

ENVIRONMENTAL STATEMENT REVIEW

HMS GANGES, SHOTLEY GATE, SUFFOLK

*Reviewed in April 2008
Re-review - November 2008*

Updated IEMA review report - amended (Regulation 19) Environmental Statement.

Institute of Environmental Management & Assessment
St Nicholas House
70 Newport
Lincoln
LN1 3DP

T. 01522 540069
F. 01522 540090

REVIEW OF THE ENVIRONMENTAL STATEMENT FOR HMS GANGES, SHOTLEY GATE, SUFFOLK

Introduction

Following an initial (April 2008) IEMA review of the above Environmental Statement (ES) Babergh District Council have requested a further review of an amended and updated ES. Given constraints within the planning timeline, this has been undertaken by a single member of staff with quality check, presenting an updated review commentary on amendments to the ES. Sections have been re-graded, in accordance with the Institute Review Criteria and Review Grades (Appendix 1 & 2). Documents reviewed are listed in Appendix 4.

- **The April 2008 review is provided for reference purposes in black font; and**
- **Review commentary on the amended ES is in red font.**

The headings presented in **bold** are from the Institute Review Criteria for assessing the quality of ESs (Appendix 1). The Review Criteria and Review Grades have been developed from original work by Lee and Colley (1990)¹ and are based on the legislative requirements of EC Directives 85/337/EEC and 97/11/EEC on environmental assessment², and on current reasonable best practice standards for ESs produced in the UK.

The review is a qualitative assessment of the ES, based on best practice, not just statutory requirements. The review does not involve a site visit, or take account of additional meetings or information supplied to a planning authority, as this information is not normally available to members of the public. ESs are public documents, which should contain all the necessary environmental information for decision makers, and it is on this basis that the Institute of Environmental Management & Assessment reviews ESs. The Institute does not oppose or support developments, but seeks to ensure that all relevant information is made available to decision makers.

The Institute acknowledges that aspects of the proposed development, such as pollution control and monitoring, will be covered by other authorisations. However, the Institute considers that it is reasonable best practice for environmental assessments for planning purposes, to consider many of these issues at the planning application stage. This has been reiterated by Planning Policy Statement 23 *Planning and Pollution Control*³, which gives guidance on the roles of planning authorities and pollution control bodies. It states that the ES "must include a description of the development, the likely significant environmental effects (including where appropriate impacts on air, water and/or soil quality before, during and after the proposed development), mitigating measures envisaged, an outline of the main alternatives studied by the applicant and reasons for his/her choice and a non-technical summary."

The advice contained in the review is based on the Institute's knowledge and experience of good practice in Environmental Impact Assessment (EIA) and understanding of a wide range of environmental issues. Nevertheless, complex technical issues are likely to benefit from the advice of a specialist and in some cases this will be recommended.

Structure of the Report

The criteria are split into three sections and the review report is structured accordingly:

Section 1 addresses all of the information contained within an ES with the exception of the assessment of the impacts.

Section 2 addresses the assessment of the impacts on the environment. The section covers the information relating to:

- the baseline conditions
- the prediction of the magnitude of impacts
- the evaluation of significance
- mitigation measures and
- follow-up

This section of the report provides an overview of the treatment of the above topics within the ES. This is followed by a review of those aspects of each environmental issue that would benefit from additional details being provided to fill gaps in the information or to provide clarification.

In order to aid decision makers, the review report in this section is structured in accordance with the environmental issues referred to in the ES. However, in order to ensure the report remains concise and focused the comments will primarily focus on those areas where the ES could be strengthened to provide an improved basis for decision-making.

Section 3 addresses the presentation and communication of the information. This includes a brief review of the non-technical summary.

1 General Criteria

1.1 Description of the Development – D C

The ES accompanies a proposal for a retirement village of 404 units on the former HMS Ganges site, together with a 60 bed nursing home, a club house and leisure facilities (bowling green, swimming pool and pavilion). Associated highway and landscaping works also form part of the proposal. Outline planning permission was granted for the development in 1997 and the current proposal is designed to amend the reserved matters submitted in August 2000.

Fifty-three of the units will be assisted living apartments and there will be one manager's house. The remainder are intended to be one to five bedroom homes. Clarification should be provided on the numbers of each type of home to be built. **Now provided (Table 4.1).**

The location of the different elements of the development is described in vague terms in the text. For example, the ES states that the majority of the houses will be built in the "southern part of the site north of King Edward VII Drive". However, there is no clear statement on what proportion comprises "the majority" and no indication of where the remainder of the houses are to be located. The ES should have included a map clearly illustrating the location of each of the elements of the development. This would also help to clarify the density of development of different parts of the site. We consider the lack of such a map to be a significant omission from the ES. **Map is now provided at Figure 4.1 along with supporting ES text and plans in Volume 4.**

The appearance of the care facility is briefly described, but it would have been helpful if this had been illustrated. Similarly, the design and appearance of the houses could have been shown. **Addressed by addition of Volume 4 (scheme drawings).**

The lack of information on the appearance and spatial distribution of the development appears to be contradictory to the indication that the application is to address the reserved matters for the outline planning permission granted in 1997 (p 4-1, 4.1.1). Reference is made to the planting of native plants and trees (p 4-1, 4.1.7). However, a plan should be provided that demonstrates the location and type of planting in the different parts of the site. **Some detail is now provided within Volume 4 on landscaping and trees, although the ES would still benefit from a section describing tree planting and visuals. Some of the new information indicates a need to remove soil (contaminated) and also the need to bring in clean topsoil (Section 3.11 of appendix 4.3). Significant material requirements for the development should be quantified.**

The ES states that the development site covers 16.5ha within an entire Masterplan area of 24ha (p 3-1, 3.1.1). Despite the following reference to the Masterplan as 'at the time of the ES, entering the public consultation exercise' (p 4-2, 4.2.2) there is no significant detail provided in the ES or its appendices. Clarification is required on the nature of the wider Masterplan, on how the proposal relates to the Masterplan and the reasons why the ES does not address the impacts of the wider Masterplan rather than just a component of the development. Clarification on the content of the Masterplan is important to assess the cumulative impacts of the proposal. Cumulative impacts are referred to elsewhere in the ES and take into account other developments within the vicinity of the proposal, but it is not clear if these form part of the Masterplan referred to in the ES. **Chapter 2 (2.5.6 – 2.5.7) and also Section 3.1.1, indicate that references to the Masterplan are now removed and that the**

Masterplan is aspirational, not the subject of a planning application or a development plan site allocation at this time and therefore not considered within cumulative effects assessments.

A phasing plan for the construction of the development is stated to have been provided as part of the application drawings (p 4-3, 4.3.3). A copy of this drawing does not appear to have been included in the ES submitted to the IEMA for review. Given that the phasing of the development can be an important influence on the environmental impacts of the proposal it would have been helpful if this had been included in the ES (important as those that have a copy of the ES may not have access to all of the planning application drawings). Phasing is now indicated within the ES in Sections 4.5.5 and 4.5.6, rationalising the former 10 phases to three (and including pre-construction preparation such as species translocation). There is a confusing discrepancy between the indication at ES (4.5.6) for three phases and Volume 4 diagram 18504A/106, which still indicates 10 phases (see also review Section 3.1). Some questions remain on phasing to be explained. An example is reference at 4.5.5 bullet point 2 to demolition of buildings outside of bat breeding or hibernation periods prior to phase 1, whilst in Chapter 8 a replacement bat loft is indicated for phase 2. It may help understanding if the ES could confirm more indicative timelines and that sequence of events is effective (in terms of interim provision for bats).

Reference is made to the demolition of buildings in the summer and autumn of 2008 (p 4-3, 4.3.3). A plan should be provided to show the location of the buildings which are to be demolished. Plan now provided in Volume 4. Clarification should also be provided on whether any other construction techniques that could potentially result in significant environmental effects (e.g. piling) are to be used. Section 4.5.13 indicates piling will not be required.

The above requirements should be incorporated into a comprehensive demolition and construction plan, (and this would be in line with commitments made on behalf of the applicant in the May 2007 Scoping Report (SR/letter in Appendix 2.2 (p4-2, 4.4)). A draft Construction and Environmental Management Plan (CEMP) is now referenced (4.5.10) and is appended at 4.3. The revised ES states that “a programme of site remediation for ground contamination will be undertaken in line with a Remediation Method Statement” (4.5.5). However the revised ES is unclear when or how this statement will be compiled. Further there is only a very brief general reference to this in the CEMP (Section 3.5 of appendix 4.3). Further clarification regarding the Remediation Method Statement is required. This plan should demonstrate how the proposed construction activities are to be timed to accommodate ecological mitigation measures. For example, in order to minimise impacts on bats, it is preferred for buildings to be demolished in March / April or September / October (p 8-48, 8.5.30); building works that might affect Shotley Fort or the Martello Tower should be carried out in the summer months (May - September); to avoid impacts on breeding birds scrub clearance is stated to take place outside of the breeding season (stated to be April to August) (p 8-52, 8.5.53). Timings are discussed within a new paragraph at 4.5.14. Principles are set out that construction will follow after completion of certain ecological mitigation measures such as translocation of reptiles (4.5.5). However, as indicated above, there may still be some remaining points of clarification required on timing and sequencing between habitat / nest / roost removal and provision of alternatives.

