

***Erratum***

***Bishopton - Report of Examination in Public***

***Summary, recommendation (2), line 2 delete "second" and insert "fourth"***

***Main report, paragraph 5.49, line 5 delete "second" and insert "fourth"***

***Main report, paragraph 5.88, recommendation (2), line 2 delete "second" and insert "fourth"***

**TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997**

**REPORT OF EXAMINATION IN PUBLIC**

**INTO ASPECTS OF THE PROPOSAL IN THE GLASGOW AND THE  
CLYDE VALLEY JOINT STRUCTURE PLAN 2006 TO IDENTIFY  
BISHOPTON AS A COMMUNITY GROWTH AREA**

**Examination chaired by: Janet M McNair MA(Hons) MPhil MRTPI**

**File references: ZPP/30**

**Dates of Examination: 19 April and 8-11 May 2007**

## Directorate for Planning and Environmental Appeals

### Summary of Report of Examination in Public of aspects of the proposal in the Glasgow and the Clyde Valley Joint Structure Plan 2006 to identify Bishopston as a Community Growth Area

<b>Case Reference</b>	ZPP/30
<b>Case Type</b>	Examination in Public
<b>Examination chaired by</b>	Janet McNair
<b>Participants</b>	The following were invited to take part in the Examination:  Bishopston Action Group Bishopston Community Council Cass Associates The Glasgow and the Clyde Valley Structure Plan Joint Committee: Mrs Trish Godman MSP Miss Annabel Goldie MSP Houston Community Council Network Rail Renfrewshire Council Scottish Environment Protection Agency Strathclyde Partnership for Transport Transport Scotland
<b>Date of Report</b>	23 July 2007
<b>Reporter's Recommendation</b>	That Scottish Ministers make the 3 changes to the Joint Structure Plan listed in paragraph 20 of this summary.

#### Reasons for holding the Examination

1. The Glasgow and the Clyde Valley Structure Plan Joint Committee submitted the Glasgow and the Clyde Valley Joint Structure Plan, which is the Third Alteration to the plan, to Scottish Ministers for approval on 28 April 2006. During the period of public consultation, which extended to 9 June 2006, over 2,000 representations were made, the majority of which opposed the structure plan's proposal to identify Bishopston as a Community Growth Area (CGA) with an indicative capacity for 2,500 houses and "a range of appropriate mixed uses". The submitted plan is not site-specific and does not specify the boundaries of the area that any CGA that might be developed at Bishopston would cover. However, in common with the

approved structure plan, the submitted plan indicates that the area that would be developed would include land on the site of the former Royal Ordnance Factory (ROF) at the western edge of the existing village. The site, which extends to over 960 ha, is now largely unused. Parts are brownfield in character, while others have a rural character. As a consequence of the site's history for the manufacture and handling of propellants and ammunition, some areas, including a significant number of buildings, are affected by contamination.

2. Ministers decided that, before reaching a decision on whether to approve the plan, they required additional information on two matters relating to this proposal, namely:

1. Do either the presence of contamination within the former Royal Ordnance Factory site at Bishopton, or the measures required for its remediation, raise issues of sufficient concern to preclude the identification of Bishopton as a Community Growth Area?

2. Does the capacity of the road and rail network preclude the identification of Bishopton as a Community Growth Area?

3. At the time of the Examination, a number of planning applications for land on ROF site, including an outline application for a mixed use Community Growth Area, had been submitted to Renfrewshire Council.

### The positions of the participants

4. **The Glasgow and the Clyde Valley Structure Plan Joint Committee** acknowledges that the site is contaminated and requires to be remediated in order to be suitable for redevelopment and that there are capacity constraints in the road and rail network serving Bishopton. However, it considers that there are no strategic planning reasons that preclude the identification of Bishopton as a CGA and that these issues can be addressed through master plans and the development control or development management process.

5. **The Bishopton Action Group (BAG)** considers that contamination on the site, the measures required for its remediation, and road and rail capacity constraints, preclude the identification of Bishopton as a CGA. It considers that more information is required in relation to the nature and level of contamination on the site and measures for remediation before any such decision is taken. It also states that measures that might have helped to address transport capacity issues have not been allocated funding and that a CGA should not be identified until funding commitments have been made.

6. **Bishopton Community Council** is opposed to development at Bishopton in the terms set out in the Third Alteration and supports BAG's position on contamination and remediation issues. It also considers that, if a CGA proposal is retained, suitable infrastructure should be required to be provided from the outset.

