



Report to Plymouth City Council

by Douglas Machin BSC DipTP MRTPI

an Inspector appointed by the Secretary of State
for Communities and Local Government

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PLANNING AND COMPULSORY PURCHASE ACT 2004

SECTION 20

**REPORT ON THE EXAMINATION INTO THE WASTE DEVELOPMENT PLAN
DOCUMENT**

Document submitted for Examination on 28 August 2007

Examination hearings held on 6 February 2008

File Ref: LDF 000466

1 Introduction and Overall Conclusion

1.1 Under the terms of Section 20(5) of the Planning & Compulsory Purchase Act 2004, the purpose of the independent examination of a development plan document (DPD) is to determine:

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- (a) whether it satisfies the requirements of s19 and s24(1) of the 2004 Act, the regulations under s17(7), and any regulations under s36 relating to the preparation of the document; and
- (b) whether it is sound.

1.3 This report contains my assessment of the Waste DPD in terms of the above matters, along with my recommendations and the reasons for them, as required by s20(7) of the 2004 Act.

1.4 My role is to consider the soundness of the submitted Waste DPD against each of the tests of soundness set out in PPS12. In line with national policy, this DPD is presumed to be sound unless it is shown to be otherwise by evidence considered during the examination. The changes I have specified in this binding report are made only where there is a clear need to amend the document in the light of the tests of soundness in PPS12. None of these changes should materially alter the substance of the overall plan and its policies, or undermine the sustainability appraisal and participatory processes already undertaken.

1.5 My report firstly considers the procedural tests, and then deals with the relevant matters and issues considered during the examination in terms of the tests of conformity, coherence, consistency and effectiveness. My overall conclusion is that the Waste DPD is sound, provided it is changed in the ways specified. The principal changes that are required are, in summary:

- Clarification of the land requirements required for waste management facilities, and confirmation that that DPD allocates sufficient land to deal with the forecasts of waste arisings;
- Inclusion of the important context provided by climate change;
- Reference to the sub regional context and the plans of neighbouring authorities;
- Amendments to Policy/Proposal W2 to confirm the site area and amend the Proposals Map, to strengthen the provisions for the protection of the natural environment, and to require the highest standard of design for development proposals.

The report sets out all the detailed changes required, in Annex 1, to ensure that the plan meets all the tests of soundness. For completeness I also include the minor changes suggested by the Council at Annex 2. These changes do not relate to the soundness of the DPD, and I endorse them as improvements to the Plan.

2 Procedural Tests

2.1 The DPD is contained within the Council's Local Development Scheme, the updated version being approved in July 2007. There, it is shown as having an examination date of March 2008. Test (i) of paragraph 4.24 of PPS12 is met.

- 2.2 The Council's Statement of Community Involvement (SCI) has been found sound by the Secretary of State and was formally adopted by the Council before the examination hearings took place. It is evident from the documents submitted by the Council, including the Regulation 28 and 31 Statements and its Self Assessment Paper, that the Council has met the requirements as set out in the Regulations.
- 2.3 I am aware from the representations that some consider that the Council gave inadequate publicity to its intention to change the status of the site at Ernesettle from a reserve site to a Policy/Proposal site. This is a matter that I consider further at paragraphs 3.19 to 21. However, I have not concluded that there have been inadequacies in the consultation process such as to affect the soundness of the DPD.
- 2.4 Alongside the preparation of the DPD it is evident that the Council has carried out a parallel process of sustainability appraisal.
- 2.5 In accordance with the Habitats Directive, I am satisfied that an Appropriate Assessment – Screening Stage has been undertaken. It concludes that there would be no significant adverse impact on the integrity of the following Natura 2000 sites: the Plymouth Sound and Estuaries Special Area of Conservation (SAC); the Tamar Estuaries Special Protection Area (SPA); the Dartmoor SAC; the South Dartmoor Woods SAC; and the Blackstone Point SAC, as a result of the policies and proposals within this DPD.
- 2.6 Accordingly, I am satisfied that the procedural tests (i), (ii) and (iii) have all been satisfied. In addition, the South West Regional Assembly has indicated that the DPD is in general conformity with the draft Regional Spatial Strategy (RSS).

3 Conformity, Coherence, Consistency and Effectiveness Tests [Soundness Tests (iv) to (ix)]

- 3.1 The main issues are:

Issue 1 – Do the sites allocated provide sufficient capacity to deal with the waste arisings, in accordance with the guidance in PPS10 and RSS Policy W1? If so, is this sufficiently demonstrated in the DPD? [Soundness Test (iv)]

