by Phase 1a to identify changes in circumstances and include modifications. Those affected by Phase 1b and Phase 2 are to be contacted prior to the Notice of Making the Vesting Order to discuss accommodation works. We support this approach, and make a general recommendation that the Department continue to discuss such works with all affected landowners with a view to resolving, where possible, outstanding individual problems. This obviates any general need to make individual recommendations on the matter in considering the site specific representations.

Recommendation:

That even where we have made no site specific recommendations the Department continues to have discussions with all affected landowners with a view to resolving outstanding individual problems and that all agreed accommodation and mitigation works be implemented.

2.2 Section 1 – New Buildings to Sion Mills

2.2.1 This element of the Report considers the stretch of the Proposed Scheme from Junction 1 to just south of Junction 8.

> Representation by Michael, Molly, Eve & Alice Patton also, residents of Ash Avenue, Drumenny Road and Dennett View **Inquiry Reference A5WTC-2016-0002**

- 2.2.2 Ash Avenue runs west from its junction with the A5 (Victoria Road) and provides access to a number of residential properties and agricultural land. No. 15 Ash Avenue, the westernmost property, is located at a point beyond which the road becomes a track. The Scheme would bisect Ash Avenue leaving 6 properties to the west unable to gain direct access onto Victoria Road. The Scheme's proposed alternative link between Ash Avenue and Victoria Road would be via a new 500m stretch of road, running parallel with the proposed dual carriageway and joining the existing Drumenny Road to the south. The Drumenny Road would cross the Scheme via an underpass and then pass through the settlement of Burndennet before joining Victoria Road.
- 2.2.3 Ash Avenue traffic would have to negotiate a new right angle bend at the junction of the new access and Drumenny Road as well as two other existing 90° bends along Drumenny Road at the corners of the cricket ground. However, adequate visibility splays at all these junctions could be accommodated within the vesting line and temporary working areas associated with the Scheme. The additional residential and agricultural traffic generated by property at Ash Avenue would not reach levels that would cause unacceptable traffic congestion or associated noise and disturbance for residents of Drumenny Road or Dennett View. Taking into account the specification of the proposed route and the low levels of additional traffic involved, this element of the Proposed Scheme would have no detrimental impact on road safety grounds provided the required visibility splays are secured.
- 2.2.4 The proposed alternative route, involving a diversion of some 1km, between Ash Avenue and Victoria Road would be longer and more convoluted than at present and would inconvenience occupiers of Ash Avenue. However, the provision of an underpass at Ash Avenue, as suggested by objectors, would require the proposed dual carriageway and the embankment to be built at a higher level than proposed. This would detrimentally impact on both the landscape and the visual amenity of surrounding residents.

- 2.2.5 An alternative link between Ash Avenue and Grangefoyle Road to the north was also suggested. This however would involve additional land take, the construction of a longer laneway and the possible installation of a safety barrier where the new road would skirt the steep embankment of the proposed dual carriageway. Furthermore, there is extant planning permission for a house close to the Grangefoyle Road and A5 junction. Ensuring that the amenity of future occupants of this dwelling was adequately protected would have further cost implications in terms of additional construction or mitigation measures. All-in-all this would be a more expensive and invasive option.
- 2.2.6 The Scheme's proposed route involves the minimum land take and constitutes the optimum solution environmentally. These environmental and economic considerations would outweigh the inconvenience experienced by the occupants and landowners of a relatively small stretch of Ash Avenue. Suggested alternative options are not therefore justified.
- 2.2.7 An objection was raised on the grounds that the proposal involved removal of a bin turning point and hard stand outside 9a Ash Avenue. However, it is not apparent from the submitted evidence that the proposed new access would extend beyond the existing carriageway on the north side of Ash Avenue. Nonetheless, should the proposal involve the loss of a turning head, we consider that it should be replaced. Mr Foley's request that Ash trees are planted along the new stretch of road to mirror the character of the existing Ash Avenue was not opposed and is one that in our view has merit.

Recommendations:

That in the interests of road safety adequate visibility splays are provided at the existing and proposed 90°bends along Drumenny Road.

That the Department reach agreement with residents regarding appropriate planting along the new stretch of road and the replacing of any lost turning head at Ash Avenue.

Representation by Elaine Connor. Inquiry Reference A5WTC-2016-0004

2.2.8 The concerns raised in this representation in relation to an alleged bottleneck being created between Derry and New Buildings are considered in Part 1 of this Report.

Representation by Brighter Ballymagorry Development Group Inquiry Reference A5WTC-2016-0006

2.2.9 It is proposed to close up the Greenlaw Road, thus preventing direct access from this road to the Strabane Canal. In order to address the concerns of

users of this route, the Department now proposes that a pedestrian underpass be provided adjacent to the Greenlaw Road using the vested land. This seems a reasonable solution in order to provide pedestrian and cyclist connectivity to this recreational asset and was welcomed by those parties present at the inquiry. It was suggested that vehicular access should also be facilitated in order to ensure the future tourist development of the area. However, we accept the Department's arguments that the profile of the dual carriageway, its drainage infrastructure and the presence of its embankment on the Glenmoran floodplain make this unfeasible at this locality.

2.2.10 Given there would no longer be access to the existing car parking at the end of Greenlaw Road and as the narrow road would not facilitate the parking or turning of vehicles, the Department should investigate the feasibility of providing additional car parking provision for this recreational resource. Concerns that the stopping up of the road would cause an increase in illegal dumping were not substantiated and at any rate this is a matter for the relevant local authority.

Recommendation:

That the Department provide a pedestrian and cyclist underpass at Greenlaw Road and investigate the provision of associated car parking.

Representation by AGL Developments Inquiry Reference A5WTC-2016-0007

2.2.11 A number of issues were raised in relation to various sites within the Strahans Road/Knockroe Road area of Strabane. The Department is liaising with the Council in order to resolve land stability concerns surrounding the current planning application to restore the quarry. In terms of the impact of the Scheme on the access to the concrete works this issue has not been finalised by the Department. They are working through a number of scenarios including the possibility of crossing the quarry area if it were to be filled in. It is essential that the Department liaises with the Thompsons to resolve these issues in order to remove uncertainty and to reduce the impact of the Scheme on the businesses. We are not persuaded that the vesting of land at the residential, car auction and concrete work sites is excessive as it is needed for realigning Strahans Road and for ground improvement, drainage and environmental mitigation. The Department also gave an assurance that any land take would be kept to a minimum. The potential impact of the Scheme on the planning permissions for a car auction centre and a residential development, and the concern in relation to the classification of the use of the land for compensation purposes are issues for the Thompsons to pursue with LPS.

Recommendation:

That the Department continue to liaise with the Thompsons in order to resolve the remaining outstanding issues relating to the stability of the quarry and the access to the concrete works.

Representation by Derek, Sylvia and Hall Donnell Inquiry Reference A5WTC-2016-0025

- 2.2.12 This representation queried the amount of land being vested. However, at the inquiry the Department gave a commitment to keep the land take from the Donnell's farm to a minimum. In terms of the severance of Woodend Farm, the assurance given at the inquiry that the family would have the sole use of the underpass at the flood connectivity culvert addressed their access concerns. In terms of potential flooding at Woodend Farm, extensive flood modelling has been carried out and we accept the Department's evidence that the situation here would not be worsened by the Scheme. As regards the financial impact of the Scheme on the holding, this is a compensation matter to be pursued with LPS.
- 2.2.13 No site specific recommendation is made in respect of this representation.

Representation by Mr Cecil Henderson Inquiry Reference A5WTC-2016-0026

- 2.2.14 The proposed vesting would involve the loss of land and the splitting of fields within Mr Henderson's farm. However, any negative impacts in this respect are compensation issues to be raised with LPS.
- 2.2.15 The Scheme involves the provision of access tracks that would render all severed fields within the holding accessible. The use of these tracks would, as a matter of necessity, be shared with other local landowners. However, while these tracks could be used by members of the public, the evidence does not establish that such a level of use would be significant. In our view, these accommodation works would adequately mitigate against the impact of the Scheme in terms of severance and prevent any unacceptable inconvenience.
- 2.2.16 A SuDS pond and watercourse diversion are proposed, and the diversion of pre-existing drains are likely to be required on Mr Henderson's land. However, given the relevant design specifications we are convinced that these features and operations can be delivered without unacceptable impact. Any future amendments to the current vesting line would be subject to statutory procedures and the associated requirements regarding public consultation.
- 2.2.17 No site specific recommendation is made in respect of this representation.

Representation by Mr David Throne Inquiry Reference A5WTC-2016-0027

- 2.2.18 Mr Throne raised compensation matters regarding severance and loss of land and impact on the viability of his farm. The issue of compensation however is appropriately pursued with LPS. Accommodation works to mitigate against potential negative impacts arising as a result of severance, noise and disturbance, loss of direct access to a cottage earmarked for renovation or rebuilding, cable re-routing, hedge loss and interference with septic tanks and water storage facilities were pre-agreed with the Department at the initial design stage. Nonetheless, these matters should be revisited at the final design stage. Furthermore we refer to our general recommendation that the Department continue to discuss such matters with affected landowners with a view to resolving outstanding individual problems and that all agreed accommodation and mitigation works be implemented.
- 2.2.19 No site specific recommendations are made in relation to this representation.

Representation by Sean Molloy and Shauna Molloy Inquiry Reference A5WTC-2016-0035

2.2.20 The concerns raised have been addressed above under A5WTC-2016-0002.

Representation by Ian and Dianne Olphert Inquiry Reference A5WTC-2016-0037

- 2.2.21 The Olphert's raised objection on flooding grounds. They stated that an attenuation pond located approximately 500m north of their property at 5 Cloghboy Road, Bready would discharge into the receiving watercourse for slow moving ditches that drained the basin area surrounding their property. They further argued that in situations where the receiving watercourse could not cope with the additional discharge, the resulting back up could cause flooding.
- 2.2.22 It is proposed that discharge from the Scheme in this area would enter the adjacent undesignated, watercourse at a point some 600m upstream of where this watercourse crosses the Cloghboy Road. The attenuation and retention features incorporated in the design of SuDS ponds is such that flows entering the watercourse can be kept to levels equivalent to the pre-existing situation. The evidence demonstrates that the Scheme would have no negative impact on drainage conditions in the area and may have a beneficial impact through retention.
- 2.2.23 No site specific recommendations are made in respect of this representation.

Representation by Gabrielle and John Dooher Inquiry Reference A5WTC-2016-0038

2.2.24 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by Northstone Inquiry Reference A5WTC-2016-0041

2.2.25 The concerns in relation to the impact of the Proposed Scheme on the concrete and block production facility at the Northstone site at Strahans Road, Strabane have been addressed above under A5WTC-2016-0007.

Representation by Mr Leslie Christie Inquiry Reference A5WTC-2016-0043

- 2.2.26 The Meenagh Road would cross the Proposed Scheme via an overbridge thereby maintaining the link between Mr Christie's farmhouse at 6 Meenagh Road and the existing A5 Victoria Road. While the proposed dual carriageway would cut through Mr Christie's farm severing a number of his fields, access to all the severed land would be maintained through accommodation works. While the Scheme would, in our view, impact on the viability of the farm, any negative impact in this respect could be a compensation matter to raise with LPS.
- 2.2.27 The Department confirmed that issues relating to any necessary replacement of water pipes and other drainage matters, field boundary treatment and the requirement of sub road ducts to facilitate umbilical slurry spreading systems would be the subject of detailed accommodation works discussions. In this regard we refer to our general recommendation that the Department continue to discuss accommodation works with affected landowners with a view to resolving outstanding individual problems and that all agreed accommodation and mitigation works be implemented.
- 2.2.28 On road safety grounds, we do not support Mr Christie's suggestion that cattle should be permitted to graze inside the fenced off verges and maintenance strips of the proposed dual carriageway. Furthermore, we did not observe a similar arrangement in place along a stretch of the existing A5 on approach from the north close to Ballymagorry.
- 2.2.29 No site specific recommendations are made in relation to this representation.

Representation by Mr Geoffrey Rankin Inquiry Reference A5WTC-2016-0044

2.2.30 The stopping up of the Sollus Road would prevent Mr Rankin from accessing an existing agricultural shed and he was concerned that a replacement shed would not be in place in time. Neither Mr Rankin nor his agents were able to

confirm whether a planning application for a replacement shed was required or applied for. The Council would make the decision as to whether any required planning permission is granted. However, there would be considerable opportunity for a replacement shed on the holding given its extent, topography and land cover.

2.2.31 The Sollus Road is not a through road but one which Mr Rankin states that he uses to access his land 70% of the time. Implementation of the Proposed Scheme would require Mr Rankin to access the majority of his land from an elongated route via the Tamnabrady Road which, while narrow and winding, is nonetheless similar to other public roads in the area in terms of dimension and gradient. Conflict on the Tamnabrady Road could be reduced by the provision of passing bays although this would be dependent on the agreement of other landowners. The implementation of the Scheme would cause significant inconvenience for Mr Rankin in conducting his farm activities which would not be fully offset by improvements to the Tamnabrady Road. However there is no feasible alternative alignment that would address this matter and the adverse consequences that could not be mitigated could be subject to compensation.

Recommendation:

That the Department consider the provision of passing bays along the Tamnabrady Road.

Representation by Billy Crumley Inquiry Reference A5WTC-2016-0046

- 2.2.32 The proposed road would cut through Mr Crumley's farm thereby severing a number of fields. Nonetheless, severed fields within the farm, including recently purchased land, would be rendered accessible by use of the minor road network and accommodation works incorporating new access tracks. While, in our view the Proposed Scheme would impact on the operation of the agricultural concern, any negative impact in this respect would be a compensation matter to raise with LPS.
- 2.2.33 No site specific recommendation is made in respect of this representation.

Representation by Mr William Fulton and Mr Robin Fulton Inquiry Reference A5WTC-2016-0047

2.2.34 The Department committed in principle to accommodation works including the reconnection of pre-existing drainage networks (PED) interrupted by construction, the replacement of holding pens and the replacement of any removed well with a new well or alternative water supply. The final detail of such accommodation works would be subject to negotiation with landowners.

Surface water from the proposed road will not flow into adjacent fields but into SuDS ponds which have a facility to retain and regulate water flow. The evidence convinces us that the Scheme would have no negative impact on the existing drainage system or increase the likelihood of flooding. The proposed road would cut through the Fulton's farm, although access to severed fields would be maintained through the provision of new access tracks. While, in our view the Scheme would impact on the operation of the agricultural concern, any negative impact in this respect would be a compensation matter to raise with LPS.

2.2.35 No site specific recommendation is made in respect of this representation.

Representation by Barbara Lowry Inquiry Reference A5WTC-2016-0048

- 2.2.36 The dual carriageway would cut through the Lowry's farm, raising issues of severance and impact upon its operation. It is proposed to run a drainage outfall pipe across a field within the farm to transfer water flow from the proposed dual carriageway to the Burndennet River. The proposed system would incorporate sealed manholes, a non-return valve and a storage facility which can be released in accordance with changing water levels in the tidal Burndennet. Having considered the evidence and visited the land in question it is considered that, given relative ground and river levels, the transfer of water from the base of the embankment to the nearby SuDS pond as suggested by the objector would not be a viable alternative. In this context we are satisfied that the Department's proposed drain could achieve a selfcleansing velocity and be delivered on the ground without flood risk. Furthermore, given the requirements of the Roads (Northern Ireland) Order 1993 and relevant compulsory purchase legislation, returning the land accommodating the drain to the landowner after construction with a burden is a more appropriate course of action in this situation than permanently vesting the land.
- 2.2.37 As the drain would be 1m below ground level we are content that it could be driven over without prohibiting ploughing or damaging mole drainage. Consequently, the proposed drain would not contribute to the severance of the field. Nonetheless, the Scheme would fragment existing fields within the farm causing severance and inconvenience. Allowing the landowner to use the proposed access to the SuDS pond would enhance livestock rotation between the resultant fields and avoid potential inconvenience. In accordance with relevant safety standards, this access would have to be fenced off to enable the landowner to use it. However this expense, which would be borne by the Department, would be justified and reasonable. Any other negative impacts on the operation of the farm that could not be mitigated would be a compensation matter to be raised with LPS.

Recommendation:

That the Department facilitate the Lowrys' use of the SuDS pond access.

Representation by Edna Friel Inquiry Reference A5WTC-2016-0055

2.2.38 The concerns raised have been addressed earlier under A5WTC-2016-0006.

Representation by Julie and Ross Kerr also other Dunnalong Road Residents Inquiry Reference A5WTC-2016-0063

- 2.2.39 Objection was raised on the grounds that land now proposed for vesting was not scheduled for vesting under the earlier iteration of the Scheme considered by the 2011 Inquiry. However, we accept the Department's statement that the current draft vesting line defines land essential to the proper delivery of the Scheme. Also, while the vesting line skirts the residential boundary of properties along Dunnalong Road it does not include any land within these properties.
- 2.2.40 Works associated with the dual carriageway, including the delivery of large structural components for an overbridge, would take access from the new road itself and would not generate significant vehicle movement along Dunnalong Road. Nonetheless, the realignment of Dunnalong Road and earthworks to accommodate the overbridge would take place in close proximity to dwellings and would necessitate vehicle movements along Dunnalong Road. This would cause residents to endure considerable noise and disturbance. However, these works would be carried out in accordance with the CEMP which contains commitments to restrict the duration of activities that generate most noise and to inform residents as to when such work would occur. Also, mitigation measures embodied in the CEMP aim to keep dust and diesel generated particulate levels to below mandatory requirements.
- 2.2.41 The rear of properties in Dunnalong Road would lie within 80m to 100m of the proposed dual carriageway. Predicted noise levels at the rear of No. 33c would be at the most 59.1dB should Phase 3 becomes open to traffic. Notwithstanding the use of low-noise surfacing which would reduce noise levels by between 3dB and 3.5 dB and the fact that the road would be in a cutting, noise levels at the rear of these properties after the opening of Phases 1, 2 and 3 would remain highly noticeable. However the levels would neither be so great as to render an acoustic barrier in the vicinity of these properties justified, nor qualify residents for noise insulation mitigation under the Noise Insulation Regulations (Northern Ireland) 1995.

- 2.2.42 The evidence indicates that air pollution levels at the properties, including the recently purchased No. 33b, would rise in terms of nitrogen dioxide and particulate matter. However, this would be comfortably within legislative tolerances relative to the protection of human health. No evidence was submitted to demonstrate that the Scheme would cause residents' property to be devalued. In any case this would be a compensation matter to raise with LPS.
- 2.2.43 No site specific recommendation is made in respect of this representation.

Representation by William McCrea Inquiry Reference A5WTC-2016-0065

2.2.44 The concerns raised have been addressed above under A5WTC-2016–0063.

Representation by Joe Melarkey Inquiry Reference A5WTC-2016-0107 and 0805

2.2.45 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by Carol Early Inquiry Reference A5WTC-2016-0108

2.2.46 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by A.Gallagher Inquiry Reference A5WTC-2016-0112

2.2.47 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by William Forbes Inquiry Reference A5WTC-2016-0123

2.2.48 The resolution of the dispute in relation to the ownership of the land at Park Road, Strabane is a matter to be resolved between Mr Forbes and the Department as it beyond the remit of the inquiry. In terms of the impact on Mr Forbes' business, whilst the Scheme will result in the loss of his building we are satisfied that the land take is necessary. The Department however gave an undertaking, following the detailed design stage, to return any land that is not needed for the Scheme. Accommodation works, which may include the replacement of the building, would also be discussed with Mr Forbes prior to the Notice of Making of the Vesting Order for this section of the Scheme. Given the limited evidence on the extent of his land holding, it is not however possible to establish where this would be located. The

demolition of Mr Forbes' property and impact on his business is a compensation matter for him to pursue with LPS outside the inquiry process.

2.2.49 No site specific recommendation is made in relation to this representation.

Representation on behalf of Dunnalong Road Residents by Ross Hussey **Inquiry Reference A5WTC-2016-0145**

2.2.50 The concerns raised have been addressed above under A5WTC-2016–0063.

Representation by Mrs Kathleen Christie Inquiry Reference A5WTC-2016-0387

2.2.51 Concerns raised in this objection relating to specific ecological sites and historic structures, are considered in Part 1 of this Report in the chapters concerning Cultural Heritage, and Ecology & Nature Conservation.

Representation by Linda Allen Inquiry Reference A5WTC-2016-0564

- 2.2.52 Mrs Allen stated that the existing service station and convenience store at 138 Victoria Rd, Magheramason relied heavily on passing trade along the existing A5. She advised that a customer survey indicated that the diversion of traffic onto the proposed A5 would cause a 40% reduction in the business's customer base. The survey may be basic in terms of its scope and methodology, and it does not make provision for any possibility that the reduction of vehicle movement along the existing A5 may make the service station/convenience store more accessible to local traffic. Nonetheless, the report's conclusions were not challenged. Furthermore, TNI figures indicate that construction of the WTC would cause a reduction of traffic movements along the relevant stretch of the existing A5 from 15,000 vehicles per day to 2,500 vehicles per day. In these circumstances a 40% reduction in the business's customer base is a reasonable premise.
- 2.2.53 The business itself lies some 2km south of the proposed Junction 2 (New Buildings South), requiring customers leaving and re-joining the proposed A5 to make a 4km round trip. The evidence establishes that the Proposed Scheme would cause a substantial and detrimental diminution of the concern's customer base, but is insufficient to demonstrate that the business would become unviable. Signage at Junction 2 could encourage motorists on the proposed dual carriageway to avail of the facilities, but we were presented with no evidence to establish to what extent. Nonetheless the Department offered to consider whether such signage would be appropriate.

2.2.54 Notwithstanding this, even were the business made unviable, its closure would not constitute grounds for abandoning or amending the proposal given that in all likelihood the services that it offers would be provided at an alternative location or locations.

Recommendation:

That the Department consider the appropriateness of providing signage indicating the whereabouts of the Allen's business at Junction 2 of the Scheme.

Representation by the McKean Family Inquiry Reference A5WTC-2016-0569

- 2.2.55 The McKean family were concerned that their driest and best agricultural fields at Park Road, Ballymagorry would be impacted on by the Proposed Scheme. A previously proposed route for the Scheme was more acceptable to the family as it would have less impact than the currently proposed route, and they referred to other stretches of the Proposed Scheme being on the floodplain.
- 2.2.56 However, following public consultation and due to floodplain and landownership issues the current route is now proposed. Given the findings of the flood modelling exercise we accept that it would be unacceptable to position the dual carriageway within the floodplain at this location. The McKeans did not present any substantive evidence to dispute the Department's claims in this respect. The family's preferred route would also cost a further £1.6m. The Department however undertook to keep the road as far to the east as is feasible, to use some of the land for embankment works and ultimately to return to the family as much land as is possible. This assurance also helps to address the family's concern about the loss of an excessive amount of land around an attenuation pond.
- 2.2.57 While there was concern about severance, raised access tracks are to be provided along the carriageway to access the severed land. A segregated overbridge to be provided opposite Lowrys Lane would also help overcome access difficulties. Any further detailed concerns, such as difficulties due to the presence of drains, the planting of replacement hedgerows, the provision of stock handling facilities and timescales for the temporary use of land, would have to be resolved with the Department when details of the accommodation works are being finalised. The potential increase in costs incurred by the farm and impacts from the loss of the land are compensation issues for the family to pursue with LPS.
- 2.2.58 No site specific recommendation is made in respect of this representation.