7. **Cass Associates** who made representations to the 2006 plan on behalf of BAE Systems/Redrow Homes, the partnership promoting the development of the former ROF site, considers that neither contamination within the site, nor the measures required for its remediation, preclude the identification of Bishopton as a CGA. It also considers that there are no road or rail network capacity issues that cannot be addressed.

8. **Mrs Godman** welcomes the principle of housing development on the former ROF site, but seeks reassurance that transport capacity and contamination and remediation issues can be satisfactorily addressed.

9. **Miss Goldie** refers to current rail capacity and rail-related parking problems, considers that existing and projected rail passenger use at Bishopton requires to be very rigorously assessed, and states that further development will add to overload on the M8.

10. **Houston Community Council's** main concerns are the potential for toxic contamination to affect watercourses, the potential for smoke from burning in the course of remediation to affect the surrounding area; and the potential for contamination from a landfill facility proposed on the site. It also wishes reassurance that the landfill site would not be used for commercial waste from elsewhere.

11. **Network Rail** considers that, as matters stand, there are no rail capacity issues that preclude the designation of Bishopton as a CGA and that there are options available to cope with the predicted increase in demand. However, it points out that, unless other funding options are identified, the cost of these solutions would have to be met from the public purse.

12. **Renfrewshire Council**, which supports the principle of a CGA on the former ROF site, sees no reason at this stage why capacity problems on the local road network could not be addressed by new infrastructure and by imposing conditions. It also considers that the contamination and remediation issues for which it is the regulator should be addressed in the context of planning applications for the site.

13. **The Scottish Environment Protection Agency** has not expressed a view on the merits of the proposal in the Third Alteration but explains that it would have a role in regulating remediation in the event that development took place on the ROF site.

14. **Strathclyde Partnership for Transport** draws attention to the statement in the Joint Transport Strategy for Western Scotland to 2025 that the ability of the existing transport network to cope with travel demands arising from development at Bishopton will be a major issue for its delivery. It also states that the SPT will work with its partners to ensure that provision is made for efficient transport links as proposals are developed.

15. **Transport Scotland**, the trunk road authority, considers that there is no evidence at this stage that there are capacity issues that could not be addressed and would therefore preclude identifying a CGA at Bishopton.

### **Recommendations in the report**

16. The report concludes that there is no evidence that there is contamination on the ROF site that raises issues of sufficient concern to preclude identifying Bishopton as a CGA. It also concludes that there is also no evidence that the "measures required" for the remediation of the site will give rise to issues of sufficient concern to preclude its identification. It considers that Strategic Policy 9C(iii) and 9C(viii), the second of which refers to paragraph 8.14 of the plan, provide sufficient safeguards for structure plan purposes. It is noted that Scottish Ministers' approach to the development of contaminated land is based on managing, not eliminating, risks and on the type of site-specific risk based assessments that can only be undertaken effectively

in the context of specific development proposals. Accordingly, while no substantive alterations to the terms of the Third Alteration are considered to be required, some changes to the wording of paragraph 8.14 are recommended. These are set out as items (1) and (2) at paragraph 20 below, together with the reasons for these changes.

17. In relation to road and rail network capacity, the report concludes that there are transport capacity issues that ought to be addressed in order for such a CGA at Bishopton to proceed. It considers that implications for the local road network and improvements to station infrastructure, and their timing, are local issues that can be assessed in the context of planning applications for the ROF site. However, it states that the M8 east of junction 29 already experiences congestion, that it is logical to conclude that, unless capacity is improved, congestion will increase in future years, irrespective of a CGA at Bishopton; and that it is also logical to conclude that a CGA at Bishopton would make congestion worse. It regards it as desirable for this situation to be avoided. In relation to the capacity of the rail network, it concludes that some services to and from Bishopton are already oversubscribed, that this ought to be addressed, irrespective of the development of a CGA at Bishopton, but that a CGA is likely to increase pressure at peak times and make overcrowding worse. It is regarded as desirable that this situation is also avoided.

18. In relation to these matters, the report notes that measures to increase capacity on the M8 are under consideration in the context of the Strategic Transport Projects Review, that a rail rolling stock strategy is being formulated for the purchase of additional rolling stock for the period 2009-2014, and that the outcome of these considerations is expected to be known in 2008 and 2008/2009 respectively. It concludes that, in both cases, it is reasonable to expect the terms in which the Third Alteration is approved to influence the prioritisation and allocation of funding and that it is unrealistic to expect funding to be committed before, or at the time, the plan is approved. Given that the Third Alteration envisages that a CGA would be developed to contribute to development needs primarily in the period to 2018, it is concluded that there would be an opportunity for capacity issues to be addressed and that, as matters stand, the capacity of the road and rail network does not preclude the identification of Bishopton as a Community Growth Area.

