	General	
GEN2.7	At D2 the Applicant submitted an update to the Rights of Way and Access Plan [REP2- 003]. This was updated to address comments made by NCC at D1. What are NCC's comments on the updated plan?	The Council supports the updated Rights of Way and Access Plan and has no further comments to make at the present time.
	Air Quality	
AQ2.2	Is NCC content that the Proposed Development will not significantly increase the levels of air pollution within the wider area by increasing the number of vehicles?	Baseline levels from DEFRA background maps for thirty-five of the nearest receptors (ten in Part A and twenty-five in Part B) shows the existing background levels of the following atmospheric pollutants; Nitrogen Dioxide (NO2) – 6 to 33 μ g/m3, and; Particulates 10 and 2.5 micron (PM10 / PM2.5) – 8 to 24 μ g/m3. The modelling of nitrogen dioxide (NO2) impacts for thirty-five human receptors has shown that the difference between Do-Minimum (without dualling) and Do-Something (dualling of the two sections as proposed) results in an increase of 1.0 microgramme per cubic metre (μ g/m3) or less for the opening year (2023) for the majority of receptors. Only one receptor would experience an increase of 3.1 μ g/m3 and this would result in a concentration at this receptor which is still below the current national Air Quality Objective for nitrogen dioxide (40 μ g/m3 annual mean). The modelling of particulate (PM10 and PM2.5) impacts for thirty-five human receptors has shown that the difference between Do-Minimum (without dualling) and Do-Something (dualling of the two sections as proposed) results in an increase of 0.4 μ g/m3 for the Opening Year (2023) or less for the majority of receptors. Only one receptor would experience an increase of 1.3 μ g/m3 and this would result in a concentration at this receptor which is still below the current national Air Quality Objective for PM10 (40 μ g/m3 annual mean).

Whilst the transmittance of small particulates occurs differently from the dispersion and dilution of gaseous pollutants, the DEFRA nitrogen dioxide fall off calculator gives some indication as to the fate of exhaust pipe pollutants with distance from the source:

https://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html

This is support by a report from Air Quality Consultants Ltd for DEFRA (NO2 Concentrations and Distance from Roads, 2008).

For a worst-case scenario for nitrogen dioxide and using the highest background level of 33.3 μ g/m3 and a roadside (three metres from kerb) NO2 level of 40 μ g/m3, the fall-off calculation predicts 36.6 μ g/m3 at twenty metres from the road.

The predictions show that there will be a net reduction in emissions by 2038, even with an increase in AADT because of a "natural" replacement of older, higher emission vehicles over this time.

As an exercise in confirming the number of existing and future receptors, the Public Health Protection Unit considered all receptors where a façade of dwellings (or gardens) fell within a 45-50 metre buffer from carriageway (Part A and B). This was an indicative assessment of receptor impacts and assuming a single carriageway road width of 5 metres and 10 metres for a dual carriageway, we counted the properties at 45 and 55 metres or less from the centre-point of the existing and proposed sections of the A1 to be dualled.

The 45 and 55 metres is the distance at which the NO2 fall-off model predicts a 50 per cent reduction in NO2 at approximately 45 metres from the carriageway. Although the fall-off calculation can be done beyond 20 metres from the roadside the calculation prediction is less certain.

The result of that count of receptors within 45 metres of the edge of the existing

