

Review of Supporting Reports

FISHER'S WHARF, EAST QUAY, NEWHAVEN

LW/799/CM(EIA)



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1 Introduction

- 1.1 This Review report has been prepared for Newhaven Town Council to assess the supporting reports submitted in relation to LW/799/CM(EIA) and no responsibility is accepted to any third party for all or part of this study in connection with this or any other development.
- 1.2 The report reviews Supporting Reports submitted in support of application LW/799/CM(EIA) for:

The construction and use of plant, namely aggregate processing plant, aggregate bagging plant, concrete batching plant, concrete block-making plant and buildings, ancillary offices and stores for processing and utilising aggregates landed at Newhaven Port and distribution of the products by road and rail together with access to the public highway and the extension of an existing rail siding.

2 Review of Transport Assessment Report (Cannon Consulting)

2.1 The Report's analysis starts with descriptions of the existing situation – mostly reasonable but:

- a. (minor comment) Para 2.22 describes the A259 (swing bridge) as the “main connection between the east and west of Newhaven town2 when of course it the ONLY connection;
- b. (minor comment) The quoted frequency in Table 2.1 for the number 12 bus service appears to ignore the 12A and 12X – the combined frequency would be higher particularly at peak times;
- c. (minor comment) The quoted frequency in Table 2.2 for rail services at Newhaven Town is way too high;
- d. (minor comment) The ‘general arrangement’ drawing of the NPAR in Appendix B is undated and appears out-of-date as it refers to the Eastside development as “business park”;
- e. (major comment) Whilst the highway network features are described, there is no commentary on the ability of the immediate and wider local network to accommodate existing flows – the relevance of this will become clear later in this review.

2.2 In its calculations of highway network assessment flows in each of the proposed Development Stages, the Report has taken account of observed counts, specific development commitments and other background growth. The observed manual traffic counts were recorded on Thursday 20th April 2017, within school term time (though close to the term start on the Tuesday following the Easter break we have no independent evidence to suggest that having had any influence on whether or not the counts are therefore representative). Background growth calculations for each development Stage scenario is estimated using TEMPRO (although it does not state which version), corrected for commitments and using the NTM adjustment (all good practice) but is based on Lewes district as a whole and ‘all roads’ as the road class when we consider that a more local relevant basis (Newhaven alone, or Newhaven plus other local coastal areas, plus ‘urban roads’ road class) would have been a better description – the background growth would then be different and more likely higher than lower though unlikely to be by much.

2.3 Trip generations for each commitment are sourced from the relevant transport reports supporting those planning applications, which is generally good practice, but in nearly all cases the distribution in the Cannon Report of those trips onto the highway network is simplistically based on observed turning movements at assessment junctions which can be acceptable in the absence of other information but it is known that at least the Eastside and Parker Pen transport reports also presented their distributions based on a more detailed assessment. The Cannon Report does not explain why, for those sites, the original distribution was not used – and it is notable that for the one commitment where it did take account of the original distribution (Plots 6&7 North Quay Road) the distribution was markedly different from what the ‘observed turning movements’ approach

would give, with a much higher proportion of trips generated crossing the swing bridge. The suspicion must be that the original distributions for the other development commitments would be equally unhelpful if used.

2.4 The derivation of HGV and light vehicle movements for each development Stage seems acceptable. Likewise, the assumption in all Stages that HGV traffic will all approach and leave the town via the A26. The distribution of light vehicles uses observed turning movements and is therefore subject to the same reservation as in our para 3 above.

2.5 Our strongest reservation relates to the way in which the Report assesses highway impacts. The approach adopted in the Report for each development Stage compares the amount of additional traffic arising from that Stage at a small selection of assessment junctions against the amount of traffic that would be there without it, taking account of observed existing flows, background growth and other commitments relevant to that Stage (together comprising the 'Base' for that Stage). The Report's assessment generally concludes that the incremental increase in traffic due to each development Stage itself compared to the 'Base' for that Stage is so small as to have no material impact on the operation of the network. In many situations this general, simple approach is proper and sufficient, but we do not consider it to be so in this case. Here, using that approach ignores that the existing situation is believed not to work particularly well, especially in the PM peak (although the Report does not acknowledge or comment on that – see our para 1e above), and does not explicitly recognise that the level of increase in the 'Base' (due mainly to other development commitments) is itself substantial compared to the existing situation. The contribution of each development Stage to total network flows may well be small but, in a situation where the network is believed to be under stress at present, and would therefore be expected to be under more stress in each future 'Base', a more detailed assessment of network performance is necessary before any conclusions can be drawn on the ability of the network to acceptably handle those small additions. In that more detailed assessment, consideration should also be given to a wider assessment area than the limited 3 junctions included in the Report, potentially including other nearby associated junctions (and any effects of the railway level crossing), the swing bridge, and part/all of the ring road (depending on the outcome of addressing the distribution issue in our para 3 above).