- 3.2 Paragraph 18 of Planning Policy Statement (PPS) 10: "*Planning for Sustainable Waste Management*" says that in allocating sites for waste management facilities, waste planning authorities should be able to demonstrate how capacity equivalent to at least ten years of the annual rates set out in the RSS could be provided. This important requirement is reiterated in the PPS10 Companion Guide at paragraph 7.22 which points to the need to be able to demonstrate that sufficient land is allocated to accommodate the necessary facilities to deal with waste arisings. RSS Policy W1 also requires waste planning authorities to make provision for a network of strategic and local facilities to provide the capacity to meet the indicative waste allocations for their areas.
- 3.3 The Plymouth Core Strategy Strategic Objective 13 aims to provide a spatial planning framework to support the Regional and Council's Municipal Waste Management Strategy (MWMS). Criterion 3 of the Strategic

Objective speaks of this being achieved by allocating sufficient and appropriate land within the City that is capable of accommodating a range of strategic waste management and treatment facilities. Paragraph 2.20 of the Waste DPD states that it "proposes the locations in the City where waste management facilities should be provided, thus enabling the fulfilment of the City's waste management strategy and compliance with regional and national targets".

- 3.4 There is nothing that causes me to question the adequacy of the projections of the waste arisings, as set down in Appendix 6 of the DPD, or the compliance of the DPD in that respect with the Regional Waste Strategy for the South West. However, the submitted DPD needs to be clearer and provide reassurance that a sufficient quantity of land is allocated at the two strategic sites at Coypool and Ernesettle for the volume of waste arisings to be managed. I accept that it is not possible for the DPD to specify the exact mix of waste management facilities that would be accommodated on each of the two sites. Much will depend upon the nature of the private sector proposals and the more detailed work on environmental impact that would be a necessary part of any planning application for development.
- 3.5 However, guidance on the land requirement for specific waste management facilities is available in the publication entitled "*Planning for Waste Management Facilities: A Research Study*" (ODPM 2004). I am in no doubt that the Council has properly had regard to this guidance. Its hearing statement on Ernesettle suggests that at least 10 hectares of land will be required for the range of facilities envisaged on the two sites. It is acknowledged that this figure would increase significantly should the higher range of forecasts prove to be correct and/or substantial quantities of waste are imported from neighbouring Districts for recovery. The two strategic site allocations at Coypool and Ernesettle would provide 14 hectares of land, which appears adequate to accommodate the range and type of facilities needed after the allowance is made for existing capacity in the City.
- 3.6 Nevertheless, I consider that the DPD is unsound unless it is changed to be more specific and transparent in the above respects. The changes necessary are, in summary:
- Clarification of net waste management capacity required;
 - Include a table of typical land requirements for various facilities;
 - Confirm both strategic sites are required and that they are not options but complementary.
- 3.7 These changes are as specified at items 1 to 9 in Annex 1. They will ensure that the DPD is consistent with national planning policy and regional strategy, and that the DPD properly reflects the requirements of Core Strategy Strategic Objective 13. Test of Soundness (iv) would thereby be met.

R1	Change the DPD in accordance with items 1 to 9 in Annex 1.
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Issue 2 - Does the DPD sufficiently acknowledge and respond to the challenge of Climate Change? [Soundness Test (iv)].

- 3.8 As the foreword to the document *"Planning Policy and Climate Change: Supplement to PPS1"* makes clear, tackling climate change is a key Government priority for the planning system, and should be reflected by planning authorities in the preparation of Local Development Documents. The document entitled *"Waste Strategy for England 2007"* states in paragraph 1.4 that *"what we do about waste is a significant part of how we treat our environment"*. Box 1.1 sets down the environmental rationale for action on waste. The need to respond to climate change figures prominently in the RSS and in the Core Strategy.
- 3.9 Whilst I do not advocate wholesale repetition of the RSS and Core Strategy in this DPD, some aspects are so important that they should be reiterated therein. Section 2 of the DPD is unsound in respect of Test of Soundness (iv) in not paying sufficient attention to the climate change issue at the beginning of the document to provide the important context for the Policies/Proposals that follow. Furthermore, the importance of ensuring that all significant scale proposals for waste management facilities incorporate measures consistent with the principles of sustainable design and include a Climate Change and Sustainability Statement should be highlighted. I consider that the DPD should be strengthened and placed on a sound footing by incorporating the changes detailed in items 10 and 11 in Annex 1.

R2	Change the DPD in accordance with items 10 and 11 in Annex 1.
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Issue 3 - Are the plans and policies of other authorities, and relevant developments there, sufficiently taken into account in the DPD? [Soundness Test (vi)].

- 3.10 Test of Soundness (vi) requires that the strategies/policies/allocations in the DPD are coherent and consistent within and between DPDs prepared by the City Council and by neighbouring authorities, where cross boundary issues are relevant. There is no question that the DPD is a spatial plan that is in conformity with the draft RSS for the South West, and that it is coherent and consistent with the City Council's Core Strategy.
- 3.11 However the draft RSS encourages Plymouth to become a location for treatment facilities for waste generated outside the City, having regard to the proximity principle. This is supported by the EiP Panel. There is a gap in the DPD's coverage in that it does not adequately reflect the potential for facilities in Plymouth to play a sub regional role in waste management. This is an important potential role for the city, and should be reflected in the DPD.
- 3.12 There is no evidence to cause me to doubt that the Policies/Proposals in the DPD have been formulated after careful consideration of the possibility of alternatives for waste management facilities on sites outside the City. The Council's hearing statement for this issue confirms that no sites in Caradon District have been identified to date capable of accommodating the facilities urgently needed for Plymouth's waste. Furthermore, the

Cornwall Waste DPD is sufficiently far from adoption as to offer no assistance in this respect.