Representation by Audrey Robinson also residents of 285 and 285a and Victoria Road, Bready Inquiry Reference A5WTC-2016-0625

2.2.59 The Scheme would pass within 100m of a row of dwellings including Nos. 285,285a and 287 Victoria Road Bready at a level above the ground level of the dwellings. While the Scheme would have a significant visual impact on occupants of these properties, the submitted evidence does not demonstrate that it would cause the residents' property to be devalued. In any case, if such an occurrence were demonstrated, it could be a compensation matter. Nonetheless, planting on the slope to the west of the dual carriageway and the properties in question would soften this visual impact.

Recommendation:

That the Department implement enhanced screen planting on the western embankment adjacent to these properties.

Representation by Douglas Nesbitt also Victoria Road & Edgewater Residents Inquiry Reference A5WTC-2016-0633

- 2.2.60 The dual carriageway would run along a flat tranquil swathe of agricultural land at a distance on average of about 200m from the rear boundaries of properties at 84a Victoria Road and the Edgewater housing development. The proposed attenuation ponds would however be closer. While the road would lie below the level of these dwellings, and would for the most part be in a cutting, its visual impact as seen from the rear of these properties would be significant. Screen planting however would not be merited in this case as it would also block longer, attractive vistas of the Foyle and land beyond to the west.
- 2.2.61 Because of its location close to the Proposed Scheme, residents of No. 6 Edgewater would experience noise levels typical of those at the higher end of the spectrum predicted for residents of Victoria Road and Edgewater. Predicted noise levels at the rear of No. 6 Edgewater would be 51.8dB at their highest if Phase 3 becomes open to traffic, an increase of 0.6dB. While noise levels would increase slightly, they would nonetheless fall well below those where an acoustic barrier would be considered and below the threshold whereby residents would qualify for noise insulation mitigation under the Noise insulation Regulations (Northern Ireland) 1995.
- 2.2.62 Also, notwithstanding the vehicle movement that would continue to be generated by the New Buildings Industrial Estate, the Scheme if built would result in a reduction in traffic and related noise along the properties fronting the existing A5 at Edgewater and Victoria Road. No detailed evidence was

provided to quantify the claims of property devaluation. Were a fall in property values attributable to the Scheme to be established, this would be a compensation matter to address with LPS.

- 2.2.63 The attenuation ponds include a retention capacity and would be constructed in accordance with current DMRB design standards which incorporate design features and specifications aimed at mitigating against flooding. In the absence of persuasive evidence to the contrary, we consider that these ponds do not constitute a flood risk. We were given no evidence to establish that the SuDS ponds would cause an increase in the rat population. In any case the Department have advised that they would attempt to circumvent potential rat problems through routine maintenance and would address any instances of vermin infestation if they did arise. Objection on the grounds that the attenuation ponds would pose a danger to walkers is not sustained as the ponds would be fenced off and not accessible to the public.
- 2.2.64 The evidence indicates that air pollution levels at the properties would rise in terms of nitrogen dioxide and particulate matter. However, this would be comfortably within legislative tolerances relative to the protection of human health.
- 2.2.65 No site specific recommendation is made in respect of this representation.

Representation by Sylvia, Karl & Ashley Rankin Inquiry Reference A5WTC-2016-0634

2.2.66 The concerns raised have been addressed earlier under A5WTC-2016–0625.

Representation by Jennifer Bruce Inquiry Reference A5WTC-2016-0636

2.2.67 The concerns raised have been addressed below under A5WTC-2016-0685.

Representation by David and Roberta Peoples Inquiry Reference A5WTC-2016-0655.

2.2.68 The concerns raised have been addressed above under A5WTC-2016–0633.

Representation by June and Alan Peoples Inquiry Reference A5WTC-2016-0656

2.2.69 The concerns raised have been addressed above under A5WTC-2016-0633.

Representation by D & M Leeson Inquiry Reference A5WTC-2016-0657

2.2.70 The concerns raised have been addressed above under A5WTC-2016-0633.

Objection by David & Jean Canning Inquiry Reference A5WTC-2016-0658

2.2.71 The concerns raised have been addressed above under A5WTC-2016-0633.

Representation by J & G Patterson Inquiry Reference A5WTC-2016-0659

2.2.72 The concerns raised have been addressed above under A5WTC-2016-0633.

Representation by Alwin and Merle Buchanan Inquiry Reference A5WTC-2016-0660

2.2.73 The concerns raised have been addressed above under A5WTC-2016-0633.

Representation by Stephen & Janita Murray Inquiry Reference A5WTC-2016-0661

2.2.74 The concerns raised have been addressed above under A5WTC-2016–0625.

Representation by Cathal Blee Inquiry Reference A5WTC-2016-0664

- 2.2.75 Mr Blee's dwelling at No.89 Urney Road, Strabane sits on a considerable sized plot of land. The dual carriageway would be located approximately 48m from the rear of this dwelling, however, we accept that the Proposed Scheme needs to be located here in order to achieve connectivity with County Donegal and to reduce other effects such as environmental impacts. We are not persuaded that the land take at this location is excessive, or that it can be reasonably moved to the fenceline in the adjoining field. The Department has however given an assurance to keep land take to a minimum, and the impact of the Scheme on Mr Blee's property would be a compensation issue for him to pursue with LPS.
- 2.2.76 In terms of the impact that the Scheme will have on the enjoyment of the dwelling, there would be a significant adverse change in the view from the dwelling due to the impairing of the attractive vista across the River Finn and its setting. The use of planting along the length of the embankment would serve to soften the impact and screen some of the movement of vehicles along the carriageway. The noise levels would increase by approximately

16.3dB to 67.1dB once Phase 2 of the road would be open to traffic; there would be a slight increase to 67.4dB should Phase 3 proceed. A 2m high environmental barrier proposed on top of the road embankment at this location would act as a visual barrier from the Scheme and would reduce the noise level by 3dB at this property. The use of low-noise surfacing should also reduce the noise by a further 3-3.5dB. The noise level anticipated at the property would therefore be below the level where noise insulation would be legally required. In terms of Mr Blee's concern in relation to increases in air pollution, while the predicted annual mean NO₂ and PM₁₀ concentrations would increase slightly they would remain well below the national limit values set for the protection of human health.

2.2.77 The Department stated that existing security levels would be maintained during and post construction. The appointed contractor would be responsible for the securing of the site during construction and any breaches of existing landowners fencing would be replaced to ensure security is maintained post construction. In terms of the existing trees along the river, the Department has given an undertaking to ensure their maintenance.

Recommendation:

That the Department maintain the existing trees located along this stretch of the River Finn.

Representation by Kathleen Blee Inquiry Reference A5WTC-2016-00665

- 2.2.78 The dual carriageway is to be located approximately 46m away from the rear of the dwelling at No.85 Urney Road. However, we accept the Department's justification as to why the Proposed Scheme needs to be located here in order to achieve connectivity with County Donegal and to reduce other effects such as environmental impacts. We are not persuaded that the land take at this location is excessive or that it can be moved to the adjoining field. The Department has however given an assurance to keep land take to a minimum. The impact of the Scheme on Ms Blee's property may also be a compensation issue for her to pursue with LPS.
- 2.2.79 In terms of the impact that the Scheme will have on the enjoyment of the dwelling, there would be a significant adverse change in the context of the view from the dwelling due to the impairing of the attractive vista across the River Finn and its setting. The use of planting along the length of the embankment would serve of soften the impact of the Scheme and screen some of the movement of vehicles along the carriagement. The noise level is also predicted to increase by approximately 17.7dB to 69.0dB once Phase 2 of the road would be open to traffic. The level (69.3dB) would be slightly higher if Phase 3 was constructed. A 2m high environmental barrier however

is proposed on top of the road embankment at this location which would act as a visual barrier and would also reduce the noise level by 3dB. The use of low-noise surfacing should reduce the noise by a further 3-3.5dB. The anticipated increase in the noise level at the property would therefore be approximately 12dB and would be below the 68dB level where noise insulation would be legally required. In terms of concern in relation to increases in air pollution, the predicted annual mean NO_2 and PM_{10} concentrations would only increase slightly and would be well below the national limit values set for the protection of human health.

2.2.80 The Department has given an assurance that existing security levels would be maintained during and post construction. The appointed contractor would be responsible for the securing of the site during construction and any breaches of existing landowners fencing would be replaced to ensure security is maintained post construction. In terms of the existing trees along the river, the Department has also given an undertaking to ensure their maintenance.

Recommendation:

That the Department maintain the existing trees located along this stretch of the River Finn.

Representation by David Lowry Inquiry Reference A5WTC-2016-0667

2.2.81 The concerns raised have been addressed above under A5WTC-2016–0048.

Representation by Mr & Mrs W. Myles Inquiry Reference A5WTC-2016-0669

2.2.82 The concerns raised have been addressed above under A5WTC- 2016-0063.

Representation by Mr & Mrs D Reid Inquiry Reference A5WTC-2016-0670

2.2.83 The concerns raised have been addressed above under A5WTC-2016-0063.

Representation by R. F White Inquiry Reference A5WTC-2016-0671

2.2.84 Concerns in relation to the need for the stretch of the Scheme between Junctions 1 and 2 are considered in Part 1 of this Report. Site specific concerns raised in relation to No. 7 Edgewater have been addressed above under A5WTC-2016-0633.

Representation by Jacqueline Robinson and Geoffrey Doherty Inquiry Reference A5WTC-2016-0676

- 2.2.85 The proposed dual carriageway would cut across Meenagh Road, which runs between Dunnalong Road and the A5 Victoria Road. It is proposed that Meenagh Road be closed to the general public and that an overbridge structure, suitable for farm, highway and drainage access and maintenance only, would link the sections of Meenagh Road either side of the dual carriageway. Meenagh Road accesses land within the ownership of a sole landowner and is used by a limited number of vehicles. Furthermore, these vehicles could divert to the existing A5 via Dunnalong Road some 1.5km to the north. Pedestrians and cyclists would also be diverted to other parts of the local road network but these disruptions would not cause unacceptable inconvenience. In these circumstances and given the cost implications of a fully accessible overbridge, closure of the road to the public would be appropriate.
- 2.2.86 No site specific recommendations are made in respect of this representation.

Representation by John Burns Inquiry Reference A5WTC-2016-0677

- 2.2.87 Following discussions between the parties, the issues raised in this representation in relation to Junction 7 at Urney Road, Strabane were resolved at the inquiry.
- 2.2.88 No site specific recommendations are made in respect of this representation.

Representation by Robin & Jean Bruce Inquiry Reference A5WTC-2016-0685

2.2.89 It is proposed to locate 2 SuDS ponds with a total capacity of some 625,000 gallons on the western side of the dual carriageway within 17m and 20m of land within the Bruces' ownership. As the design of the attenuation ponds is constantly evolving and improving it is accepted that the Department could not yet confirm their exact design specification. Nonetheless, we accept that the attenuation ponds would be constructed in accordance with DMRB design standards. It is reasonable to expect competent construction and maintenance in accordance with the CEMP. Consequently, while it is understandable that the presence of such a large volume of water within close proximity to the Bruces' house would be a source of concern, the concerns about the structures failing are perceived ones rather than demonstrably likely ones in the context of the evidence provided including the Flood Risk Assessment.

- 2.2.90 The SuDS ponds would incorporate retention capacity, a specification aimed at the accommodation of a 1:100 year return period (1% Annual Event Probability). They would also have design features aimed at the avoidance of flood risk or overtopping in accordance with current guidance, including an additional 300 mm freeboard to allow for climate change and a hydro brake. It is proposed to modify and realign the receiving watercourse bordering the objectors' property in order to deliver a more consistent profile and erosion protection. This work will not necessarily cause an increase in flow rate within the watercourse. The Scheme does not involve importing additional rainwater into the catchment of the existing watercourse but rather the management of that water. The attenuation and retention features incorporated in the SuDS ponds are such that flows entering the watercourse can be kept equivalent to the existing levels. Furthermore, the flow within the mill race would be retained at existing levels by a piped system. evidence demonstrates that the Scheme would be likely to be beneficial to the area in respect of drainage management, flood risk and enhanced water quality.
- 2.2.91 While the ponds would be within 90m and 97m of the objectors dwelling, this is not an unprecedented situation. There are some 16 instances throughout the Scheme, where ponds are proposed within 100m of houses. Moving the ponds further from the house either to the north or the south would require additional land and take them further from the receiving watercourse. Also, the ponds must be located to coincide with the low point in the vertical alignment of the proposed carriageway. Taking into account the relevant factors of impact on residential amenity, minimising land take, carriageway alignment and proximity to the receiving watercourse, the proposed siting of the ponds is the optimum solution.
- 2.2.92 We welcome the Department's offer to carry out clearance works within the wooded area to the south west of the objectors' property in order to prevent obstructions to the watercourse and culvert at the A5 Victoria Road. The Department suggested, as a gesture of goodwill, that they could investigate any possible silting impact on the river and mill race as a result of material being brought from surrounding agricultural land. However, there is no evidence of the occurrence of such silting, and given that such an occurrence would be outside the scope or influence of the Scheme we do not think it appropriate that such work be required.
- 2.2.93 We were given no evidence to establish that SuDS ponds cause an inevitable increase in rats, other vermin, insects, or stench. In any case we are satisfied that the Department would attempt to avert such problems through routine maintenance. The Department no longer wishes to vest the lane bounding the objectors' property to the north. The Department could not rule out the contractor making use of the lane to some degree. However,

such a use is likely to be limited and if it occurred it would be with the agreement of the landowner and in accordance with the terms of the CEMP. We conclude that such a use would not give rise to unacceptable nuisance.

- 2.2.94 The visual impact of the road from the objector's property would be rendered moderate by its low alignment. However such impact would become slight as embankment planting becomes established. The Department have committed to the use of low noise surfacing in the vicinity of the property. This would keep noise level increases to approximately 4.7dB, below the threshold for statutory noise insulation mitigation.
- 2.2.95 The objector's property would be sandwiched between two roads should the Scheme go ahead. The increased noise from the A5WTC would, to some degree, be offset by reduced noise levels from the existing A5 because of a reduction in traffic movement along it, in particular heavy freight traffic. There was no persuasive evidence submitted to indicate that the Scheme would cause a reduction in the value of the objectors' property.

Recommendation:

That the Department carry out clearance works within the wooded area to the south west of the Bruces' property.

Representation by Paul Foley Inquiry Reference A5WTC-2016-0764

2.2.96 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by Louise McGettigan Inquiry Reference A5WTC-2016-0765

2.2.97 The concerns raised have been addressed above under A5WTC-2016-0002.

Representation by G McGettigan Inquiry Reference A5WTC-2016-0767

2.2.98 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by Rory Brennan Inquiry Reference A5WTC-2016-0768

2.2.99 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by Patricia Porter Inquiry Reference A5WTC-2016-0769

2.2.100 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by C Mc Cauly Inquiry Reference A5WTC-2016-0770

2.2.101 The concerns raised have been addressed above under A5WTC-2016-0002.

Representation by Pamela McCauly. Inquiry Reference A5WTC-2016-0771

2.2.102 The concerns raised have been addressed above under A5WTC-2016-0002.

Representation by Mr R. O'Neill Inquiry Reference A5WTC-2016-0772

2.2.103 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by Barry Porter Inquiry Reference A5WTC-2016-0773

2.2.104 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by J. Douglas Inquiry Reference A5WTC-2016-0774

2.2.105 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by Anne O'Neill Inquiry Reference A5WTC-2016-0775

2.2.106 The concerns raised have been addressed above under A5WTC-2016-0002.

Representation by Mary Potts Inquiry Reference A5WTC-2016-0776

2.2.107 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by George Potts Inquiry Reference A5WTC-2016-0777

2.2.108 The concerns raised have been addressed above under A5WTC-2016-0002.

Representation by Stephen Barry Brown Inquiry Reference A5WTC-2016-0778

2.2.109 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by John Brennan Inquiry Reference A5WTC-2016-0779

2.2.110 The concerns raised have been addressed above under A5WTC-2016–0002.

Representation by Deborah McCrory also other Glenfinn Park residents Inquiry Reference A5WTC-2016-0780

- 2.2.111 Glenfinn Park is a relatively compact housing development located along the banks of the River Finn. The dwellings are set on quite modest plots with their main private open space located to the rear. It is proposed to position the Scheme between the river and the rear of this residential development with there being an intervening embankment and a 2m high environmental barrier.
- 2.2.112 We accept that the Proposed Scheme needs to be located within this narrow corridor area in order to achieve connectivity with County Donegal. However, the row of dwellings adjacent to the Scheme would only be approximately 10-14m away from its associated earthworks and approximately 25m from the proposed carriageway. These measurements are also calculated from the rear wall of the main building and do not take into account any rear extensions or additions to the buildings. The negative visual impact of the Scheme so close to these properties, which have quite restricted outdoor space, would be immense. This impact would be exacerbated by the presence of Junction 7's 12m high lighting columns approximately 30m west of Glenfinn Park.
- 2.2.113 Before mitigation is taken into account it is anticipated that the noise level would increase by approximately 22dB to over 72dB once the road is operational. The proposed environmental barrier along this stretch of the road would reduce the noise level by approximately 5dB. Low noise surfacing would also be used to reduce the noise level by a further 3dB. However, there would be still be a substantial increase in the noise level of approximately 14dB.

2.2.114 The Department anticipates that higher standards of flood protection would be provided, that the decrease in air quality is well within the legislative guidance and that the safety of all residents could be ensured. The Department's assurance that the structural integrity of the properties would be independently monitored before and after the work would also alleviate some of the residents' concerns in relation to traffic related vibrations. However, much of the impact of the Scheme cannot be satisfactorily mitigated. Given the special and very particular circumstances pertaining here we recommend that these residents be given the option for their properties to be purchased by the Department.

Recommendation:

That the residents of Glenfinn Park adjacent to the road Scheme are given the option to have their properties voluntarily vested by the Department.

Representation by Wendy Tourish Inquiry Reference A5WTC-2016-0781

2.2.115 The concerns raised have been addressed above under A5WTC-2016-0780.

Representation by Ann Marie Neeson Inquiry Reference A5WTC-2016-0782

2.2.116 Although it has been concluded above (representation A5WTC-2016-0780) that the owners of the riverside properties along Glenfinn Park should be given the option to have them voluntarily vested, No.17 Glenfinn Park is located within a different context. It is located approximately 80m north of the Proposed Scheme on the other side of Glenfinn Park. The Scheme will therefore not have the same adverse visual impact on the property. In terms of changes in the noise levels experienced by the residents of No.17, it is anticipated that there would be an increase of approximately 11dB to a level of approximately 64dB. However this would be reduced to approximately 57-57.5dB once mitigation in the form of the environmental barrier and low noise surfacing are taken into account. This is below the level when a property has to be considered for noise insulation. During construction, the contractor has also undertaken to liaise with the local authority to agree noise limits, mitigation measures and protocols for the works which would include notification of local residents. The Department also estimate that after mitigation it is likely that there would be approximately a 15-20% increase in the level of traffic induced vibration experienced by the residents. However we were assured that the structural integrity of the properties would be independently monitored before and after the work and this alleviated some of the residents' concerns at the inquiry.

- 2.2.117 Within their evidence the Department demonstrated that the modest increase in air pollution would still mean that the residents would experience levels well within that legally accepted for ensuring human health. They also gave an assurance that appropriate mitigation measures would be undertaken to ensure that dust nuisance would be kept to a minimum.
- 2.2.118 The impact that the Scheme would have on the value of the property is beyond the remit of the inquiry and would be a matter to raise with LPS.

Recommendation:

That No.17 Glenfinn Park is structurally monitored by an independent surveyor before and after the completion of the Scheme and the residents are provided with a copy of the reports once they are completed.

Representation by Orla and Eugene Gallen Inquiry Reference A5WTC-2016-0783

2.2.119 The concerns raised have been addressed above under A5WTC-2016-0780.

Representation by Mandy and Liam Hume Inquiry Reference A5WTC-2016-0784

2.2.120 The concerns raised have been addressed above under A5WTC-2016-0780.

Representation by Linda and Masoud Baghi Inquiry Reference A5WTC-2016-0785

2.2.121 The concerns raised have been addressed above under A5WTC-2016-0780.

Representation by Jacqueline and Liam Cleery Inquiry Reference A5WTC-2016-0786

2.2.122 The concerns raised have been addressed above under A5WTC-2016-0780.

Representation by the residents of Greenlaw Road, Ballymagorry Inquiry Reference A5WTC-2016-0787

2.2.123 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by Ms Linda Buchanan Inquiry Reference A5WTC-2016-0789

2.2.124 Other than advising that the Scheme would cause an adverse impact on the value of No. 36 Windyhill Road, Artigarvan, Ms Buchanan did not substantiate further her concerns in relation to the impact on her property.

On that basis we simply point to the considerable distance that the property would be from the Scheme and the existing A5 lies between the property and the Proposed Scheme. The impact of the Scheme on the value of the property would be amatter to raise with LPS.

2.2.125 No site specific recommendation is made in respect of this representation.

Representation by Derek Robinson Inquiry Reference A5WTC-2016-0806

2.2.126 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by Noelle Donnell Inquiry Reference A5WTC-2016-0807

2.2.127 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by Edward Robinson Inquiry Reference A5WTC-2016-0814

2.2.128 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by Gerard and Tracy McLaughlin Inquiry Reference A5WTC-2016-0815

2.2.129 The concerns raised have been addressed above under A5WTC-2016-0006.

Representation by William Mehaffey Inquiry Reference A5WTC-2016-0881

- 2.2.130 Mr Mehaffey expressed concerns in relation to the land that is being vested at his property and the irregular shape of field that would result. Given the size of Mr Mehaffey's holding and the modest amount of land that would be vested, we concur that an Agricultural Impact Assessment (AIA) was not considered necessary in this instance.
- 2.2.131 We accept that extra land is needed at Strahans Road in order to provide the required visibility splays and a maintenance strip. In terms of the land that is required for the SuDS pond, both ponds on either side of the Proposed Scheme are necessary at this location in order to provide adequate road drainage and to ensure water quality. The SuDS pond in question cannot be positioned too close to the road for safety reasons, hence its encroachment into Mr Mehaffey's field. At the inquiry the Department undertook to review and discuss with Mr Mehaffey the extent of the land-take at detailed design stage in order to minimise the impact on his holding. Assurance was also given that the required land would not be taken until there was a vesting line set out in a final Vesting Order.