2.6 In summary, in its assessment of highway impacts, the Transport Assessment Report's treatment of:

- Development Stage trip generations is generally acceptable;
- The distribution of those trips onto the highway network is only partly acceptable;
- The assessment of impacts on the highway network is not generally acceptable, in our view requiring a more detailed assessment of network performance under all relevant scenarios

(existing / each future 'Base' / each future 'Base' + Stage) over a wider network than considered in the Report.

3 Review of Noise Report (WBM Acoustic Consultants)

- 3.1 Our comments on the Noise Report are focussed on the traffic related noise impacts of the proposed development as that's where our main expertise lies.
- 3.2 The traffic data used in the Report cannot be fully verified as only limited reference is included in the Report (Section 9, 2nd para) and the quoted figures appear inconsistent with the traffic data used in the Air Quality Report¹.
- 3.3 Traffic related noise impacts have been modelled using the CRTN modelling approach (CRTN = Calculation of Road Traffic Noise Memorandum 1988) which is (despite its age) still the standard way of modelling such effects.
- 3.4 Traffic related noise impacts should be assessed for all relevant Stages of the development at a number of 'Receptors' located in the vicinity of those road links that potentially could experience material changes in traffic flows arising from the proposed development.
- 3.5 In the Noise Report, traffic related noise is only assessed for one Operational Stage and at one location - Stage 1 on Beach Road. No other Operational Stages and no other roads were assessed. The assessment therefore does not consider any impacts in Stages 3&4 on the Newhaven Eastside permitted residential development adjacent to the Port Access Road.
- 3.6 The Stage 1 assessment results for Beach Road of a +0.2 dB(A) increase in traffic related noise levels over the standard 18hour weekday assessment period is probably of the right order expected for the input traffic data level. The Report's conclusion that the impact of that predicted change is negligible when using the standard DMRB HD 213/11 impacts assessment approach is also agreed, but note that the Report does correctly (and honestly) caveat (Section 9 last para):

"Individual HGV movements would generate maximum noise levels corresponding to the separation distance to dwellings, which is perhaps as little as 5 m for some dwellings on Beach Road. Whilst the impact of individual HGV movements cannot be described as negligible, the change in daily road traffic noise is small and the noise change is negligible."

¹ Noise assessments require traffic data in the form of average 18hour 5-day weekday. Air quality assessments require data in the form of AADT which is the 7-day average over the whole year. The two figures are typically not the same, though may be similar. Section 9 of the Report states 34 HGV movements / day and 52 car movements / day on Beach Road associated with the Stage 1 development. The Air Quality Report quotes (Table 3.6) 34 HGV and only 19 light vehicles for the same scenario. It would be unusual for the HGV figures to be the same and the light vehicles not.

3.7 Each of Stages 1 to 4 of would be preceded by a Construction Stage. No noise assessment of construction related traffic at any Construction Stage has been reported, though the Report does state at section 8 last sentence: *“The imposition of a planning condition requiring the submission, prior approval and implementation of a construction management plan is invited.”* This could include measures to manage any possible traffic related noise impacts. It is likely that each pre-Stage construction period would be well under one year and therefore the annually averaged noise impacts of each may not be considered to be material, but that is not explicitly stated or assessed in the Report and the short-term construction period impacts may be of more significance.

3.8 We would concur with the comments made by Rob Burns which are as follows:

- Choosing to measure background when there was metal loading at night - together with the methodology (percentile choice) used for arriving at the LA90's is questionable.
- It is essential to a critique that these background noise measurements are verified by Lewes District Council.
- Overall the background level, combined with the choice of a low impact noise correction could mean up to 10dB difference which is very significant. Add in the exclusion from consideration of what sources are considered to be PD (which again requires scrutiny) and you can see the potential for a very significant underestimate of the noise impact (of the development as a whole) on residential receptors and on the tranquillity of the Tide Mills habitat.