- 3.13 As for the Devon Waste Local Plan, the DPD complies with that in as much as the Devon Plan wishes to see waste dealt with in accordance with the proximity principle. Two sites at Wrangaton and south of Lee Mill are identified for strategic waste management facilities in the Devon Plan but there is no evidence before me that constraints on these sites have been overcome and that development of suitable facilities is imminent. Again, the plans and policies of other authorities appear not to assist Plymouth, at least in the short term. I consider that the DPD should be changed to reflect this situation.
- 3.14 The hearings also provided an opportunity to consider whether the DPD, especially Policy/Proposal W2, would have an adverse impact on the regeneration plans for Saltash. I do not consider this will be the case. As I conclude later, the DPD provides the opportunity, but does not impose the requirement, to develop an iconic waste management facility at Ernesettle. This would be seen as part of the urban fabric of the largest city west of Bristol and against the background of Europe's largest naval base. There is no clear evidence on how this would deter investment in Saltash or discourage tourism. The alternative to making proper provision to deal with Plymouth's waste, and possibly the waste arising from Saltash as well as from other settlements further away, within the City boundary, could involve moving it out of the City by road. This would include using the A38(T) through Saltash, and such activity could have a far greater adverse impact on Saltash than providing a modern waste treatment facility at Ernesettle.
- 3.15 In the absence of any detailed evidence on the regeneration plans for Saltash and how they might be adversely affected, I am not convinced that the DPD, in allowing for the possibility of waste management facilities at Ernesettle, is unsound in this respect.
- 3.16 In conclusion, the DPD needs to be changed by adopting the wording detailed Items 12 and 13 in Annex 1.

R3	Change the DPD in accordance with items 12 and 13 in Annex 1.
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Issue 4 - Is Policy/Proposal W2 the most appropriate in all the circumstances, bearing in mind the site's proximity to the Tamar Estuary, nearby residents and the likely traffic generation? [Soundness test (vii)].

- 3.17 Test of Soundness (vii) requires that the strategies/policies/allocations in the DPD should represent the most appropriate in all the circumstances, having considered the relevant alternatives, and that they are founded on a robust and credible evidence base. The hearings considered arguments that Policy/Proposal W2 – Land West of Ernesettle Lane, is unsound in as much the site is unable to accommodate Energy from Waste (EfW) incinerator without adverse impact on the appearance and character of the Tamar Estuary, on residents on both sides of the River, and on the free flow of traffic.

- 3.18 In terms of the site selection process leading to the choice of Ernesettle, as well Coypool, as sites for strategic level facilities, there is no dispute that the Council has carried out a thorough and exhaustive search for suitable waste managements sites. The evidence base in this respect has been prepared in accordance with Government good practice guidance. It is unchallenged in the sense that there is no dispute over the waste management strategy proposed for the City, and no alternative sites have been proposed to meet the requirements of the strategy. The site selection process is adequately summarised in sections 4 and 5 of the Council's hearing statement, and therefore I will not rehearse it here.
- 3.19 Ernesettle was included as a reserve site in the Preferred Options report of 2005, with a statement that the site would only be brought forward for development if the other sites identified cannot be brought forward. However, concern by the Council that Coypool may not be deliverable in the timescale needed, and the realisation that both Ernesettle and Coypool would be needed to guarantee that the DPD's strategy would be implemented led the Council to raise the Ernesettle's status. The site was included in Policy CS25, adopted in April 2007, along with Coypool and others, as an area where the potential to accommodate waste management facilities should be explored.
- 3.20 I have taken account of the views of those who feel that they were not aware of the raised status of Ernesettle, and feel that the consultation process has left them disadvantaged. I also note that some consider that the Council's consultation website has not been as user friendly as it might have been. I accept that it can be challenging for the Council to ensure that every local resident is continuously informed of plans and policies that are evolving in response to changing circumstances and in the light of comments made by all concerned with the Local Development Framework.
- 3.21 Notwithstanding any such perceived deficiencies in the way the City Council may have approached the status of Ernesettle, I am satisfied that the Council has at least fulfilled the requirements of the Statement of Community Involvement. The change in the status of the site from a reserve site to a firm Policy/Proposal was clearly signalled in the Core Strategy adopted last year as a precursor to its inclusion as a Policy/Proposal in the Waste DPD. It has been quite clear since then that the Council would pursue allocation of the site at Ernesettle as a firm proposal, and no evidence has been produced to suggest that alternatives exist that have not been properly considered.
- 3.22 Ernesettle and Coypool are complementary and not competing sites in that both sites are required to accommodate the range of strategic facilities required if the step change in approach in waste management from landfill to recovery and re-use is to be achieved in the timescale required. Having regard to the land requirements for the various waste management facilities contemplated, it is clear that neither Coypool nor Ernesettle alone would be sufficient to provide the capacity to handle the projected waste arisings during the lifetime of this DPD. There is no evidence to dispute this conclusion, but for the DPD to be sound it should make this point abundantly clear.
- 3.23 Much of the argument against Ernesettle centred on the possible impact of an EfW incinerator, and I now turn to consider if what is stated in the DPD about development on the site is sound in this respect. It is important to start by noting that the Companion Guide to PPS10 (paragraph 2.10)