19. However, it is recommended that the Third Alteration ought to make clear that the development of a CGA at Bishopton will be contingent on transport capacity constraints being satisfactorily addressed and ought to record that the principle of a new motorway junction at Bishopton has been accepted. Recommendation (3) below reflects this conclusion.

## **Recommendations**

20. The report therefore recommends the following changes to the Third Alteration:

(1) to make clear that it encompasses all the matters listed in the subsequent bullet points, the second sentence in paragraph 8.14 is changed to refer to "Requirements, including for supporting infrastructure and services....".

(2) for clarity, and to be consistent with Scottish Ministers' policy, "satisfactory" is inserted before "treatment" in the second bullet point in the paragraph.

(3) the following text should be inserted after the final bullet point in paragraph 8.14 "In the case of Bishopton, while the principle of a new motorway junction has been accepted, the

development of a Community Growth Area will also depend on capacity problems on the M8 to the east of Bishopton being satisfactorily addressed and on improvements to rail capacity”.

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File reference: ZPP/30

*23* July 2007

The Scottish Ministers  
Victoria Quay  
Edinburgh

Ministers

I have the honour to report that, in accordance with my minute of appointment dated 1 December 2006, I held an Examination in Public into aspects of a proposal in the Glasgow and the Clyde Valley Structure Plan 2006 to designate Bishopton as a Community Growth Area.

The Glasgow and the Clyde Valley Structure Plan Joint Committee submitted the 2006 plan to Scottish Ministers for approval on 28 April 2006. During the period of public consultation, which extended to 9 June 2006, over 2,000 representations were made, the majority of which opposed the structure plan's proposals for Bishopton. On 1 December 2006, Ministers decided that, before reaching a decision on whether to approve the plan, they required additional information on two matters relating to this proposal, namely:

1. Do either the presence of contamination within the former Royal Ordnance Factory site at Bishopton, or the measures required for its remediation, raise issues of sufficient concern to preclude the identification of Bishopton as a Community Growth Area?
2. Does the capacity of the road and rail network preclude the identification of Bishopton as a Community Growth Area?

Ministers also invited the following parties to take part in the Examination:

Bishopton Action Group  
Bishopton Community Council  
Cass Associates \*  
The Glasgow and the Clyde Valley Structure Plan Joint Committee  
Mrs Trish Godman MSP  
Miss Annabel Goldie MSP  
Houston Community Council  
Renfrewshire Council  
Scottish Environment Protection Agency

Strathclyde Partnership for Transport  
Transport Scotland

\* Cass Associates made representations to the 2006 plan on behalf of BAE Systems/Redrow Homes, the partnership promoting the development of the former Royal Ordnance Factory site.

I held a procedure meeting on 12 February 2007, when it was agreed that the Examination would be based on the guidance contained in the 1985 Code of Practice for the Examination in Public of Structure Plans and that it would take the form of a series of structured discussions, on a topic-by-topic basis, based on statements and supporting material submitted by the participants in advance.

Network Rail had written to Scottish Ministers on 6 February, referring to its responsibilities in relation to rail capacity, and stating that it would welcome the opportunity to contribute to the Examination. It was agreed at the procedure meeting that Network Rail seemed well-placed to make a useful contribution, and I exercised the discretion afforded by the Code of Practice to invite Network Rail to take part in the discussion on rail capacity.

The Examination took place within the Erskine Bridge Hotel, Erskine on 19 April and between 8-11 May 2007. On 20 April, I made an accompanied visit to the former Royal Ordnance Factory and to the existing village of Bishopton. At the request of Bishopton Action Group, Bishopton Community Council and Cass Associates and with the agreement of the other participants, I made further, unaccompanied, inspections of the public roads around the periphery of the site and of Ferry Road between Bishopton and Erskine prior to the May sessions of the Examination. I also visited Bishopton around 8.30 am on 8 May.

The participants in the examination were represented as follows:

**Bishopton Action Group**

Ms Frances McCartney, Messrs Pattison & Sim, Solicitors

Mr Stewart Ferguson, Chairman, Bishopton Action Group  
Mr Donald McIntosh, Bishopton Action Group  
Dr Angela Norman, Bishopton Action Group  
Mr Sandy Smith, Bishopton Action Group and Scientific Adviser  
Mr Tony Sowersby, Bishopton Action Group  
Mrs Janette Waller, Strategy Manager, Bishopton Action Group

*Adviser on road and rail capacity*

Mr Donald Chisholm

*Advisers on contamination and remediation issues*

Professor A D Dayan  
Dr Paul Johnson  
Professor J M Midgley

Dr Dick Van Steenis

*Curriculum vitae* provided at the Examination by Professor Dayan, Professor Midgley and Dr Van Steenis are bound in with Volume 1 of the documents on contamination and remediation issues submitted by the Action Group. Dr Johnson's *curriculum vitae* is incorporated in the Action Group's statement on these issues.