4 Review of Air Quality Report (RPS Consultants)

- 4.1 Our comments on the Air Quality Report are focussed on the traffic related AQ impacts of the proposed development as that's where our main expertise lies.
- 4.2 The traffic data used in the assessment cannot be fully verified as, whilst comprehensive in its highway network coverage, no information is given as to their derivation².
- 4.3 Traffic related air quality impacts have been modelled using the ADMS-Roads modelling approach (ADMS = Atmospheric Dispersion Modelling System) which is widely used in the UK for this purpose. The standard key pollutants measured and calculated are NO_x (oxides of Nitrogen) and PM₁₀ (Fine Particular Matter). The Report has also considered changes in PM_{2.5} (a subset of PM₁₀). Impacts are quantified and assessed in terms of the absolute and %age change in concentration of the pollutant compared to national Air Quality Strategy (AQS) objectives. This is the standard approach.
- 4.4 Traffic related Air Quality Impacts should be assessed for all relevant Stages of the development at a number of 'Receptors' located in the vicinity of those road links that potentially could experience material changes in traffic flows arising from the proposed development.
- 4.5 In the Air Quality Report there are 10 Receptors, each given a Receptor ID No. with locations all marked on Figure 1 of the Report. Receptor locations include a site on Beach Road, another on its northern extension Clifton Road, and another on the Port Access Road north of the B&Q access (titled 'Business Park'), but there is no Receptor on the Port Access Road adjacent to the approved Newhaven Eastside residential development.
- 4.6 There are 15 road links, each given a Road Link ID No. but which are not explicitly marked on Figure 1 (they are stated in the Report to be "illustrated in"). Road Links include one site on Beach Road (Road Link 2) and another on the 'New Port Access Road' (Road Link 11). Whilst in most instances one can work out from the description (&/or the related traffic flow data) where each Road Link is on the map, it is unclear which part / parts of the Port Access Road are covered by Road Link 11.

² Air quality assessments require data in the form of AADT which is the 7-day average over the whole year. Noise assessments require traffic data in the form of average 18hour 5-day weekday. The two figures are typically not the same, though may be similar. Section 9 of the Noise Report states 34 HGV movements / day and 52 car movements / day on Beach Road associated with the Stage 1 development. The Air Quality Report quotes (Table 3.6) 34 HGV and only 19 light vehicles for the same scenario. It would be unusual for the HGV figures to be the same and the light vehicles not.

- 4.7 There is therefore no Receptor specifically representing the Eastside residential development, and no clarity on the relevant traffic flow data to be used in the assessment of any air quality impacts on that development arising from Stages 3&4 of the proposed development. However, the assessment of impacts at the 'Business Park' Receptor may be sufficiently representative.
- 4.8 The modelled results for changes in levels of all assessed pollutants for each Operational Stage are probably of the right order for the input traffic data. However, all values are rounded which could mask small but consistent low-level changes. This could be of importance for Receptors in the town centre AQMA where the Report acknowledges that NO₂ levels currently exceed AQS objectives.
- 4.9 Each of Stages 1 to 4 would be preceded by a Construction Stage. No air quality assessment of construction related traffic at any Construction Stage has been reported. It is likely that each pre-Stage construction period would be well under one year and therefore the annually averaged air quality impacts would not be material, but that is not explicitly stated and the short-term construction period impacts may be of more significance than their annually averaged impacts.

5 Conclusions

5.1 In summary, in the Transport Assessment Report:

- Development Stage trip generations are generally acceptable;
- The distribution of those trips onto the highway network is only partly acceptable;
- The assessment of impacts on the highway network is not generally acceptable, in our view requiring a more detailed assessment of network performance under all relevant scenarios (existing / each future 'Base' / each future 'Base' + Stage) over a wider network than considered in the Report.

5.2 In the Noise Report:

- traffic related noise is only assessed for one Operational Stage and at one location - Stage 1 on Beach Road. No other Operational Stages and no other roads were assessed. The assessment therefore does not consider any impacts in Stages 3&4 on the Newhaven Eastside permitted residential development adjacent to the Port Access Road.
- The Stage 1 assessment results for Beach Road of a +0.2 dB(A) increase in traffic related noise levels over the standard 18hour weekday assessment period is probably of the right order expected for the input traffic data level. The Report's conclusion that the impact of that predicted daily change is negligible is agreed, but note that the Report does correctly caveat that: *the impact of individual HGV movements cannot be described as negligible*.
- Each of Stages 1 to 4 of would be preceded by a Construction Stage. No noise assessment of construction related traffic at any Construction Stage has been reported. Though the annually averaged noise impacts of each may not be considered to be material, because each construction period would be well under a year, the short-term construction period impacts may be of more significance.
- In relation to general noise impacts, overall the background noise level selected, combined with the Report's choice of a low impact noise correction could mean up to 10dB difference which is very significant. Add in the exclusion from consideration of what sources are considered to be PD (which again requires

- scrutiny) and there is potential for a very significant underestimate of the noise impact (of the development as a whole) on residential receptors and on the tranquillity of the Tide Mills habitat.

5.3 In the Air Quality Report:

- The modelled results for changes in levels of all assessed pollutants for each Operational Stage at each identified Receptor are probably of the right order for the input traffic data. However, all values are rounded which could mask small but consistent low-level changes. This could be of importance for Receptors in the town centre AQMA where the Report acknowledges that NO₂ levels currently exceed AQS objectives.
- Each of Stages 1 to 4 of would be preceded by a Construction Stage. No air quality assessment of construction related traffic at any Construction Stage has been reported. It is likely that each pre-Stage construction period would be well under one year and therefore the annually averaged air quality impacts would not be material, but that is not explicitly stated and the short-term construction period impacts may be of more significance than their annually averaged impacts.

- End of Report



Drainage - Flood Risk - Highways - Transport

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