indicates that DPDs should not normally prescribe the waste management techniques or technologies that will be used to deal with specific waste streams but should identify the type(s) of waste management facility that would be appropriately located on the allocated site. Policy/Proposal W2 does not in any sense **require** an incinerator on the site. W2 allows for "*a range of waste management facilities which may include... energy recovery...*". This is consistent with the guidance in PPS10 and with the complementary role envisaged for Ernesettle and Coypool. It will be the public/private partnerships, as well as the relevant statutory regulatory regimes, that will ultimately determine the precise mix of waste management facilities that are built on which sites. The Council reassured me that no decision has been made in this respect. It is the case that it will be at the planning application stage that such decisions will be made.

- 3.24 There is no evidence that the Ernesettle site is incapable of accommodating some waste management facilities, such as low level buildings to accommodate for example, recycling and composting, without harm. I have therefore considered whether the Policy/Proposal is unsound unless it rules out the more controversial aspect of an EfW incinerator. Alternatively would it be justified to impose a sequential test that would mean that such a facility would only be built if Coypool was found to be unsuitable in some respect?
- 3.25 In terms of the potential visual impact of an EfW incinerator, clearly such a facility would be a very large structure occupying a site of between 2 and 5 hectares. The mass and height of such buildings, based on my observation of the facility at Marchwood, Southampton, would make such a building at Ernesettle highly visible from the Ernesettle neighbourhood, from the River, from the Saltash waterfront and from rural settlements further north in the Tamar valley. It would be unrealistic to expect that the prominence of such a building could be masked by landscaping.
- 3.26 The site is part of the setting of the Tamar Valley Area of Outstanding Natural Beauty (AONB). Government guidance and local development plan policy aims to preserve and enhance the natural beauty of such areas. The RSS states that the provision of waste facilities should generally avoid protected landscapes. RSS Policy W2 requires a sequential approach to be followed with the location of waste facilities being within the City in the first instance. Nevertheless, viewed from the western side of the River Tamar, the context for Ernesettle and buildings that could be built on the allocated site is provided by the overwhelming presence of the built form of Plymouth, and predominantly of HM Naval Base Devonport and the armaments depot. The Tamar Bridge and the Royal Albert Bridge are also very significant townscape elements. The Ernesettle site is on the edge of the built up area of Plymouth and adjoined by high quality landscape but so is much of Plymouth. In functional terms it is appropriate to consider the site as having a role in accommodating the requirements of a City of 250,000 that will grow to over 300,000 residents. The role of the site in this respect is further enhanced by the sub regional role that waste management facilities in Plymouth are expected to have.
- 3.27 I am in no doubt that there is the potential to achieve a high quality design that could produce an iconic building for the Ernesettle site. There are examples of such buildings both in the UK and overseas. My tour of the EfW incinerator at Southampton, accompanied by the Council and those who had representations against Policy/Proposal W2, confirmed to

me the potential to achieve a high quality design at Ernesettle, should there be requirement for such a facility. I have also taken into account the design of other EfW incinerators at the Isle of Man, Slough, and Vienna. These provide further evidence of the potential to achieve a high quality design or even an iconic structure for Plymouth's waste management facilities.