Professor Dayan and Professor Midgley wished it to be recorded that they attended the Examination because BAG had presented to them its concerns regarding public health and that they were offering independent advice in relation to the data that had been provided in the hope that this would assist everyone and lead to a better decision.

**Bishepton Community Council**

Mrs Irene McSpoman, Secretary  
Mr Geoff Prowse  
Mr David Woodrow, Chairman

**Cass Associates**

Mr Neil Collar, Messrs Brodies, Solicitors  
Mr Gordon Baker, JMP Consulting Transport Planners & Engineers  
Dr Gordon Bulloch, BAE Systems Environmental  
Mr Colin Campbell, former Executive Director Environment and Community and Deputy  
Chief Executive, Chorley Borough Council  
Ms Alison McKay, BAE Systems Environmental  
Mr Stuart Milligan, Redrow plc  
Mr Graham Trehella, Cass Associates

Cass Associates' document 3.1 contains *curriculum vitae* for these representatives.

**The Glasgow and the Clyde Valley Structure Plan Joint Committee**

Dr Grahame Buchan, Structure Plan Manager  
Mr Gordon McNaughton  
Mr Stuart Tait, Assistant Structure Plan Manager

**Houston Community Council**

Mr John Wilson, Chairman

**Network Rail**

Mr Nigel Wunsch, Principal Route Planner  
Mr David O'May, Senior Account Surveyor

**Renfrewshire Council**

Mr Scott Allan, Principal Engineer  
Mr Bob Darracott, Director of Planning and Transport

Mr Bill Gallacher, Principal Officer, Plans and Implementation  
Mr Robert Graydon, Environmental Protection Manager  
Ms Shona MacDougall, Director of Environmental Services  
Mr Mark Smith, Atkins  
Mr Bert Wilson, Head of Regulatory Services

**Scottish Environment Protection Agency**

Ms Susan Watson, Regional Solicitor  
Mr Murray Dobson, Contaminated Land Specialist  
Mr Stewart Meams, Planning Unit Manager  
Mr David Sandford, Acting Unit Manager, Renfrew & Inverclyde

**Strathclyde Partnership for Transport**

Mr Alan Comrie  
Mr Rodney Mortimer, Director, Policy and Strategy

**Transport Scotland**

Mr Ewan Macleod, Messrs Shepherd & Wedderburn, LLP  
Mr Colin Bathgate, Faber Maunsell, Transport Consultants  
Mr Gerard McPhillips

**Mrs Godman and Miss Goldie appeared on their own behalf.**

It was agreed at the Examination that I would seek clarification from Transport Scotland as to whether the modelling on which Table 1 in its statement is based took account of traffic likely to be generated on the M8 by future developments at Inverclyde and, specifically, whether it reflected the programming in the housing land supply in Inverclyde envisaged in Table 11 of the Third Alteration. It was also agreed that clarification would be sought as to whether the modelling on which the Predicted am Peak Load Factors in Table 11 in Network Rail's Route Utilisation Strategy (CD/19) took account of the proposal for a CGA at Bishopton and of the Housing land supply programming envisaged in Table 11 of the Third Alteration.

The responses received were circulated to the other participants in the transport capacity sessions, who were given the opportunity to comment. The only comments received, from Bishopton Action Group and Miss Goldie, have been placed on the file and taken into account in my report. They have not been circulated to the other participants. Otherwise, the report is based on matters as they stood at the end of the Examination.

Chapter 1 of the report summarises the background to, and context of, the Examination. Chapters 2-4B summarise some factual aspects and the positions of the participants in relation to contamination, remediation and transport capacity issues, while Chapter 5 contains my conclusions and recommendations. As the summaries of positions are brief, and some of the statements provided by the participants incorporate tables or other explanatory material, all these statements, as well as the documents lodged, accompany the report. Appendix 1 and Appendix 2 list the statements and the documents that were lodged.