In describing the proposed development (p 4-1, 4.1.8) the ES states that “the outline planning permission has already established the principle of a new roundabout and an access road” and that “the amended information includes further details on these

proposals". It is not clear where (if) these details are provided and consequently the ES may need to address lack of information on location and nature of the agreed road improvements. **Added at 4.3.9.** Also there is no confirmation that services to the site are adequate to provide for the development – specifically, sewage treatment and electricity supply. **Added at 4.3.15 (commenced but report not yet completed).**

The ES does not present a consolidated review of planning policy in the description (see comments in review Section 2.2.1 below) although selected policies are reviewed in topic chapters. Also, broader issues such as need for the proposal and scale of development have not been specifically addressed in the ES description. **Development need is now described at 4.1. A separate Planning Policy review has also been added (appendix 3.1).**

With regard to the revisions and additional information provided, the ES needs to be clear on which documents now form the ES (see review Section 3.1 below on Presentation). This point, however, is relevant to this 'description' review, because the corresponding ES chapter (4) makes various cross references to Volume 4 (e.g. on elevations, landscaping design, etc). The reader therefore needs to be confident that Volume 4 is part of the revised ES. Also any inconsistencies between the main text and plans within Volume 4 need to be resolved (e.g. phasing issue above).

1.2 Site Description – C-B

The location of the development in a regional and local context is described and illustrated. This includes an illustration of the local road network.

The locations of designated sites within the vicinity of the development site are illustrated on the maps provided (p 3-5). However, it would have been helpful if the location and exact extent of the site could have also been illustrated on these in order to demonstrate the relationship between the site and the designations. For example, Figure 3.5 (p 3-5) shows the Environment Agency's (EA) indicative flood risk map. The text indicates that the development site is not within the flood risk zone, however, this is not demonstrated on Figure 3.5 as the site is not marked on the map. **Addressed by new Figure 3.6.** There also appears to be an inconsistency on Figure 3.4 (p 3-5) where the AONB boundary is on the key but not on the map. **Addressed at 3.5 in Volume 2.** The respective sizes and boundaries of the Masterplan area are described in the ES (p 3-2, 3.2.1); however, it would have been easier to understand how the wider Masterplan and the specific development site related to each other if their respective boundary lines were illustrated on a map.

The map presented in the appendices, as Fig 8.6 shows RAMSAR, SPA and SSSI designations relative to what is assumed to be the Masterplan area 'red line'. The quality of this map, however, is poor as it is difficult to discern base map detail relative to the boundary lines (also, an HMS Ganges 'red line' is indicated but is not labelled to distinguish if it is the Masterplan area, the development site or some other boundary such as land ownership). Further designations including the AONB boundary are shown on Figure 10.1, in the appendices, this time relative to the development red line. This is a better quality map (has clear base detail) and indicates the AONB boundary as adjoining the development red line at the northern boundary. The respective maps should be clear and consistent. A consolidated map indicating all designations against the development boundary would have been very helpful. **This is now provided.**

Additional information on the activities that took place on the site whilst it was a Royal Navy training establishment would be helpful. **New reference to earlier uses added**

at 3.2.3. This is important in order to indicate the potential for contaminated land on the site. Recent extensions to conservation designations are not referenced (see review Section 2.2.4) and potential future status of the land in the absence of the project (e.g. changes in conservation status) is not considered. Some consideration has been added in relation to alternatives consideration and a do-nothing scenario. This, however, is quite general. Given the site's varied environmental interests a fuller exploration may have been useful.

1.3 Scoping – C

A scoping report was compiled (appendix 2.1) and used as the basis to request a scoping opinion from Babergh District Council (BDC) in June 2007. The BDC scoping response was provided in August 2007. August is also the month stated as the publication date for the ES. Clarification should be provided on the extent to which the scoping opinion was able to influence the conduct of the EIA and the content of the ES. Given the publication date of the ES, mid June may appear a little late to seek a scoping opinion from the Local Planning Authority (LPA).

There are points made in the scoping opinion relating to the assessment of specific impacts that have not all been complied with (details are provided in Section 2 of this review). Where the EIA has adopted an alternative approach to that proposed in the scoping opinion a justification should be provided for the variation, and preferably agreement should have been obtained from the appropriate statutory consultee.

There is no indication that consultation with the local community has been undertaken to ensure their environmental concerns are addressed by the EIA. The application principle is longstanding, therefore it is perhaps surprising that community concerns or interests (expressed through this period) have not been referenced. ES now states at 2.5.3 that no public consultation was carried out because of the nature of the planning history and the principle of the development being established through the outline planning permission.

The potential for cumulative effects is identified and a brief explanation as to their nature is provided (p 2-6) along with the ES approach to this issue (described as 'necessarily qualitative'). Two other developments are referred to as having been taken into account in the Cumulative Effects Assessment (CEA). It is however, not clear whether there has been a systematic consideration of what other developments are reasonably foreseeable (there is no clear indication that consideration has been given to other applications or to allocations that might exist in the local plan / Local Development Framework).

The ES now includes new sections 2.5.4 – 2.5.8, which describe the developments which can be included within any assessment of cumulative effects. These are primarily within the HMS Ganges site, but also include a permitted Marina Housing scheme (2.5.8). It would have been helpful if the ES mapped these potential developments and explained the rationale whereby developments or allocations relevant to CEA have been selected (e.g. what level of proximity or influence).

The revised ES now indicates the Masterplan is not relevant within CEA, because it is only aspirational and not part of any development plan site allocation. This may be reasonable especially if the two schemes are completely separate. However, if the current scheme is creating infrastructure that will help facilitate future development, then there may be a case for including assessment of the Masterplan. Also, areas of the wider Masterplan are likely to be considered as brownfield (if left) and, as such, will be at least available for and likely to be developed in the future.

In the scoping report, cumulative effects are referenced in relation to the Masterplan, indicating that “as such the cumulative effects of the inevitably larger scheme need to be considered” (SR - 2.3.8, p2-4). Although the ES approach to CEA (described at ES Section 2.6) does indicate that the ‘larger scheme’ is to be considered, this does not appear to have been followed for a number of issues in the report. An example is the approach to assessing habitat loss (8.4.4, p 8-28 and Table 8.8), where percentages of habitat that will be retained or lost is usefully set out relative to the development boundary. However, the potential loss relative to the Masterplan is not presented.

1.4 Consideration of Alternatives – E- D

The ES states that the only reasonable alternatives to consider are the do-nothing option, or an alternative configuration (p 4-2, 4.2.1). We agree that alternative sites are not an appropriate consideration given that the application relates to the details associated with a previous outline planning consent for the site. However, alternative layouts and alternative scales (which may well be evaluated) do not appear to have been addressed. An alternative layout is stated to be at Masterplan stage and covers the whole of the HMS Ganges site. The Masterplan is stated to include a reduced size retirement village (although the revised size is not stated) (p 4-2, 4.2.2). This appears to imply that the current proposal is not integrated into the redevelopment of the whole site - given this context clarification should be provided on how the remainder of the site is likely to develop. No details are provided on the alternative layout in the Masterplan.

The ES should have included an evaluation of the environmental advantages and disadvantages of alternative site layouts. As a minimum, a justification of the proposed layout and scale of development in environmental terms should be provided.

Some alternative layouts are now described and considered in terms of their environmental advantages and disadvantages within Chapter 4. These relate to options that have been previously considered / developed such as:

- A do nothing scenario;
- A 325 unit scheme (2003 Haylink submission);
- ‘Original’ scheme layout (August 2007);
- Potton Reserved matters submission (2000); and
- Masterplan application.

The Do Nothing and Masterplan options are stated as being included for completeness only (4.4.4 and 2.5.7).

The above descriptions indicate certain alternative levels and scales of development considered for the site and wider area (albeit variations on a theme). There are however difficulties and the reader is hampered due to certain issues including:

- Although the alternatives largely relate to actual plans and applications, they are not presented in a direct chronological order;
- The referenced maps (Figures) are not all properly labelled / titled within the hard copy of Volume 2 (Figures 4.1 - 4.4);
- There is an immediate confusion with Figure 4.1 referenced at 4.4.6. The reader may confuse this and refer to Figure 4.1 on page 18 of the ES, whereas it is (presumably) meant to be Figure 4.1 in Volume 2;

- Compounding the above, Figure 4.1 in Volume 2 is not itself titled on the hardcopy version and can only be identified as being Figure 4.1 from the CD;
- Further, Figure 4.1 (Volume 2) is titled HMS Ganges Masterplan 2004 and consequently it is not clear if it is indicating the 325 unit scheme as stated on page 21 of the ES or if it may be confused with the wider Masterplan;
- Figure 4.1 in Volume 2 also has a poor use of colour on its key making it impossible to distinguish existing from proposed development; and
- A reference to Figure 4.4 (Masterplan Application) at ES 4.4.1 is confusing as no Figure 4.4 appears in either Volume 2 appendix or on the CD version.

The above issues make it difficult to follow this Section. As well as improved and accurate labelling, referencing and titles, a further improvement would have been to indicate each alternative on a standard base map. This would enable easier and more consistent comparison.

2 Issue Specific Criteria¹

2.1 General Comments

2.1.1 Baseline Conditions – ~~C~~B

The methods used to gather baseline information are clearly stated. Where standard methods or guidance have been used these are referred to. The limitations associated with some of the surveys are indicated; for example reptile surveys were not undertaken at the most appropriate time of year. Quantitative information is provided where considered appropriate.