2.2.132 No site specific recommendation is made in respect of this representation.

Representation by Mervyn and Olive Baird Inquiry Reference A5WTC-2016-0883

- 2.2.133 The Bairds estimate that the Scheme would take an excessive 0.4 acres of land from their modest holding at No. 9 Strahans Road, Strabane. The detailed design stage may allow a reduced land take, but until this is carried out it is necessary to retain the currently indicated lands in order to be able to complete the Scheme as presently designed. Until then it is accepted that the Department are not presently in a position to discuss the details of how the Bairds' buildings are going to be accessed.
- 2.2.134 It is anticipated that once Phase 2 is open traffic related noise levels at the property would be approximately 57.3dB once account is taken for the use of low-noise surfacing. The location of the road in a deep cutting at this location also would act as a visual screen and noise barrier. Even if Phase 3 were to be constructed, there would still only be a modest 0.3dB further increase in noise levels. The predicted noise level would not exceed the 58dB level when an environmental barrier would be considered. While the Bairds sought mitigation to address the predicted noise increase of approximately 13.3dB above existing levels, a screen or hedgerow erected on top of the cutting would be of litle acoustic benefit here. The anticipated noise levels are also below the 68dB limit where residents can apply for the insulation of their property under the Noise Insulation Regulations (Northern Ireland) 1995.
- Vibrations associated with road traffic sources are not thought to have any influence at distances outside of 40m from the subject road. The Bairds' property is located beyond this distance. Groundborne vibration is not anticipated to be an issue as it is only thought to be perceptible where the road surface is uneven. However, in order to give some assurance to the Bairds in relation to their concern about damage to their property during construction the contractor undertook to arrange independent pre-and post construction condition surveys of their property. A landowner liaison officer would also be appointed to carry out regular visits of those affected and to keep them informed about the nature of the works. Given the proximity of the Baird's property to the substantial cutting (which would require rock blasting) it is appropriate that such procedures are carried out and that the Baird's are furnished with a copy of the survey reports.
- 2.2.136 Due to the proposed realignment of the Strahans Road, a further issue was raised in relation to the maintenance of the existing stretch of road located outside the Baird property. Whilst this stretch of road is not needed to complete the Scheme and it may be broken up and landscaped once the road alignment is completed, the Bairds do not own this land. As there is an

obligation to firstly offer it back to the original owner, the future of this strip of land is something for the Department to discuss with the relevant party/ies.

Recommendation:

That the Department ensure that pre and post condition surveys of the Bairds' property are carried out, and that Mr and Mrs Baird are provided with a copy of the reports once they are completed.

Representation by Riverside Building Development Ltd. Inquiry Reference A5WTC-2016-0884

- 2.2.137 Riverside Building and Development Limited has been liaising with the Department in relation to the interfacing of the approved Three Rivers Project and the A5WTC in order to ensure that they complement each other. Both parties are keen to continue this collaborative working and we support such an approach.
- 2.2.138 We make no site specific recommendations in relation to this representation.

Representation by Margaret Ferguson Inquiry Reference A5WTC-2016-0902

2.2.139 The concerns raised have been addressed in Chapter 1.6 of Part 1 of this Report.

Representation by G O'Reilly Inquiry Reference A5WTC-2016-0926

- 2.2.140 This representation neither specified the objector's address, nor the school to which the raised concerns related. An identical representation A5WTC-2016-0927 though was written from an address with a Strabane, BT82, postcode. Accordingly, we can only make general points. While construction works would cause disruption the effects would be relatively short lived. In terms of pollution we refer to Chapter 1.8 of this Report. The Department also confirmed that were the Scheme to be implemented, for schools in the general BT82 area the maximum predicted annual mean concentration of pollutants would be well below the levels set as limit values by UK legislation relevant to the protection of human health.
- 2.2.141 No recommendations are made in relation to this site specific objection.

Representation by Richard and Lousie Gamble Inquiry Reference A5WTC-2016-0927

2.2.142 The concerns raised have been addressed above under A5WTC-2016-0926.

Representation by Ms Sarah Guthrie Inquiry Reference A5WTC-2016-0961

2.2.143 The concerns raised have been addressed above under A5WTC-2016-0063.

Representation by Mr Brian Guthrie Inquiry Reference A5WTC-2016-0962

2.2.144 The concerns raised have been addressed above under A5WTC-2016-0063.

Representation by Mr Cecil Martin Inquiry Reference A5WTC-2016-2009

- 2.2.145 It is acknowledged that Mr Martin does not wish to relocate from the family home, Castletown House, Strabane. However, as noted in Part 1, while the building is an important part of Strabane's cultural heritage the Proposed Scheme needs to be located within this narrow corridor along the banks of the River Finn, and is in the optimum location to achieve connectivity with County Donegal and to reduce other effects such as environmental impacts. This and the overall justification for the Proposed Scheme provide an exceptional reason why Castletown House could not be retained.
- 2.2.146 No site specific recommendations are made in respect of this representation.

Representation by Mr John Eltham Inquiry Reference A5WTC-2016-2016

2.2.147 Matters raised in relation to the specific design of Junctions 7 and 16, and other matters related to Phase 3 are considered in Part 1 of this Report.

Representation by Mr Derek Clarke Inquiry Reference A5WTC-2016-2022

- 2.2.148 While Mr Clarke did not make a written representation he appeared at the inquiry. Two of his residential properties and approximately 10 acres of his agricultural land at Cloughcor are being vested. There have obviously been discussions between the Department and Mr Clarke, and he has received 90% of his compensation payment for the vesting of his property. Negotiations are ongoing in relation to the remaining 10% figure.
- 2.2.149 Mr Clarke has already built and is occupying a new residence a short distance away at Cloughcor. The presence of gravel within the area of land being vested is a matter for the compensation process. The suggestion that the Department could consider vesting all of his land if a figure could be agreed is also a matter for the Department. It is noted however that Mr

Clarke accepted at the inquiry that, even with the proposed loss of the agricultural land for the Scheme, he could still carry out his farming activities which he commenced in 2015. In order to address his concern about accessing his land and car business, an overbridge is proposed and its segregated nature should prevent Mr Clarke's cars getting dirty from mud left by the agricultural vehicles belonging to an adjacent farm which would also have access to the bridge. We therefore consider that Mr Clarke is being provided with suitable access arrangements.

2.2.150 No site specific recommendation is made in respect of this representation.

2.3 Section 2 – Sion Mills to South of Omagh

2.3.1 This element of the Report considers the stretch of the Proposed Scheme from just south of Sion Mills to Junction 13.

Representation by Darragh Canning Inquiry Reference A5WTC-2016-0001

- 2.3.2 The Environmental Statement considered the effect of noise and vibration at the various residential properties and other sensitive receptors. However, as no specific locational details were provided for Mr Canning's property at Gortgranagh Road, Newtownstewart, it is not possible to assess the proposed road's impact on it. It is however noted that in general terms the noise assessments demonstrate that a greater number of receptors would experience generally perceptible reductions of 3dB or more in traffic-related noise than would experience perceptible increases of 3dB or more. Should the resultant noise level exceed 68dB, there is also provision under the Noise Insulation Regulations (Northern Ireland) 1995 for residents to apply to have their property insulated.
- 2.3.3 No site specific recommendation is made in respect of this representation.

Representation by Martin Bonner Inquiry Reference A5WTC-2016-0028

- 2.3.4 Concern was raised in relation to the suitability of an attenuation pond in proximity to No.154 Beltany Road, Newtownstewart and the means of access to it. The use of SuDS ponds are the preferred drainage system due to their treatment, operation and maintenance benefits, their avoidance of risk to watercourses and their biodiversity potential. The safety benefit of providing direct and independent access to the pond outweighs the unsubstantiated claims in relation to the sensitivity of this landscape. The potential for compensation costs arising out of implementing this drainage arrangement is a matter which is beyond our remit.
- 2.3.5 No site specific recommendation is made in respect of this representation.

Representation by Teresa Donnelly also others concerned with Peacock Road, Sion Mills Inquiry Reference A5WTC-2016-0033

2.3.6 It is proposed to stop up Peacock Road and, as a result, the Department stated that traffic will transfer onto Primrose Road where the two way 12 hour weekday flow would rise from 990 vehicles to 1,970 vehicles. Given that

direct access is not proposed from Orchard Road onto the Scheme, it is also considered that up to 50% of the Orchard Road traffic would transfer to Primrose Road, further increasing the two way traffic by 685 up to 2,655 vehicles. In terms of concerns that additional traffic would be generated by future development in Glebe, this is a matter to be assessed as part of any development plan process and is beyond the remit of the inquiry.

2.3.7 A number of properties are located in very close proximity to Primrose Road with only the length of a car separating the dwellings from the road in some instances. The road also has speed humps presumably to address current issues that occur along this road. Whilst it is accepted there may be little change or impact on the operation of the junction of Primrose Road, given the expected reduction in the traffic flow along the existing A5, the residents' concern that there would be a considerable increase in the amount of traffic negotiating this road is considered well founded. Although the cost and logistics of providing an on-line bridge at Peacock Road in order to allow it to remain open may be considerable, the gravity of the negative impact that the current proposal would have on the residents of Primrose Road makes it something that should be seriously assessed further. The Department also cannot just assume that the residents would prefer this negative impact rather than close Primrose Road; having access via Bellspark Road and Peacock Road would still maintain connectivity with Sion Mills and its hinterland of Glebe.

Recommendation:

That the Department reassess the closure of Peacock Road, Sion Mills.

Representation by Brian Donnelly Inquiry reference A5WTC-2016-0034

2.3.8 The concerns raised have been addressed above under A5WTC-2016-0033.

Representation by Patrick McNamee Inquiry Reference A5WTC-2016-0039

2.3.9 Mr McNamee requested the re-alignment of the Scheme in the Newtownstewart area in order to reduce the impact on his lands. However, given the heritage concerns posed by the presence of Harry Avery's Castle, and the Department's wish to avoid properties and not to sever Newtownstewart, we accept there is no scope to change the alignment of the Scheme at this location. The bridge at Gortgranagh Road is necessary in order to provide connectivity across the carriageway. However, to help Mr McNamee retain more of his best agricultural field, given the short distances between the roads and as he owns the majority of the intervening agricultural

land, the Department should assess and discuss with Mr McNamee the necessity of the access track between Glen Road and Gortgranagh Road. The various concerns raised in relation to the availability of water in certain fields and the provision of hedges, fences etc are all accommodation work matters to be negotiated with the Department.

- A number of flooding related concerns were raised by Mr McNamee. However, at the inquiry, the Department gave an assurance that appropriate drainage infrastructure would be put in place. The Department should liaise with Mr McNamee in relation to these works and discuss the detail as to what happens to his affected lands post construction. In terms of the concerns that he is going to be left with a number of small fields; that this is going to adversely impact on their let-ability; that there will be a loss in income during the years of construction of the scheme, and that there will be loss in value of his property, these may be compensation matters for Mr McNamee to pursue with the Department and Land and Property Services. We cannot however give any assurance as to what will be judged to be worthy of compensation as this is beyond our remit.
- 2.3.11 In terms of the noise impact on No.10 Glen Road, whilst the noise level will increase by approximately 10dB once the low-noise surfacing of the road is taken into account, at just under 50dB it would still be considerably below the 58dB and 68dB levels when noise mitigation and the insulation of the property would have to be considered.

Recommendation:

That the Department liaise with Mr McNamee in relation to the necessity of the access track between Glen Road and Gortgranagh Road, the proposed drainage works, and what happens to his affected lands post construction.

Representation by Gordon and Aubrey Smyth Inquiry Reference A5WTC-2016-0040

2.3.12 A number of access laneways are proposed on the Smyth family's lands between Mulvin and Urbalreagh Road, Victoria Bridge. The Department acknowledged at the inquiry that, in consultation with the family, the exact location of these and the specifics of the accommodation works adjacent to No.33 Urbalreagh Road, may change. We refer to our general recommendation that the Department continue to discuss such matters with affected landowners with a view to resolving outstanding individual problems and that all agreed accommodation and mitigation works be implemented. In terms of the proposed provision of a single width underpass to provide access across the farm, given the extent of the holding and the amount of land being severed, the Department should investigate the feasibility of

providing a double width structure at this location. If this is not feasible, then thought should be given as to the suitability of splitting the underpass in order to serve the two farms.

- 2.3.13 It is estimated that the noise level at No.102 Mulvin Road, (the property most affected) would increase by approximately 13.5dB once an allowance is made for the intended use of low-noise surfacing. Having modelled the use of a noise barrier at this location, the Department estimated that it would only result in a reduction of approximately 1.4dB. We accept the Department's proposition that this would have no meaningful benefit for the Smyth family. As the modelled noise level at the properties would be below the 68dB threshold, they would also not be eligible for noise insulation.
- 2.3.14 As regards air pollution, whilst there would be a very small increase in the levels of traffic related pollutants (nitrogen dioxide and particulate matter), the anticipated levels would be substantially below the national limit value set for the protection of human health. In terms of light pollution, no light columns would be positioned in the vicinity of these lands. Light from passing traffic should be minimal given the orientation of the road, the separation distances between the carriageway and the properties and the proposed intervening planting.
- 2.3.15 Concerns in relation to the loss of privacy and on the visual impacts of the Scheme as seen from the properties were not substantiated. However the presence of surrounding outbuildings, the separation distances involved and the proposed intervening planting would lessen such impacts. The orientation of the carriageway and the likely speed of those travelling along it are also likely to reduce the impact on the dwellings' privacy. This may also be a compensation issue to pursue with LPS.
- 2.3.16 Changes to people's movements, such as how people will move between various family properties along the Urbalreagh Road, would be inevitable. Likewise, the Scheme will impact on the mature vegetation and on the wildlife located on the Smyth's land. However the Department have endeavoured to minimise such impacts with the use of various mitigation measures like the introduction of new planting along the section of the carriageway adjacent to No.102 Mulvin Road.
- 2.3.17 The Department assured that the farm's water supply would be treated as a private supply and would be maintained. We are satisfied that the pond in the flood compensatory storage area would serve the dual purposes of controlling the release of water into the River Derg and improve the water quality without posing a risk to the Smyth's holding. The details in relation to how the septic tank would operate will have to be addressed as part of the

discussions surrounding the accommodation works as will the provision of hedgerows and other requirements for the farm e.g. holding pens.

2.3.18 In terms of when the lands would be vested, the Department stated that it would not be vested until it was needed for that part of the Scheme. when compensation would be payable, this is a matter beyond the remit of the inquiry. The various impacts of severance; of the construction process; on the viability of the business; losses of land, value and of a replacement dwelling opportunity may be compensation issues to pursue with LPS.

Recommendation:

That the Department assess the suitability of providing a segregated underpass, or a double width underpass for its users.

Representation by David, William and Arthur Dunbar **Inquiry Reference A5WTC-2016-0045**

- 2.3.19 General concerns about the AIA process have been considered in Part 1 of this Report. In relation to the loss of agricultural land, the severance of land, the loss in value of the remaining lands and the impact on the viability of their farm business (including the Beltany out-farm) these are compensation issues to pursue with LPS. The determination of what are legitimate compensation issues, and the payment of compensation are also matters for LPS to consider.
- 2.3.20 In terms of the severance that the Scheme would cause, irrespective of the purchase of further lands, we are satisfied that suitable access arrangements are proposed. Therefore we see no need to provide an overbridge for the farm or to reposition the Castletown Road bridge. The costing for an overbridge would also be prohibitive at approximately £365k. Castletown Road overbridge, where it is currently proposed, would improve the road standards at this location whilst enabling the existing road to be kept open when the bridge is being constructed. In terms of accessing the land whilst the construction works are being carried out, the Department has given an undertaking that private access will be provided at all times during this period and that advance warning would be given of any such disruption.
- 2.3.21 In terms of the request to have their silage pit ramps at the home farm (No.34 Castletown Road) removed from the vesting area, the Department agreed to reduce the area being vested in plot 22.06 accordingly.
- 2.3.22 Health and safety concerns were raised in relation to the substantial cutting proposed at the Beltany out-farm. The Department confirmed that a safety margin/maintenance strip, containing boundary treatment, would form part of the Scheme and be positioned on top of the cut slope. A road safety audit would also to be carried out which should identify potential hazards and risks

to be mitigated. The provision of fencing, gates, drainage, water and cattle handling facilities are all accommodation works matters to be discussed with the Department. Objections in relation to bio-security resulting from the proposed shared access were not substantiated and the Department were satisfied that there was no evidence of similar measures being taken on the farm.

- 2.3.23 In terms of the noise impact on the residence at No.34 Castletown Road, the predicted levels would increase by approximately 17dB to approximately 59dB. It is unclear however if low-noise surfacing is proposed at this location. If so, it would reduce the noise level experienced at this property. If however it is anticipated that the level would remain above 15dB then the Dunbars' should be given the option of having their property noise insulated in order to protect their residential amenity.
- 2.3.24 There would be a very minor increase in traffic related pollutants (nitrogen dioxide and particulate matter) however the levels would be substantial below the national limit value that is set to ensure the protection of human health.

Recommendations:

That the Department investigate the anticipated noise levels at No.34 Castletown Road. Should the predicted noise level change exceed 15dB a suitable domestic noise insulation scheme should be agreed with the Dunbars and be implemented prior to any construction works commencing at this location.

That the area to be vested at Plot 22.06 be reduced in order to protect the silage pit ramps.

Representation by Alan Russell Inquiry reference A5WTC-2016-0050

2.3.25 Whilst Mr Russell's land, including part of a garden (at Bellspark Road, Sion Mills), would have to be vested, we are satisfied that it is required in order to complete all the elements of the Scheme. The argument that there has not been any accidents on this stretch of Bellspark Road, and that it will carry less traffic, do not overcome the need for side roads to be re-aligned to an appropriate standard. Assurance has however been given that should less land be required, following a more detailed design process, this would be reflected in the final Vesting Order. In relation to the possibility of some land being taken on a temporary basis and returned to Mr Russell, the amount would not be known until the detailed design stage is carried out. The Department have stated that they would consider a Permission to Enter (PTE) process and any agreement would detail the works to be carried out and how the land would be reinstated. The loss of land and the Scheme's

impact on the viability of the farm including the loss of Single Farm Payments are compensation matters to be addressed by LPS; they are beyond the remit of the inquiry.

- 2.3.26 In terms of Mr Russell's spring water supply, the Department acknowledge their obligation to provide a replacement system should the current supply be affected by the works. A number of options are possible and the Department undertook that the solution will be arrived at by mutual agreement.
- 2.3.27 While objection was raised regarding an attenuation pond being located on Mr Russell's land, topography makes this the most suitable location and it would allow maintenance access to the pond from Garden Road once it is realigned. In terms of the suggestion that it would be more suitable to utilise a disused well, we accept that the use of SuDS ponds is the preferred treatment system and avoids risk to aquifer-fed surface water courses, provides biodiversity potential and has operational and maintenance benefits.
- 2.3.28 No recommendation is made in relation to this representation.

Representation by Malcolm Russell Inquiry Reference A5WTC-2016-0051

2.2.29 The concerns raised have been addressed earlier under A5WTC-2016-0050.

Representation by Albert Millar and Millar Farms Inquiry Reference A5WTC-2016-0052

- 2.3.30 A number of Mr Millar's plots are leased rather than taken in conacre and the Department updated their records accordingly. In terms of accessing the leased lands off Seein Road, we are not persuaded that it is necessary to enlarge or segregate the proposed bridge in order to facilitate the movement of stock and machinery. The realigned Seein Road would also have to meet the appropriate road safety standards which would prevent the movement of the herd being a health and safety risk. In terms of the farm's spring water supply, the Department acknowledge their obligation to provide a replacement should it be affected by the works. Whilst they will endeavour to maintain the existing system, the solution that is arrived at will be by mutual agreement between the parties.
- 2.3.31 Potentially two outbuildings may be demolished in order to facilitate the realignment of Seein Road, and this would have implications for the operation of the farm. Whilst the loss of such buildings would be a compensation matter to pursue with LPS, the Department are trying to retain as much of the buildings as possible in order to reduce the impact on the holding. Precisely how much can be retained will not be known until the detailed design stage of

the Scheme is carried out. In terms of the turning head at High Road, we are not persuaded that the land take to facilitate this is excessive as it needs to allow vehicles to turn in a safe manner. We are also not persuaded that it would be appropriate to stop up High Road at its junction of Peacock Road and provide a gated entrance for landowners to the remaining section of High Road. This may not allow the landowners to safely turn their vehicles within the public highway. Any occurrences of fly tipping at this location would have to be pursued with the local authority.

- 2.3.32 In terms of the overall impact on the future viability of the farm business, the Department acknowledge that the Scheme would have a substantial adverse impact. This is however a compensation matter to be pursued with LPS.
- 2.3.33 No site specific recommendation is made in respect of this representation.

Representation by Christopher and Andrew Adams Inquiry Reference A5WTC-2016-0053

- 2.3.34 The family have a substantial farm holding located off the Mulvin Road, Victoria Bridge and were concerned that they would experience access difficulties following the Scheme's construction. The Department propose to provide one underpass here and, whilst this is not at a location agreeable to the family, this is something that they can negotiate as part of the detailed design process which would not commence until a construction date for Phase 2 is confirmed. As part of this negotiation, the dimensions of the proposed structure should be discussed in order to establish what is appropriate and feasible. We are not persuaded that the request for a second underpass is justified as access would be possible for cattle and machinery across the Concess and Fyfin Roads. Arguments in relation to the severance of the farm's internal road network and the Scheme's impact on the financial viability of the farm business are compensation issues for the family to pursue with LPS. The provision of additional internal laneways, drains and the removal of hedgerows and fences are matters for the landowner to discuss with the Department as part of the accommodation works. The timing of such discussions would be a matter for the Department, however they intend to contact landowners affected by Phase 2 prior to the making of the vesting order for that phase.
- 2.3.35 The Department have undertaken to try to maintain the existing spring water supply system, and if that is not possible to provide a replacement water supply subject to the agreement of the family.
- 2.3.36 Concerns were expressed in relation to farm drainage and the Scheme's impact on an area the family said is a breeding ground for wildlife. However, the drainage design proposed is appropriate and the use of SuDS ponds

would allow for biodiversity. Although a gun club may have shooting rights within this area, any impact on the club may be a compensation issue for them to address with LPS.

Recommendation:

That the Adams family are provided with one underpass at a location and of dimensions to be agreed amongst the parties.

Representation by E Lynch Inquiry Reference A5WTC-2016-0066

2.2.37 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by A Lynch Inquiry Reference A5WTC-2016-0067

2.2.38 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Sarah Patton Inquiry Reference A5WTC-2016-0068

2.2.39 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Andy Patton Inquiry Reference A5WTC-2016-0069

2.2.40 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by J Caldwell Inquiry Reference A5WTC-2016-0072

2.2.41 The concerns raised have been addressed earlier under A5WTC-2016-033.

Representation by James O'Kane Inquiry reference A5WTC-2016-0073

2.2.42 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by E O'Kane Inquiry Reference A5WTC-2016-0074

2.2.43 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Rosie O'Kane Inquiry Reference A5WTC-2016-0075

2.2.44 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Noreen Robinson Inquiry Reference A5WTC-2016-0076

2.3.45 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Gary Robinson Inquiry Reference A5WTC-2016-0077

2.3.46 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Mary Donaghey Inquiry Reference A5WTC-2016-0078

2.3.47 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Eamon Donaghey Inquiry Reference A5WTC-2016-0079

2.3.48 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Mary Donaghey Inquiry Reference A5WTC-2016-0080

2.3.49 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Andrew Connolly Inquiry Reference A5WTC-2016-0081

2.3.50 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Catherine Connolly Inquiry Reference A5WTC-2016-0082

2.3.51 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by M Godfrey Inquiry reference A5WTC-2016-0083

2.3.52 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by WG Godfrey Inquiry Reference A5WTC-2016-0084

2.3.53 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Myles Donnelly Inquiry Reference A5WTC-2016-0085

2.3.54 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Thomas Mutch Inquiry Reference A5WTC-2016-0086

2.3.55 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Pamela Mutch Inquiry Reference A5WTC-2016-0087

2.3.56 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by J Barr Inquiry Reference A5WTC-2016-0088

2.3.57 The concerns raised have been addressed earlier under A5WTC-2016-0033.

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Representation by A Barr Inquiry reference: A5WTC-2016-0089

2.3.58 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Marguerite McGonigle Inquiry Reference A5WTC-2016-0090

2.3.59 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by John Dunbar Inquiry Reference A5WTC-2016-0091

2.3.60 Mr Dunbar was concerned with the impact of the Scheme on what he considers to be the best farm fields. He suggested at the inquiry that the Scheme could be repositioned to the west of his and Mr and Mrs Curran's land at No.148 Beltany Road though no details of this were provided. However, whilst such a repositioning might lessen the impact on their holdings, it would impact on other holdings and have other constraints which the Department have not had the opportunity to properly investigate. Given

this, we are not persuaded that such a repositioning of the route here is appropriate.