		and proposed carriageway was; for Part A of the scheme there would be a reduction from twenty-four (three commercial) to nine receptors (zero commercial) and Part B there would be a reduction from seven to six residential receptors (with the compulsory purchase and demolition of the one dwelling at Charlton Mires). The net benefits of the removal of sixteen receptors for the current situation should be seen as a positive for the scheme, especially in Part A of the scheme. In conclusion, the predicted air quality impacts from the operation of the dualled sections at receptors are minimal and do not cause any exceedance of the national Air Quality Objectives for nitrogen dioxide or particulates at the identified receptors. Impacts further afield would not be expected as gaseous and particulate pollutants disperse, dilute and settle out from the atmosphere.
DIO2.4	Biodiversity & Habitats Regulation	This issue was a sure and a manufacture will be a second at the control of the co
BIO2.4	The Applicant submitted an Updated Biodiversity Air Quality Assessment at D3 [REP3- 010]. NE is asked to comment on the report generally and particularly in respect of the impacts on the River Coquet and Coquet Valley Woodlands SSSI. Are NE's concerns resolved and if not, what are the consequences? NCC is also asked to comment on the findings of the report	This issue remains under review and a response will be provided at Deadline 6.
BIO2.5	In its LIR [REP1-071] NCC stated (paragraph 5.48) that it was considered far from clear that the loss of ancient woodland was being addressed satisfactorily from a spatial point of view in terms of the wording of Policies ENV1 and QOP 4 in the emerging Northumberland Local Plan. It was recognised by NCC that while the policies cannot be given full weight, neither of the parts quoted is the subject of significant outstanding objections. The Applicant	This issue remains under review and a response will be provided at Deadline 6.

	responded to the LIR at D3 [REP3-025]. NCC is asked to comment on the Applicant's response within the context of NCC's statement that the overall ancient woodland strategy is welcomed (LIR 6.7.10).	
BIO2.6	The Applicant's Comments on the LIR [REP3-025] responding to paragraph 6.7.1 of the LIR indicate that the Applicant has issued additional assessment information comprising Updated HRA Reports [REP1-012 and REP1-013] and HRA Addendum Report [REP1-043]; Biodiversity No Net Loss Assessment for the Scheme [REP2-009]; Annex A – Approach to the Assessment of Losses and Gains of Watercourse [REP2-010]; and Updated Biodiversity Air Quality DMRB Sensitivity Assessment [REP3-010]. NCC has not yet commented on these documents and is asked to do so.	This issue remains under review and a response will be provided at Deadline 6.
	Draft DCO	
DCO2.3	The Applicant's Comments on Responses to ExQ1 – Appendix A PRoW Response [REP2- 021] provides comments on NCC's response to DCO.1.44 and specifically proposed changes to Schedules 3 & 4 of the dDCO. Can NCC confirm that it is content with the proposed changes to Schedules 3 & 4 of the dDCO?	SCHEDULE 3 – PART2: The current dDCO has inconsistencies in relation to the southern extent of the de-trunked section of the A1 at Priest's Bridge over that which has been agreed between the applicant and NCC in so far that maintenance responsibly of the bridge over the River Lyne would not transfer to NCC. An e-mail detailing this was sent to the applicant on 23rd March 2021 but in relation to this Schedule (along with the description of Works No 10a in Schedule 1) an amendment is required to reflect the start of the de-trunked A1 to be vested in the local highway authority being at approximately 418569E, 591638N. SCHEDULE 3 – PARTS 3&4: Additional information in relation to the classification of roads within the scheme was sent to the applicant by e-mail on 24th March 2021. This broadly confirms the classification of the roads used in the dDCO as being correct although the Fenrother Lane (east) link is classified currently as the C139. For the ExA benefit, the following post-scheme road classifications were supplied to the applicant in this e-mail: · Part A: o C111 - To be applied to the de-trunked A1 from