The regulatory and policy context for each of the issues is described. However, during the period in which the EIA was undertaken a revised version of the National Air Quality Strategy (NAQS) was published and it would have been helpful if the implications of the revisions for the assessment had been discussed (see review Section 2.2.1). Also the designated SPA was extended in 2005 (see review Sections 2.2.4 and 3.2). **Some baseline related updates are now included on both air quality and ecology (see review Sections 2.2.1 and 2.2.4 below). The ES now references the extended SPA and also provides quantified information in relation to the Social and Economic baseline.**

The ecological surveys that were undertaken do not appear to be consistent with the requirements set out in the scoping opinion issued by BDC. A breeding bird survey and an invertebrate survey were not undertaken and clarification of the reasons for this should be provided (see review Section 2.2.4). **Reasons are now stated re invertebrates (see 2.2.4).**

Ground contamination is considered, but uses data from earlier site investigations (see review Section 2.2.5). Again the scoping opinion does not appear to have been followed and no new surveys or site walkovers undertaken.

A thorough report has been compiled on archaeology and heritage (July 2007) although it is not clear if site investigations (as recommended in this report) need to be completed ahead of the planning determination (see review Section 2.2.5). **Further site meeting and consultations have taken place with specialist reports produced (see review Section 2.2.5).**

A three hour noise survey was undertaken to determine the baseline noise environment. Clarification should be provided on the period i.e. time of day covered by the survey. In addition, given that the noise survey was undertaken in 2003, clarification should be provided on whether there has been any addition or removal of significant sources of noise in the interim period. **Further information and clarifications have been added on these points.**

Within the baseline considerations there is no consolidated review of planning policies (although relevant policies are referenced in topic chapters). A schedule of relevant policies may have been helpful. **This is now provided in Appendix 3.1.**

¹ See 'Structure of the Report' in the Introduction for advice regarding the structure of this section.

2.1.2 Prediction of Impact Magnitude – D-C

The prediction of the magnitude of the impacts is variable. In some cases quantitative predictions are provided that demonstrate the change in the environmental conditions (e.g. air quality, traffic noise). Qualitative descriptions are provided where appropriate, but have also been used where a more quantitative approach would have been appropriate. For example, quantitative information should have been provided on the impact of construction noise (see review Section 2.2.7) and the impact of the proposal on the demand for health services (see review Section 2.2.8). We consider these to be significant omissions. **Quantified information has now been provided on both topics. The magnitude figures in relation to health service (numbers of residents relative to GP provision) are questionable both in relation to individual and cumulative effect (see review Section 2.2.8). Consideration of a worst case scenario assuming a higher level occupancy along with inclusion of cumulative effects would have been appropriate. The potential cumulative population increase from the Marina housing scheme (2.5.8) does not appear to be addressed in the assessment of residents to GP provision.**

Cumulative effect from the Marina housing scheme is now factored in new ecological assessments at 8.4.59 relating to recreational pressure.

Descriptions of the visual impact of the proposal have been provided for groups of receptors. However, these should have been supported by visualisations which demonstrated the likely impact. **Visualisations have been provided.**

Cumulative, related and combined effects are considered but are not addressed in a consolidated section and examples exist where the cumulative effects relative to the Masterplan have not been addressed (example in review Section 1.3). **ES now states the Masterplan is not relevant to cumulative effects (this however is questioned – see Section 1.4 above).** The site appears to hold a number of values in relation to its nature conservation value, cultural heritage, and coastal landscape setting. The combined effects of development on the site's aggregate value should have been considered. **This does not appear to have been completed.**

Despite changes in the development, such as the pond addition, it may be surprising that the habitat schedule as outlined in Table 8.8 has not been modified.

2.1.3 Impact Significance – D C

Criteria for the assessment of the significance of impacts are provided in many of the chapters. These are based on regulatory requirements or guidance in many cases (e.g. air quality).

The basis for assessing the significance of impacts on ecology is stated to be based on Institute of Ecology and Environmental Management (IEEM) guidance. However, the method described appears to be inconsistent with the final version of the guidance published in 2006 (see review Section 2.2.4).

The assessment of the significance of the residual ecological impacts appears to assume the proposed mitigation measures are 100% effective. The basis for this assumption should be provided (see 2.2.4 below). In the event that this assumption proves not to be robust, combined with the use of a method of assessing significance that is not now recommended by IEEM, the significance of the ecological impacts could be altered. **Revised ES has confirmed that measures are not assumed to be 100% effective. However, only one of the originally identified residual impacts has been increased (see review Section 2.2.4 below with reference to ES Table 8.16 on p 112).**

The basis for assessing the significance of the change in the demand for health care services should be clarified (see 2.2.8 below). This is important as this is a potentially significant effect of the development and insufficient information is provided at present to demonstrate the conclusion provided on the significance of the impact. Further explanation has been provided although there are considered to still be issues with the assessment (see review Sections 2.2.8 and 2.1.3).

2.1.4 Mitigation – D C

Mitigation measures are described where significant impacts are predicted to occur. The effectiveness of the measures is described in terms of revised significance of the residual impact. Quantified information on the effectiveness of the measures should be provided where possible. Some of the proposed mitigation measures for ecological impacts, although addressed in some detail, are likely to have variable rates of success. The ES should have indicated the levels of confidence that could be placed in the various measures outlined (see review Section 2.2.4). The revised ES has included new information on the effectiveness of some mitigation measures, particularly on certain ecological impacts (e.g. bats).

The mitigation measures for addressing flood risk & land drainage and landscape & visual impacts are poorly defined. More detailed information should be provided on the measures to be put in place, their location and the time taken for the measures to become effective. The revised ES states at 7.5.4 no additional mitigation (beyond scheme design) is required for flood risk and land drainage. Additional information on design principles have been included. Regarding landscape and visual impacts a small modification is made, accepting that certain measures will not be immediately effective (e.g. tree planting). There is still, however, a lack of detail within the main ES concerning the approach to landscape and visual mitigation (see review Section 2.2.6).

There is a lack of integration between the chapters of the ES and as a result some of the mitigation measures appear to be contradictory. For example, the measures proposed to mitigate the risks from contaminated land appear to conflict with the proposals for addressing land drainage issues (see review Section 2.2.5). Similarly, the measures proposed for the mitigation of the impact on reptiles conflict with the proposed construction programme for the proposal (see review Section 2.2.4). Given these conflicts it is difficult to fully understand and gauge the level of commitment to the implementation of the mitigation measures.

The above two contradictions appear to have been addressed and revisions and additions (such as the integrated management plan at Appendix 4.2) have improved integration within the ES. Some uncertainties remain, however, such as the concerns regarding the scale and effectiveness of ecological receptors / mitigation measures and potentially the lack of wider landscape conservation integration into appendix 4.2. (2.1.5 below).

2.1.5 Follow-Up – G B

A major follow up measure proposed is a management plan for the Martello Towers that will be designed to manage the cultural heritage, ecological and public access interests. Additional information on the likely content and objectives of the plan would have been helpful to demonstrate that these interests can be reasonably balanced.

An integrated Ecological, Heritage and Landscape Management plan has been compiled outlining interactions between topics (e.g. conservation of bats and the need to improve built structure) and proposing measures accordingly. The plan

concentrates on ecological and built heritage, landscape is considered but mainly with regard to measures that improve conservation of Scheduled Monuments (e.g. scrub and tree removal). Landscape is not addressed in the context of landscape character and views of designated landscapes. The plan does, however, set out to manage and resolve the respective ecological and heritage interests.

Dual ownership at Shotley Fort is identified as a major constraint to progress. The Plan refers on occasions to a 'management group' for the Martello Tower (5.30). Under ecology, it states ecological effects will be monitored (6.7) but does not indicate who will do this. The exact balance of future management is not clear although that may be understandable given past issues and future uncertainties. Section 6.4.1 refers to a 'Shotley Fort Nature Reserve area' but there is little information on how this will be progressed. If the ecological interest is to be managed and conserved, then further possible management options may need to be developed. One option might be discussion with the Local Authority (LA) to either take on or designate the site as a Local Nature Reserve (in line with Policy EN07 at Appendix 3.1).

A further suggested follow up measure is the possibility of a planning condition to require an appropriate programme of investigation and recording for previously unknown, sub-surface archaeological remains (p 6-18 6.5.2). This, however, is not presented as a commitment. Reference is now made to a potential programme of mitigation including trial trench evaluation (6.5.2).

The Non-Technical Summary (NTS) indicates that a CEMP or Code of Construction Practice will be agreed with the LA. It also refers to some measures during construction (e.g. dust). Although these are referenced, the inclusion of a draft or outline of the CEMP would have been appropriate, along with an identification of responsibility for implementing the measures identified within it. A draft CEMP is now provided at Appendix 4.3. It covers a range of general principles and future management commitments in line with typical expectations. It does not fully address all measures, but sets principles. It also references other required plans that will follow including a Site Waste Management Plan and a Remediation Method Statement and Validation Plan. It is not clear who has compiled the CEMP.

Ecological monitoring is proposed, for example on the use of the site by reptiles, but additional detail should be provided on the methods to be used, the frequency of the monitoring and number of seasons over which it would be undertaken. Further confirmations still appear to be required.

Given the range of interests on site (heritage, archaeology, ecology, visual) it would have been useful on this development to present a consolidated list of major follow up / mitigation measures in a timeline against the construction schedule. This would have been helpful and would help resolve any concerns such as those identified in review Section 2.2.4 (e.g. reptile translocation 1 year ahead of construction). Although such a full consolidated schedule is not provided, a combined management plan does now address certain topics (in particular ecology and built heritage). There is also now a more specific commitment on reptile translocation (in advance).