- 2.3.61 In terms of the severance of Mr Dunbar's land, given the proximity of the proposed overbridge at Hamilton's Road and the fact that eastern fields could be accessed via Beltany Road an additional overbridge or underbridge for Mr Dunbar's use is unnecessary. The minutia in relation to how the farm would be accessed can be negotiated with the Department as part of their accommodation works discussions. The impacts on the viability of the farm, animal holding pens, on sand/gravel deposits and on the loss of a claimed replacement dwelling and wind turbine development opportunity are compensation issues for Mr Dunbar to pursue with LPS.
- 2.3.62 Concerns were raised that the Scheme would adversely impact on drainage, flooding and wildlife. However the Department gave assurance that runoff from the Scheme would be collected, with the majority being stored in SuDS ponds. The ponds would help to slow down the movement of water and improve its quality, thus helping flora and fauna. No discharge into Mr Dunbar's retained land was anticipated. A freeboard allowance of 600mm was also being made to culvert sizes in order to allow for climate change. We therefore accept that a suitable drainage system is being proposed and that there is no greater risk of flooding as a result of the Proposed Scheme.
- 2.3.63 The uprooting of mature hedgerows and trees, including an ancient oak tree, in order to make Mr Dunbar's remaining fields workable and to facilitate the construction of the Scheme would be unfortunate. However, the general loss of such features in the landscape is acknowledged and addressed in the Environmental Statement. The Department gave an assurance that replacement species would be locally sourced and appropriate to its context in order to try to maintain the character of the landscape. The suggestion that sheughs and streams affected by the Scheme would need to be piped is a matter for Mr Dunbar to discuss with Rivers Agency as the land is outside the proposed vesting line.
- 2.3.64 No site specific recommendation is made in respect of this representation.

Representation by the Armstrong Family Inquiry Reference: A5WTC-2016-0100 to 0103

2.3.65 The Armstrong family own a considerable farm holding in the locality of Mellon Park Drive, Omagh. The AIA estimates that approximately 45% of this land would be lost in order to facilitate the Scheme and this would have a severe adverse impact on the various family members who have run and lived on this farm which has been in the family for five generations. Given that the Department acknowledge the substantial impact that this would have

on their dairy farming business, they have agreed to purchase the Armstrong family's entire holding. Whilst the Department stated that they could not preempt the outcome of any blight legislation process should it be initiated for the farm, they gave a commitment that should it be unsuccessful they would still enter into negotiations with the family.

2.3.66 The Armstrong family's strategic arguments including in relation to the uncertainty caused by the Scheme and the consultation process have been addressed within Part 1 of this Report.

Recommendation:

That the Department follow through with their commitment to buy out the entire Armstrong holding should the blight legislation process prove to be unsuccessful.

Representation by Margaret Fyffe c/o Alan Armstrong Inquiry Reference: A5WTC-2016-0104

- 2.3.67 There were concerns about the Scheme's impacts on the residence at No.6 Drumlegagh Road South, Omagh. In terms of the changes in noise levels, it is predicted that there would be an increase of approximately 6dB once an allowance is made for the use of low noise surfacing. At approximately 53dB, the predicted noise level at the property would therefore be below the level where noise mitigation or insulation would have to be considered. In terms of concerns in relation to the resultant air quality, there would only be a very slight increase in traffic related annual mean nitrogen dioxide level however it would still be considerably below the national limit value set for the protection of human health. It is not anticipated that there will be any increase in particulate matter levels which are presently less than a quarter of the national limit value for the protection of human health.
- 2.3.68 Whilst the property would be approximately 100m east of the Proposed Scheme, whether or not the dwelling would be considered as blighted or would qualify for compensation would be matters to raise with LPS.
- 2.3.69 No site specific recommendation is made in respect of this representation.

Representation by Gerald and Evelyn Heaney Inquiry reference: A5WTC-2016-0105

2.3.70 The Heaneys reside at Tamlaght Road on the outskirts of Omagh and have a holding of approximately 6 acres located on either side of that road. The dual carriageway would be approximately 75m away from the front elevation of their property. With a considerable cutting located within the intervening area to facilitate the Scheme the work here would include the construction of an overbridge for the Tamlaght Road.

- 2.3.71 Given the relatively quiet rural setting of this property, it is predicted that noise levels would increase by approximately 17.5dB to approximately 58dB once the low-noise surfacing of the Scheme is taken into account. As the increase in predicted noise levels would be significant and the fact that an environmental barrier would only result in approximately 0.3dB reduction in noise levels due to the property's elevation the dwelling should be noise insulated before construction commences in order to protect residential amenity. The Department stated that a barrier structure would only have a limited visual effect. However, given the proximity of the Scheme, the orientation of the dwelling and the large adverse impact on the property, it is appropriate to provide a visual barrier as well as additional planting along the dwelling's curtilage boundary and proposed vesting line. Whilst the Department expressed reservations in relation to the visual impact of such a barrier, the addition of planting on either side would soften its impact.
- 2.3.72 In terms of dust and general disturbance during construction, mitigation measures have been identified and included within the environmental commitments for the Scheme. There is also a mandatory commitment for the appointed contractor to implement such works and no substantive evidence was presented to refute this position. Although the construction works would be mostly online, the construction of the overbridge would require vehicle movements along the Tamlaght Road. Where there would be a relatively high noise level as a result of the works, assurance has been given by the Department that the Council would be consulted to agree limits, mitigation measures and protocols for the implementation of the work. The protocols would include details on timing restrictions and procedures for notifying residents about the works. Assurance was provided by the Department that existing security levels already present at this property would be maintained during and post construction.
- 2.3.73 At the inquiry the Department was confident that the land take on the northern side of Tamlaght Road could be reduced, as could the area to the south subject to negotiations with other family members who own land in this locality.

Recommendations:

That a suitable domestic noise insulation scheme be agreed with the Heaneys and that this be implemented prior to construction works commencing at this location.

That prior to the road opening at this location the Department provide an environmental barrier and planting on either side of the proposed vesting line positioned along the front elevation of the Heaneys' dwelling.

That the Department liaise with adjacent landowners in order to establish if the land take from the Heaney family could be reduced.

Representation by Charles Quinn Inquiry Report: A5WTC-2016-0110

- 2.3.74 The proposed carriageway would run approximately 43m to the east of the dwelling at No.51 Seein Road, Sion Mills. The realigned Seein Road, located on an overbridge, would sweep to the north of the property. Given this juxtaposition, and notwithstanding the proposed planting, the Proposed Scheme would have a sustained large adverse visual impact on this property. However, we do not consider that Mr Quinn's privacy would be unacceptably affected by the Scheme even during winter months. This is due to the alignments of the roads, their separation distances from the dwelling and the lack of traffic that would be passing to the front of the dwelling given the road's realignment.
- 2.3.75 The traffic noise levels at the property would increase by approximately 22dB once an allowance is made for the low-noise surfacing mitigation. This is a significant increase in noise levels in this tranquil rural area, and the Department advised that there would be no benefit in erecting a noise barrier at this location given the level of elevation of the property which would effectively overlook the Scheme. The predicted noise level would be approximately 59dB, which is below the 68dB level when noise insulation would be legally required. However, given the substantial predicted increase in noise level and the ineffectiveness of a noise barrier at this location, the property should be noise insulated before construction commences in order to improve residential amenity.
- 2.3.76 In terms of construction activities, the Department assured that access to the dual carriageway works would be on-line, and that significant vehicular traffic was not anticipated along Seein Road. Whilst the existing Seein Road would be used by vehicles working on its diversion and the construction of the associated bridge, the large structural elements of the bridge would be transported along the route of the dual carriageway. The recommendation that this property be noise insulated prior to such work commencing should also help to alleviate some of the internal noise within the property. As a programme of works has yet to be agreed with the contractor/s, it is not possible to assess whether a number of works would be carried out simultaneously. The Department however undertook that where construction activities involve relatively high noise levels, that mitigation and protocols, including in relation to the timing and informing of residents, would be agreed with the relevant local authority. There is also a mandatory obligation on the appointed contractor to carry out the environmental commitments for the Scheme which include dust controlling measures.

2.3.77 It is appreciated that when designing the road, the Department sought to avoid requiring the demolition of properties. Mr Quinn however has been unable to sell his property and he presented evidence that this is due to the proximity of the Proposed Scheme. It is not however within our remit to determine what are compensatable circumstances, or whether such an application would be successful. This would be a matter for Mr Quinn to pursue directly with LPS.

Recommendation:

That a suitable domestic noise insulation scheme be agreed with Mr Quinn and that this be implemented prior to construction works commencing at this location.

Representation by Alfie and Janet Cooper also, representation by Ross Hussey MLA on their behalf Inquiry Reference A5WTC-2016-0111 & 0144

- 2.3.78 The Cooper's dwelling, No.53A Seein Road, Sion Mills is approximately 80m west of the proposed dual carriageway. The realigned Seein Road and its associated embankment would be about 90m north of the property.
- 2.3.79 The proposed drain track in the field opposite would not have a visual impact on the dwelling. Views from the rear of the property towards the realigned road would be from bedrooms and stairs/landing rather than rooms of main occupation. While existing deciduous vegetation to the rear of the property is not under the Coopers' control the realignment of the Seein Road would have a limited visual impact given the intervening distance, vegetation and buildings. Whilst the rear return, housing the kitchen, would be closer to the road, there are no windows on the facing elevation. From the first floor window on the property's side elevation there would be an appreciation of both the dual carriageway and the realigned Seein Road. However, this room is used as a walk-in wardrobe rather than a room of main occupation. At present idyllic rural views are visible from the Cooper's property especially from the numerous windows on its front elevation. Even allowing for the proposed planting, and while there would still be an appreciation of the wider rural landscape, the Scheme would have a sustained large adverse visual impact on this property - especially as seen from the front elevation. However we agree with the Department that screening the property would not be a satisfactory solution given the elevation of the property and the visual impact of the barrier. Although there would be an awareness of headlights, these should not shine into the property due to its position approximately 8m above the proposed dual carriageway. The realignment of Seein Road would also mean that the current traffic which passes very close to the dwelling's front elevation would be removed, bar that which would be accessing Mr Quinn's adjacent dwelling.

- 2.3.80 Whilst there would be a modest increase in annual mean concentrations of nitrogen dioxide and particulate matter, the predicted levels would be considerably below the level set to ensure the protection of human health. After mitigation, traffic related noise levels at the property would be approximately 66.9dB. This would be marginally below the 68dB level when noise insulation would be legally required. However, given the anticipated increase in noise level of about 25dB, the Cooper's dwelling should be suitably insulated prior to the commencement of any works at this location. This would help to improve residential amenity, assist in allowing the Coopers' son who works nightshifts to rest, and address concerns raised in relation to the effectiveness of low noise surfacing. We appreciate the Coopers' concerns in relation to how their enjoyment of the outside of their property would be affected, and the internal noise levels should windows and doors be opened. However, an environmental barrier would only result in a 0.6dB reduction in the anticipated noise level, well below the 3dB reduction required in order for the reduction to be appreciated. The Coopers also raised the World Health Organisation's guidance on appropriate noise levels. However, we have no reason to conclude that the Department did not have regard to the requirements of the DMRB and the relevant legislation referred to in that document.
- 2.3.81 In terms of construction noise, as a programme of works has yet to be agreed with the contractor/s, it is not possible to assess whether a number of works would be carried out simultaneously. However where construction activities (including rock breaking) involve relatively high noise levels, mitigation and protocols, including the timing and informing of residents, would be agreed between the Department and the Council. While this area was not classified as a 'hot spot', this is a term used to identify locations where significant construction activities would be likely to involve high noise levels over a relatively long timescale. As construction here is not anticipated to involve high noise levels over a relatively long timescale, it would not be appropriate to define it as a 'hot spot' area.
- 2.3.82 While animals generally acclimatise to increased noise, informing the Coopers of the programme of works would allow them to assess the impact on their animals and make appropriate arrangements. The recommendation that the property be noise insulated prior to any construction work being carried should help to reduce the noise levels for animals within the property. The Department are confident that the property would not be adversely affected by vibrations from the construction process. However, should the detailed design stage identify such a possibility this could be appropriately addressed by the contractor at that stage. There is also a mandatory obligation on the appointed contractor to carry out the environmental commitments for the Scheme which include dust controlling measures.

- 2.3.83 The Department assured that where road closures were necessary during construction works there would be adequate diversions, or the works would be for a short duration and private access and egress would be provided at all times. Having examined the Construction Management themed report, it is assumed that the reference to notification about disruption in access is referring to local residents being informed about road closures rather than not being fit to access their individual properties. In terms of how the Coopers would be impacted upon when walking along the Seein Road, the Department aim to build the overbridge before the road would be closed. In relation to the use of the existing Seein Road for construction vehicles, a Scheme Traffic Management Plan is to be developed and agreed with Transport NI and other relevant authorities. This would detail the traffic management schemes that would have to be implemented along the route and control the use of the local network by construction traffic.
- 2.3.84 The Coopers' concerns in relation to the consultation process are acknowledged, however the Department undertook to liaise with them to try to agree measures well in advance of works being carried out.
- 2.3.85 In terms of the impact on the property's value and the ability to obtain a mortgage for the dwelling, these are matters to pursue with LPS. In terms of whether this property is blighted, this is a matter on which they should obtain independent legal opinion.
- 2.3.86 Details of the ES for the Scheme, which would include this property, are publicly available. Whilst an Equality Impact Assessment (EQIA) of the Scheme was considered to be unnecessary by the Department, EQIAs have been carried out on the RDS 2035 and *Ensuring a Sustainable Transport Future: A New Approach to Regional Transport*, from which the Proposal emerges.
- 2.3.87 When all the arguments are cumulatively considered together, we therefore do not consider that the design of the Scheme at this location and its impact would warrant the purchase of this property by the Department.

Recommendation:

That a suitable domestic noise insulation scheme be agreed with the Coopers and that this be implemented prior to construction works commencing at this location.

Representation by Shane and Nuala O'Neill Inquiry Reference A5WTC-2016-0114

2.3.88 The O'Neill's farm holding and dwelling are along the Beagh Road. The Proposed Scheme would run through the middle of the holding. Presently Mr O'Neill can solely farm the land without any assistance.

- 2.3.89 The precise location of the access lanes to service the farm buildings have not been finalised, and the Department will liaise with the O'Neills in order to establish their optimum location. The Department however suggested that there is the possibility of a single access track running up to the overbridge from the farmyard, thus allowing the cattle to cross the Beagh Road using the bridge before entering the land on the other side of the dual carriageway.
- 2.3.90 Given the minor nature and low vehicular usage of the Beagh Road, the evidence that the animals would not have to be moved from the western fields on a daily basis and given the cost and safety implications, we do not consider it reasonable to widen the overbridge to provide a dedicated cow path. The Department though suggested the possibility of providing an underpass for the sole use of Mr O'Neill's cattle. We support further consideration of this possibility given the substantial adverse impact the Scheme would have on this holding. In terms of milk lorries and other large vehicles accessing the farm, the Department assured that appropriate access, no steeper than the roads in the area, would be provided.
- 2.3.91 Repositioning the northern SuDS pond to the other side of the dual carriageway would retain more of the farm's grazing platform. However, its currently proposed location is optimal as it utilises a slightly flatter area adjacent to the main watercourse and requiring less land take and earthworks. The Department however undertook to reassess the positioning of the ponds during the final design stage which would inform the final Vesting Order. They also undertook to contact the O'Neills in order to discuss accommodation works including in relation to drainage and water runoff.
- 2.3.92 It is estimated that when Phase 2 opens, and even allowing for a 3.4dB reduction with the use of low noise surfacing, there would be about a 22dB increase in noise levels at No.26 Beagh Road. The resultant noise level would be slightly above the 58dB level when an environmental barrier has to be considered. However, as such a barrier in this instance would only reduce the noise level by about an imperceptible 1dB it would be ineffective here. Given the existing low background noise levels and the substantial anticipated increase in noise levels the family should be given the option of having their home noise insulated in the interests of residential amenity. The family contended that noise and visual barriers would help to screen views of the source of the noise and reduce the impact by targeting both the visual and hearing senses. However as the visual barrier would be some distance away from the property its benefit would be limited. There would be a large adverse visual impact on the property, but mixed species planting would help to screen and soften the road's visual impact. The Department's offer to put additional planting to the south of the Beagh Road overbridge along the dual

carriageway's embankment would also be more appropriate visual mitigation at this location than a solid barrier.

2.3.93 The claim that the family's property has been blighted is a matter for the family to take independent legal advice on and pursue with LPS. General concerns in relation to the impact of severance on the farm's viability are compensation issues to pursue with LPS. We consider the land take at this location to be necessary in order to construct the Scheme, though the Department gave a commitment that once the final design stage is completed that they will keep land take to a minimum.

Recommendations:

That discussion occur between Mr O'Neill and the Department in relation to the feasibility of providing an underpass and to establish its optimum location for both parties.

The Department ensure that land take is kept to a minimum including in relation to the northern SuDS pond.

That a suitable domestic noise insulation scheme be agreed with the O'Neills and that this be implemented prior to construction works commencing at this location.

That additional planting take place south of the Beagh Road overbridge along the Scheme's embankment.

Representation by Raymond and Attracta Curran Inquiry reference A5WTC-2016-0116 and 0152

- 2.3.94 The Curran residence at No.148 Beltany Road, Omagh enjoys panoramic views across the Strule Valley towards the Sperrins. The Scheme, located approximately 80m to the east would require a small section of their garden area. The visual effect on their property would be moderately adverse in the Scheme's opening year and then reduce to slight adverse after 15 years. In order to reduce the visual impact the Department offered to provide 160m of fencing along the verge in addition to the proposed planting. This proposition would need to be discussed with the Currans in order to establish if this would help to address their concerns. If acceptable to them then appropriate planting should be placed on either side of it to soften its impact.
- 2.3.95 The Currans' existing access would be severed by the Scheme, but a short diversion via the Hamiltons Road overbridge would provide them with direct access onto the existing A5 carriageway. Such a minor diversion would not increase their journey times by any meaningful degree. During the construction period some road closures would be necessary. However, there would be adequate diversions in place, or the works would be of a short

duration. Private access and egress would be provided at all times. Access would also be possible via Castletown Road.

- 2.3.96 Taking account of low-noise surfacing, the increase in traffic noise levels would be a moderate 5.7dB when Phase 2 of the Scheme is opened. Noise would be over 58dB, but below the 68dB level when there is a legal entitlement to noise insulation. A noise barrier would not be justified at this location as it would only result in an imperceptible 0.7dB reduction in noise levels. In terms of construction noise, as a programme of works has yet to be agreed with the contractor/s, it is not possible to assess whether a number of works would be carried out simultaneously. The Department however gave a commitment that where construction activities involve relatively high noise levels, that mitigation and protocols, including in relation to the timing and informing of residents, would be agreed with the relevant local authority. There would also be a mandatory obligation on the appointed contractor to carry out the environmental commitments for the Scheme which include dust controlling measures.
- 2.3.97 The Department assured that existing security levels would be maintained during and post construction. The appointed contractor would be responsible for the securing of the site and any breaches of existing fencing would be replaced to ensure security post construction. Whilst we accept that the proposed land take is presently reasonable and necessary, should it become apparent following the detailed design stage that it is excessive the Department have undertaken to return it to the relevant owner/s.
- 2.3.98 The impact of the Scheme on the property, including on its value, would be a compensation matter to raise with LPS. Given their difficulty selling their property the Currans believe that it has been blighted, but this is something they should seek independent legal advice on and raise with LPS.

Recommendations:

That the Department establish if the proposed 160m fencing along the verge of the dual carriageway would help to overcome Mr and Mrs Curran's visual concerns. If so, then the fencing should be implemented and have appropriate planting on either side in order to soften its impact.

That the Currans be given early notification in relation to any works programmed in this locality.

Representation by O D Colhoun Inquiry Reference A5WTC-2016-0126

2.3.99 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Inquiry Reference A5WTC-2016-0147

Representation by Bryan and Ronald Campbell

Commission Reference: 2015/D003-D006

- 2.3.100 The Campbell holding is based in and around No.6 Mellon Park Drive. Peripheral land within the holding is required in order to construct the Scheme and an associated flood compensation area. In relation to the drainage works the Department have carried out the appropriate modelling and given an assurance that there would be no adverse impact. The Scheme's road drainage would not discharge into adjacent field drains, rather the flows would enter attenuation ponds which would in turn discharge into larger receiving watercourses, such as the nearby Fairywater River. We agree with the Department that the re-profiling of the remaining land in order to provide the flood compensation storage would provide a moderate beneficial impact. The loss of land and the impact that it would have on the farm business is a compensation matter to pursue with LPS.
- 2.3.101 We accept that the impact of the Scheme cannot be fully mitigated, and the Campbells requested that the Scheme's side slopes be extensively landscaped in order to lessen its visual impact. However, given the distance of about 500m between the Scheme and No.6, the orientation of the house and the presence of intervening vegetation and buildings, the Department's proposed planting measures are appropriate for this location. Once account is taken of the proposed use of low-noise surfacing, anticipated noise levels on the western side of the property would increase by approximately 1.6dB when Phase 2 is open to traffic. With the reduction in use of the existing A5, located to the east of the property, it is anticipated that there would be a reduction in noise level at the eastern elevation by approximately 1.8dB. The increase in the noise level along the western facade would be modest and well below the level when an environmental barrier or noise insulation should be considered. A noise barrier is not judged necessary.
- 2.3.102 In terms of what happens to Mellon Park Drive after construction works, the Department undertook to liaise with the relevant landowners. Should illegal dumping occur along this road this would be a matter for the appropriate authorities such as the local council and TNI.

Recommendation:

That the Department discuss the future of Mellon Park Drive with local landowners.

Representation by Roy and Ian Hamilton Inquiry Reference A5WTC-2016-0165

2.3.103 Although the nature of the Hamilton's farming business in and around No.34 Baronscourt Road, Newtownhamilton may have changed, we accept the Department's evidence that the proposed embankment at this location would be unable to accommodate an underpass of a greater height and width than

3m. The access track that would run alongside the Proposed Scheme and be accessed off the re-aligned Baronscourt Road would facilitate larger machinery accessing the severed land. The Department should however continue to liaise with the Hamiltons in relation to the details of these accommodation works, including providing clarification in relation to the ownership of rights of way of such access laneways and whether they would support any potential application to DAERA for the removal of hedgerows in order to make the remaining fields workable.

2.3.104 It is forecast that the noise levels at the property would increase by approximately 24.8dB once account is taken of low-noise surfacing. The noise level would be below the 68dB level when the property would be legally entitled to noise insulation. However given the level of noise increase, and as an environmental barrier would be ineffective at this location, we recommend that the dwelling be noise insulated prior to any construction work being carried out.