DCO2.6	Point 25 of NCC's Response to Action Points from Hearings [REP4-074] stated that there may be	The council does not have an alternative wording to suggest for R4 but will discuss with the applicant prior to deadline 6, however it was clear at the hearing sessions
DCO2.6	Point 25 of NCC's Response to Action Points from	the de-trunked A1, along the de-trunked A1 to the Tritlington Road junction (Northern Section Works No. 10A); o U6727 - To be applied to the de-trunked A1 from the Tritlington Road junction to the end of the future adopted highway before Priests Bridge (Majority of Southern Section Works No. 10A; o C134 - To be applied to the new link from Bywell Road to West Moor Road (Works No. 16B); o C133 - To be applied to the realigned West Moor Road (Works No. 16D). Part B: o U3158 - To be applied to the new East Hall Link Road (Works No. 29I); o U3151 - To be applied to the new section of West Hall Link Road to connect with the existing layby (Works No. 29H) o U3004 - To be applied to the new Rock South Farm access road (Works No. 30B). SCHEDULE 3 - PART 5: No comments to make. The Council has reviewed the changes to Schedule 4 contained in the draft DCO - Revision 4 with respect to public rights of way and supports all of the changes. SCHEDULE 3 - PART 6: The extent of the footways/cycleways to be provided may change as a result of the ongoing discussions in relation to access for nonmotorised users as discussed in the Issue Specific Hearing Sessions and in the Deadline 4 submissions. As stated in our initial Relevant Representation (Ref: RR-001) there are proposed footways within the scheme that do not connect to existing infrastructure especially at the new grade separated crossings of the new dualled A1. In respect to the dDCO as submitted and notwithstanding the above, the following comments are made: · Footway on Fenrother Junction connector road: Shall continue eastwards to connect with existing/diverted footway on detrunked A1 · Footway on Causey Park Overbridge: Shall continue eastwards to connect with the existing/improved footway on the de-trunked A1.
		West Moor Junction through to the new Fenrother Junction (Works No. 9I, 10B, 16L) - this would require the reclassification of Fenrother Lane (east) from C139 to C111 (Works No. 9I); o C129 - To be applied from the new junction to the west of

	alternative wording which could make R4 clearer, easier to follow and more explicit as there is potentially multiple cross-referencing between documents. NCC is asked to expand on its concerns about the drafting of R4 and to propose amended wording at Deadline 5. The Applicant is asked to respond to NCC's suggestion at Deadline 6 unless the matter is agreed between the parties in the meantime.	that the applicant wishes the requirements to be worded in this way. The comment reflects the discussion at the hearing sessions that it is important the Local Planning Authority is clear what the documents are, what the approved plans are etc. during the discharging of the requirements and during the implementation phase of the project.
DCO2.10	Point 25 of NCC's Response to Action Points from Hearings [REP4-074] stated that the Council was satisfied that R9 provides for archaeological remains to be identified and recorded but recognised that alternative wording could make the requirement clearer, easier to follow and more explicit. NCC is asked to expand on its concerns about the drafting of R4 and to propose amended wording at D5. The Applicant is asked to respond to NCC's suggestion at D6 unless the matter is agreed between the parties in the meantime.	The Council would like the applicant to confirm what the purpose of the Archaeological Control Plan will be that is referred to in R4. If the Archaeological Control Plan is to identify areas of archaeological mitigation then reference to the plan it should also be incorporated into R9. The council does not have a suggested alternative wording but will endeavour to discuss this with the applicant prior to deadline 6 and come to an agreement on this issue.
DCO2.14	Sch. 4 - Permanent Stopping up of Streets, Public Rights of Way and Private Means of Access. Is NCC content with the Applicant's proposed changes to Sch. 4 at D4?	PART1: The amendments to the Part 1 of Schedule 4 are acceptable in broad terms and include road classification numbers where relevant. Some typographical errors are present in the Schedule and we trust these will be picked up in future versions of the dDCO. The labelling of location points currently shown in the Rights of Way and Access Plans in column (2) tie in to the drawings, however, following our ongoing discussions in respect to the limits of future adoption, it may be that these locations are relocated slightly to ensure that future highway verge is not Stopped Up under this Schedule. For example, Point 15/I on Sheet 15 of the Rights of Way and Access Plans may require relocation slightly east so that the highway verge and embankment that will be created through the realignment of the B6341 under Works 29A remains as public highway