## ABBREVIATIONS

BAG	Bishopton Action Group
BAE	BAE Systems
BCC	Bishopton Community Council
(B)CLG	(Bishopton) Community Liaison Group
CAR	Controlled Activities (Scotland) Regulations 2005
CGA	Community Growth Area
CLR	Contaminated Land Reports
DDA	Disability Discrimination Act 1995
DEFRA	Department for the Environment, Food and Rural Affairs
DMRB	Design Manual Road and Bridges
EPA	Environmental Protection Act 1990
GARL	Glasgow International Airport Rail Link
GCVSPJC Committee	The Glasgow and the Clyde Valley Structure Plan Joint Committee
ha	hectare(s)
JC Committee	The (Glasgow and the Clyde Valley Structure Plan) Joint Committee
JTS	Joint Transport Strategy
LoS	Level of Service
MDS	Metropolitan Development Strategy
NPPG	National Planning Policy Guideline
PAN	Planning Advice Note
PPC	Pollution Prevention and Control
RC	Renfrewshire Council
ROF	Royal Ordnance Factory, Bishopton
RTS	Regional Transport Strategy
RUS	Route Utilisation Strategy
SE	Scottish Executive
SE-TRNMD Division	Scottish Executive - Trunk Roads Network Management Division
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SPP	Scottish Planning Policy
SPT	Strathclyde Partnership for Transport
SRTDb	Scottish Roads Traffic Database
STAG	Scottish Transport Appraisal Guidance

STPR	Strategic Transport Projects Review
TMfS	Transport Model for Scotland
TR(s)	Technical Report(s)
TS	Transport Scotland
vpd	vehicles per day
WML	Waste Management Licence or Licensing

## **1. THE EXAMINATION IN PUBLIC - BACKGROUND AND CONTEXT**

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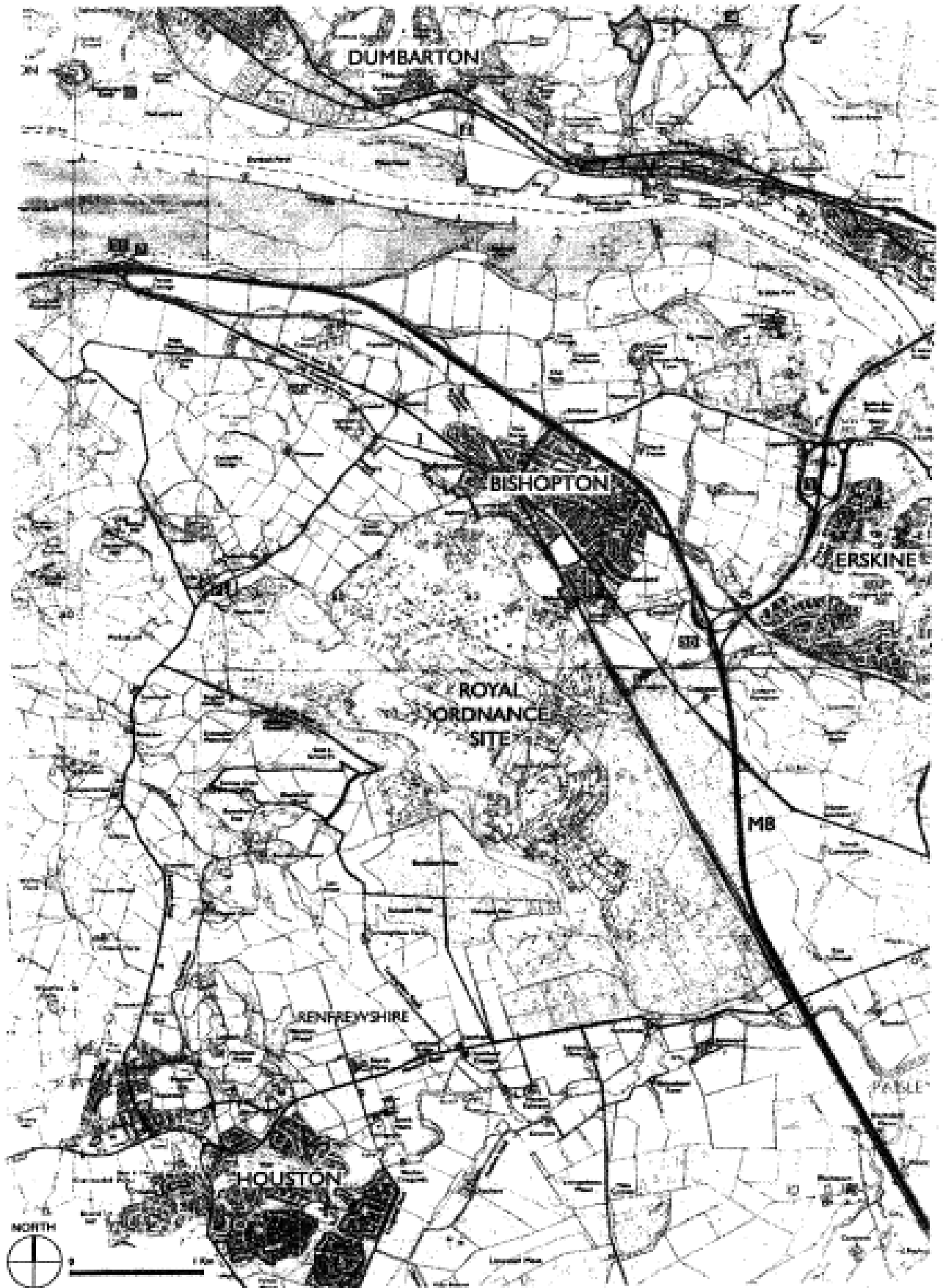
### **The former Royal Ordnance Factory at Bishopton**