Recommendation:

That a suitable domestic noise insulation scheme be agreed for No.34 Baronscourt Road and that this be implemented prior to construction works commencing at this location.

Representation by Stephen Walmsley Inquiry Reference A5-WTC-2016-0666

- 2.3.105 The Proposed Scheme would run through the middle of Mr Walmsley's holding at Urbalreagh Road causing severance and land loss. It is acknowledged that the Scheme would have a substantial adverse impact on the farm. However, its effect on the farm's viability and any future residential development opportunities on it, would be compensation matters to pursue with LPS.
- 2.3.106 No site specific recommendation is made in respect of this representation.

Representation by Joe Lowry Inquiry Reference A5WTC-2016-0680

- 2.3.107 Mr Lowry, who resides at No. 68 Blackfort Road sought assurance that his existing farm drainage would not be negatively impacted upon by the Proposed Scheme. As the Department has given assurance that the temporary working area and its associated drainage would be reinstated following construction, with existing catchment flows maintained, this should address his concerns.
- 2.3.108 No site specific recommendation is made in respect of this representation.

Representation by Peter James Robert Smyth Inquiry Reference A5WTC-2016-0683

- 2.3.109 Mr Smyth's holding is located in the vicinity of No.4 Derg Road outside Victoria Bridge. He would lose over one third of his productive land and concern was expressed about the potential loss of a horse exercise/training field which was claimed to play a major part in his equine business that is used all year round. The Scheme would have a substantial adverse impact on the farm and the loss of such an asset would be a compensation matter to pursue with LPS as is the rate of any compensation payable.
- 2.3.110 The dwelling at No.4 Derg Road is approximately 115m from the Scheme, and the anticipated traffic related noise level would increase by 9.6dB taking into account low-noise surfacing. As noise at the property would be below the 58dB and 68dB levels at which an environmental barrier and noise insulation would have to be considered, we make no recommendations in relation to this matter.
- 2.3.111 In relation to the dwelling's proximity to the proposed realigned Derg Road, this realignment would sit on a 3-5m embankment. To mitigate this, it is proposed to position the road 20m north of the existing Derg Road and further away from Mr Smyth's property. The intervening area would be landscaped to provide screening. We consider this to be an acceptable proposition. In order to address the concern in relation to the proximity of the access route to the SuDS pond to his dwelling, the Department suggested an alternative route located on the opposite side of the dual carriageway. This new route appears to be logical, however the Department should discuss this matter with Mr Smyth in order to establish if it would overcome his concern.

Recommendations:

That the re-aligned Derg Road be positioned 20m north of Mr Smyth's property and the intervening area be landscaped.

That the Department liaise with Mr Smyth to establish if the amended access to the SuDS pond would address his concerns.

Representation by Desmond McLaughlin Inquiry Reference: A5WTC-2016-0686

2.3.112 Mr McLaughlin of No.18 Beagh Road was concerned about the increased noise from the Proposed Scheme and the negative impact that this would have on him and his wife's quality of life. This area presently has a low background noise level. The Department accept that the anticipated increase of 19dB-19.3dB in noise level would be highly noticeable. While the proposed use of low-noise surfacing would reduce this increase by 3-3.5dB, the increase would still be significant. As a result, and taking account of the

personal circumstances we recommend that Mr McLaughlin be offered the opportunity to have his property noise insulated.

Recommendation:

That a suitable domestic noise insulation scheme be agreed with the Mr McLaughlin and that this be implemented prior to construction works commencing at this location.

Representation by Christine Scott Inquiry Reference: A5WTC-2016-0687

- 2.3.113 The family expressed concern about the impact that the Proposed Scheme would have on their farming business and livelihood. Whilst this concern was not substantiated with details, the AIA estimates that there would be a loss of 3.6% of their productive land. The loss of any grazing land would be a compensation matter to pursue with the Department of Finance's LPS.
- 2.3.114 No site specific recommendation is made in respect of this representation.

Representation by Rebecca Scott Inquiry Reference: A5WTC-2016-0688

2.3.115 The concerns raised have been addressed above under A5WTC-2016-0687.

Representation by Jonathan Scott Inquiry Reference: A5WTC-2016-0689

2.3.116 The concerns raised have been addressed above under A5WTC-2016-0687.

Representation by Desmond Scott Inquiry Reference: A5WTC-2016-0690

2.3.117 The concerns raised have been addressed above under A5WTC-2016-0687.

Representation by Robert and Valerie Wilson Inquiry reference: A5WTC-2016-0691

- 2.3.118 This representation referred to property being vested at Rylands, outside Omagh. However as no substantive evidence was presented in relation to the holding it is not possible to comment on the impact that the Scheme would have on it. Whilst it is appreciated that such a situation can leave landowners in an uncertain state, it is for Mr and Mrs Wilson to get independent legal advice and pursue with LPS the possibility of utilising blight provisions. It is beyond our remit to comment on such matters.
- 2.3.119 No site specific recommendation is made in respect of this representation.

Representation by James and Florence McFarland Inquiry Reference: A5WTC-2016-0692

- 2.3.120 The Scheme would run through the middle of the McFarland's dairy farm which is located in the vicinity of No.1 Rosemary Road, Omagh. This would cause a substantial adverse impact on the business due to the severance and loss of land. However this is a compensation matter to be pursued with LPS.
- 2.3.121 In terms of the loss of grazing land for use as a deposition area, we accept the Department's justification that this ground is needed to store material required to fill an area of soft ground in close proximity to the Scheme. The area is also going to be used to fill in the hollow created between the road embankment and the existing slope. Discussions have already taken place in relation to how the land take could be minimised and how to reduce the time period when the ground would be unavailable for grazing. These discussions should continue once the design has been finalised. The Department is also proposing to use the Permit to Enter process in those instances where they do not require the land after the construction is completed. Should this process be possible Mr and Mrs McFarland would be notified prior to the removal of their land from the Vesting Order. Any adverse impact caused as a result of the use of this land as a deposition area would be a compensation issue for the McFarlands to pursue with LPS.

Recommendation:

That the Department liaise with Mr and Mrs McFarland in order to establish if the impact of the proposed deposition area could be reduced.

Representation by John Smyth Inquiry Reference: A5WTC-2016-0693

- 2.3.122 No.33 Urbalreagh Road lies in a tranquil rural location outside Victoria Bridge. The dwelling and its associated orchard are located to the west of the Proposed Scheme. The dwelling is approximately 240m from the Scheme, and the family are in the process of extending their holding.
- 2.3.123 There were concerns that vehicles would pass in close proximity to the dwelling and organic orchard thus impacting upon health and well being, and lead to food contamination. We accept that as the family's current property is not within 200m of the Scheme the Department did not include it within the air quality assessment study area as the impact for such properties is thought to be negligible. However, when considering other properties assessed along this road, the maximum predicted traffic related pollutants (nitrogen dioxide and particulate matter) were anticipated to rise by very modest levels. The levels would still be substantially within the national limit value set for the

protection of human health. Additionally, the maximum predicted traffic related annual mean oxides of nitrogen concentrations would only increase by a marginal amount and would be less than a quarter of the national limit value set for the protection of vegetation and ecosystems. While wind directions can change, evidence was also presented by the Department to demonstrate that the property would be upwind of emissions from vehicles using the Scheme for the majority of the year. Therefore fine particulate matter would be less likely to deposit on the vegetable garden. We are not persuaded that air quality would be a significant issue at this location. In terms of dust and general disturbance during the Scheme's construction, mitigation measures have been identified and included within the environmental commitments. There is a mandatory commitment on the appointed contractor to implement such works. If the identified mitigation measures are implemented, dust nuisance should be kept to a minimum.

- 2.3.124 Mulvin Wood, which was recorded on the 1837 OS map, is located to the south-east of the property, and we accept that there is no alternative to removing approximately 40% of this mound and ancient woodland in order to facilitate the construction of the Scheme. Whilst this would change the landscape in this area, there is no substantive evidence to support the assertion that this is an ancient burial ground. The Department however have committed to carrying out further archaeological investigations, and to try and retain as much of the mound and wood as possible at the detailed This commitment was demonstrated by the specimen design stage. drawings presented by the Department which illustrate a reduced vesting line, areas of replacement planting in proximity to the woodland, the removal of the maintenance strip area and a proposed steepened/reinforced slope through the wood to reduce the land take. Whilst the drawings appear accurate, this can be confirmed at the detailed design stage.
- 2.3.125 The Scheme will have an adverse impact on views from the property and will sever the land holding. Whilst these impacts cannot be fully mitigated the proposed environmental mitigation and landscape strategy should reduce the impact. In terms of noise levels, it is anticipated that there would be a modest increase of 3dB once an allowance is made for the use of low-noise surfacing. The anticipated noise level would be below the level when an environmental barrier or noise insulation would have to be considered. In relation to the concern about vibrations arising as a result of the Scheme, we have no reason to doubt the Department's evidence that groundborne vibrations are generally only perceptible where the road surface is uneven and that airborne traffic-related vibrations do not normally have any influence at distances beyond 40m from the Scheme. Vibration is therefore unlikely to be an issue at this location.

Recommendation:

That the Department carry out further archaeological investigations of Mulvin Wood, ensure that the land take at this feature is kept to a minimum and carry out additional planting as demonstrated in their specimen design drawings.

Representation by John Hassard Inquiry Reference: A5WTC-2016-0694

- 2.3.126 Mr Hassard's main farm complex is located in the vicinity of No. 5 West Road outside Newtownstewart. He had concerns that the Scheme would have a significant adverse impact on the farm business due to the quality and position of the fields affected. There were also concerns over animal health and biosecurity. However, we concur with the AIA that the impact on the farm holding would be slight. This is due to the type and scale of farming being undertaken, the possibility of isolating animals on the opposite of Castletown Road and on the Strabane Road out-farm, the existing use of the road network to move animals, and the modest land take and lack of severance.
- 2.3.127 Whilst Mr Hassard would have a greater percentage loss of land than a neighbouring owner, there are other factors to consider when defining the impact that the Scheme may have on an individual holding. As noted in Part 1 of this Report the AIA is of little, if any, relevance in establishing compensation levels which would be a matter to raise with LPS. Given the existing uncertainty about a definitive timescale for construction, it is appreciated that Mr Hassard is reluctant to spend funds improving his farm. However, his right to compensation for any works he wishes to undertake would again be matters to raise with LPS prior to their commencement.
- 2.3.128 No site specific recommendation is made in respect of this representation.

Representation by Emma Davis Inquiry Reference: A5WTC-2016-0740

2.3.129 The concerns raised have been addressed above under A5WTC-2016-0693.

Representation by Barry and Lynn Attwood Inquiry Reference: A5WTC-2016-0749

2.3.130 The Scheme would be located approximately 60m north-east of the family residence at No.151 Brookmount Road, Omagh. When low-noise surfacing is taken into account, it is anticipated that there would be an increase in noise

level of approximately 5.7dB. Whilst this increase may be perceptible when outside the property, the resultant noise level would remain below the levels where an environmental barrier or noise insulation of the property would have to be considered. Vibrations associated with road traffic sources are not thought to have any influence at distances beyond 40m from the subject road. Furthermore groundborne vibration is not anticipated to be an issue as it is only thought to be perceptible where road surfaces are uneven.

- 2.3.131 Traffic related annual mean concentrations of nitrogen dioxide and particulate matter would only increase modestly, and would be well within the national limit value set for the protection of human health. In relation to the impacts on the vegetation garden, the increase in the concentration of oxides of nitrogen would be very slight and the resultant level would be approximately one quarter of the national limit value set for the protection of vegetation and ecosystems. We are not persuaded that pollutant levels would have an adverse impact on the residents of the property.
- 2.3.132 We appreciate the stress experienced by the Attwood family and their preference to have their property purchased in order to allow them to buy a similar property elsewhere. In this instance we are not persuaded that the impacts of the Scheme are such that this is necessary. Arguments in relation to their property experiencing blight, and that the valuation of their dwelling should be based on an assessment prior to the Scheme, are matters for the family to discuss directly with LPS.
- 2.3.133 No site specific recommendation is made in respect of this representation.

Representation by Fergus McAleer Inquiry Reference: A5WTC-2016-0758

2.3.134 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Pat McAleer Inquiry Reference: A5WTC-2016-0759

2.3.135 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Thomas McAleer Inquiry Reference: A5WTC-2016-0760

2.3.136 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Eileen McAleer Inquiry Reference: A5WTC-2016-0761

2.3.137 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Mary McAleer **Inquiry Reference: A5WTC-2016-0762**

2.3.138 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by M Stewart Inquiry Reference: A5WTC-2016-0866

2.3.139 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by James and David Crosbie Inquiry Reference: A5WTC-2016-0882

- 2.3.140 The Scheme would have a substantial adverse impact on the Crosbie holding which is in the vicinity of No.36 Rash Road, Omagh. However, the impact of the loss of the land is a compensation matter to pursue with LPS. The holding would be severed by the Scheme and it was requested that an underpass be provided in order to help mitigate this. While reference was made to a report that the Crosbie's had commissioned for the 2011 Inquiry this was not presented to us for consideration. Given the level of alternative access provisions for the movement of animals and agricultural machinery, the rural nature of the Rash, Tully and Lisnagirr Roads and the estimated cost of its provision we are not persuaded that an underpass is justified in this instance.
- 2.3.141 In terms of the positioning of the Rash Road overbridge, whilst it is to the south of the holding, side roads need to be realigned and the Department advised that it was positioned here in order to reduce the land-take. Although the proposed access route from the overbridge to the Crosbies' western lands would run through what is presently third party land, this land is also being vested by the Department. While raising the overbridge on pillars would reduce the land-take further, improve access arrangements in the locality and may have been used in other schemes the additional cost of approximately £1.7 million would be unjustified in this instance.
- 2.3.142 Whilst good quality land may be proposed to accommodate the deposition area the Crosbies' alternative deposition area does not meet the requirements for vesting or for the Scheme generally. Also a Permission to Enter arrangement would not be suitable in this instance.
- The proposed road drainage would not discharge into adjacent field drains 2.3.143 but rather enter attenuation ponds which would then discharge into larger receiving watercourses. Where disrupted, existing drainage infrastructure would be connected to appropriate Pre-Earth Works Drainage (PED) infrastructure before discharging to adjacent receiving watercourses. This would also apply to land required for temporary construction works. Cross drains would also be put in place in order to transfer PED across the

carriageway. Rather than using open sheughs the design allows for the use of piped infrastructure. The Department undertook to liaise with the landowners to ensure that all drainage concerns are addressed.

Recommendation:

That the Department liaise with the Crosbies in relation to the details of the drainage infrastructure.

Representation by Paula Blake Inquiry Reference: A5WTC-2016-0888

2.3.144 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Carmel McGrath Inquiry Reference: A5WTC-2016-0889

2.3.145 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Michael McGrath Inquiry Reference: A5WTC-2016-0899

2.3.146 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by John Blake Inquiry Reference: A5WTC-2016-0900

2.3.147 The concerns raised have been addressed earlier under A5WTC-2016-0033.

Representation by Mr and Mrs Nicholas McKinley Inquiry Reference: A5WTC-2016-0904

- 2.3.148 A modest portion of the western section of the McKinley's land holding at No. 19 Grange Road, Newtownstewart would be required for the Scheme. From the information provided the impact of the Scheme on the farm holding would be slightly adverse. However this and arguments in relation to loss of income and viability of retained lands, the loss in the value of the holding and increases in insurance premiums due to the proximity of livestock to the dual carriageway are compensation issues to pursue with LPS.
- 2.3.149 Land is being vested in order to provide a deep cutting, verge and maintenance strip at this location. However, irrespective of what happened in other road schemes, we are satisfied that the land take presently identified for this Scheme is necessary in order for its various elements to be accommodated. The Department however assured that once the final design of the Scheme is completed and the specifics of verges, slope gradients and width of maintenance strips are apparent only the appropriate amount of land

would be vested. If some land is not required at all or only temporarily this would be reflected in the final Vesting Order.

- 2.3.150 In terms of the details of the boundary fencing that would be erected, this is an issue which the Department should discuss with the landowner prior to any work commencing at this location. The maintenance of such fencing would reasonably fall to the landowner who would have had to secure their land regardless of the Scheme. Should any additional maintenance costs be incurred however, again this may be matter which the owners could discuss with LPS. The provision of water drinkers is also an issue to discuss with the Department when resolving the details of the accommodation works. In terms of drainage issues, it is not envisaged that road drainage from the Scheme would discharge into adjacent field drains. Assurance has also been given by the Department that, should there be any disruption to the existing drainage network, it would be connected to the appropriate infrastructure in order to discharge to the adjacent receiving watercourses.
- 2.3.151 No site specific recommendation is made in respect of this representation.

Representation by Mr and Mrs David McKinley Inquiry Reference: A5WTC-2016-0905

- 2.3.152 Mr and Mrs David McKinley's farm at No.20 Grange Road, Newtownstewart is run in conjunction with Mr and Mrs Nicholas McKinley's adjacent holding. As the representation raised common issues, please see the response to these above under A5WTC-2016-0904.
- 2.3.153 An additional concern raised related to bio-security, due to the prospect of animals having to share access routes. However, provided that the requirements of the DAERA's Veterinary Service are met, we are not persuaded that this poses an issue for the farm. The AIA also did not identify this as an issue.
- 2.3.154 No site specific recommendation is made in respect of this representation.

Representation by Stanley and Hazel Bell Inquiry Reference: A5WTC-2016-0967

2.3.155 Mr and Mrs Bell own a dwelling at No. 2 Golf Course Road, Newtownstewart. In order to accommodate Junction 10 of the Scheme it is proposed to vest their property. They questioned the necessity of positioning the junction at this precise location and alluded to the fact that other roads, such as Drumlegagh Road North, could have been used to provide connectivity. However, we accept that the positioning of Harry Avery's Castle influenced the potential route of the Scheme. Also, the connectivity required for Baronscourt Road means that the proposed location for the junction is ideal.

To position the junction where suggested by Mr Bell would not deliver the same level of connectivity for users. It would also lengthen the carriageway and mean linking the junction with an unclassified road. In terms of its design we accept the evidence that the potential traffic flows, effectiveness and geometry dictated the choice of junction.

- 2.3.156 It is accepted that the process has been traumatic for the family, but should the property be vested then it is matter for LPS to establish what level of compensation is due. Given that the family are concerned about the uncertainty surrounding the timescale of the Scheme and as their property is on the market for sale, the family could consider pursuing compensation utilising the blight process. There is however no provision for Mr and Mrs Bell to be provided with assistance to obtain planning permission for a similar rural property.
- 2.3.157 No site specific recommendation is made in respect of this representation.

2.4 Section 3 – South of Omagh to Aughnacloy

Introduction

- 2.4.1 This element of the Report considers the stretch of the Proposed Scheme from Junction 13 to the Moy Bridge border crossing south of Aughnacloy.
- 2.4.2 Whilst we have recommended in Part 1, Chapter 1.5 of this Report that Phase 3 (Junction 15 to the border) be removed from the Proposed Scheme the Minister may take an alternative view. Accordingly, we continue to consider the site specific representations made in relation to Phase 3 issues and, where necessary, make recommendations on them.
- 2.4.3 The general matters relating to the need for and design of Junction 16 and alleged associated inconvenience for traffic on the Tullyvar and Loughans Roads have already been considered in Part 1, Chapter 1.6 of this Report. As such we do not report further on the considerable number of standardised letters which raised these issues further, other than to advise that while they briefly referred to the Scheme bounding the Dicksons' farmyard no detailed representation in respect of this farm was placed before us to address.

Representation by Sean and Helene O'Neill Inquiry Reference A5WTC-2016-0003

- 2.4.4 The O'Neill's property at No. 54 Errigal Road comprises their residence and the Lavender Health Spa. The establishment, in a quiet attractive location would lie some 250m from the proposed dual carriageway and 100m from the proposed overbridge at Glenhoy Road. The visual and acoustic impact of the proposal would be significant, both in terms of the Spa and the dwelling. The Department should therefore implement enhanced screen planting on the Glenhoy Road embankment. The Construction Environmental Management Plan (CEMP) will detail reasonable steps to minimise disruption and incorporate plans to limit the closure of Errigal Road.
- 2.4.5 Any negative impact on the commercial business and the residence that cannot be mitigated would be a compensation matter to raise with LPS. With the proposed use of low noise surfacing, predicted noise levels at the property would rise to 53.3dB at worst. Such levels would be below that whereby consideration of an acoustic barrier would be required. Nonetheless, the Scheme would give rise to increases in noise levels of at least 22.2dB at the property. In these circumstances we consider that while not statutorily required, both the residential and commercial buildings should be fitted with noise insulation. Notwithstanding this however, we do not

consider that the adverse impacts of the Proposed Scheme warrant its cessation or substantial amendment.

Recommendations:

That the Department implement enhanced screen planting on the Glenhoy Road embankment.

That a suitable noise insulation scheme be agreed for the residential and commercial buildings comprising no. 54 Errigal Road and that this be implemented prior to construction works commencing at this location.

Representation by John, Anna & Ian Wilson Inquiry Reference A5WTC-2016-0049

2.4.6 The Scheme would cut through the Wilsons' farm at Springhill Road thereby severing a number of fields. Access to some of the severed fields would be maintained through the provision of new access tracks, which together with other accommodation works (including the replacement of a slurry tank) have been agreed between the Department and the landowner. A dedicated cattle crossing to run along Springhill Road and under the proposed dual carriageway is not warranted given that Springhill Road is lightly trafficked. As such it is reasonable on safety grounds that cattle pass along that road verge and underneath the new road / bridge. The Department committed to return any land required on a temporary basis as soon as possible and in an appropriate state. The fine detail regarding the condition and timescale for hand back of such land is a matter for agreement between the Department and the landowner. While, in our view the Scheme would impact on the operation of the agricultural concern, any negative impact in this respect not mitigated by accommodation works, could be a compensatable matter to pursue with LPS.

Recommendation:

That a replacement slurry tank be provided prior to removal of the existing one.

Representation by Paul Hackett Inquiry Reference A5WTC-2016-0106

2.4.7 Proposed woodland planting to the embankment slopes would integrate with and augment existing mature riverside vegetation and thereby screen and filter views of the dual carriageway from the objector's property at No. 220 Newtownsaville Road. While not removing any visual impact, the proposed measures would, both initially and increasingly as the planting matures, render these impacts slight. A visual barrier on the embankment would not deliver a significant benefit over and above that provided by the proposed embankment planting.

2.4.8 The Department stated that it had tested projected noise levels at No. 220 Newtownsaville Road as it appeared to be a borderline case. With the provision of low noise road surfacing it was predicted that noise levels of between 56.1dB and 56.6dB would be experienced at the property. Such noise levels would be below the thresholds whereby an acoustic barrier (or indeed domestic noise insulation) would be required by legislation. The Department also stated that given the distance between the dwelling and the noise source, and considering the prevailing topographical conditions including landfall, an environmental barrier would produce a scarcely perceptible noise reduction of less than 3dB. We have no reason to conclude otherwise, and in this context an acoustic barrier is unwarranted. Nonetheless, as the Scheme would cause occupants to experience noise level increases of 24dB we consider mitigation in the form of noise insulation to be warranted.

Recommendation:

That a suitable domestic noise insulation scheme be agreed for No. 220 Newtownsaville Road and that this be implemented prior to construction works commencing at this location.