		PART 2: no comments to make. The Council has reviewed the changes to Schedule 4 contained in the draft DCO – Revision 4 with respect to public rights of way and supports all of the changes.
	Landscape and Visual	
LV2.2	The plans which form Appendix LV.2 Trees to be Removed and Replaced at Coronation Avenue WQ LV.1.8 [REP1-044] are annotated 'Draft'. The Applicant is asked to explain how this relates to the requirement in R5(3) of the dDCO for the landscaping scheme to include a strategy for the replacement of trees which are to be removed at Coronation Avenue? IPs are asked to comment on the proposals for Coronation Avenue.	The number and location of replacement trees for Coronation Avenue as illustrated on the draft plans are appropriate. These proposals are now also reflected on 6.31 Landscape Mitigation Masterplan – Part A – Rev 2 submitted at Deadline 4.
LV2.6	Appendix LV3 Response to LV.1.13 [REP1-051] considers potential additional mitigation measures, their suitability and the prospect of potentially reducing significant effects to non-significant. What are the views of IPs in respect of these further potential mitigation measures?	Additional mitigation has been discussed and agreed with the Applicant at West Moor and Fenrother junctions and to the west of Causey Park Bridge. This is reflected on 6.31 Landscape Mitigation Masterplan – Part A – Rev 2 submitted at Deadline 4. This represents a welcome improvement in the landscape mitigation proposals although NCC agree with the assessment provided by the Applicant that the previously identified significant effects would remain.
LV2.8	Reference 1.1.23 of the Applicant's response to Relevant Representations [REP1-064] suggests that matters are agreed in relation to the replacement of any vegetation and trees to restore Coronation Avenue. Could both the Applicant and NCC confirm that this position is resolved?	Draft plans [REP1-044] submitted at Deadline 1 propose enhanced replacement of trees on Coronation Avenue and are in line with what was discussed and agreed with the Applicant in January 2021 (also see response to LV2.2). NCC are content that this position is resolved.
LV2.9	The Applicant's Response to Deadline 2 Submissions [REP3-024] noted that NCC has still to carry out a	This issue remains under review. A response will be provided at Deadline 6.

	detailed review of Appendix LV.1 [REP1-050]. NCC is asked to respond.	
LV2.10	As defined within Policy S5 of the Northumberland County and National Park Joint Structure Plan, a specific section of the scheme lies within the Green Belt [REP1-071]. The emerging NCC Local Plan seeks to confirm the boundaries of the Green Belt. Could NCC confirm the status of the emerging policy and provide an update on when the emerging NCC Local Plan is expected to be adopted.	The Northumberland Local Plan Examination has now concluded and the inspector has written to the Council to advise that the plan is sound subject to a number of major modifications. The modifications do not involve the Green Belt boundary in this part of the County. The plan is expected to be adopted later in 2021.
LV2.16	In response to [REP1-036], NCC has raised concerns [REP2-025] in relation to the mitigation measures for receptors at VP27 – View looking northeast from Howdens Glebe cottages, off West Moor Road, and also road users at West Moor. Can the Applicant provide an update on this matter?	See response to LV2.6.
LV2.17	[REP1-036] identifies that residential receptors at VP1, VP6, VP10 and VP36 will be subject to adverse visual effects. The justification provided states that these will typically arising where views would be experienced at close quarters or where existing open and expansive elevated views of open countryside would be impacted by the construction of the Scheme. Does NCC agree with this assessment and that no further mitigation measures are necessary?	NCC agrees with this assessment and is content that no further mitigation measures are necessary.
LV2.18	[REP1-036] identifies that PRoW users in relation to VP4, VP6, VP29, VP32, VP33, VP37 will be subject to large adverse visual effects. It also identifies that Users of Long Distance Path VP24 will too be subject to large adverse visual effects. The justification provided states that these will typically arising where views would be experienced at close quarters	NCC agrees with this assessment and is content that no further mitigation measures are necessary.