2.2 Issue-Specific Comments

2.2.1 Air Quality

Reference is made to the National Air Quality Strategy (NAQS) of 2000 amended in 2003 (p 5-1, 5.2.2). Given that the ES was published in August 2007 (according to the title page of the document) the most recent NAQS published in July 2007 should have been reviewed to determine whether it is likely to have affected the air quality assessment and any of its conclusions. Specifically, the 2010 objectives for PM_{10s} have been replaced by exposure objectives for PM_{2.5}. Whilst it might be inappropriate to ask for the air quality assessment to be 'reworked' any gaps in the assessment as a result of changes to the strategy should be acknowledged.

Whilst it is true to state nationally PM_{10s} and NO_x are the most problematic pollutants, in order to ensure the assessment was focused on the key issues the ES should have had regard to the LA's latest Updating and Screening Assessment (USA) to identify whether any other pollutants are likely to be a problem at this particular location. A comment on baseline and background levels particular to such coastal locations may also have been helpful e.g. describing the situation regarding elevated ozone levels at coastal sites. **Section 5.2.5 onwards, now makes reference to the 2006 USA and also the 2007 APR. Section 5.3.1 indicates that Ozone is not referenced within the USA as a problem. It is not clear, however, if this is because USAs tend to concentrate on other pollutants or whether low level ozone has been measured and is within accepted limits.**

The ES assumes road traffic is likely to be the main source of air pollution in the locality. In the absence of information being available to the contrary (such as the USA) this may not be an unreasonable assumption, however, an indication of the potential influence of emissions from any other nearby sources (e.g. ports) would have been helpful. **USA now referenced and Section 5.2.9 considers situation regarding Ports.**

Five receptor locations are identified and the locations of these are shown on maps provided (p 5-3, 5.2.17). However, in addition to the detailed street maps, it would have been helpful if a smaller scale map had been provided that illustrated the receptor locations in relation to the site and the road network. Clarification should be provided on whether the receptor locations were agreed with the LA. **Confirmed, not agreed with LA but explanation provided at 5.2.23.**

The assessment years selected are 2007, 2010 and 2012 (p 5-4, 5.2.23). Clarification should be provided on the basis for selecting these years. Given the development is only likely to be completed in 2012, a later year when it is likely to be fully occupied and operational may be more appropriate. **Basis has now been provided (5.2.28).**

Traffic predictions have been derived from AM peak hour flows. These have been factored to provide 12 hour, 16 hour and annual average daily traffic (AADT) flows. The factors used to extrapolate the flows over a longer time period are stated to be locally derived. Whilst the approach to determining these flows may be appropriate, the ES should acknowledge the use of these techniques will affect the accuracy of the predictions. **Explanation and context on limitations, approach and constraints now provided (5.2.34 and 5.2.35).**

2.2.2 Archaeology and Cultural Heritage

The methodology used to assess the impacts is clearly set out and the significance criteria are well defined (p 6-6, 6.2.29).

There is reference to the Masterplan including a buffer of open space around the Martello Tower L (p 6-19, 6.5.5). However, as the Masterplan has not been included in the ES the reader is unable to understand the nature, or evaluate the adequacy, of this space. In addition, given the earlier reference to the Masterplan including alternative proposals to the current application (see review Section 1.4), it is unclear which features of the Masterplan are included in the current proposal.

An archaeological desk based assessment is presented in Appendix 6.1. Within this assessment report, Section 4.58 indicates that an archaeological 'site walk over' took place in June 2007. There is no mention of any consultation with the LA Archaeological officer relating to the archaeological assessment. This is considered an omission, especially as BDC's scoping opinion advised direct dialogue with the Suffolk County Council Archaeological unit. Section 6.2.28 now indicates subsequent meetings have now been held with representatives from Suffolk County Council on 7th December 2007 and 18th January 2008. The outcome of these meetings was further consideration needed to be given to the extent and origin of the underground bunkers and tunnels on site and the potential for the site to contain below ground archaeological remains. Consequently, EDP prepared two documents: Briefing Paper on Underground Bunkers and Tunnels at HMS Ganges, April 2008; and Briefing Paper on Undesignated Cropmark Remains at HMS Ganges, April 2008 (documents are at Appendix 6.2 and 6.3 of revised ES).

Further, the ES indicates (p6-4, 6.2.19) BDC local plan policy 27 states "...if research indicates that archaeological remains may exist, a developer will be required to submit an archaeological field evaluation before determining a planning application". Within the assessment in Appendix 6.1, indicative research is cited (S5) and a recommendation is made (S6) that further site investigation may be required in line with this policy (CN27). It is not clear if this recommendation has been addressed or if any dialogue with Local Authorities has taken place to resolve any need for intrusive investigations prior to decisions on planning permission (see comments above and below re consultations and further studies).

Reference is made to the provision of a management plan for Martello Tower L and the fort to reconcile the requirements of public access, nature conservation and archaeology (p 6-19, 6.5.6). Given that this will be an important component in achieving the stated cultural heritage benefits and protecting the bats that use the tower, it would have been helpful if a draft of the management plan had been provided in the ES. An indication of who will be responsible for the implementation and monitoring of the plan should also have been provided. Section 6.2.30 indicates that continuing consultation has taken place with the Suffolk County Archaeologist and English Heritage during the course of the application submission and this has informed the content of the draft Integrated Ecological, Heritage and Landscape Management Plan for the site, which is now attached at Appendix 4.2. The ES further states that "The final version of the Management Plan and the works necessary to adequately preserve archaeological material, including further investigation work at the site will be agreed via a condition on the decision from Babergh District Council". At this stage, the precise responsibility for implementation can not be confirmed.

2.2.3 Drainage and Flood Risk

The ES describes the topography of the site and the existing drainage arrangements. Calculations for site runoff are provided in Appendix 7.1, but an explanation of the likely impact should have been included in the ES.

The ES describes a range of potential mitigation measures and reference is made to the future detailed design of a drainage scheme (p 7-5, 7.5.7). In the context of this ES (accompanying planning application for reserved matters) it is surprising that fuller scheme details and assessments are not set out within the ES. Also, given the potential for conflict between the land drainage proposals and the measures designed to minimise the impact of contaminated land (see review Section 2.2.5), it would have been helpful for a drainage strategy to be developed that satisfied the requirements of both issues. Fuller details are now set out within a proposed drainage strategy at Appendix 7.2. This addresses drainage aspects for the development, including solutions and methods in response to local context (e.g. the discovered limitations of the site in relation to soakaways). The above mentioned potential conflict (regarding drainage proposals and contaminated land measures) does not appear to be specifically addressed in Chapter 7 or within appendix 7.2. It is, however, referenced in ground conditions (see review Section 2.2.5 below).

The scoping opinion from BDC stated drainage as a “significant effect that should be included” in reference to the potential impact upon Shotley Marshes SSSI or the Stour and Orwell SPA. This context has not been specifically addressed in the ES chapter on drainage and flood risk. It appears this scoping response is not explicitly reviewed in the drainage chapter of the revised ES. Appendix 7.2 does recognise a requirement for discharge consent to the Estuary from the EA (3.16, p8).

2.2.4 Ecology

The ES provides a clear statement on the ecological groups that were surveyed for on the site, together with the regulatory and policy context for ecology.

Clarification is required on how the ecological surveys required for the assessment were scoped as there appears to be some inconsistencies between the content of the ES and the scoping opinion issued by BDC. A major consideration appears to be the requirements from public enquiry in 2006 which recommended further details for bats and reptiles on the site (p 8-4, 8.2.11). These have been addressed in detailed reports appended to the ES. The scoping opinion requested the ES to be “more explicit in relation to the proximity of the proposed scheme to internationally and nationally designated sites” and also references that the SPA was extended to include mudflats at Shotley Marina in May 2005. It is not clear if the ES has addressed these factors. Additions have been made with regard to these potential impacts and associated mitigation (comments below).

Given the site’s increased proximity to the Stour and Orwell Estuary SPA (p 8-8, 8.2.23), a survey of wintering and breeding birds may have been expected to understand if and how birds use the site. However, the ES appears to imply observations were made during walkovers that were being undertaken for other reasons, rather than by a systematic survey in accordance with a recognised methodology. The ES should be clear on how this was scoped and whether Natural England agreed to the approach. This point has not specifically been addressed, although the ES now indicates further consultations have been held with Natural England and the Suffolk Wildlife Trust (8.1.2). The ES does not clearly indicate the outcomes of these consultations.

The decision not to undertake an invertebrate survey, whilst not necessarily unreasonable, appears to have been entirely based on the judgement of the consultants rather than existing information or the opinion of consultees on the value of the site for invertebrates (p 8-8, 8.2.24). In contrast, the scoping opinion indicates an invertebrate survey is required on the basis that the habitat is suitable for scarce species such as burrowing bees or wasps. Clarification should be provided on whether Natural England and/or the Council had agreed to this revised approach. **The revised ES is indicating a baseline scenario assuming high intrinsic interest has been followed. Section 8.3.56 states "it is likely that further survey would demonstrate that the site has a high intrinsic invertebrate interest. Potential effects on invertebrates have therefore been assessed on this basis". Section 8.2.25 now states that a worst case scenario has been assumed.**

The ES states the ecological assessment has been undertaken in accordance with the guidelines published by the IEEM in 2006 (p 8-8, 8.2.25). Table 8.2 (p 8-10) sets out the basis for assessing the significance of an ecological impact based on a consideration of the value of the ecological receptor and the magnitude of the impact.