Representation by Patrick and Elizabeth O'Hagan Inquiry Reference A5WTC-2016-0109

- 2.4.9 Land not required on a permanent basis will be returned to the landowner by formal agreement prior to the final vesting order. A safety margin/maintenance strip and standard boundary treatment, informed by the Road Safety Audit process and designed to prevent any potential vehicular safety hazards, would run along the top of the steep embankment at the objectors' land at Tycanny Road.
- 2.4.10 The objectors' stated their intention to 'redevelop' an existing derelict farmhouse located some 200m northwest of the proposed dual carriageway. Even using low noise surfacing the predicted increase in traffic related noise at the property would remain highly noticeable at 57.5 dB when Phase 2 becomes open to traffic (an increase of 18.5 dB). These levels fall below the threshold for consideration of either an environmental barrier or domestic insulation. However, one option for redevelopment of this dwelling may be to replace it on a less noise sensitive part of the holding. Notwithstanding the predicted noise levels, and given the uncertainty as to whether the derelict farmhouse would be replaced or refurbished, we do not consider domestic insulation for it to be justified in this case. However, any future refurbishment

scheme for the building is likely to incorporate noise mitigation measures. It is for LPS to determine whether this is a compensatable matter.

Recommendation:

That a safety margin/maintenance strip and associated boundary treatment, designed in accordance with the Road Safety Audit process be provided along the top of the steep embankment at Tycanny Road.

Representation by Marie Therese McSorley & McSorley Enterprises Ltd. Inquiry Reference A5WTC-2016-0113

- 2.4.11 We agree with the Department and Rivers Agency that, in terms of biodiversity and maintenance, retention of an appropriately designed open watercourse with boundary treatment is generally a more favourable option than culverting. Specifically in this case we are not persuaded that an elongated culvert of some 100m as suggested by the objector would have any advantages, in terms of either safety or practicality, to outweigh the environmental benefits of an open watercourse.
- 2.4.12 There is no certainty as to whether extant residential development permissions on the objectors land at Newtownsaville Road would be implemented. The use of low noise surfacing would bring predicted noise levels at the property to 56 dB, below the threshold whereby the Department would normally consider an acoustic barrier. Nonetheless the Department did consider such a barrier given the borderline nature of the noise levels here and as such a barrier is proposed on the opposite side of the proposed dual carriageway. However, we agree with the Department's assessment that a barrier would not be warranted as it could reduce the effectiveness of the barrier on the opposite side through noise reflection, and as it would deliver a scarcely perceptible reduction of 3dB at the objector's property,
- 2.4.13 No site specific recommendation is made in respect of this representation.

Representation by Hugh Ward and Kathleen Ward Inquiry Reference A5WTC-2016-0115

- 2.4.14 The proposed Tattykeel overbridge is the proposed method of maintaining connectivity between the Tattykeel Road and the existing A5 Doogary Road. When the matters of visual impact and practicality are considered, it is a more favourable solution than either raising the alignment of the dual carriageway over the Tattykeel Road or linking the Tattykeel Road with the proposed Junction 13 (Omagh South).
- 2.4.15 While the dual carriageway and the attenuation pond would visually impact on the objectors' residence and hospitality business accessed off Doogary

Road, this impact would be mitigated by various measures. These include woodland and scrub planting on roadside embankments, continuous hedgerows along the road boundary, and earth mounding and associated additional planting along the boundary closest to the objector's property. It is proposed to maintain security and prevent trespass at the Wards' property by provision of fencing, both during and post construction. It is proposed to locate the attenuation pond at a low point along the road alignment as per standard practice. The pond would be designed in accordance with DMRB standards, be fenced off with no public access and maintained by TNI who would be responsible for keeping it litter and vermin free. Furthermore, mandatory measures for the control of construction dust are incorporated into the CEMP. The Department committed to replace or repair any damage to existing sewage disposal facilities.

Recommendation:

That alternative provision or replacement of lost septic tank and percolation area facilities be provided.

Representation by Pauline O'Hagan Inquiry Reference A5WTC-2016-0124

2.4.16 Connectivity between severed sections of the Rarone Road would be provided by the proposed Rarone Road overbridge and embankment. This would involve amendment of the existing access off Rarone Road to two fields within separate ownership. The proposed new access to the adjoining O'Hagans' field is not contentious. However, the new access to the field within the ownership of the McAleers would be provided via a track some 60m in length running along the frontage of the field owned by the O'Hagans. Alternative proposals, aimed at reducing the length of this track, and the amount of the O'Hagans' land required, were presented by the objector. We appreciate that safety considerations such as the permissible degree of the embankment's slope and the position of safety barriers along it are paramount. Furthermore, it is likely that any acceptable solution in safety terms would involve the use of some land within the O'Hagans' ownership. Nonetheless we recommend that the access serving the McAleers' land should be made to be as direct from the Rarone Road as safety constraints permit so as to minimise the land take from the O'Hagans. The Department agreed to reassess the situation.

Recommendation:

That the Department reassess the access from the Rarone Road overbridge to McAleers' field and implement a safe design solution incorporating the most direct route and involving minimum use of the O'Hagans' land.

Representation by David & Victor Brush Inquiry Reference A5WTC-2016-0129

2.4.17 It was contended that there would be no room for the Scheme between Lisgenny Orange Hall, the farm of David Brush, the home of Paul McClean and Lisgenny Rath. However, as noted in Part 1 of this report, the Rath would not be directly impacted on by the Scheme. Part 1 of this Report also considered the general line taken by the Proposed Scheme between Ballygawley and Augnacloy to be acceptable should Phase 3 proceed. Also, we have been given no convincing evidence to establish that the dual carriageway as proposed would not by-pass all of these features albeit within close proximity to them. The Department have acknowledged the comment regarding space constraints and stated that this will be considered during the detailed design stage. In this evidential context there appears to be no justification for the proposition that the proposal could not proceed because of these space constraints.

Commission Reference: 2015/D003-D006

2.4.18 No site specific recommendation is made in relation to this representation.

Representation by Seamus McCarron Inquiry Reference A5WTC-2016-0146

- 2.4.19 The proposed arrangements incorporate the removal of direct access to the Annaghilla Road (A4) from the Ballynany Road. While the proposed alternative route would be circuitous for the McCarron family the evidence does not establish that vehicular movement along it would substantially increase. Furthermore, given the proximity of the family dwelling to the new route and given its gradient, the Department offered to provide appropriate safety barriers or bunding. Provided such safety measures are enacted we consider the proposed new route to constitute the best available option. Any detrimental impact on the farm's operation that would not be mitigated could be a compensatable matter to be raised with LPS.
- 2.4.20 The impact of the proposal on the objector's property in terms of visual amenity and privacy would not be unacceptable given the screening and softening effect offered by surrounding drumlin topography, and existing and proposed planting. It is acknowledged that part of Ballynany Road would become a cul-de-sac should TNI not exercise their option to dispose of this stretch the road. Otherwise, maintenance of this stretch and enforcement in respect of illegal parking would remain the responsibility of TNI. Mitigation measures in accordance with relevant design standards including provision of piped drainage would be implemented to deal with water runoff from steep roads.

2.4.21 Predicted noise levels at 2 Ballynany Road would be 54.5dB when Phase 2 becomes operational and 57.7dB should Phase 3 become operational, an increase of 1.4dB and 4.6dB respectively. These levels would not exceed the threshold whereby an environmental barrier would be considered.

Recommendation:

That appropriate safety measures incorporating either a crash barrier or bund with associated landscaping be installed at the realigned road in proximity to the McCarron family home.

Representation by Reps. of Thomas James and Sean McKenna Inquiry Reference A5WTC-2016-0148

- 2.4.22 Runoff from the proposed road will not be discharged into field drains within the objectors' land. Existing field drainage systems interrupted as a result of the Ballynasaggart Road works, and activities on deposition areas, would be connected to appropriate infrastructure and discharged to receiving watercourses in accordance with the CEMP. The Scheme would have no negative impact on the objectors' retained lands in terms of drainage and the contractor would have a mandatory requirement to mitigate noise and dust impacts from construction as part of the CEMP.
- 2.4.23 The visual impact on occupants of No. 33 Ballynasaggart Road would be slight given the profile of the proposed structure and the nature of intervening topography, and existing and proposed vegetation. A visual barrier would not therefore be justified in this case. Predicted noise levels at the dwelling would be 48.4dB when Phase 2 becomes operational and 48.8dB should Phase 3 become operational, an increase of 10.6dB and 11.1dB respectively. These levels would not exceed the thresholds whereby an environmental barrier would be considered or domestic insulation required.
- 2.4.24 No site specific recommendation is made in respect of this representation.

Representation by Emmet McGrady Inquiry Reference A5WTC-2016-0149

2.4.25 The use of low noise surfacing would bring predicted noise levels at the objector's property at No. 20 Ballynasaggart Road to just under 50dB. This would not exceed the threshold whereby an acoustic barrier would be considered. Furthermore, given the predicted noise level increase of just over 12dB, we are not convinced that further noise mitigation measures in the form of domestic insulation at the recently constructed property would be justified. The proposed overbridge at this location would constitute a prominent feature. However, extensive planting incorporating the augmentation of existing woodland, and hedge and embankment planting

would act to screen and soften views of the works both initially and more effectively over time. An environmental barrier on visual grounds would not deliver a significant additional benefit.

2.4.26 The Department agreed to replace any sewage facilities damaged or lost as a result of the Scheme. The contractor would have a mandatory requirement to mitigate noise and dust impacts arising from construction and use of deposition areas as part of the CEMP. Both the Roughan River crossing underneath the proposed dual carriageway (2.4m x 5.7m) and the watercourse crossing Ballynasaggart Road (2.1m x 2.1m) are designed in accordance with DMRB standards, and the evidence does not establish them as unfit for purpose.

Recommendation:

That any lost septic tank and percolation area be replaced.

Representation by Kieran and Amanda O'Neill Inquiry Reference A5WTC-2016-0150

- 2.4.27 Notwithstanding the screening and softening impact of intervening existing landform and vegetation, the visual impact of the proposed dual carriageway on the objector's property would be significant. This impact would however, be satisfactorily mitigated by proposed planting.
- 2.4.28 Noise levels experienced by occupants of No. 69 Glenhoy Road would be 62dB when Phase 2 is open (an increase of 24.6 dBdB) and 62.5dB should Phase 3 open (an increase of 25.2 dB). These levels would be reduced by between 3 dB and 3.5 dB, with the use of low noise surfacing. These noise levels would fall below that whereby domestic insulation would be required, but they would exceed the threshold for which an environmental barrier would be considered. However, we accept the Department's evidence that an acoustic barrier would not be justified in this location given its likely effectiveness, visual impact, cost and engineering practicality. Furthermore, planting would be a more effective form of screening than an environmental barrier. Nonetheless, the increase in noise levels emphasises the degree to which this is a quiet rural location and highlights the need for noise mitigation in the form of domestic insulation.
- 2.4.29 The proposed Glenhoy Road overbridge would run adjacent to an agricultural building and nursery paddock. The exact location of the overbridge would be determined at detailed design stage. Nonetheless, we are satisfied that the proximity of the Scheme would render the shed and the associated circulation space unusable. Furthermore, given the consequent restricted nature of the adjacent circulation space, this issue would not be resolved by retrofitting of the buildings apertures. Given the restricted extent of the

holding and the limited opportunity to relocate the shed this would have a considerable negative impact on the viability of the farm unit and the O'Neills' livelihood. We are not persuaded that a slight realignment of the overbridge is unfeasible and we recommend that the Department undertake such a realignment to allow the shed to remain fully usable. The contractor would have a mandatory requirement to mitigate dust and noise impacts from construction as part of the CEMP.

Recommendations:

That a suitable domestic noise insulation scheme be agreed with the O'Neills and that this be implemented prior to construction works commencing at this location.

That the Glenhoy Road overbridge is realigned to leave adequate circulation space around the existing agricultural building to enable retention of its full use.

Representation by Geraldine McKenna Inquiry Reference A5WTC-2016-0151

- 2.4.30 Any land scheduled for vesting that proves surplus, will be returned to the landowner. New tracks are proposed to access severed parcels. However, any negative impact of the Scheme in respect of access to severed land could, as a compensatable matter be referred to LPS. A maintenance strip and associated boundary treatment, designed in accordance with the road safety audit process, would run along the top of cut slopes. This is standard practice to prevent potential hazards arising when using farm machinery close to slopes. Any damaged or removed septic tanks or percolation areas would be replaced as accommodation works and operations to divert or culvert watercourses are required to comply with DFMRB standards. There is no evidence to support the objector's statement that the Scheme would have a harmful impact on drainage on her land.
- 2.4.31 Nos. 5 and 7 Tullanafoyle Road would lie within 124m and 90m of the proposed dual carriageway respectively. Landscaping including the introduction of embankment planting between the dwellings and the carriageway embankment is proposed. This would be the most appropriate form of visual mitigation as a visual barrier would close long vistas and appear as an incongruous element.
- 2.4.32 The anticipated noise levels at No. 5 Tullynafoyle Road would be 62dB when Phase 2 opens to traffic and 62.6dB should Phase 3 open increases of 29.9dB-30.4 dB respectively. At No. 7 Tullanafoyle Road noise levels would be 58.5 dB at 7 (an increase of 38.5 dB) when Phase 2 opens and 59dB (an increase of 38.9 dB) should Phase 3 open. While the land slopes downward

from these properties towards the proposed carriageway, low noise surfacing would reduce these levels by between 3dB and 3.5dB. This would bring them below the level where an acoustic barrier would be considered. However, such increases in noise levels means that mitigation in the form of domestic insulation is warranted.

Recommendations:

That a suitable domestic noise insulation scheme be agreed for Nos. 5 and 7 Tullanafoyle Road and that this be implemented prior to construction works commencing at this location.

That any lost septic tank and percolation area for either dwelling is replaced as accommodation works.

Representation by Stephen Kee and Melanie Kee Inquiry Reference A5WTC-2016-0154

- 2.4.33 New tracks, accessing severed land parcels are proposed and any remaining negative impact in respect of farm viability is a compensation matter to be raised with LPS. Should the detailed design result in a reduced land take, surplus land will be returned to the landowner. The proposed Tattykeel overbridge would maintain connectivity between the Tattykeel Road and the existing A5 Doogary Road. This would constitute a better solution practically and visually than either raising the alignment of the dual carriageway over the Tattykeel Road or linking the Tattykeel Road with the proposed Junction 13 (Omagh South). Whilst an attenuation pond would be sited on the Kees' land, it is in the optimum location in terms of practicality and limiting land take given the proposed alignment of the dual carriageway. Department's preferred boundary treatment around the pond would be a post and wire fence, they agreed to provide a palisade fence if consensus could be reached with other landowners. Furthermore, land vested or made accessible under the Permission to Enter (PTE) process that is not required permanently will be returned to the owners.
- 2.4.34 The objector's residence and equipment business is located about 500m from the proposed Tattykeel Road overbridge. Given the proposed dense scrub and tree planting on the overbridge embankments, other intervening vegetation and the distance between it and the proposed works, there would be no unacceptable impact on the property in terms of privacy or visual impact.

Recommendation:

That the Department agree with adjoining landowners, an appropriate boundary treatment to the attenuation pond.

Representation by Stephen Johnston Inquiry Reference A5WTC-2016-0155 & 0156

- 2.4.35 The objector, who lives at No. 26 Loughans Road Aughnacloy raised objection regarding Junction 16 and was concerned about compensation and potential blight in respect of two approved sites for dwellings on Carnteel Road. However, matters relating to the necessity of Junction 16 are considered in Part 1 of this report. Also, matters of blight and compensation for loss of other agricultural land should appropriately be addressed with LPS.
- 2.4.36 No site specific recommendation is made in respect of this objection.

Representation by Brian and Pauline Starrs Inquiry Reference A5WTC-2016-0163

- 2.4.37 We are satisfied that all land scheduled for vesting is reasonably required for delivery of the Scheme. However, if it transpires that any land is not required permanently it would be returned to the owners. Access to Tattykeel Lane on either side of the proposed dual carriageway, including the bog and the McKane household, would be maintained via proposed access tracks and an underpass measuring 3.4m high x 3.0m wide. The track providing access to the bog however should be gated to prevent public access. The objector's land would be secured both during and after construction by appropriate permanent security fencing as part of the CEMP. Runoff from the proposed dual carriageway would not be discharged into adjacent land, and existing field drainage interrupted as a result of works within deposition areas would be connected to appropriate infrastructure and discharged to receiving watercourses in accordance with the CEMP. Any diversion of watercourses and culverting are required to comply with DMRB standards and the submitted evidence does not suggest that there would be a harmful impact on drainage of the land.
- 2.4.38 The Starrs' recently constructed a dwelling that would lie some 68m from the proposed carriageway. It is anticipated that noise levels at this dwelling would be 58.3dB when Phase 2 opens (an increase of less than 8.1dB) and 58.7dB should Phase 3 open (an increase of 7.9dB over existing levels). The provision of low noise surfacing would reduce these levels to below that whereby an acoustic barrier or domestic insulation would be considered.
- 2.4.39 Proposed embankment and hedgerow planting, including larger and denser nursery stock at this location. However, even when it has become established, this planting would not fully mitigate the visual impact of the Scheme. It is our view however, that this planting is the best and most effective available option. A visual barrier would be of little mitigation value

as it would quickly become obscured by intervening hedgerow and embankment planting.

Recommendation:

That access to the bog is gated to prevent public access.

Representation by Barney Starrs also Daniel and Claire McKane Inquiry Reference A5WTC-2016-0164

- 2.4.40 The Starrs and Mc Kanes occupy neighbouring properties at Nos. 139 and 143 Doogary Road. These properties, both accessed off Tattykeel Lane, would lie between the existing A5 Doogary Road and the proposed Scheme. The dual carriageway would pass within 32m - 34m of the dwellings on an embankment, with the carriageway being some 5.5m above existing ground level. The impact on the dwellings in terms of outlook and intrusion would be severe on opening and remain adverse after 15 years. However while the negative impact cannot be fully mitigated proposed mitigation measures will assist. These include an environmental and acoustic barrier of some 200m in length between chainages 63870 and 64070 approximately. proposed is planting, including the retention of existing trees and new planting belts incorporating larger planting stock and increased density shrub and tree planting. Thus while a significant detrimental visual impact on residential amenity would remain the mitigation measures would provide reasonable levels of screening and privacy.
- Occupiers of both dwellings would experience predicted noise levels of 68.5dB (an increase of 10.8dB) when Phase 2 is opened, and 69dB (an increase of 11.1dB) should Phase 3 open. A proposed acoustic barrier would reduce these noise levels by 3dB, and the use of low noise surfacing would deliver a further reduction of between 3dB and 3.5dB. We consider the Department to have proposed adequate noise mitigation measures.
- 2.4.42 Access to the bog within the objector's ownership would be provided via an underpass and access track. The access track should be gated to prevent public access. The objectors land would be secured both during and after construction by appropriate permanent security fencing as part of the CEMP. Tattykeel Lane would be closed off and part of the road between the turning head at the McKane's dwelling and the dual carriageway would become a cul-de-sac should TNI not exercise their option to dispose of this stretch of road. Otherwise, maintenance of the stretch of road and enforcement in respect of illegal parking, dumping and maintenance, would remain the responsibility of TNI.

Recommendation:

That access to the bog is gated to prevent public access.

Representation by Emmet O'Neill Inquiry Reference A5WTC-2016-0831

2.4.43 We are satisfied that all of Mr O'Neill's land scheduled for vesting is reasonably required for delivery of the Scheme. However, the Department stated that any such land would be returned to the owners where it transpires that it is not required permanently. Access to severed land is, in some cases, to be provided through accommodation works but the Department, in this case, committed to vesting severed land to which it would be impractical to provide access. Furthermore, existing drainage networks interrupted by the Scheme would be connected to appropriate infrastructure, discharging into receiving watercourses. The Department were unaware of the existence of a spring or well on the plot but agreed, as per their normal practice, to retain the spring or well if practical or to provide either a replacement well or an alternative mains water supply.

Recommendations:

That the severed land to the north west of the plot be vested.

That the Department retain or provide an appropriate replacement for any natural spring or well.

Representation by Gladys Emily Bingham Inquiry Reference: A5WTC-2016-00832

- 2.4.44 The proposed carriageway would be located about 228m away from Ms Bingham's dwelling at No. 25 Feddan Road. While she wished the carriageway to be further away the Department, having taken account of environmental, safety, economic, integration and accessibility factors (including the need to provide a junction with the existing A4 whilst avoiding properties) have arrived at the most appropriate route at this location. In terms of the impact of the Scheme on the value of the property, this would be a compensation matter to pursue with LPS.
- 2.4.45 Based on the information currently available, we are satisfied that the appropriate amount of land that is required to complete all aspects of the Scheme has been identified. Should less land be required following the completion of the detailed design stage, the Department committed to reducing the land take accordingly and this would be reflected in the final Vesting Order. In terms of part of Ms Bingham's land being utilised for a deposition area the Department assured that the Permit to Enter process would be utilised whereby the land would be handed back once construction was completed. There would be conditions specified within the PET

providing details in relation to, for example, drainage. Whether Ms Bingham may be entitled to compensation in relation to this matter would be an issue for LPS. No substantive evidence was presented to support the claim that the proposed drainage works would be likely to lead to a future flooding problem. The Department advised that the drainage of the land and the provision of the septic tank would be addressed as part of the accommodation works.

- 2.4.46 The deposition area would cover approximately 10.9ha and contain approximately 488,000m³ of material. It is therefore important that the Department liaise with Ms Bingham to agree appropriate screening measures, whether it be a mound or a temporary visual screen along the frontage of her dwelling. In relation to noise levels, taking into account the use of low-noise surfacing, it is estimated that there would be an increase in the traffic related noise level of approximately 8.5dB. This noise level would however be below the level when an environmental barrier or noise insulation would have to be considered. In relation to construction noise, it is anticipated that access for the carriageway works would be online and that there would not be significant vehicle movements along Feddan Road. Whilst a programme of activities has yet to be agreed, assurance was given that there would be limits, mitigation measures and protocols in relation to activities involving relatively high noise levels.
- 2.4.47 In terms of air quality, whilst the property is outside the 200m assessment area, the evidence indicates that increases in the levels of nitrogen dioxide and particulate matter along the Feddan Road would be well below the values set by EU and UK legislation in order to ensure the protection of human health. Emissions linked to construction traffic would also only be temporary. The Department undertook that appropriate mitigation measures would be undertaken to ensure that dust nuisance would be kept to a minimum.

Recommendation:

That the screening mechanism/s along the frontage of No. 25 Feddan Road should be agreed with Ms Bingham prior to the commencement of any construction works at this location.