	or where existing open and expansive elevated views of open countryside would be impacted by the construction of the Scheme. Does NCC agree with this assessment and that no further mitigation measures are necessary?	
	Material Resources	
MR2.2	The Applicant's Comments on the LIR [REP3-025] responding to paragraph 6.10.3 of the LIR address discrepancies raised by NCC in the potential capacity for inert landfill in the county as set out in Table 13-11 of the ES [APP-056] [APP-057]. Is NCC content with the Applicant's response?	The Applicant has responded by to state that removing the availability of landfill capacity from Merryshields Quarry and Alcan Ash Lagoons, the total regional capacity falls by less than 200,000 metres ³ . They have not included a calculation for Hollings Hill, but most recent Environment Agency data suggests another 40,000 metres ³ should be included in this calculation (leaving an available capacity of 532,853 metres ³ at this site). The applicant states that the overall reduction is less than 0.7% of the regional capacity for landfill and is therefore not significant. This is accepted, although it is perhaps worth noting that the majority of this regional capacity is found in sites in Durham and Teesside. When removing the Alcan Ash Lagoons and Merryshields Quarry sites, the most recent Environment Agency data finds a remaining landfill capacity of 1,452,862 metres ³ in Northumberland. However, it is agreed that when assessing on a regional basis the reduction in available capacity does not materially affect the findings of the assessment carried out.
	Noise and Vibration	
NV2.5	Paragraph 6.9.32 of the ES [APP-042] states that reflective noise barriers are proposed for two locations. What other mitigation measures are being considered if these were not provided? Why are these only proposed and not agreed? How has the assessment of environmental impacts accommodated the uncertainty surrounding the proposed barriers?	Some responses to these questions may lie with the applicant as the Public Health Protection Unit can only comment upon the information submitted and which is in the public domain. If the applicant has considered other options and not presented them, then we are unable to comment upon them. The proposal includes reflective noise barriers on Part A of the scheme only; at Northgate Farm (PNB1) and at Felmoor/Bockenfield (PNB4). [1] It is noted that a low noise road surface is also proposed for the section of
		carriageway in the location of Northgate Farm. Should the barrier not be

constructed then one receptor at Northgate Farm would be eligible for compensation under the Noise Insulation Regulations.

[2] The role of the Public Health Protection Unit is to provide technical advice to Northumberland County Council on this application, in this role we indicate whether the submitted information is factually and technically correct and follows legislation and guidance.

[3] The Public Health Protection Unit are unable to answer this question other than to comment that it appears the option is either the reflective barrier(s) to be incorporated or not.

Comments:

It appears that because of the assessment criteria in the previous version of the DMRB (HD 213/11) to the current one (LA 111) has changed, specifically in the way that vehicle speed are "banded" has led to some differences in the previous and current noise predictions.

For the one impacted dwelling at Northgate Farm it appears that should the reflective barrier (PNB1) not be built the property would be eligible for compensation under the Noise Insulation Regulations. Whilst not ideal, this might allow the occupant to invest in some noise mitigation of their own (ie enhanced glazing). Felmoor/Bockenfield would not be eligible for compensation under the Noise Insulation Regulations.

In respect of Felmoor/Bockenfield (PNB4), it is noted in Section 3.2.6 of the that "The results (following LA 111 (Ref. 1.1) methodology) for Felmoor Park and Bockenfield Holiday Park were also compared with the results following HD 213/11 (Ref. 1.2) methodology. Whilst the predicted noise levels have changed due to the factors discussed above, no receptors in this area are likely to experience significant adverse effects, as was previously the case."

Following comments included in the supporting documents, the Public Health

Protection Unit are also unsure of the occupation types for these two sites although Felmoor Park appears to offer sales and rentals the same is not clear for Bockenfield Country Park.

In terms of the magnitude of the impact, the Public Health Protection Unit cannot replicate the noise modelling the applicant has commissioned but in respect of the Northgate location, this is immediately north of the existing dual-carriageway. Local knowledge of this location is that vehicles (particularly cars) begin accelerating southbound at the point where the current access is to Northgate Farm is off the A1, particularly where they are behind slower moving vehicles. On the northbound carriageway, the dualled section ends just south of the A697 flyover but traffic is still travelling at speeds greater than 60 mph, again trying to "jump" in front of vehicles in the nearside carriageway even filtering back in on the hatched areas/

It is difficult to select a road link section in the submitted traffic data which shows representative baseline, Do-Minimum 2023 and a Do-Something 2023 traffic flows at Northgate. However, using a DfT road census point (Site number: 8427) just south of Northgate and the A697 junction which has an AADT of approximately 30k in 2015, road link 2303_24021 seems to have a corresponding 2015 traffic flow. This link has a 2015 Base or 28756, Do-Minimum 2023 of 29852 and a Do-Something 2023 of 30423 and taking a higher HDV of 11 per cent from elsewhere for each scenario). This indicates that even without dualling there would be an increase in traffic flows of about 4 per cent, with dualling the increase would be about a 6 per cent increase.