The significance of an impact is classified on a scale of no impact, negligible, minor, moderate and major. The terms 'moderate' and 'major' are highlighted in bold. There is no explanation as to why this is in the ES, but other ESs have used this method to indicate the level of impact highlighted in bold is considered to be significant. If this is the approach adopted in this ES then the approach to assessing significance appears to be inconsistent with the IEEM guidance. Based on the approach used it would not be possible for an impact at a neighbourhood level to be considered to be significant and even at a district scale only an impact of high magnitude would be considered to be significant. The IEEM guidance defines an ecologically significant impact "as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographical area...The value of any feature that will be significantly affected is then used to identify the geographical scale at which the impact is significant." (IEEM guidelines, paragraphs 4.27 & 4.28). This approach does allow for significant effects to occur at a neighbourhood or district level whilst recognising their geographical context. **The revised ES does not offer further explanation on the above other than the following statement at 8.2.29:**

"These significance criteria are used for guidance, and judgement is required in their application to take account of the particular circumstances of a project".

The ES states the density of the reptile population on the site is less than one animal of each species per hectare (ha) (p 8-16, 8.3.28). Clarification should be provided that the survey method is sufficient to provide a reliable estimate of the density of the population. This is particularly important given the constraints on the surveys noted on page 6 of Appendix 8.5 which indicate that the surveys were undertaken at a suboptimal time. **An explanation has been added at 8.3.28.**

The ES concludes there is little chance of a direct impact of the development on the SPA due to geographical separation (p 8-36, 8.4.43). The potential for disturbance to birds in the SPA is highlighted (8.4.45) and the potential for such impacts may require separate 'Appropriate Assessment' (AA) to be undertaken. The ES should refer to any possible AA requirement and indicate either how AA would be addressed, or alternatively reference any consultations with relevant bodies that have confirmed AA is not required. **An explanation regarding Appropriate Assessment is now included at Sections 8.5.88 and 8.5.89, and references made to discussions with the LPA and Natural England. Public access to the SPA has been acknowledged**

and addressed within the revised ES (in Sections 8.4.50-8.4.59). Studies have been drawn on to assess impacts and a modified adverse impact has been added to Table 8.12.

Reference is made to the need for a management plan for the site (p 8-43, 8.5.4) and it is implied that this is provided in a separate document. Clarification of the precise document which provides this information should be given. In addition, the information, or at least a summary of it, should be included in the ES in order to demonstrate the ongoing commitment to the implementation of the mitigation measures. Habitat creation measures are briefly described (8.5.5-8) suggesting there is a spatial plan for the ecological mitigation measures. A map indicating the location and extent of each of the areas of created habitat should be provided. **Integrated proposed management plan now provided at Appendix 4.2.**

The description of the translocation of reptile raises the possibility that the receptor site may not have the capacity to accommodate the additional reptiles (p 8-46, 8.5.20-21). Clarification on how the practitioners will know the site is 'over capacity' would be helpful. The need for an additional receptor site, in the event that the proposed site does exceed its capacity, is acknowledged. Criteria are provided for the selection of an additional site, but it would have been helpful for an additional site to have been identified to avoid any adverse effects resulting from delays incurred at the time when the need for an additional site is identified. **Clarification of receptor capacity and management has been provided at 8.5.24.**

The ES is dated August 2007 and states that, as a result of the lengthy process of reptile translocation, a translocation programme should commence at least a year prior to construction commencing (p 8-45, 8.5.15). Clarification should be provided on whether this recommended timing of the translocation programme is to be complied with given that construction is anticipated to start in Spring 2008 (approximately 6 months after the date of the ES). **Clarification provided at 8.5.19, indicating that "the exact (construction) start date will be dependant on the duration of the translocation programme".**

In order to mitigate the impact on the bat population on the site it is proposed to include bat boxes or bat tubes within the walls of the proposed new dwellings (p 8-48, 8.5.33). Clarification should be provided on how many of these are to be provided and how these, in combination with the bat boxes mounted on trees, have been calculated to be sufficient to replace the roosts that will be displaced as a result of the development. The timing of the provision of these measures in relation to the destruction of existing roosts and habitat will also be an important factor, particularly for the proposed bat loft (8.5.34), and should be explained. Clarification should also be provided on the confidence that can be placed in the boxes being used as this assumption provides the basis for changing a 'major negative' impact into a 'minor adverse' and eventually (it is claimed) a positive. **Clarification has been provided by the ES referencing 'take up' in studies and monitoring of bat boxes on other locations. Timing has been explained at 8.5.42 and principles appear to be addressed (although there is still some confusion re phasing – see earlier comments in review Section 1.1). It would be helpful if the ES confirmed the process of dialogue and engagement with Natural England or other relevant bodies on this topic (this would give additional confidence re the scheduling and overall measures). The ES and management plan have however addressed the issue in some detail.**

Section 8.5.59 now indicates that houses within 40m of the Martello Tower will not be permitted to have security flood lighting.

A number of management measures are proposed to avoid or minimise impacts on the SPA (p 8-52-53, 8.5.57-61). Clarification is required on how the implementation of these measures will be monitored. This is particularly important given the international value of the SPA. Sections 8.5.77 – 8.5.87 now indicate a number of measures that will be implemented. Future monitoring is not outlined within the main ES text.

Tables 8.13 – 8.16, which list the mitigation measures and the change in the significance of the impact resulting, appear to work on an assumption that all of the measures are 100% effective (addressed at 8.5.1 which now indicates that 100% effectiveness is not assumed). Justification for this assumption should be provided, particularly where methods are to be adopted that do not intervene between the source of the impact, but seek to change the behaviour of users of the site that could cause an impact, e.g. through the use of signage or educational materials. If such justifications can not be provided then a likely significance range (post mitigation) might be more realistic (i.e. – a best case / worst case range). Range or variation is not used in relation to residual impact after mitigation (reference revised Table 8.16).

Generally a number of mitigation measures are now outlined, addressing ecological issues identified in the ES. There is still uncertainty on how some measures outlined (which appear to be suited to the development impacts) will be monitored and how corrective actions may follow if required. As an example Section 8.5.69 states “Predation of birds by cats could feasibly be controlled through restrictions on the possession of domestic pets within the new residential units. However, due to the onerous nature of this condition, this will only be considered if thought to be necessary and there is no satisfactory alternative”. Having made this statement, the ES fails to indicate how monitoring might identify if such measures are required or how they would be implemented.

A map of habitats and development impacts is included in Appendix 3 of the CEMP at Appendix 4.3. This is useful, although the map is quite cluttered and it is difficult to read the respective losses and gains. A further positive assessment technique, adopted in the original (and revised) ES, was to set out a schedule of semi-natural habitats on site along with the proposed loss and retention. It is somewhat surprising that this schedule has not changed in the revised ES (Regulation 19). Generally there may be some uncertainty over the density and extent of development, relative to habitat loss and ecological impact. In this context expert opinion may be required to help review the assessed impacts and the effectiveness of the planned ecological provision.

2.2.5 Ground Conditions

The ES appears to utilise data from earlier work undertaken by CARD (2001 and 2002). No recent survey work is referenced and no recent site walkover inspection appears to have been done (p 9-2, 9.2.3). The BDC scoping opinion indicated a land contamination investigation should be designed in consultation with the Council’s contaminated land officer and also the EA. It is not clear if such consultations have taken place. This has not been confirmed within Chapter 9.

The locations in which contamination has been identified should be shown on a map. Trial pits are indicated on Figures 9.1 and 9.2 but the location of contamination is not indicated. Quantified data on the levels of contamination discovered should be provided and compared to the appropriate environmental assessment levels. Maps do not appear to have been added. A reference to results in Appendix 9.1 has now been added (at 9.3.15).

The importance or sensitivity of the Stour and Orwell (SPA designations) as potential receptors are not clear in this section. Both estuaries are considered (e.g. p9-14 table 9-4) but their SPA status is not referenced. **This has now been referenced at 9.3.6.** The potential for any impacts upon the SPA should be more clearly explained, especially in the context of the geological conditions (sands and gravels) whereby “pollutants have the potential to move through the surface deposits, and the deposits have little ability to attenuate diffuse pollutants” (p 9-6, 9.3.7).

The ES refers to the isolation of residual contamination through hardstandings that form part of the development or through an engineered capping layer (p 9-11, 9.5.6-7). Clarification should be provided as to how this approach is consistent with the proposed mitigation for drainage and flood risk that includes soakaways, permeable paving and discharge to soft landscape areas (p 7-4, 7.5). Whilst it is clear that mitigation for both issues has not been finalised this apparent conflict does highlight the need for a coherent mitigation strategy that addresses both effects to have been included in the ES.

The revised ES sets out to address these points. Section 9.5.8 states that “the soakaway drainage proposed will be within natural sands and gravels beneath the site unaffected from any contaminated materials within the Made Ground. Surface water run off either from hardstanding or engineered soil capping layer will be isolated from any contamination in the Made Ground using an impermeable membrane laid beneath drainage layers thus preventing any downward infiltration. Surface water will then drain directly into natural sands and gravels in the soakaway systems or to surface water drains, as detailed in the drainage strategy attached as Appendix 7.2. Drainage infiltration will be located well beneath near surface materials”. Section 9.5.9 states “Isolation of the residual contamination within the Made Ground will minimise incidents of surface water run off causing residual contaminants to pass through the sands and gravels and into the SPA in the Stour and Orwell estuaries”.

The above sections do appear to address the identified issue. There may, however, be concerns regarding the level of detail in these explanations and the confidence outlined (relative to the extent of explanation). Diagrams indicating the proposed mitigation response and use of membranes would be helpful to the reader, as would maps indicating extent of contamination (or the development locations affected). Regulator comment on the approach might further add confidence that measures will be effective.