1.1 Bishopton, shown on the location plan overleaf, is situated on the south side of the River Clyde, to the west of the Erskine Bridge. The M8 Glasgow-Greenock road curves around the north-eastern edge of the village while the A8 and the Greenock/Wemyss Bay to Glasgow Central railway line run through the south-western part. The former Royal Ordnance Factory (ROF), which extends to 964 hectares (ha), adjoins the western edge of the village, to the west of Bishopton Station. To the north is the minor road linking the A8 to the north of the village via Formakin with the B789 Houston road. The B790 to Houston runs along the southern boundary of the site, with the minor roads (Turningshaws Road and Reilly Road) that connect the two B roads broadly coinciding with the western boundary. Historically a major employment location, the ROF site came into use in 1916, primarily for the manufacture of propellant for supply to the ordnance manufacturing industry. Subsequent activities included the breakdown of surplus ammunition, the filling of smoke ammunition and the manufacture of propellants. It is now largely unused, following an announcement in 1999 by the owner, BAE Systems (BAE), that the factory was to close. However, BAE intends to retain an Environmental Test Facility in the south-eastern part of the site. The gatehouse is occupied and an on-site security presence is maintained.

1.2 The site contains over 2,000 buildings, generally with large spaces between as a consequence of the nature of the work previously undertaken, a range of ancillary buildings, including power stations, staff and other ancillary facilities, a network of site roads, and railway lines previously linked to the external transport system. Extensive areas of woodland, primarily in the western and southern parts of the site, are rural in character. Towards the centre of the site is the Category B listed Dargavel House. The main watercourse is the Dargavel Burn, which runs through the site to join the River Gryfe just to the south of the B790. The Craigton Burn passes under the railway line and through some old clay extraction ponds to join the Dargavel Burn near the centre of the site. Photographs in Cass/4.4 illustrate many of these features.

1.3 There are 3 existing roads between the ROF site and the A8 through the village - Newton Road, Rossland Crescent and Station Road. Access along Station Road, which is the most southerly, is via a bridge below the railway line and then past Bishopton Station. This also provides access to houses at Sachelcourt Avenue, at the north-eastern edge of the site.

1.4 At the time the Examination was held, Cass Associates had submitted the following planning applications on behalf of BAE Systems/Redrow Homes to the planning authority, Renfrewshire Council (RC):



ROYAL ORDNANCE BISHOPTON  
LOCATION PLAN

- an outline application with a master plan for a mixed-use community growth area;
- a detailed application for a new junction to the M8 at its intersection with the A8 south of Bishopton, between junction 30 (Erskine) and junction 29 (St James Interchange);
- a detailed application for engineering operations comprising remediation and reclamation earthworks; and
- a detailed application for the construction of a landfill facility.

BAE had also submitted a detailed application for the erection of a security fence around the Environmental Test facility.

### **The Glasgow and the Clyde Valley Joint Structure Plan 2000**

1.5 The approved structure plan covering Bishopton, the Glasgow and the Clyde Valley Joint Structure Plan 2000 (CD/11), became operative on 1 May 2002. Its policies focus on the period to 2006, although an assessment is also made of the possible demand for, and potential supply of, housing for the period 2006-2011. **Strategic Policy 2: Long Term Potential for Development** identifies Bishopton (Royal Ordnance Factory) as one of two locations (the other is Gartcosh-Gartloch) where the planning authorities are to assess the potential for strategic environmental renewal and the development of housing, business and industrial uses to contribute to the requirement for development land post-2006. It states that this assessment is to be based on the Guiding Principles for Sustainable Development and the criteria in Strategic Policy 9 (which relate to the assessment of development proposals) and that any significant proposals for development will require to be confirmed in terms of their impact and need through a subsequent Alteration to the structure plan.