- 3.28 As far as the terms of Policy/Proposal W2 are concerned, I consider that the requirement in relation to design should be strengthened, and made more consistent with the expectations of Policy/Proposal W8, which sets down the considerations for all waste development proposals. Criterion 5 of W8 requires a good standard of design. I consider that W2 should have an additional criterion to require the highest standard of design that will respect or even enhance the surroundings of the site.
- 3.29 The fear of the health impacts of EfW incinerators can be a relevant factor in decision taking on such facilities. However, it is important to be guided by the evidence of the latest technology, and the controls available over the operation of such facilities, rather than by fears that may or may not be based on what has occurred in the past. The best evidence before me in this respect comprises firstly, the 2004 report commissioned by the Department of the Environment, Food and Rural Affairs (DEFRA) entitled "*Review of Environmental and Health Effects of Waste Management*"; secondly the 2008 report commissioned by the City Council entitled "*Preliminary Air Quality Assessment – For a Proposed Thermal Processing Plant, University of Plymouth Playing Fields, Ernesettle* ", and thirdly the evidence as to how modern, well run facilities like the one at Marchwood can satisfy concerns on possible impacts on health.
- 3.30 In respect of the conclusions of the first report, the Chief Scientific Advisor to DEFRA summarise the findings of the report by stating "*the review has concluded that the effects on health from emissions from incineration, largely to air, are likely to be small in relation to other known risks to health*". He notes further "*rigorous enforcement will be crucial to ensure that the new emission standards are not exceeded...*". In respect of the second report's conclusions, the following extract from the Executive Summary is compelling: "*In conclusion, maximum environment concentrations of all pollutants (from an 80,000 tons per annum and a 180,000 tons per annum EfW incinerator at Ernesettle) comfortably satisfy the appropriate Air Quality Objectives, with the vast majority of pollutant concentrations being less than 50% of the objectives when combined with background levels*".
- 3.31 In relation to the evidence provided by the site inspection of the Marchwood facility, the very high standards achieved there in terms of the control of emissions and odours control is impressive. The information is publicly available through the operating company's website. The control regime operated by the Environment Agency, and indeed the requirements of Policy/Proposal W8, criteria 2 and 3, leave me in no doubt that a similar facility to Marchwood built on the Ernesettle would be an asset to Plymouth, and the surrounding Districts, and not a cause for concern. There is no evidence before me of comparable weight to cause me to question these conclusions and their relevance to Ernesettle.
- 3.32 As for the impact of traffic generated by waste management facilities at the Ernesettle site, again the best evidence is provided by the Council. That is, in summary, that the worst case scenario would see peak hour

traffic flows on Ernesettle Lane increasing by up to 30%, and use of the Victoria junction with the A38 (T) increasing by up to 5% by the end of the plan period. Although the proportion of HGV traffic would increase by a greater percentage, there is no evidence before me to suggest that the highway network could not accommodate those increased levels of traffic. I note the concerns of local residents about the potential danger from such an increase and the possibility of "rat running" through residential streets. This is a matter that can also be strictly controlled in contract arrangements between the Council and waste disposal companies, and it is also addressed by Policy/Proposal W8, criterion 6. I am therefore satisfied that the DPD is sound in this respect, and no change is needed.

3.33 I have considered all the other matters raised at the hearings in relation to the soundness of Policy/Proposal W2. It is important to recognise the complementary role of the Core Strategy in controlling as well as promoting development. Many of the concerns expressed over the potential impacts of development at Ernesettle are addressed in Core Strategy Policies, and for the most part do not require reiteration in the Waste DPD. In relation to the nature conservation value of the Ernesettle site, this can be protected by Policy/Proposal W8, criterion 1, and by Core Strategy Policy CS19. The site's relationship and potential impact on the SSSI, SPA and SAC does however require some additional emphasis in the DPD. The potential for an EfW incinerator to add to any adverse effects of temperature inversion in the Tamar Estuary would be a matter to be addressed in the Environmental Statement that would accompany any planning application. As for mitigation for the loss of sports facilities on the site, but unused for several years, criterion 2b of Policy/Proposal W2 should be changed to read "*Mitigation for the loss of sports facilities*". Other changes are needed to clarify the site's area and the MOD blast zone boundaries within it, and to highlight the importance of the need for a high standard of design of any facility.

3.34 The changes necessary are, in summary:

- Clarification of site area and boundaries;
- Highlight the nature conservation matters that need protection;
- Emphasise the mitigation required for loss of sports facilities;
- Require the highest standard of design of facilities.

3.35 In conclusion, I am satisfied that Policy/Proposal W2 has been arrived at after a full consideration of all reasonable alternatives, it is supported by extensive evidence, and takes into account Government guidance and up to date research evidence. I do not consider that there is a justifiable case to relegate Ernesettle to a site of last resort, given the control over development proposals provided by the DPD and the Core Strategy. I find that, with the changes detailed in items 14 to 20 of Annex 1, the DPD is sound.

R4	Change the DPD in accordance with items 14 to 20 in Annex 1.
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4 The Other Tests of Soundness

- 4.1 There is nothing that causes me to question whether the other Tests of Soundness, not considered above, have been met.

5 Minor Changes

- 5.1 The Council wishes to make several minor changes to the submitted DPD in order to clarify, correct and update various parts of the text. Although these changes do not address key aspects of soundness, I endorse them on a general basis in the interests of clarity and accuracy. These changes are shown in Annex 2. The Council has also identified within the submitted DPD those paragraphs that will become superfluous on adoption. Since these were included simply to assist readers to understand how the submission version has been arrived at, I am content that these can now be removed.

6 Overall Conclusion

- 6.1 I conclude that, with the amendments I recommend, the Waste DPD satisfies the requirements of s 20(5) of the 2004 Act and the associated Regulations, is sound in terms of s20(5)(b) of the 2004 Act, and meets the tests of soundness in PPS12.