2.2.6 Landscape and Visual Impacts

The ES includes 'interim conclusions in respect of landscape character' (p 10-10, 10.3.37). Why only interim conclusions are provided is not clear. **This is now explained at 10.2.9, indicating that these are initial conclusions of the baseline in the absence of the development proposals.** The conclusions indicate the site is capable of accommodating significant change, but this appears to be based on inter-visibility with adjoining areas. However, the visual impact of the proposal is stated to be dealt with in the following Section (10.3.42 onwards). The assessment of the ability of the landscape to accommodate change should be based on the character of the landscape rather than just views of it.

In the description of the methodology there appears to be a lack of clarity between effects of the development on landscape character and visual effects (Appendix 10.2, A2.42-45). In the discussion on effects on landscape character the visibility of a development appears to be a significant determinant of whether a site has the capacity to accommodate development and there is less emphasis on the effect on

the character of the site and the components of the landscape that contribute towards that character.

In relation to the baseline, the ES does not present the local and regional planning policy context. The Structure Plan has been reviewed but the ES approach does not present its relevant policies. Reasons are also given for not assessing policies from adjacent local authorities (Tendring District and Suffolk Coastal). The decision not to present and review Structure Plan policies is questioned. **Planning context is now presented in Appendix 3.1.** Further, the review presented of local plan policies (BDC) fails to outline relevant policies in full and the reader is left unsure of the exact policy context. In relation to the AONB, the ES states that "...it is accepted that consideration should be also given to development which has the potential to affect the visual context of those areas" p 10-4, 10.3.6). The level of consideration however is not clear. **Further confirmation is not apparent in the revised ES (Regulation 19). Some explanation of 'limited effect' is provided in the new ES Appendix 3.1 within the policy appraisal.**

Reference is made to the selection of view points (p 10-11, 10.3.45). Clarification on whether the LA was consulted on the selection of these would be helpful. This is particularly important given that the Council requested to be consulted on selection of receptors in their scoping opinion. However, we do note that the reasons for the selection of the view are provided in (Table 10.1 p 10-12). The selection of the viewpoints is stated to be based on the generation of a Visual Envelope by computer and 'on the ground' visual appraisal (p 10-11, 10.3.44-45). The Visual Envelope should have been provided as one of the figures, this is critical to demonstrating that the selected viewpoints are representative of views of the site. **The Visual Envelope is indicated in an additional figure (Figure 10.37).** Clarification should also have been provided as to whether views from sea to land had been considered. Given the presence of a nearby marina, these may be considered to be important by some stakeholders (e.g. Ferry passengers travelling to Parkeston and also the Harwich Foot Ferry (14.3.35) which travels direct to Shotley from Harwich Haven). **The Visual Envelope indicates and demonstrates the extent of views from the sea to land. Section 10.3.49 indicates that BDC have not requested any further views be assessed (referencing a letter dated 7th December 2007). The ES, however, is not limited to BDC requests and could have more directly addressed this issue.**

A description of the view from each group of the viewpoints is provided and includes a classification of the sensitivity of the view (10.3.47-54). The ES should have provided a definition for the terms used to categorise the sensitivity of the views.

Definitions are provided for the terms used to categorise the magnitude of the visual impacts (Appendix 10.2, A2.53). However, in many cases these definitions substitute one qualitative term for another (e.g. a 'very substantial / substantial' impact is defined as one where the development will be 'highly prominent') and therefore convey little in terms of the basis for allocating an impact to a particular category.

The ES describes elements of the proposal that are designed to mitigate the landscape and visual impacts. However, in the absence of any plans indicating how the site is to be developed or photomontages of the proposed development it is not possible to verify whether the proposed design is successful in delivering the mitigation. For example, the ES state that the setting of the Martello Tower has been considered in the design through the retention of open space and "the set back and orientation of buildings which reflect the circular symmetry of the Tower." (p 10-20, 10.4.22). **Photomontages are now included at Appendices 10.4 and 10.5, along with the addition of the Visual Envelope at Fig 10.37.**

The Landscape and Visual Impact Assessment (LVIA) refers to the need for a Masterplan for the whole site (p 10-21, 10.4.27). However, other chapters in the ES appear to indicate that such a Masterplan already exists or is in preparation (e.g. p 3-1, 3.1.1). Clarification is required on whether a Masterplan for the whole site does exist and, if so, how this relates to the proposal and visual assessments. **The ES is now indicating the masterplan is completely separate and not assessed.**

Descriptions of the visual impact of the development are provided in the ES and are supported by Figures 10.4-16. However, these figures only provide a line that indicates the predicted extent of the development from the various viewpoints. The ES should have included visualisations of the development that would indicate how the views from key locations would alter as a result of the development. **Visualisations are now included in Appendix 10.5.**

Clarification should be provided on the methods used to produce photographs. The ES provides two photographs of each view, one taken with a 50mm lens, the second with a 200mm lens, but it is not clear which is meant to represent the naked eye view from the various view points. In the event the photographs were taken with a digital camera there is the risk that the 50mm view is not consistent with the 'naked eye' view. **Information is provided within Appendix 10.5 to explain the methods used.**

Significant new information is provided, especially via photomontages for winter and summer views. There are, however, certain aspects that may require further consideration (possibly via an expert review of this topic). This includes the assessment of impacts in relation to the site's prominent location within a broad area of protected landscape (coastal zone and AONB). Although the visualisations help to demonstrate the impact and have informed qualitative assessments, the extent of consideration relative to wider views of this coastal zone is not clear (both from sea and land). The ES assertions regarding intervisibility (see policy comments at end of Appendix 3.1) may be reasonable. An expert opinion, however, may be required.

2.2.7 Noise and Vibration

The ES states the purpose of the noise assessment is to consider the change in sound level that would occur at the most noise sensitive time of the day or night (p 11-1, 11.2.2). The ES then refers to a 3 hour noise survey that was undertaken (p 11-2, 11.2.6). Clarification should be provided on whether this was based on an estimate of the likely most sensitive times of the day or night. The time period covered by the survey at each location should also be recorded. **Time period confirmed at 11.2.6.** The noise survey referred to was undertaken in 2003. The ES should clarify whether there is likely to have been any change in the noise environment during the intervening time due to the addition of new sources or the removal of previously significant sources. **Clarification included at 11.2.12.**

The receptor locations for the noise survey are described, but it would have been helpful if they had also been illustrated on a map. Locations 1a and 2 are stated to be selected to represent the worst case for assessing the effects on the nearest residential area (p 11-2, 11.2.7). Given the extent of the development the selection of these receptors must have included assumptions about the major sources of noise from the development, these should have been made transparent in the ES. Clarification should be provided as to whether the worst case construction impacts as well as operational impacts were considered. **Explanation now included at 11.2.7.**

The ES identifies 70dB L_{AeqT} to be an acceptable noise limit for construction noise (p 11-4, 11.2.15). This is stated to have been set after taking into account recommendations contained in BS 5228. In order to provide greater transparency as

to the reasons for setting this criterion it would have been helpful for the recommendations to have been included in the ES. Further relevant information has been provided in relation to Department of the Environment Advisory Leaflet AL72. This is old and out of print guidance (1976) and this should be recognised within the ES along with any limitations this causes. It is, however, appreciated that guidance in this field is limited.

The ES does not provide any predictions for construction noise on the site. Noise levels from typical construction plant have been added at Table 11.1. It is indicated that at least some of the plant is likely to have some difficulty in meeting the proposed criterion of 70dB (p 11-7, 11.4.2). Nevertheless, the ES should have provided an estimate of the extent to which the criterion will be exceeded in order to also give a clear indication of the change in noise levels that is likely to be experienced by local residents. This is particularly important given there is some potential for piling to be used on the site (p 6-17, 6.4.17). No mitigation is proposed for construction noise impacts at present and therefore the worst case impact should be assumed. A clear statement on the level of significance of the impact (in accordance with Table 11.3) should be provided. Sections 11.4.2 and 11.4.3 now indicate that worst case scenarios have been followed. A draft CEMP and mitigation has now been included (Section 11.5.2).

The ES states the main operational noise source will be the traffic generated by the development (p 11-7, 11.4.4). Data is provided for the AM and PM peak hours. Whilst this will inform on the maximum noise levels likely, the period when the greatest change in noise levels is likely to occur may be different. Noise prediction should have been provided for the period when the largest change in traffic levels is likely to occur.

The ES states that there would be no significant sources of vibration during construction assuming conventional construction practices (p 11-9, 11.4.12). Clarification should be provided on the vibration impact of the potential piling referred to in the Archaeology and Cultural Heritage Chapter (p 6-17, 6.4.17). It is understood from other chapters that piling methods will not now be followed. This may however require confirmation.

Operational noise impacts on new properties are to be mitigated through appropriate design (p 11-10, 11.5.3). Examples should be provided of the specific measures that will be employed to mitigate the impact and their level of effectiveness in order to demonstrate the required level of mitigation is achievable. Information has been added at 11.5.5- 11.5.7.

2.2.8 Socio-Economic

The scope of the socio-economic assessment is described, focusing on the need for the proposed development and potential for effects on social infrastructure (p 13-1, 13.2.4). Given that the proposal will potentially result in a significant increase in the population of the area, it would have been helpful if the ES had addressed the relationship of the retirement village to Shotley Gate and the potential effect of the change in demographics. Demographic change is now considered in 13.3.2-13.3.6. The relationship to Shotley Gate is not clear in this analysis, which considers population change in the District and also in the two wards of Berners and Holbrook (where the development is located). A map indicating all local wards affected by the development may be helpful to the reader and to the analysis.