1.6 Paragraph 7.35 states that, without prejudice to the general need to limit further urban expansion in the short-term, it is considered that the responsiveness of the plan to changing circumstances could be enhanced by evaluating the longer term potential of two locations, Bishopton and Gartcosh-Gartloch, “in view of their potential in relation to renewal issues, and their relationship to the strategic transport network”.

1.7 Paragraph 7.35(A) states that the ROF occupies a very large area of countryside and that, although parts of the site are, or were, in industrial use, it cannot be considered to be an urban site. It goes on to describe a substantial portion of the site as vacant and derelict, with parts suffering from significant contamination, reports BAE Systems’ intention of closing the plant, that discussions were continuing with a view to securing its continued operation, and that the Scottish Executive (SE) had set up a Working Group to explore future uses and to draw up a framework for its regeneration. The paragraph concludes that “In these circumstances, consideration requires to be given to the implications of a long-term sustainable mixed-use development directly connected to the rail system”.

1.8 Following comments on Gartcosh-Gartloch in paragraph 7.35(B), paragraph 7.36 states that “In view of these considerations, Strategic Policy 2 promotes the preparation of master plans to test the feasibility and impacts of longer term urban expansion for housing and employment uses. Any major development proposals in

either of these areas, beyond the re-use of existing buildings and existing consents, would raise new structure plan issues in view of their potential wider impacts on Renfrewshire and the structure plan area and other structure plan priorities. It would therefore require to be brought forward through a structure plan Alteration and reflected in local plans”.

*Note 1:* The Consultative Draft Structure Plan (CD/10) of October 1999 also reported BAE’s intention of closing the ROF and discussions regarding the possibility of retention. It noted that, if the site, which was contaminated, fell out of use, mechanisms to enable its restoration would have to be considered.

1.9 The Working Group comprised representatives of BAE Systems, RC, the SE, Scottish Enterprise, Bishopton Community Council (BCC) and Paisley and District Chamber of Commerce. Its brief was:

- to draw up a robust framework for the regeneration of the site;
- to explore the potential uses of the site;
- to consider the business opportunities this presents to the area and the existing Royal Ordnance workforce; and
- to work in partnership with all interested parties, particularly with the local community.

1.10 A report by Cass Associates: Royal Ordnance, Bishopton: Development Strategy (CD/29), commissioned on the first two of these issues by a sub-group made up of representatives of BAE Systems, Renfrewshire Council, the SE and Scottish Enterprise was published in April 2001. This was followed, in December 2002, by a second report, Royal Ordnance, Bishopton: A Planning Framework for Regeneration (CD/30), also by Cass Associates, which was seen by its authors as providing the springboard for progressing towards an Alteration to the structure plan.

### **The Glasgow and the Clyde Valley Joint Structure Plan 2006: The Twenty Year Development Vision**

1.11 The plan submitted to Ministers (CD/15), which includes a Supplementary Written Statement (CD/13), is the Third Alteration to the approved structure plan. As and when it is approved, it will replace the current approved plan as the strategic component of the statutory development plan.

1.12 Other documents, including a Statement of Publicity and Consultation, a Strategic Environmental Assessment (SEA) in the form of a four-part Environment Report, and 9 Technical Reports (TRs), were also sent to Scottish Ministers when the plan and the Supplementary Written Statement were submitted. TR6/06: Assessment of Potential Areas for Urban Expansion (CD/16) includes an assessment of Bishopton. These other documents do not form part of the plan and are not subject to approval by Scottish Ministers.

1.13 The Third Alteration sets out an Agenda for Sustained Growth for a twenty-year planning and development strategy for Glasgow and the Clyde Valley. Among other things, its policies provide for 53,000 additional households and 30,000 extra

jobs in the area in the period to 2011 and for a further 56,000 homes and 40,000 jobs in the period to 2018.

*The proposal to designate Bishopton as a Community Growth Area*

1.14 Paragraph 2.4 of the plan states that the development priorities of the structure plan have been reaffirmed in the SE's National Planning Framework for Scotland 2004 (NPF, CD/8) and Regeneration Policy Statement (CD/9), including the identification of:

- Gartcosh and Bishopton as preferred locations for long-term expansion within the Glasgow and Clyde Valley Area.

Paragraph 2.5 describes the reference in the NPF as an endorsement by the SE of the regeneration priorities of the structure plan area, noting that the Regeneration Statement seeks to align the future National Transport Framework for Scotland and Scottish Water's Strategic Investment Programme to deliver these key spatial regeneration priorities.