Douglas Machin,

INSPECTOR

ANNEX 1 – SCHEDULE OF CHANGES TO MAKE THE DPD SOUND

Item No	Submitted Waste DPD Reference	Page No	Recommended Change
1	Para 4.12	21	<p>After the first sentence add the following:</p> <p><i>"In 2005 around 29 000 tonnes of municipal solid waste was recycled or composted so significant new infrastructure will be needed to meet even the lower forecast."</i></p> <p>Replace the second sentence with the following:</p> <p><i>Annual recovery capacity of between 132 000 tonnes and 170 000 tonnes will be required, "which includes the recycling and composting tonnages giving a net increase of between 67 000 tonnes and 87 000 tonnes. This does not include any importation of waste for recovery from neighbouring authorities nor does it include the potential to recover a proportion of the waste that may be exported for landfill."</i></p>
2	Para 4.13	21	<p>Add the following:</p> <p><i>"There will therefore be a proportion of waste exported for disposal. In 2005 there was over 100 000 tonnes of residual municipal solid waste but this will substantially decline over the period of the Waste DPD as landfill diversion targets are introduced."</i></p>
3	Para 4.14	21	<p>Add the following:</p> <p><i>"Information on existing recovery capacity for commercial and industrial waste is less complete and up to date but historically around 87 000 tonnes of waste annually has been managed at non-landfill facilities."</i></p>
4	Para 4.15	21	<p>Add the following:</p> <p><i>"Historic data indicates that annually around 50 000 tonnes of this waste stream has been land filled."</i></p>
5	Table 2	22	<p>Add third column and footnote to include typical land requirements for different facilities. Include Revised Table 2</p>
6	After para 4.21	23	<p>Add new paragraph as follows:</p> <p><i>"Ultimately it is the mix of facilities that will dictate</i></p>

			<p><i>land requirements. However it is possible to make some assumptions about the general types of facilities needed and what that may mean for land allocations that should be included within the Waste DPD."</i></p> <p>Add new paragraph as follows: <i>"The table below looks at recycling / composting and recovery requirements for the management of municipal solid waste and commercial and industrial waste. Note that land requirements can increase at some sites where additional land is needed for landscaping or other site infrastructure."</i></p> <p>Add new Table 3</p> <p>Add new paragraph as follows: <i>"It is possible to combine facilities on sites and also to manage both waste streams at certain facilities. However, it can be concluded that a large site will be needed for some form of energy from waste facility that could also include other treatment. Note that the above figures do not include the possible importation of waste for recovery which suggests that a site towards the top end of the 2-5 ha sizing is likely to be needed for energy from waste technology. Additional land will also be required to increase recycling capacity and also to provide at least one facility for green and kitchen waste in the form of anaerobic digestion and / or in-vessel composting."</i></p>
7	Para 5.1	25	<p>Add the following: <i>"The step change required to meet recycling / composting and recovery targets means that new strategic sites are required if Plymouth is to meet its obligations and move towards more sustainable waste management."</i></p>
8	Para 5.4	25	<p>Add the following: <i>"Coypool and land west of Ernesettle are identified in the Waste DPD as strategic sites for the management of municipal solid waste and industrial and commercial waste. The analysis of waste requirements and the land needed to develop new facilities indicate that both sites will be required to deal with these waste streams."</i></p>
9	Para 5.6	25	<p>Delete all of existing paragraph except the first sentence.</p> <p>Add the following, to explain the need for two strategic sites: <i>"Such a close fit approach to identifying the quantity of land required is overly prescriptive and</i></p>

			<p><i>does not comply with Government Guidance. Using the mid range figures, the combined infrastructure requirements are likely to be in excess of 10ha. This requirement would increase significantly should the higher range forecasts prove to be correct and/or substantial amounts of waste are imported for recovery. The provision being made at Coypool is 6ha and the provision at Ernesettle is 8ha."</i></p> <p>Add new paragraph:</p> <p><i>"Consequently, two sites for strategic facilities are being identified and both of these are likely to be required to some extent or another. The two site approach will:</i></p> <ul style="list-style-type: none"> <i>• ensure there is sufficient capacity to meet future needs</i> <i>• enable competition to ensure that any solutions are value for money</i> <i>• allow for different waste streams, such as commercial and industrial</i> <i>• allow for the flexibility necessary to adapt to new technologies</i> <i>• give a degree of certainty over the short term</i> <i>• give flexibility over the long term ie to 2021 and beyond"</i>
10	After para 2.2	9	<p>Add additional paragraphs, to make explicit the importance of climate change, as follows:</p> <p><i>"We are living beyond our environmental means. Using the planet's resources within the limits of its eco systems is vital to the survival, health and prosperity of future generations. The most crucial threat from exceeding environmental limits is from dangerous climate change. The cost of tackling this threat now will be far less than the damaging costs of climate change later if we fail to take prompt action.</i></p> <p><i>What we do about waste is a significant part of how we treat our environment. Reducing our use of natural resources, and recycling materials and recovering energy from those we do use, is a vital part of moving us towards a more sustainable existence. In addition, if waste is not managed safely then it can become a serious threat to public health, and cause damage to the environment as well as being a local nuisance.</i></p> <p><i>Better management of waste can contribute to:</i></p> <ul style="list-style-type: none"> <i>• Reducing greenhouse gases – notably methane from landfill sites but also carbon dioxide emission (through re-use and recycling)</i>