The assessment of the effect on the demand for health care services is qualitative (and appears primarily based on opinion). Quantitative data is provided to

demonstrate that the ratio of patients to general practitioners (GPs) on the Shotley Peninsula is within the average ration per GP set out in the National GP Contract (p 13-3, 13.3.6). This information is based on 2001 census data and it would have been helpful if more up to date estimates of the population could have been provided. In addition, the distribution of the three surgeries servicing the peninsula should be clarified. This is important as overall ratios of GPs to patients may not reflect the development's demand for services 'on the ground' which may primarily fall on one surgery.

The ES reasonably states the population of the retirement village is likely to be less than a conventional housing development (although we do note that up to five bedroom houses are planned for the development (p 4-1, 4.1.3). Nevertheless, quantitative data should have been provided for the predicted population of the retirement village. This might be based on the size and types of properties to be provided or on the experience of other retirement settlements. This information has now been added in Table 13.1. There is a small error within Table 13.1 on the resident calculation for the five bed retirement home. For the 3-5 bed retirement homes an occupancy assumption of just two people per unit is made (and justifications made at 13.4.7). Although this may be reasonable, a worst case scenario could have been appropriate and in this context, an assumption of more than two person occupancy in the 3-5 bed units, would increase the estimate. Cumulative effects might then further increase this figure. For example:

- 1) The ES has not included (not factored in) the potential cumulative population increase from the Marina housing scheme (as referenced in 2.5.8) into its considerations of residents to GP provision; and
- 2) Those moving in to two bed dwellings in the development may be vacating nearby family homes (which in turn are likely to be sold to larger family units).

Based on this information the additional population to be provided for by the local GP practice could have been calculated. This has now been calculated by the ES (estimated from figures above) and an increased population of 11% is referenced. 13.4.11 states that "this will mean a just under 10% increase in the practice size of the local GP service".

GP capacity can be deduced to be 200 (from information in 13.3.18), whereas the ES estimates a population increase of 734. Some reasons are provided (13.4.10) to indicate why new residents may not be a significant impact on GP services in the short term. However, the above figures appear to point to a potential impact which the ES does not convincingly address.

At 13.3.3 the ES makes reference to a Figure Y which does not appear within the ES (but is understood to be in a wider referenced document). This may be slightly confusing to the reader.

A quote is provided from a Joseph Rowntree Foundation publication that appears to indicate that a retirement village would not result in significant additional demand for social and health services (p 13-4, 13.4.1). The quote, however, also indicates there is insufficient evidence either way to draw any firm conclusions. Given the lack of any objective research evidence, it is inappropriate to assume the 'best case' that there would not be an increase in demand of health services, over that simply associated with the increase in population. Consultation with the primary health care trust (PCT) to find out their opinion on this issue would have been helpful. Consultation with the PCT associated with an area that already has a retirement community would also have helped to establish the nature of the change in demand

associated with this particular type of change in the population. **Some further information has been provided in relation to the Rowntree Foundation report.**

The ES states additional population of the retirement village is "relatively small" (p 13-4, 13.4.3). However, there is no clear indication of what the change is being compared to in order to be considered 'relatively small'. The preceding sentences indicate how the predicted population is likely to be less than that occupying a conventional housing development. Whilst this is likely to be correct, it is not relevant to the assessment of the impact on local services. The quantified information referred to above should be provided to support this statement. **Quantified estimates are now included.**

The ES concludes the direct effects on existing healthcare services are not likely to be significant (p 13-4, 13.4.3). Taking into account the issues raised above we do not consider that the ES has presented the evidence to support this conclusion. **The ES does now indicate likely capacity issues over the medium to longer term (13.5.7). It is not clearly stated if there would be any short term capacity issue (e.g. during construction).**

2.2.9 Transportation

The ES provides considerable evidence of consultation with Suffolk County Council having been undertaken to agree the data and methods used in traffic assessment.

The transport assessment has focused on the highway capacity during the AM and PM peak hours as agreed with Suffolk County Council. However, for the purposes of identifying the period which is likely to result in the greatest change in environmental conditions resulting from the traffic, it would have been helpful for baseline data to have been gathered for other periods and for trips to be predicted for these periods. **Further explanation has been provided in Sections 14.2.52 – 14.2.54.**

The assessment of the impact on pedestrians and cyclists focuses on the opening up of access to the site. Consideration should also have been given to the impact on pedestrians and cyclists using the road network that would be affected by the change in traffic levels. **A statement has been added to the ES that use is minor (14.4.35).**

3 Presentation of Results

3.1 Presentation – C-B

Information in the ES was presented in a clear and logical order. The figures provided were clear, although the quality of the reproduction of the photographs and some maps could have been improved. Technical language has largely been avoided within the text.

The ES did omit key illustrative material that restricted the understanding of the nature of the development and its environmental impacts. In particular, a plan showing the distribution of buildings on the site and a map showing the visual envelope of the proposal were key omissions. Similarly the ES would have benefited from a consolidated and accurate plan of important ecological and landscape designations relative to the actual development footprint (see review section 1.2).

The chapters dealing with the environmental impacts of the development appear to have been presented in alphabetical order. Arguably, a more helpful form of presentation would have been to deal with most significant issues first and the secondary issues toward the end of this section of the ES.

Additional editing of the document is required. There are cross references within the text that are incorrect, for example:

- Paragraph 10.3.4 (p 10-4) refers to Figure 8.1, but should refer to figure 10.1.
- The bullet points in paragraph 14.2.46 (p14-8) refer to paragraphs that are not in the ES.

In addition, the definition provided for landscape character refers specifically to the urban environment (p 10-6, 10.3.17).

The description of the methodology adopted for the landscape and visual impact assessment is provided in an Appendix. Given that this is fundamental to the credibility and understanding of this assessment, this should have been included in the main document.

A number of presentational improvements have been made and the majority of above issues addressed. However, some presentational concerns still exist:

- Failure to correctly title hardcopy appendix plans and a missing plan of 4.4. These and other presentation points significantly effect the reader's understanding of description of alternatives (see review Section 1.4);
- There is a discrepancy between main text and the new Volume 4 appendices regarding the development's phasing (see review section 1.1); and
- The ES contents page does not directly reference the new titled Volumes 1-4 and consequently the reader is unclear if Volume 4 is actually part of the ES.

3.2 Objectivity – D C

The objectivity of the ES appears to be variable. The ES clearly sets out the methods used to gather the information on the environmental conditions at the site and the surrounding areas likely to be affected. The ES also includes

correspondence with BDC on the scope of the EIA and there is evidence of extensive consultation relating to the transportation assessment. However, the ES appears to miss some issues raised in BDCs scoping response and is also vague on many of the details of the development and on the level of impact where it is potentially significant. For example:

- A plan of the layout of the proposal has not been provided;
- Quantified information on the construction noise impact of the proposal has been omitted; and
- A quantified analysis of the additional demand for health services could have been undertaken, instead of the qualitative judgement provided.

The above issues have now been addressed by the revised ES. The quantified analysis regarding additional demand on health services however may result in some objectivity concerns.

There are also some presentational issues that appear to reduce the document's objectivity. For example, in reference to stated designations (SPA, RAMSAR and AONB) the ES states "boundaries of these extensive areas fall just short of the masterplan area" (3.3.2, p3-4). The fact that the AONB boundary adjoins the site is not clearly stated. Also the extension of the Stour and Orwell SPA in May 2005, to include mudflats at Shotley, is not stated. The above presentational issues appear to be addressed and some good quality plans have been included particularly on the landscape and ecological designated areas. Some new added sections however may now offer similar objectivity concerns. In particular, the new information on alternatives is difficult to follow as outlined in review Section 1.4.

The objectivity of the document is further undermined by the lack of integration of proposed mitigation measures with each other and with the plans to develop the site. This raises questions regarding the commitment to their implementation. The combined draft management plan does help to address this concern (although specific concerns remain). Finally, the inclusion of recommendations to grant planning permission for the proposal within the assessments potentially undermines the objectivity of these studies. For example, the landscape and visual impact assessment includes a recommendation that the application be considered favourably (p 10.21, 10.4.27). However, it is the role of the EIA to provide an objective, credible assessment of the environmental effects of the proposal in order for this information to be considered by the appropriate decision maker (a recommendation in favour of the proposal potentially undermines the objectivity of the assessment). The above mentioned specific recommendation has been removed.

3.3 Non-Technical Summary – C A

The Non-Technical Summary (NTS) reflects the strengths and weaknesses of the main document. Technical language is largely avoided, but there are occasions on which it has been included in the text without explanation. For example, the summary of the transportation assessment refers to RFC values without explaining what they are. This has been removed.

There is further evidence that insufficient attention has been given to providing information on the development and its environmental effects in this key communication document for decision makers and the wider community:

- Qualitative terms such as ‘major’, ‘minor’ and ‘moderate’ are used within the text and should be defined to provide some understanding of the nature of the impact. **New section added on methodology (section 7);**
- A location plan is provided within the NTS at a scale that only shows the peninsular. A more useful plan may have been in line with maps in the main ES which indicate the main rivers and estuaries and the wider context of Harwich Haven and Felixstowe. **Such plan has been added as Figure 1.2;**
- The NTS opens at 1) Introduction – with a straight text copy from the main ES (to the extent of stating that “this document comprises the main report of the ES”). **This is corrected;**
- The Table in Section 10 is poorly presented (i.e. it is split over two sides and this makes it harder to read). It also has some errors as birds appear to be discussed in the row labelled bats. **Corrected; and**
- The NTS pages are not numbered **(now corrected).**

The objectivity of the NTS is undermined by statements with the summary of the ecological and landscape and visual impact assessments in favour of the development, rather than providing an objective assessment of the impacts.