Representation by Lawrence, Joseph, Shiona & Garry Heslip Inquiry Reference A5WTC-2016-0833 & 848 to 0850

2.4.48 The details of accommodation works and compensation matters for Phase 3 cannot be addressed until the Department publish the related notice of intention to make a Vesting Order and a notice of intention to make a Direction Order. The implications of this and the issue of blight are considered in Part 1, Chapter 15 of this Report. The Department however

stated that while the final design of Phase 3 may involve some adjustment, any previously agreed accommodation works including overbridges, an underbridge and cattle creeps would be honoured. The Department confirmed that vehicular access could be provided to the severed land to the south of the dual carriageway by either:-

- Increasing the dimensions of an underbridge to provide vehicular access off Tullywinny Road - which would involve vesting additional land from neighbours; or
- Compensating the objector for using the more circuitous access off the narrow Lisdoart Road.
- 2.4.49 The Department gave a commitment that, as part of the Transport Management Plan, the contractor would be required not to bring material along the Tullywinney Road from the east. The Ballynany Road would be used for this purpose in the first place and an alternative route such as Drumcullion Lane used when Ballynany Road is closed. Furthermore, it is envisaged that Tullywinney Road would only be closed for a short time while the bridge is being constructed. This would take place mainly at night and in liaison with local people. Such measures should ensure that disruption to vehicle movement generated by the Heslip's activities or those of their suppliers are minimised. As part of the CEMP, mains water will always be made available and swale drainage will not be compromised.
- 2.4.50 No. 40 Tullywinney Road is located some 50m from the Proposed Scheme. and the matter of noise impact on the property was only raised at the inquiry. The Department stated that noise levels experienced at the property would be in the region of 60.3dB, an increase of 18.3dB. They also advised that a 2m high barrier on the Tullywinney Road overbridge would provide a 3dB reduction, and that low noise surfacing would also provide a noise reduction of between 3dB and 3.5dB. The resulting noise level would be below the level where an environmental barrier or noise insulation would have to be considered. However, at the inquiry the Department conceded that in this particular case they were uncertain about the effectiveness of the proposed mitigation measures. Given this and the proximity of the property to the Scheme the Department committed to measure the noise impact post construction and to provide enhanced noise mitigation should noise levels exceed the thresholds whereby further noise mitigation measures such as domestic insulation would be required.

Recommendations:

That the Department measure the noise impact of the Scheme on No. 40 Tullywinney Road post construction and provide any required additional noise mitigation measures should the noise levels increase by 15dB or more above existing levels.

That the Transport Management Plan specify that the contractor shall not bring material from the east along the Tullywinney Road.

Representation by Adrian Kyle also Arlene & Euan Millar c/o Adrian Kyle Inquiry Reference A5WTC-2016-0834 and 0858

- 2.4.51 The Department confirmed that there would be a consultation process and separate inquiries should there be objections to the new Draft Direction Order and Draft Vesting Orders for Phase 3. Issues of land lost through vesting are compensation matters to be pursued with LPS.
- 2.4.52 Planning permission has been granted for a dwelling on the objectors' land. While extant, this permission is unimplemented and notwithstanding the final vesting requirement, could not, in all likelihood, be implemented should Phase 3 proceed. The Department confirmed that it would take an extant permission into consideration when determining the final road line, but that while they tried to avoid loss of buildings an unimplemented permission would carry less weight in this respect. Also, given the particular circumstances that apply in this case, the objector has the option of applying for planning permission to replace the extant permission on another part of his holding - though the decision on this would rest with the local Council. Notwithstanding this, the matters of compensation and blight are dealt with in Part 1, Chapter 15 of this report.
- 2.4.53 Accommodation works to provide access to severed land include shared arrangements with a neighbouring landowner. Such an arrangement is an appropriate solution in these particular circumstances. Runoff from the proposed dual carriageway will not be discharged into adjacent field drains. Existing field drainage systems, interrupted as a result of the Scheme would be connected to appropriate infrastructure and discharged to receiving watercourses in accordance with the CEMP. The Scheme would have no negative impact on the objectors' land in terms of drainage.
- 2.4.54 No site specific recommendations are made in respect of this representation.

Representation by Christine Kyle **Inquiry Reference A5WTC-2016-0856**

2.4.55 The concerns raised have been considered above under A5WTC-2016-0834.

Representation by Lorna Kyle Inquiry Reference A5WTC-2016-0857

2.4.56 The concerns raised have been considered above under A5WTC-2016-0834.

Representation by Wildridge and Joy Coote Inquiry Reference A5WTC-2016-0835

- 2.4.57 Matters relating to the need for Junction 16 and the alleged associated inconvenience for traffic on the Tullyvar and Loughans roads are dealt with in Part 1 of this Report. While this representation referred to Junction 16 bounding Dicksons' farmyard no detailed representation in respect of this farmyard was placed before us. It is accepted that the loss of land, due to the road alignment and junction layout would cause severance of the farm holding and have an adverse impact upon it. The Scheme would also extend journey times to the severed lands. However, overall there is insufficient justification to amend the road alignment or junction design at this location. Any negative impact on farm viability would be a compensation matter to raise with LPS.
- 2.4.58 The detail of accommodation works and compensation matters related to Phase 3 works cannot be addressed until the Department publish a notice of intention to make a Vesting Order and a notice of intention to make a Direction Order. The implications of this and the issue of blight are considered in Part 1, Chapter 15 of this report. We are satisfied that the drainage works as proposed are in accordance with the relevant DMRB standards. No substantive evidence was submitted to demonstrate that they would lead to a flooding problem.
- 2.4.59 No site specific recommendations are made in relation to this representation.

Representation by David Ferguson Inquiry Reference A5WTC-2016-0836

2.4.60 The Scheme involves the closure of Cormore Road, which would cause the objector to travel an additional 3.5 mile round trip to reach severed parts of his farm. Also, delivery vehicles including articulated lorries would have to access the farm complex via a longer route along the Tullanafoyle Road. Notwithstanding proposed improvements at 'The Rocks' and at its junction with Rockmore Road, the Tullanafoyle Road is narrow and undulating with the associated limitations on forward sight distance and passing and manoeuvring opportunities. While the Tullanafoyle Road is similar in terms of design and dimension to other roads in the area, the Department also conceded that there were more passing opportunities on the Cormore Road. The provision of an overbridge on Cormore Road was requested to address

these matters. However, given the added necessity of negotiating a water feature, the provision of such a structure at this location would cost approximately £2 million. Such expenditure would not be justified given that the Tullanafoyle Road is used by only 130 vehicles per day and given that the problem could be partially addressed by the provision of passing bays along Tullanafoyle Road.

- 2.4.61 The location of the proposed pond between chainage 75,800 and 75,900 is the optimum one given that it will be grouped with other engineering features including a compensatory store area, culverts and a watercourse diversion.
- 2.4.62 No site specific recommendations are made in respect of this representation.

Representation by John James McGirr Inquiry Reference A5WTC-2016-0837

- 2.4.63 Land lost or devalued as a result of vesting could be subject to compensation, and the Department stated that it is their standing principle that land required under PTE arrangements, or on a temporary basis, is returned to the landowner. Concentrations of traffic related pollutants at Mr McGirr's properties are estimated to be substantially below legislative limits relevant to the protection of human health.
- 2.4.64 The proposal incorporates access via the realigned Rarogan Road, a shared access structure with a clearance of 4.25m under the proposed dual carriageway from Newtownsaville Road and new access tracks. These arrangements, although shared, provide adequate access both to severed land and to the objector's dwelling which is currently being refurbished. With low noise surfacing, occupiers of No. 3 Rarogan would experience noise levels of 57.3dB, an increase of 6.6dB. Such an impact would not warrant additional noise mitigation measures and, due to ground level conditions an acoustic barrier would deliver an ineffective reduction of less than 1dB. There was no evidence presented to demonstrate that proposed drainage works would lead to a future flooding problem.
- 2.4.65 No site specific recommendations are made in respect of this representation.

Representation by Robert Noel Bingham Inquiry Reference A5WTC-2016-0838

2.4.66 Mr Bingham resides at No.11 Ballynasaggart Road and has a dairy farm at this location. We accept the conclusion of the AIA that the Scheme would have a substantial adverse impact on this holding. The impact that this would have on the viability of the business, value of the holding and the use of some of his land as a temporary storage area are however compensation

matters to be pursued with LPS. In relation to the provision of access tracks, including at the Crew Road overbridge, and any alternative business structure/s, the Department undertook to liaise with Mr Bingham once the detailed design stage has been completed.

- 2.4.67 The Department provided a letter at the inquiry assuring that should an existing well be affected a new one would be provided and that there would be no break in the supply. In relation to concerns over drainage works, runoff from the Scheme would be collected in attenuation ponds which would help to slow down the movement of water. On retained lands, the existing drainage networks would be intercepted and connected to Pre Earthworks Drains which would discharge into the adjacent receiving watercourse. A freeboard allowance would also be made to culvert sizes in order to ensure safety. Therefore a suitable drainage system is being proposed and there would be no greater risk of flooding as a result of the Proposed Scheme.
- 2.4.68 While Mr Bingham considered that the Scheme could have been positioned further from his property we are satisfied that the Department, having taken account of environmental, safety, economic, integration and accessibility factors including avoiding properties, have arrived at the most appropriate alignment at this location. In terms of noise, once an adjustment is made for the use of low-noise surfacing, there would be an increase of approximately 6.7dB at the property. The resulting noise level would be considerably below the level when an environmental barrier or noise insulation would have to be considered. In terms of other environmental concerns, given that Mr Bingham's property is located more than 200m away from the carriageway, there would be a negligible impact on his air quality. The Department also gave an assurance that appropriate mitigation measures would be undertaken to ensure that dust nuisance would be kept to a minimum.
- 2.4.69 No site specific recommendation is made in relation to this representation.

Representation by Shirley Swenarton Inquiry Reference A5WTC-2016-0839

- 2.4.70 Concentrations of traffic related pollutants at the objector's dwelling on Tullanafoyle Road are estimated to be substantially below legislative limits relevant to the protection of human health. No persuasive evidence was advanced to establish that the proposed drainage works would lead to a future flooding problem.
- 2.4.71 The Proposed Scheme would require the removal of the former fever hospital, a derelict part single storey, part two storey vernacular stone building fronting the road. The building however, is not listed and does not appear on the Northern Ireland Sites and Monuments Record. Although of

local note, it does not represent a cultural asset of such merit that its retention would justify altering the Scheme.

- 2.4.72 With the use of low noise surfacing, occupiers of the dwelling would experience noise levels of 60.9dB (an increase of over 35 dB). Such levels would normally warrant mitigation in the form of an acoustic barrier and domestic insulation. However, we agree with the Department that because of topography such a barrier would be of little benefit. In these circumstances of an increase of over 35 dB, it is appropriate that mitigation be provided in the form of domestic insulation.
- 2.4.73 The proposed attenuation pond is located in the most practical position given the relationship between the proposed road alignment and the adjacent watercourse. We see no justification for moving it to the other side of the proposed dual carriageway as this would necessitate diverting the existing watercourse.

Recommendation:

That a suitable domestic noise insulation scheme be agreed with Ms Swenarton and that this be implemented prior to construction works commencing at this location.

Representation by Michael and Celine McGarvey Inquiry Reference A5WTC-2016-0840

- 2.4.74 At the inquiry it was requested that Mr and Mrs McGarvey's property at Annaghilla Road, Ballygawley be purchased by the Department. The Department gave an undertaking to assess the business case for such a proposition and agreed to speak to their agent in relation to the matter.
- 2.4.75 Based on the current information we are satisfied that the appropriate amount of land that is required to complete all aspects of the Scheme has been identified. Should less land be required following the completion of the detailed design stage, the Department undertook to reduce the land take accordingly and reflect this in any final vesting order. While the McGarveys' judged that the Scheme could have been located further away from their dwelling, we are satisfied that the Department, having taken account of environmental, safety, economic, integration and accessibility factors including the need to avoid properties, have arrived at the most appropriate route at this location. In terms of the impact of the Scheme on the value of the McGarveys' property, this would be a compensation matter to pursue with LPS.
- 2.4.76 In terms of access arrangements for the property, whilst we appreciate that the McGarveys' presently enjoy direct access on to the Annaghilla Road, we

are satisfied that the use of the proposed Feddan Road overbridge is satisfactory and safer. The specific details about access tracks and field openings could be agreed between the Department and the relevant landowner/s as part of the accommodation works.

- 2.4.77 It is estimated that when Phase 2 opens that there would be an increase in noise level at the property of approximately 3dB taking the noise level to 73.8dB. Given that low noise surfacing would reduce this level by 3.5dB, there would actually be a reduction in the existing noise level experienced. Should Phase 3 proceed, the noise levels at the property would fall to 59.7dB. So, while the noise level at the property would exceed 68dB, given the reduction in noise levels a package of noise insulation for the property would not be warranted. In terms of construction noise the Department are confident that this would not be an issue, and assurance was given that it would be reassessed by the appointed contractor prior to the commencement of work.
- 2.4.78 On the opening of Phase 2, it is estimated that the maximum predicted air pollution levels for nitrogen dioxide and particulate matter would increase by 6.4 and 0.4 respectively. These levels would however be well below the national limit value set for the protection of human health and if Phase 3 proceeds then there would be less traffic related pollution due to the displacement of some of the traffic away from the dwelling. In terms of dust, the Department has given an assurance that appropriate mitigation measures would be undertaken to ensure that such nuisance would be kept to a minimum.
- 2.4.79 No site specific recommendation is made in relation to this representation.

Representation by Colin Robinson Inquiry Reference A5WTC-2016-0841

2.4.80 With low noise surfacing predicted noise levels at No. 77 Glenhoy Road would be 57.9dB. This is below the threshold whereby the Department would be required to consider an acoustic barrier. In any event there is no reason to dispute the Department's contention that a barrier at this location would reduce noise levels by a barely perceptible 3dB. While mounding was suggested by the objector this would also deliver imperceptible reductions in noise levels of between 1dB and 2dB. It would also appear as an incongruous element in the landscape. Nonetheless, given the tranquil nature of the surrounding area, and the fact that occupants would experience increases in noise levels of more than 19dB, domestic insulation should be provided.

- 2.4.81 The Department advised that deposition areas would be returned to the landowner in a condition whereby they would be available for grazing within one year. The loss of mature trees to the front of the dwelling would be limited to those necessary for the provision of accommodation access tracks. The final location of these tracks and the consequences in terms of tree loss would be the subject of negotiation between the Department and the landowner. Any tree loss would be offset to some degree by substantial embankment planting.
- 2.4.82 The vertical alignment of the Scheme at this location would require water runoff from the dual carriageway to transfer from a low point on the road to the adjacent watercourse. Furthermore, the land where the pond is proposed is relatively flat and any deviation from this location would necessitate more earthworks. We see no justification for relocating the pond. We were given no evidence to establish that the proposed works would have any detrimental impact on drainage or lead to flooding. Neither were we presented with evidence to substantiate the objector's claim that the proposal would devalue the property. In any case such a matter, together with that of the impact on his farming activities through loss of land and interference, would be a compensation matter to pursue with LPS. There is a mandatory requirement that the contractor minimise dust and smell in accordance with the CEMP.
- 2.4.83 Access to all severed land would be made available by accommodation works including an underpass and access tracks. While access to severed parcels via these methods would be more convoluted this is the best solution and any detrimental impact on the efficient operation of the farm could be raised with LPS as a matter for compensation.

Recommendations:

That a suitable domestic noise insulation scheme be agreed for No 77 Glenhoy Road and that this be implemented prior to construction works commencing at this location.

That the Department and the landowner reach an agreement regarding the precise location of accommodation tracks and the impact thereof on the retention of existing trees.

Representation by Alan Moore Inquiry Reference A5WTC-2016-0842

2.4.84 Mr Moore dairy farm is in the vicinity of his dwelling at No.1 Ballynany Road. While he believed that the Scheme could have been located further away from his dwelling we are satisfied that the Department, having taken account of environmental, safety, economic, integration and accessibility factors (including the need to provide an at-grade junction with the A4 and to

balance the impacts between the properties and existing side roads) has arrived at the most appropriate route at this location.

- 2.4.85 We have no reason to judge that the Department's noise assessment methodology is flawed. When Phase 2 is opened Mr Moore's dwelling would experience a 0.8dB reduction in noise level. Should Phase 3 become operational there would be a further reduction (1.1dB). It is appreciated that there would be a considerable amount of construction and earthworks proposed nearby in order to widen the existing A4 carriageway, construct the nearby roundabout and bridge and realign local roads. However, the Department undertook that where construction activities involve relatively high noise levels, that mitigation and protocols, including in relation to the timing and informing of residents, would be agreed with the relevant local authority.
- 2.4.86 While traffic related pollutants (nitrogen dioxide and particulate matter) would increase slightly as a result of the Scheme they would be considerably below the national limit value set for the protection of human health. In terms of dust, there would be a mandatory obligation on the appointed contractor to carry out the environmental commitments for the Scheme which include dust controlling measures. We are therefore satisfied that the residential amenity of Mr Moore's property would not be adversely affected. In terms of the impact of the Scheme on the value of Mr Moore's property, this would be a compensation matter which he may wish to pursue with LPS.
- 2.4.87 Based on current information, we are satisfied that the appropriate amount of Mr Moore's land that is required to complete all aspects of the Scheme has been identified. Should less land be required following the completion of the detailed design stage, the Department undertook to reduce their land take accordingly and this will be reflected in the final vesting order.
- 2.4.88 The land take and severance caused by the Scheme would have a significant adverse impact on the farm business. Whilst Mr Moore alluded to the fact that there have been previous discussions with the Department in relation to the possibility of them vesting his farm, the Department stated at the inquiry that they were not aware of such a proposition. However they committed to investigating it once a formal request was made. At present, there is also no commitment to vest the farm buildings as opposed to replacing them. Should the Department however decide to not vest Mr Moore's property, he may be entitled to compensation from LPS.
- 2.4.89 In terms of access arrangements, while the Department point out that the farm is already fragmented the proposed access changes would have a further impact on the farm's operations. This may be compensatable. Whilst Mr Moore presently has access from Ballynany Road he would lose this direct access route. However, access would be possible via the Feddan

Road overbridge which would have a special parapet design to ensure the safe crossing of cattle. If Phase 3 does not proceed, whilst Mr Moore would still not have access to the A4 he would still have access to the lower section of Ballynany Road. If Phase 3 does proceed it is proposed to provide Mr Moore with an underpass in order to access his severed southern parcel of land. The Department assured that only parties who have a right to use it would be able to avail of the underpass. Mr Moore could liaise with the relevant authorities in order to explore, for example, whether gating the underpass would be an acceptable option. During the construction period, the Department also gave a commitment that Mr Moore would continue to have access to the A4 and Ballynany Road until the Feddan Road overbridge is in place. In terms of the specifics of the accommodation work arrangements, the Department agreed to discuss these matters with Mr Moore once the detailed design stage is completed. We therefore consider that satisfactory and safer access arrangements have been put in place for Mr Moore.

2.4.90 No site specific recommendation is made in relation to this representation.

Representation by Noel Brush Inquiry Reference A5WTC-2016-0843

- 2.4.91 Sharing of a proposed accommodation track to access the objector's severed land would be an acceptable solution in this situation given the seasonal nature and limited degree to which such a track would be used. No evidence was presented to indicate that a well had been contaminated by previous ground investigations. Indeed, given that such works would have taken place below the level of the well with no apparent pathway between the works and the water feeding the well, such contamination would be unlikely. Nonetheless, should it be established that the well is detrimentally impacted by the Scheme, it should be either repaired or replaced with another well or a mains supply.
- 2.4.92 We were given no persuasive evidence to establish that the proposed works would have any detrimental impact on drainage or lead to flooding. Neither did the objector substantiate his claim that the proposal would devalue his property. In any case any negative impact on farm viability may be compensatable and would be a matter to raise with LPS. Also, there is a mandatory requirement that the contractor minimise dust and smell in accordance with the CEMP.

Recommendation:

That the well on the property be monitored both pre and post construction and any negative impacts appropriately mitigated.

Representation by Hugh and Pauline McAleer Inquiry Reference A5WTC-2016-0844

- 2.4.93 The realigned Rarone Road embankment would be 9m above ground level, and some 100m from the residence at No.3 Augher Point Road. The banking itself would instantly screen all but the higher sided vehicles from view and proposed planting would render screening complete within 2 years. In these circumstances, visual barriers would be neither effective nor warranted, and while the visual impact of the proposed overbridge would be adverse and not fully mitigatable the proposed measures are the best and most effective available.
- 2.4.94 Predicted noise levels would be 60.2dB when Phase 2 is open (an increase of 15.8dB) and 60.6dB should Phase 3 open (an increase of 16dB). The proposed use of low noise surfacing would reduce these levels by between 3dB and 3.5dB. An acoustic barrier would be ineffective at this location as it would deliver a barely perceptible reduction in noise level of only 1.3 dB. The level of noise increase, albeit in a presently tranquil location, would not warrant domestic insulation. It was stated that the matters of runoff from Rarone Road and interference with septic tanks and percolation areas are no longer at issue as they have been dealt with by previously agreed accommodation works.
- 2.4.95 No site specific recommendation is made in relation to this representation.

Representation by Seamus and Paula Woods Inquiry Reference A5WTC-2016-0845

- 2.4.96 No. 5 Routingburn Road would lie approximately 100m from the proposed road. Anticipated noise levels would be 58.9dB (an increase of 21.1dB) with Phase 2, and 59.5dB (an increase of 21.7dB) should Phase 3 open. The use of low noise surfacing would reduce these levels by between 3dB to 3.5 dB to below the threshold whereby an acoustic barrier would be considered. In any case, because an earth bund is incorporated into the Scheme design, an acoustic barrier on top of it would have diminishing returns and deliver an imperceptible 0.4dB reduction in noise levels. Such a barrier would therefore be ineffective and unwarranted. However, given the scale of the increase in noise levels, mitigation in the form of domestic insulation is warranted.
- 2.4.97 The Scheme would constitute a significant visual presence in this area where long, sustained views of it would be available. However, appropriate planting comprising mainly smaller, bushier stock would be a more appropriate screening solution in this area than a visual barrier. We consider the proposed deposition areas to be required for effective delivery of the

Scheme. Also, there is a mandatory requirement that the contractor minimise noise, dust and smell in accordance with the CEMP.

Recommendation:

That a suitable domestic noise insulation scheme be agreed for No. 5 Routingburn Road and that this be implemented prior to construction works commencing at this location.

Representation by Justin Hackett Inquiry Reference A5WTC-2016-0846

- 2.4.98 Anticipated noise levels at No. 94 Glenhoy Road would be in the region of 52.1dB (an increase of 13.2dB) on the opening of Phase 2, and 52.6dB (an increase of 13.8dB) should Phase 3 open. The use of low noise surfacing would reduce these predicted noise levels by between 3dB and 3.5dB. The resulting noise levels would therefore fall below the threshold whereby an acoustic barrier would be considered or where we would judge domestic insulation to be warranted.
- 2.4.99 The proposed dual carriageway crosses the floodplain adjacent to the objector's land. However, flood connectivity infrastructure has been incorporated into the design to maintain equilibrium across the floodplain. Any diversion of watercourses and culverting would comply with DMRB standards and existing drainage networks, interrupted as a result of works would be maintained by connection to Pre-Earthworks Drainage infrastructure discharging into receiving watercourses in accordance with the CEMP. In these circumstances we are persuaded that the Scheme would have no negative impact on the objector's lands in terms of drainage.
- 2.4.100 No site specific recommendations are made in relation to this representation.