			<ul style="list-style-type: none"> • <i>Improving resource efficiency – saving energy and reducing material use through waste prevention, re-use, recycling and renewable energy recovery</i> • <i>Protecting public health through safe management of potentially hazardous substances</i> • <i>Protecting ecosystems (soils, groundwater, emissions to air)</i> • <i>Safeguarding social amenity – by ensuring household waste is collected, reducing fly tipping by households and businesses, and limiting local nuisances from waste facilities</i> <p><i>Disposal of biodegradable waste to landfill results in emissions of methane, a powerful greenhouse gas which adds to global warming (methane is 23 times as damaging a greenhouse gas as carbon dioxide and currently makes up about 3% of UK greenhouse gas emissions). On the other hand, recycling waste and recovery of energy from it can preserve virgin materials and reduce the use of fossil fuels (so reducing greenhouse gas emissions). By further reducing landfill and increasing the amount of waste that is recycled, composted or has energy recovered, there is considerable scope for reducing greenhouse gas emissions from the waste we produce."</i></p>
11	Policy W8	47	<p>Add new sub paragraph 11: <i>"All buildings should incorporate measures consistent with the principles of sustainable design and construction equivalent to the current BREEAM excellent standard."</i></p> <p>Add new sub paragraph 12: <i>"All major applications for waste management facilities include a Climate Change and Sustainability Statement. Suggested content for this statement is included in the Design SPD."</i></p>
12	Para 2.9	11	<p>Before third sentence add new heading, to reflect importance of taking a sub regional approach: Sub Regional Approach</p> <p>New paragraph then begins: "Following discussions withwithin the city" Delete last sentence of paragraph that reads: "It was alsofrom neighbouring areas" and replace with: <i>"Furthermore, encouragement is given within the Regional Spatial Strategy for Plymouth to be a potential location for a facility able to treat waste from the sub region. Economies of scale could accrue from developing such a facility. Traditionally, waste from Plymouth has been</i></p>

			<i>disposed of and treated outside the city, and in turn the city has taken waste into its facilities from surrounding disposal authorities. Providing it represents a sustainable solution, this form of intra-regional co-operation is to be encouraged."</i>
13	Para 2.11	11	<p>Before this paragraph, add new heading: The Plans of Neighbouring Waste Planning Authorities</p> <p>After fourth sentence add the following, to reflect the lack of availability of sites outside Plymouth: <i>"Apart from landfill facilities, there are no available sites in Cornwall within proximity of Plymouth that could potentially provide waste management capacity for the city. Similarly none of the sites identified in the Devon Waste Plan are considered to be either suitable or deliverable for the city's waste management needs, particularly over the short and medium term."</i></p>
14	W2	30	<p>Add additional sub para before sub para 1. as follows: <i>"In the region of 8ha of land for waste management development towards the eastern end of the site."</i></p> <p>Amend sub para 2.b, removing "..... pitches" and replacing with: <i>"..... facilities".</i></p> <p>Amend sub para 2.c, by removing the last phrase beginning "particularly in terms" so that the sub para reads: <i>"Mitigation measures as necessary to protect the internationally and nationally important nature conservation and landscape designations of the Tamar/Tavy."</i></p> <p>Amend sub para 2.e by adding after "The sites visual prominence": <i>"..... from Ernesettle, Caradon and the AONB,"</i></p>
15	W2	30	<p>Remove sub para 2.k.</p> <p>Add new sub para <i>"Protection and enhancement of the natural features of the site and its fringes and mitigation for any necessary removal of valuable natural features. The site should retain its function as a buffer for the adjacent County Wildlife Site (CWS);"</i></p>
16	W2	30	<p>Add the criterion: "Proposals must exhibit the highest standard of design that will respect or even</p>

			enhance the surroundings of the site, including the AONB. Proposals should achieve an iconic or landmark building that will be worthy of its surroundings".
17	Para 5.14	31	Add after "This is a large greenfield site": <i>" of approximately 17ha in total, of which approximately 8ha would be used for waste development. It was "</i>
18	Para 5.16	31	After the first sentence add the following: <i>"A public right of way runs along the northern boundary of the site adjacent to the sewage treatment works"</i>
19	Para 5.17	31	At the beginning of this paragraph add the following: <i>"It is right that the control of development on this site should be afforded a high level of prescription because of its proximity to sensitive areas. It is close to the Plymouth Sound and Estuaries Special Area of Conservation and the Tamar Estuaries Complex Special Protection Area, 1.5km from the Tamar Valley AONB and adjacent to a County Wildlife Site."</i>
20	Proposal Map W2	33	Amend proposals map as attached, to clarify extent of site boundary.