The NTS has benefited from significant addition of plans and explanatory sections.

4 Recommendations

A number of issues have been identified throughout the review report (above) and further clarification is likely to be required on the specific and general points raised.

REFERENCES

1. Lee N & Colley R (1990), *Reviewing the Quality of Environmental Statements, Occasional Paper No. 24*, EIA Centre, University of Manchester and as updated by Lee N, Colley R, Bonde R & Simpson J (1999), *Reviewing the Quality of Environmental Statements and Environmental Appraisals, Occasional Paper No. 55*, EIA Centre, University of Manchester.
2. Commission of the European Communities (1985), *Directive on the assessment of the effects of certain public and private projects on the environment*, (85/337/EEC), Official Journal of the European Communities, 175, Brussels; and as amended by the Directive 97/11/EC.
3. Department of the Environment (2004), *PPS23 - Planning and Pollution Control*, HMSO, London.

APPENDIX 1 – IEMA ES REVIEW CRITERIA

1 General Criteria

1.1 Description of the Development

The ES should describe the purpose and objectives for the development. The proposal and its need should be placed in the context of local/regional/national plans/objectives/ strategies. The anticipated time scales of construction, operation and (where appropriate) decommissioning of the proposal should be given. The likely methods of construction (techniques and equipment to be used) should be given where construction could give rise to significant impacts. In instances where the likely methods of construction are unknown the ES should indicate possible methods and adopt the worst-case scenario approach in prediction of related impacts. The description should include the physical characteristics of the proposal, including its location, the design and size of the development and the area of land take during construction and operation. The ES should describe the main characteristics of any production processes, for instance the nature and quantity of materials to be used. The description should be illustrated by the use of maps and/or diagrams. A brief outline of the experience of the operator and the operational process (es) that will be employed should be included within the ES. The ES should provide reasoned estimates for the quantities and type of traffic that will arise during construction and operation. Where materials are considered to be an important resource, the ES should describe and quantify the materials to be used. The quantities and types of residues and emissions generated at each of the above phases should also be estimated.

1.2 Site Description

The area of proposed land take should be clearly described and indicated on an appropriate map or diagram. The land uses on the site and the surrounding area should be described and illustrated. The ES should describe any policies, plans or designations that are relevant to the site and its surroundings. The study area should be consistent with the area potentially affected by the development. The description should place the affected land in the context of its surroundings. The ES should also describe how the affected land would be expected to develop without the proposal and the future status of the land in the absence of the project (e.g. is the site allocated for development or how would the conservation status change over time).

1.3 Scoping

The Environmental Statement (ES) should describe the scoping process that has been undertaken to identify key impacts. The description should include details of consultation with appropriate statutory and non-statutory consultees, including the public. The ES should identify those parties consulted and provide a summary of their responses. Where issues raised by the consultees are not to be addressed in detail in the ES, a reasoned justification for their exclusion should be given. The scoping process should identify those aspects of the environment that are likely to be significantly affected by the development (including in particular, population, fauna, flora, geology and soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors). The ES should also evaluate any direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and

temporary, positive and negative effects, resulting from the existence of the development, the use of natural resources and the emission of pollutants, the creation of nuisances and the elimination of waste. The ES should clearly state what effects will, and what effects will not, be addressed and how this decision was reached, together with the spatial and temporal scope of the assessment. The ES should identify the regulations under which the EIA is required, and indicate whether it is also to be used to address other regulatory requirements (e.g. Appropriate Assessment under the requirements of the Habitats Directive, or as part of a Pollution Prevention and Control Application).

1.4 Consideration of Alternatives

The ES should describe the main alternatives to the proposal that have been considered. For example, alternative sites, construction practices, plant and equipment, operating processes and site layouts should be considered (where appropriate). The advantages and disadvantages of each option should be clearly stated. The main reasons for the selection of the preferred option should be described in outline, taking into account the environmental effects. Other factors influencing the choice of alternative should be noted, e.g. feasibility, cost-effectiveness and reasonableness of each option. If a formal option appraisal has been carried out it should be described and the relevant decision factors noted.

2 Issue Specific Criteria

2.1 General Comments

2.1.1 Baseline Conditions

The ES should describe the current condition of those aspects of the environment that are likely to be significantly affected by the development. An indication of how these aspects could be expected to develop if the project were not to proceed should also be given. Where existing data has been used to establish the baseline the source of the data should be identified in the ES. The ES should provide a clear description of the methods used to supplement existing information. Where possible, the data gathered should be expressed quantitatively. The baseline environment should be evaluated, for example in relation to its sensitivity and importance. This could be achieved by comparison to relevant threshold limits (WHO Limits, EU Quality Standards etc.) or by reference to appropriate environmental designations. Any limitations of baseline surveys should be recognised.

2.1.2 Prediction of Impact Magnitude

The predictions for the magnitude of the likely significant effects of the development should be identified in the ES. The magnitude of the impact should be predicted as a deviation from the established baseline conditions, for each phase of the proposal. The information and data used to predict the magnitude of impact should be clearly described. Where there are any gaps or uncertainty, these should be identified. The methods used to establish magnitude should be clearly described and be appropriate and reasonable in relation to the importance of the impact. Where assumptions or unsupported data has been used in the predictions these should be highlighted and

accompanied by an indication of the reliability/confidence of those assumptions or data. The data given should be quantified and levels of confidence in the estimates given. The ES should identify quantitatively the impacts that remain following mitigation. The ES should evaluate any direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects, resulting from the existence of the development, the use of natural resources and the emission of pollutants, the creation of nuisances and the elimination of waste.

2.1.3 Impact Significance

The significance of all impacts should be assessed using the appropriate national and international quality standards limits (WHO Limits, EU Quality Standards etc). Where no such standards exist, the ES should describe the judgements (assumptions and value systems) that underpin the attribution of significance. The assessment of significance should consider the impact's deviation from the established baseline condition, the sensitivity of the environment and the extent to which the impact will be mitigated or is reversible. The range of factors which are likely to influence the assessment of significance should be clearly identified. The ES should also detail how these variables will affect the significance of the impacts over the life of the development. The ES should identify the significance of impacts that remain following mitigation.

2.1.4 Mitigation

The ES should describe the measures proposed to avoid, reduce, and if possible, remedy significant adverse impacts. The ES should provide an indication of the effectiveness of the stated measures. The ES should demonstrate a clear commitment to implementing the mitigation measures and indicate how and when these measures will be implemented. Where there is uncertainty over the effectiveness, or it is dependent on assumptions, justification should be provided for the acceptance of the assumptions.

2.1.5 Follow-Up

The ES should provide details of any management plans that are to be implemented to deliver mitigation measures and to monitor the environmental impact of the project. These should also provide details of the time scales of the management plans and their geographical extent. Where a management plan is to be integrated into an environmental management system, the ES should describe how this would be implemented. The ES should identify those responsible for the follow-up programme and describe how the results of such a programme will affect the proposal's operation.

3 Presentation of Results

3.1 Presentation

The ES should be clear and logical in its layout and presentation and be capable of being understood by the non-specialist. The use of technical terms should be kept to

a minimum, with a glossary provided. A full list of references should be provided. The inclusion of information not directly relevant to the nature of the proposal and its associated impacts should be avoided. Plans should be provided to assist in understanding the locations of impacts and should be labelled with all places mentioned in the text.

3.2 Objectivity

The ES should be a balanced document, providing an unbiased account of the environmental effects with reasoned and justifiable arguments. The ES should give appropriate prominence to both positive and negative effects relative to their importance. The ES should summarise the issues raised by consultees. The ES should be explicit in recognising areas of limitations within the ES, any difficulties that have been encountered and assumptions on which the assessment is based. How these have affected the ES and what measures were taken to limit them should be detailed.

3.3 Non-Technical Summary

The NTS should provide sufficient information for the non-specialist reader to understand the main environmental impacts of the proposal without reference to the main ES. The NTS should include a summary of the description of the development, the main alternatives considered, the aspects of the environment likely to be significantly affected by the development, the likely significant impacts and the mitigation measures to be implemented. The NTS should include or make appropriate reference to maps and diagrams which, at a minimum, illustrate the location of the application site, the footprint of the proposed development, and the location of relevant key features. The NTS should be provided as a separate, stand alone document to facilitate a wider readership.

4 Recommendations

Any recommendations will be noted in this section. If the ES does not merit comment in this section, it will be deleted from the review. This section will be not be graded.

APPENDIX 2 - INSTITUTE REVIEW GRADES

A	Excellent, no tasks left incomplete
B	Good, only minor omissions and inadequacies
C	Satisfactory despite omissions and inadequacies
D	Parts well attempted, but must as a whole be considered unsatisfactory because of omissions and/or inadequacies
E	Poor, significant omissions or inadequacies
F	Very poor, most tasks left incomplete
N/A	Not applicable. The review topic is not applicable or relevant in the context of this statement

APPENDIX 3 – REVIEWERS

Original Review undertaken by:

Karl Fuller Associate of the Institute of Environmental Management and Assessment

Nick Blyth Institute of Environmental Management and Assessment

Re-Review undertaken by:

Nick Blyth Institute of Environmental Management and Assessment

APPENDIX 4 - DOCUMENTS REVIEWED BY THE IEMA

Original Documents

Environmental Statement – Volume 1 Main Report

Environmental Statement – Volume 2 Appendices

Non-Technical Summary

Revised Documents

Environmental Statement - Volume 1 Main Report

Environmental Statement - Figures

Environmental Statement - Appendices

Non Technical Summary