Representation by Keith and Julie Mitchell Inquiry Reference A5WTC-2016-0851

2.4.101 Accommodation works for the land at No. 4 Routingburn Road, including details of boundary treatment and electricity and water ducting arrangements have been previously agreed. Access to severed fields would be via accommodation tracks and an underpass measuring 4.5m wide and a headroom of 4.25m. These are standard underpass dimensions and would accommodate most farm machinery. We consider them to be acceptable in this situation for a number of reasons. Flood water levels restrict the depth of the underpass and raising the road level would have negative implications in terms of the visual impact on neighbouring properties, the alignment of the road and the effectiveness and design of proposed acoustic barriers. We consider it appropriate that the landowner should be responsible for cleaning

the underpass. We accept that larger silage vehicles may not be able to negotiate such an underpass, and that the subject fields may be used in the future for grazing. However, should these eventualities transpire, any negative impact on the operation of the farm may be compensatable and could be raised with LPS.

- 2.4.102 The final design of the accommodation tracks would be a matter for discussion between the Department and the landowner depending on the predominant use of the land. However we are mindful that while the floor of the underpass would be concrete, standard cow lanes comprise layers of wood bark, geotextile membrane and stones. Stock handling facilities and safety barriers could be provided as an accommodation work. However again this is appropriately a matter for further discussion between the landowner and Department.
- 2.4.103 The Scheme would require the objector to travel greater distances to access severed fields. However these diversions are not exceptional and any incurred additional cost could be a compensatable matter. We consider the proposed deposition areas to be required for effective delivery of the Scheme. Also, there is a mandatory requirement that the contractor minimise noise, dust and smell in accordance with the CEMP.
- 2.4.104 No site specific recommendations are made in relation to this representation.

Representation by Philip Coote Inquiry Reference A5WTC-2016-0852

2.4.105 This representation was withdrawn.

Eric Samuel Coote Inquiry reference A5WTC-2016-0853

- 2.4.106 Mr Coote raised concern in relation to the amount of his land at Tullybryan Road, Ballygawley that was to be vested for the Scheme. At the inquiry the Department gave a commitment to keep the land take to a minimum. Where ever it was feasible, they also agreed to enter into a Permit to Enter arrangement so that as much land as possible could be returned to Mr Coote. Whilst we appreciate the uncertainty of the situation, such an arrangement cannot be entered into until the specifics are known at the completion of the final design stage. The Department also agreed to honour previous commitments made in relation to the accommodation works and are to liaise with Mr Coote to ensure that these are acceptable.
- 2.4.107 No site specific recommendations are made in relation to this representation.

Representation by Arlene & Euan Millar c/o Adrian Kyle Inquiry Reference A5WTC-2016-0854

2.4.108 The concerns raised have been considered above under A5WTC-2016-0834.

Representation by Raymond and Dorothy Busby Inquiry Reference: A5WTC-2016-0855

- 2.4.109 Mr and Mrs Busbys' poultry business is in the vicinity of their dwelling at No.14 Feddan Road, Ballygawley. Whilst they judged the proposed land take to be excessive, on the information currently available we are satisfied that the appropriate amount of land that is required to complete all aspects of the Scheme has been identified. Should less land be required following the completion of the detailed design stage, the Department has given a commitment to reduce the land take accordingly and this would be reflected in the final vesting order.
- 2.4.110 In terms of the argument that the loss of their land would significantly limit their ability to continue their free range chicken business, substantive evidence was not presented to demonstrate what land the business requires now and in the future. To the south of the substantial chicken house it is proposed that there would be a substantial deposition area. This land would be temporarily used and the Department gave an undertaking at the inquiry to keep this area approximately 3m from the chicken building. The filling of the deposition area would also be phased, and the appointed contractor gave an assurance that he would liaise with the landowner/s in order to establish what would be the optimum approach. Although Mr and Mrs Busby may not wish chickens to be in proximity of their chalet accommodation, the chickens could have temporary access to the field to the north of the chicken house until the temporary works to the south were completed. As was stated at the inquiry and as witnessed at the site visit, the chickens appear to stay close to the chicken house building. The use of this area should therefore not seriously impact on the chalet accommodation. Should there be a loss in earnings from the accommodation this may be compensatable issue to pursue with LPS.

Recommendations:

That the deposition area located to the south of Mr and Mrs Busby's chicken house be kept approximately 3m away from the structure.

That the Department and the appointed contractor liaise with Mr and Mrs Busby in relation to the phasing of the filling of the deposition area.

Representation by Paul & Elaine Barrett Inquiry Reference A5WTC-2016-0859, 0860 & 0880

2.4.111 We acknowledge that the Barretts' holding has expanded since the AIA was carried out with the construction of a new cattle shed, the acquisition of additional land and increased stock numbers. It was indicated that between March and November the movement of 80 cattle across Annaghilla Road was a twice daily occurrence and lasted between 10 and 15 minutes. While we accept that this situation exists at present, the Department estimated that the Annaghilla Road would experience a 7-8% increase in vehicle movements per day (some 1,100 movements), by 2021. This would cause the landowner increasingly unacceptable inconvenience. Furthermore, the associated blockage on the Annaghilla Road could back up to Junction 15. Notwithstanding that this junction would have dual lanes such an eventuality could constitute a traffic hazard which could not be avoided by traffic lights and/or signage. No evidence was presented that an accommodation structure under the Annaghilla Road would not be feasible in terms of drainage or other engineering concerns, and in these circumstances such a structure is warranted as a solution to the problem.

Commission Reference: 2015/D003-D006

- 2.4.112 While the exact distance would not be known until the final detailed design is available, the existing silo would be close to the proposed dual carriageway. We accept that the silo is positioned near a junction where vehicle speeds and the associated vibration would be comparatively low. We also accept the Department's statement that evidence indicates that damage in such circumstances is rare and that any potential damage could be avoided by an appropriate engineering solution. Nevertheless, given the uncertainty that exists, a structural survey of the silo should be carried out pre and post construction and any negative impacts mitigated.
- 2.4.113 The farm complex is bounded to the south by the Annaghilla Road while the Scheme would form a boundary to the north east. Upon opening of the Scheme, it is predicted that noise levels at the front of the farmhouse would decrease by just over 2dB as it faces Annaghilla Road. Predicted noise levels at the rear of the complex, facing the Scheme, would be 62dB when Phase 2 opens (an increase of 5.5dB) and 62.3dB should Phase 3 open (an increase in 5.8 dB). Notwithstanding the use of low noise surfacing, which would reduce these levels by between 3dB and 3.5dB, they would still be above the threshold whereby the Department would consider an acoustic barrier. However, we are persuaded in this case that an acoustic barrier would not to be warranted in this location as it would deliver an imperceptible reduction in noise levels of less than 2.8dB.
- 2.4.114 Modern, appropriately angled street lighting would not emit dazzling or unacceptable levels of backlight and objection on these grounds is not sustained. We note that the Department committed to give the idea of a

turning lane on Annaghilla Road to facilitate a right turn into No. 82 further consideration. However we do not consider such a facility to be justified given both the number of vehicle movements on Annaghilla Road generally and those generated by No. 82 specifically.

Recommendations:

That a structural survey of the silo be carried out pre and post construction and any negative impacts mitigated at the Department's expense.

That an underpass structure be provided under the Annaghilla Road.

Representation by Albert Barrett Inquiry Reference A5WTC-2016-0861.

2.4.115 The concerns raised have been considered above under A5WTC-2016-0859.

Representation by Darren Coote Inquiry Reference A5WTC-2016-0876

- 2.4.116 No. 7 Aghaloo Road is located to the east of the existing A5, and more than 1km from the nearest part of the Scheme. Consequently occupants would experience a reduction in traffic noise and impact from traffic related contaminates should Phase 3 be opened. The visual impact of the elements of the Scheme closest to the property where they are not in a cutting would be mitigated by planting. Taken in the round the Scheme would not detract significantly from the amenity value of the property.
- 2.4.117 No site specific recommendations are made in relation to this representation.

Representation by David & Mary Allen Inquiry Reference: A5WTC-2016-0879

- 2.4.118 We are satisfied that all land scheduled for vesting within the holding at No. 60 Tullanafoyle Road is reasonably required for the delivery of the Scheme. However, the Department stated that where it transpires that any such land is not required permanently, it will be returned to the owners. Control of litter pollution is a matter for the responsible authority to deal with.
- 2.4.119 Noise levels of 61.8dB (an increase of 22.8dB) were predicted at the dwelling when Phase 2 was opened, and 62.4 dB (an increase of 23.4dB) should Phase 3 become operational. The use of low noise surfacing would reduce the noise levels by 3dB to 3.5dB. Even in the best case scenario these noise levels would reach the threshold whereby an acoustic barrier would be considered. However the Department did not explain why such a barrier would not be merited here and we conclude that this matter should be

considered further. In any case, as the increase in noise levels would be in excess of 19dB, mitigation in the form of domestic insulation is also warranted.

Recommendations:

That a suitable domestic noise insulation scheme be agreed for No. 60 Tullanafoyle Road and that this be implemented prior to construction works commencing at this location.

That the Department consider the merits of an acoustic barrier at this location.

Representation by William T Armstrong Inquiry Reference A5WTC-2016-0880

2.4.120 The Scheme involves the diversion of an existing watercourse on land at No. 81 Killadroy Road, Beragh, which is liable to flooding. In line with standard safety practice, a barrier is proposed along the road edge bounding the watercourse. The landowner argued that the Department would not adequately maintain an open watercourse and was concerned that obstruction would cause flooding on 4ha of his land. He requested that a 40m stretch be culverted in order to avoid blockage due to factors including bank subsidence. While not appropriate in all cases, we accept the premise advanced by the Department and the Rivers Agency that an open watercourse is in principle the more environmentally favourable option. However the process of installation of a pipe and backfilling, while normally successful, is not without risk. Furthermore, while the watercourse would normally be low flow, a pipe could become overloaded in times of high flow and can become clogged with detritus in any flow conditions. The diverted watercourse would be steep sided but provided it is engineered to prevent bank slippage by use of an appropriate geotextile membrane, we do not consider that a pipe would be a better solution in terms of flood prevention or maintenance practicality.

Recommendation:

That the engineering specification of the diverted watercourse incorporates an appropriate geotextile membrane to prevent bank slippage.

Representation by Claire McGarvey and Barry O'Donnell Inquiry Reference A5WTC-2016-0903

2.4.121 In terms of the argument that the Scheme could have been located further away from No.33 Tullybryan Road, Ballygawley, we accept that to widen the

existing A4 in a southern direction could have resulted in the demolition of another residential property. We are satisfied that the Department, having taken account of environmental, safety, economic, integration and accessibility factors including the need to provide an at-grade junction with the A4 and to balance the impacts between the properties and existing side roads, has arrived at the most appropriate route at this location. Due to the overlap in the timescale for the preparation of the Scheme and the construction of the dwelling, the Department provided drawings at the inquiry which illustrated a reduced proposed vesting line in order to exclude the garage under construction. The drawings also illustrate that there would be the need for a retaining structure adjacent to their garage. The Department gave an undertaking to agree the details of the accommodation works with Ms McGarvey and Mr O'Donnell. Any arguments that the Scheme would detract from the value or residential amenity of the property should be pursued with LPS who deal with compensation matters.

- 2.4.122 Irrespective of whether Phase 3 is constructed, when account is taken for the use of low-noise surfacing, there would be a 2.2dB increase in the level of noise experienced at the property. Whilst evidence was presented that a noise barrier would be ineffective here, as the property would be experiencing a noise level above 68dB it would qualify for noise insulation. Given this qualification we do not need to make a recommendation on the matter. Whilst there would be increases in the levels of traffic related pollutants, they would still be well within the national limit value set for the protection of human health. If the Department were to proceed with Phase 3 of the Scheme then there would be slightly less traffic related pollution due to the displacement of some of the traffic away from the dwelling. In terms of dust, the Department has given an assurance that appropriate mitigation measures would be undertaken to ensure that such nuisance would be kept to a minimum.
- 2.4.123 In relation to the loss of vegetation at this locality, a landscape mitigation strategy has been compiled for the Scheme and at the inquiry the Department gave an undertaking to replant the banks along this section of the A4. This should help soften the visual impact of the Scheme. In terms of the access lane to be located at their property, the Department are willing to enter into a Permit to Enter arrangement in order to use the land temporarily to complete the works and then return it to the family. The details of such an arrangement should be discussed between the parties before the commencement of any works in this locality. Whilst the inclusion of a footpath area on the overbridge would maintain pedestrian access to their relatives' property at No.93 Annaghilla Road, the Department should liaise with other family members not present at the inquiry in order to establish if they would be agreeable to such a proposition.

Recommendations:

That the Department liaise with Ms McGarvey and Mr O'Donnell and other relevant parties in relation to the access lane and the provision of a footpath on the overbridge.

That the bank along the carriageway to the south of their dwelling be replanted as part of the Scheme.

Representation by Daniel and Claire McKane Inquiry Reference: A5WTC-2016-2010

2.4.124 The concerns raised have been considered above under A5WTC-2016-164.

Representation by Mr John Eltham Inquiry Reference A5WTC-2016-2016

2.4.125 Matters raised in relation to the specific design of Junctions 16, and other matters related to Phase 3 are considered in Part 1 of this Report.

Part 3 Conclusions

3.1 Conclusion & Recommendations on the Orders

- 3.1.1 Many objectors contended that there was no compelling case in the public interest to allow the Scheme, and that there was insufficient justification for the interference with the human rights of those with an interest in affected land. The AA5A judged that the Department's *Human Rights Impact Assessment* (HRIA) was inadequate in showing both that the Proposed Scheme was necessary and proportionate, and that no more land would be vested than was required to achieve the objectives of the project. It was also contended that no consideration had been given to some impacts such as the effect of severance on individuals' home and family life.
- 3.1.2 Section 6 of the *Human Rights Act 1998* (HRA) makes it unlawful for a public authority to act in a way which is incompatible with a convention right. Of relevance in the context of this inquiry are Article 8 (Right to respect for private and family life) and Article 1 of the First Protocol to the Convention (Entitlement to peaceful enjoyment of possessions). These are qualified rights and in essence it is necessary to consider whether the Proposed Scheme is proportionate, that is, does it strike a fair balance between public and private interests. In considering this a measure can be proportionate even if it is not the least intrusive means possible of achieving the measure's aims.
- 3.1.3 The Department's HRIA essentially sought to identify what, if any, human rights are impacted upon by the proposal. While perhaps the assessment could have been fuller on matters such as severance, it has correctly identified the above mentioned convention rights. The Minister, in considering the issue will have both the HRIA before him and our consideration which continues below.
- 3.1.4 We point to the policy context setting out the benefits of upgrading the A5 Corridor, including the inter-governmental impetus behind a dual carriageway solution to that upgrade. The Scheme's benefits are a sound fit with the aforementioned context and the stated objectives for the Scheme. The benefits are of major public significance. While alternatives might, for example, have a lesser land take than the Proposed Scheme, we are not persuaded that they are reasonably capable of achieving the same scale of benefits.
- 3.1.5 Weighing the above against the negative impacts of the Scheme, and bearing in mind foregoing recommendations, we concluded that there are no

issues which would weigh decisively against the various Orders being made. Accordingly, there is a compelling argument for the Scheme to be delivered in the wider public interest. Also, Phases 1 and 2 appear deliverable within a reasonable timescale. On the basis of the information before us, and subject to foregoing recommendations, the land proposed to be acquired for these Phases is judged to be reasonably necessary for the construction, mitigation and maintenance of the Scheme.

- 3.1.6 Against this the considerable impacts of the Scheme upon individuals' family and private life, and the peaceful enjoyment of their possessions is acknowledged. The issue of severance is but one that would feed into the impacts upon individual's rights. The stress and anxiety caused to individuals, with the associated potential for impacts upon health is also recognised indeed some participants in the inquiry contended that their health had already been affected by the Scheme. We have considered these matters and the whole range of issues and concerns placed before us in evidence. However, in balancing the individual rights and the wider public interest it is concluded that the making of the Orders linked to the Proposed Scheme are a proportionate interference with the human rights of those with interests in the affected lands.
- 3.1.7 It is concluded that the Scheme should proceed on the basis of the following:

Recommendations:

That the Department implements all the recommendations made in relation to the General and Strategic matters considered in Part 1 of this Report.

That the Department implements all the recommendations made in relation to the Site Specific representations considered in Part 2 of this Report.

That the Direction Order, The Trunk Road T3 (Western Transport Corridor) Order (Northern Ireland) 2016, be made subject to any amendments arising from the foregoing recommendations.

That the Vesting Order for Phase 1a, Phase 1b and Phase 2 be made subject to (a) any amendments arising from the foregoing recommendations and (b) any other amendments agreed by the Department during the course of the inquiry.

That The Private Accesses on the A5 Western Transport Corridor (Stopping-up) Order (Northern Ireland) 2016 be made.

APPENDIX 1: Acronyms & Abbreviations Used in the Report

AA	Appropriate Assessment	
AADT	Annual Average Daily Traffic Flows	
AA5A	Alternative A5 Alliance	
AIA	Agricultural Impact Assessment	
AOD	Above Ordnance Datum	
AONB	Area of Outstanding Natural Beauty	
ASSI	Area of Special Scientific Interest	
A5WTC	A5 Western Transport Corridor	
BCR	Benefit Cost Ratio	
CEMP	Construction Environmental Management Plan	
COBALT	Cost and Benefit to Accidents – Light Touch, computer	
	programme	
CO ₂	Carbon Dioxide	
DAP	Derry Area Plan 2011	
DAERA	Department of Agriculture, Environment and Rural Affairs.	
dB	Decibel	
DEFRA	Department for Environment Food and Rural Affairs	
DEM	Director of Engineering Memorandum: Management of	
	Archaeological Investigations in Major Road Improvement	
	Schemes DEM 156/15	
DfC	Department for Communities	
DfI	Department for Infrastructure	
DMRB	Design Manual for Roads and Bridges	
DOE	Department of the Environment	
DRD	Department for Regional Development	
EHS	Environment and Heritage Service	
EIA	Environmental Impact Assessment	
EQIA	Equality Impact Assessment	
ES	Environmental statement	
EU	European Union	
ha	Hectare	
HAWRAT	Highways Agency Water Risk Assessment Tool	
HED	Department for Communities - Historic Environment Division	
HGV	Heavy Goods Vehicle	
НМС	Historic Monuments Council	
HRIA	Human Rights Impact Assessment	
GIR	Ground Investigation Report	
GQRA	Generic Quantitative Risk Assessment	
IDP	Investment Delivery Plan	
KTC	Key Transport Corridor	
km	Kilometre	
LCA	Landscape Character Area	
LCZ	Landscape Character Zone	
LPS	Land and Property Services	
m	Metres; Million pounds	
MBR	Monuments and Buildings Record	
mph	Miles per hour	
MSBC	Major Scheme Business Case	

Acronyms & Abbreviations Continued

NI	Northern Ireland	
NICLA	Northern Ireland Northern Ireland Landscape Character Assessment 2000	
NIEA		
NIEA-NED	Northern Ireland Environment Agency	
NIGEAE	NIEA-Natural Environment Division	
NIGEAE	Northern Ireland Guide to Expenditure Appraisal and Evaluation	
NMUs	Non Motorised Users	
NO2	Nitrogen dioxide	
NOx	Nitrogen oxide	
NSMC	North South Ministerial Council	
NTS	Non Technical Summary of the Environmental Statement	
SPPS	Strategic Planning Policy Statement 2015	
TUBA	Transport Users Benefit Appraisal	
PCN	Potato Cyst Nematode (PCN)	
PED	Pre-earthworks drainage	
PET	Permit to Enter	
PfG	Programme for Government	
PM ₁₀	Particulate matter less than 10 micrometers in diameter	
PM _{2.5}	Fine particulate matter less than 2.5 micrometers in diameter	
PPS6	Planning Policy Statement 6: Planning, Archaeology and the	
	Built Heritage	
PPS15	Planning Policy Statement 15: Planning and Flood Risk	
PPS21	Planning Policy Statement 6: Sustainable Development in the	
	Countryside	
PTE	Permission to Enter	
RDS	Regional Development Strategy for Northern Ireland	
RIPS	Railway Investment Prioritisation Strategy 2014	
ROI	Republic of Ireland	
RSTNTP	Regional Strategic Transport Network Transport Plan 2015	
RSTN	Regional Strategic Transport Network	
RSPB	Royal Society for the Protection of Birds	
RTS	Regional Transportation Strategy for Northern Ireland 2002- 2012	
SAC	Special Area of Conservation	
SMC	Scheduled Monument Consent	
SMP	Silt Management Plan	
SPA	Special Protection Area	
SRTP	Sub Regional Transport Plan	
SuDS	Sustainable Urban Drainage Systems	
SUSTRANS	Sustainable Transport, a charity organisation	
TEN	Trans European Network	
TSS	Total suspended solids	
TUBA	Transport User Benefit Appraisal	
UKCP09	2009 UK Climate Projections	
UNECE	United Nations Economic Commission for Europe	
WFD	Water Framework Directive	
WHO	World Health Organisation	
WTC	Western Transport Corridor	
WebTAG	Web-based Transport Analysis Guidance	

APPENDIX 2: Core Departmental Documents before the Inquiry

Scheme Documents (SD): Document Title	Reference
Inspectors' Report	A5WTC-CD-SD-001
Draft Flood Risk Assessment	A5WTC-CD-SD-002
On-line Assessment	A5WTC-CD-SD-003
Alternatives Discussion Paper	A5WTC-CD-SD-004
Departmental Statement	A5WTC-CD-SD-005
Habitat Regulations Assessment	A5WTC-CD-SD-006
Stage 1 Scheme Assessment Report - Preliminary Options Report	A5WTC-CD-SD-007
Stage 2 Scheme Assessment Report - Preferred Options Report	A5WTC-CD-SD-008
A5WTC- Section 1 Brochure - Proposed Scheme 2016	A5WTC-CD-SD-009
A5WTC- Section 2 Brochure - Proposed Scheme 2016	A5WTC-CD-SD-010
A5WTC- Section 3 Brochure - Proposed Scheme 2016	A5WTC-CD-SD-011
Geotechnical Preliminary Sources Study Report (PSSR)	A5WTC-CD-SD-013
Ground Investigation Report (GIR)	A5WTC-CD-SD-014
Stage 3 Scheme Assessment Report -	A5WTC-CD-SD-012
Statutory Processes (SP): Document Title	Reference
Environmental Statement 2016	A5WTC-CD-SP-001
Environmental Statement 2016 - Non-Technical Summary	A5WTC-CD-SP-002
Notice of Intention to Make a Direction Order	A5WTC-CD-SP-003
The Draft Stopping Up (Private Accesses) Order	A5WTC-CD-SP-004
Notice of Intention to Make a Vesting Order – Phase 1A	A5WTC-CD-SP-005
Notice of Intention to Make a Vesting Order – Phase 1B	A5WTC-CD-SP-006
Notice of Intention to Make a Vesting Order – Phase 2	A5WTC-CD-SP-007

Strategic (ST) / Other: Document Title	Reference
Regional Strategic Transport Network Transport Plan 2015	A5WTC-CD-ST-001
Regional Transportation Strategy for Northern Ireland 2002- 12	A5WTC-CD-ST-002
Regional Development Strategy for Northern Ireland 2025	A5WTC-CD-ST-003
Regional Development Strategy for Northern Ireland 2035	A5WTC-CD-ST-004
Department for Regional Development Business Plan 2015- 16	A5WTC-CD-ST-005
Investment Delivery Plan (IDP) for Roads	A5WTC-CD-ST-006
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TNI Theme Report - The Appropriate Assessment Process	A5WTC-TR-022
TNI Theme Report – Economic Assessment	A5WTC-TR023

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