Replacement Table 2

Type of Facility	Description	<i>Typical Land Area Required*</i>
Waste Transfer Facility	Buildings for the bulking up and transfer of wastes. Waste normally transferred to larger vehicles for onward transport to other waste management facilities.	<i>A facility managing around 50 000 tonnes would require around 1-2 ha</i>
Materials Recycling Facilities	Buildings used to separate waste streams for subsequent reprocessing. Materials may be separated using a variety of methods including hand picking, mechanical sorting and magnetic separation.	<i>A facility managing around 50 000 tonnes would require 1-2 ha</i>
In-vessel Composting	Composting proceeds in some form of vessel that provides temperature and moisture control to achieve accelerated composting. Normally also requires an outdoor period of maturation.	<i>A facility managing around 25 000 tonnes would require 1-2 ha or potentially more depending on area needed for maturation</i>
Anaerobic Digestion	Biological treatment of organic waste in a digester in the absence of oxygen. The digester is some form of container which is heated, sealed and airless. The biogas produced can be used to produce energy.	<i>A facility managing around 40 000 tonnes would require 1 ha</i>
Mechanical Biological Treatment	Used to describe a number of treatment combinations that normally involve buildings for the separation of non-biodegradables, which may be bulked up for recycling; followed by drying and biological treatment in containers of the remainder. The dry, odourless product can be used as a fuel.	<i>A facility managing around 50 000 tonnes would require 1-2 ha</i>
Energy from	Various types of facility involving the combustion of waste at high	<i>Normally at least 2 ha is required but</i>

Waste Plant	temperatures coupled with energy generation through utilising heat, steam and/or gas.	requirement can be up to 5 ha for larger plants managing 200 000 tonnes or more
Advanced Thermal Treatments	Pyrolysis and gasification are thermal processes. They use high temperatures to break down any waste containing carbon. Gasification is the thermal decomposition of organic material at elevated temperatures in an oxygen restricted environment. Pyrolysis takes place in the absence of oxygen.	A facility managing around 50 000 tonnes would require 1-2 ha

** Typical land requirements based upon data in Appendix 4 to the Regional Waste Strategy for the South West 2004-2020. All tonnages are annual figures.*

New Table 3

Recycling and Composting		
Estimated Shortfall in Capacity (tonnes per annum at 2021)	Possible Mix of Facilities	Approximate Land Area Need (hectares)
<i>Municipal Solid Waste</i> 36 000 – 54 000	<i>Enhanced CA Sites / new recycling capacity</i>	1-2 ha
	<i>Anaerobic Digestion / In-vessel Composting</i>	1-3 ha
<i>Commercial and Industrial Waste</i> 20 000 - 85 000*	<i>Materials Recycling Facility</i>	1-2 ha
	<i>Anaerobic Digestion / In-vessel Composting</i>	1-3 ha
Recovery		
<i>Municipal Solid Waste</i> 67 000 – 87 000	<i>Energy from Waste</i> <i>Mechanical Treatment</i> <i>Biological</i>	2-5 ha
<i>Industrial and Commercial waste</i> 15 000 – 72 000	<i>Energy from Waste</i> <i>Mechanical Treatment</i> <i>Biological</i>	2 ha +

* Assumes existing capacity comprises 50% recycling/composting and 50% recovery

Revised Proposals Map for Policy/Proposal W2



ANNEX 2 – SCHEDULE OF MINOR CHANGES THAT DO NOT RELATE TO SOUNDNESS, PROPOSED BY THE COUNCIL, WHICH I SUPPORT

Item No	Submitted Waste DPD Reference	Page No	Recommended Change
1	Picture 2	9	Revise "Summary diagram of the Waste Hierarchy" to reflect greater importance of prevention New Diagram in preparation
2	Proposal W1	27	Remove requirement 3.j: "All buildings should BREEAM excellent standards"
3	Table 1	14	Add to site assessments: <i>"Waste Management Site Feasibility Study, ENTEC, December 2006"</i> <i>"Ernesettle Air Quality Modelling, ENTEC, Feb 2008"</i> Add to Impact Assessments: <i>"Design Guidance for Waste Management Facilities, LDA Design, Jan 2008"</i>
4	Para 2.10	11	Add this paragraph to the end of the remaining parts of paragraph 2.9
5	Proposal W3	34	Add new sub para 2.d. <i>"the need to safeguard the HQPT route and its associated infrastructure."</i>
6	Para 6.7	43	Remove final sentence: "Whilst it is extension to it"
7	Policy W9	48	Add new sub paragraph 3. <i>"The development proposal would not suffer unacceptable adverse impacts as a result of the operation of the waste facility"</i>
8	Para 9.3	53	Amend fifth bullet point by replacing "..... of carbon emissions" with: <i>".....in greenhouse gases"</i>
9			New Picture 2, to demonstrate the importance of prevention and minimisation, being prepared