A simplified noise calculation is included in The Calculation of Road Noise (Department of Transport, 1988) which includes a number of factors to predict road traffic noise, but the main contributions are from the traffic flows (AADT) and HDV percentage. Using the calculation in CRTN, with an increase of six per cent over baseline indicates a less than one decibel increase in noise levels at ten metres from the carriageway. The difference between Do-Minimum 2023 and Do-Something 2023 is around 0.1 decibels. The CRTN calculation predicts noise levels

		at 10 metres from the carriageway. The western, gable end of Northgate Farm is approximately 8.5 metres from the carriageway and 1 & 2 Warreners Cottages about 13 metres from the carriageway.
	Traffic and Transport	
TT2.1	At D1 the Applicant submitted a revised version of the Rights of Way and Access Plans [REP1-003]. The key indicates that the revision reflects amendments to Rights of Way Refs and details. This was further updated at D2 [REP2-003] with the description amended to 'Examination Deadline 02 Update'. The Applicant is asked to explain the source of these updates? Do they incorporate changes proposed by NCC? Can NCC confirm the accuracy of the revised plans?	No comments to make at the present time on the accuracy of the plans.
TT2.2	The Applicant's Response to D3 Submissions [REP4-024] states that the Applicant's Comments on Responses to Written Questions - Appendix A - Public Rights of Way Response [REP2-021] retains a small number of minor amendments to references which would be communicated in writing. The Applicant and NCC are asked to provide an update on addressing these outstanding matters.	The Council can confirm that either the minor amendments to the plans and schedules have been made or are no longer required because of other changes to the schedules.
TT2.3	The Applicant submitted a revised Construction Traffic management Plan at D1 [REP1- 025] [REP1- 026]. NCC is asked to confirm whether the document is acceptable in its current form. The Applicant is asked to confirm whether or not this is a draft document subject to approval through the DCO. NE is asked to comment on the advice regarding the use of the A1068 as a diversion route.	The applicant has submitted a further revision to the Construction Traffic Management Plan at D3 [REP3-015 and REP3-026] that incorporates the minor changes made in our response to the original document. Actions and point of clarification in relation to the document were discussed at a meeting with the applicant on 15th February and the actions and points of note from that meeting are agreed. It is assumed that these points will be confirmed in a subsequent submission of the Construction Traffic Management Plan and the meeting notes forming the

		Statement of Common Ground as appropriate.
TT2.4	Appendix TT.3 Maintenance Boundaries is provided in response to ExQ1 TT.1.23. Is NCC content with the material provided in in Appendix TT.3?	The proposed maintenance boundaries contained within the material provided in Appendix TT.3 concentrates on the boundaries around the grade separated junctions within the scheme. The boundaries shown in Figure 2-5 for the grade separated junctions in Part A and Figure 3.2 for the Charlton Mires junction in Part B are agreed in principles subject to the detailed design. As stated in our response at D4, for the avoidance of doubt, we would wish to see similar maintenance boundaries included for the full extent of the scheme. This will subsequently feed into revised Rights of Way and Access Plan as well as the locations of Stopping Up as detailed in our response to DCO2.14
	Water Environment	
WE2.4	The second bullet in Section 7 of Appendix 10.5 Drainage Strategy Report for Part A [APP258] states that the maintenance of trunk and local drainage assets will be subject to a Memorandum of Understanding (MoU) between Highways England and NCC. Nevertheless, MoU referenced in the SoCG [REP4-016] only makes reference to details of the detrunking aspects of Part A. Could the Applicant provide confirmation that such a MoU is being developed and agreed. How would it be secured through the DCO? NCC is also invited to comment.	Items relating to highway drainage of the new links within Part B have been discussed with the applicant and there is the requirement that all new local roads be positively drained. We are awaiting follow up discussions in respect to this. We will continue to work with the applicant to develop the MoU for both Parts of the scheme.