1.15 **Strategic Policy 1: Strategic Development Locations** states that priority shall be given to investment in the following locations, in order to maximise the scale of urban renewal, in particular to support the Metropolitan Flagship Initiatives identified in Joint Policy Commitment 1 and to sustain rural communities:

(c) Community Growth Areas Schedule 1(c)

Schedule 1(c) lists Bishopton as a Community Growth Area (CGA), with an indicative capacity of 2,500 houses to be assessed through local and master plans.

**Note 2:** Paragraph 2.14 of the Supplementary Written Statement, having referred to Strategic Policy 2 of the approved plan, states that the potential of Bishopton and Gartloch-Gartcosh has been assessed and that this is reflected in their deletion from Strategic Policy 2 and inclusion in Schedule 1(c).

1.16 Paragraph 6.4 of the Third Alteration states that the structure plan seeks to strengthen communities by (among other things):

- focussing required urban expansion on longer-term CGAs, consolidating existing communities and enabling effective master planning to help secure the timely provision of infrastructure, the green network and community facilities.

1.17 Paragraphs 8.12-8.15 expand upon the intentions for CGAs, paragraph 8.12 stating that development demands arising from the plan's Agenda for Sustained Growth will not be met alone through the use of brownfield land and that, although experience indicates that new brownfield opportunities will emerge to meet part of this demand, it is considered necessary to make provision for the new areas of urban expansion, or CGAs, listed in Schedule 1(c). Paragraph 8.13 states that the major CGAs relate to 4 key transport corridors, including (ii): Western (Glasgow to Greenock).

1.18 Paragraph 8.14 states that CGAs will be developed in accordance with master plans approved by the relevant planning authority; that requirements for supporting infrastructure and services will be established through these master plans and, where necessary, through legally binding agreements; and that requirements include:

- linkage to the existing and planned extensions to the fixed public transport network or park and ride facilities;
- treatment of any associated derelict or contaminated land;
- “green transport” links (including walking, cycling and public transport) to employment areas and town centres; and
- a range of appropriate mixed uses and of housing types and choice.

It states that the scale of development should accord with the indicative capacity in Schedule 1(c) and assessed through local planning and approved master plans, and that these requirements are additional to any other requirements, such as the assessment and safeguarding of existing environmental resources. “In addition, liaison with the SE will be required on trunk road issues and, where necessary, prior agreement reached”.

1.19 Paragraph 8.15 acknowledges that there are outstanding strategic planning requirements that will need to be met if development in the CGAs is to be acceptable, referring to a general planning need to improve access to these areas by public transport. It also states that development at a number of locations is dependent on improvements to road and rail infrastructure; that, if these requirements cannot be delivered, the planning status of these areas will need to be reassessed; and that these considerations will be taken into account in the implementation of Strategic Policy 9C.

1.20 Paragraph 8.17, under the heading of Longer Term Potential, includes CGAs among locations that could allow for development beyond 2018, subject to confirmation and phasing as part of the master planning required, with land release controlled through Strategic Policy 9A(ii) and any updated assessments agreed by the Joint Committee of the supply and demand estimates used in the plan.

1.21 Strategic Policy 9 lists the criteria that development proposals require to satisfy in order to accord with the structure plan. Part A of the policy requires the case for any development which exceeds the thresholds set out in Schedule 9 to be established in terms of criteria relating to the supply of land for the use proposed. Part C of the policy requires developers to have made appropriate provision for (among other things):

- (i) the infrastructure or facilities required to make the development acceptable;
- (ii) the implementation of appropriate transport measures for the minimisation and management of future levels of traffic generated, including Green Transport Plans;
- (iii) remedial environmental action and maintenance of related greenspaces;
- (viii) the requirements of the approved master plans for the GCAs set out in paragraph 8.14.

*Summary of transport policies and proposals with a bearing on Bishopton*

1.22 **Joint Transport Priorities** in Schedule 1(e) include the Glasgow International Airport Rail Link (GARL) as a commitment and “M8 west upgrade” and Crossrail as projects to be safeguarded and investigated. Paragraph 8.22 reports that GARL is committed, but that, at this stage, any commitment to the upgrading of the M8 between Junctions 26 and 29 will depend on the outcome of further studies.

1.23 **Strategic Policy 3** states that the sustainable development of the Glasgow and the Clyde Valley metropolitan area requires that the following range of measures are included in local plans and local transport strategies:

- (a) the selection of sustainable locations for development .....
- (b) management plans for Strategic Transportation Corridors in Schedule 3(b) and Diagram 11.

Priority Corridors in Schedule 3(b) include, in the Central Corridor, “Airport-Tunnel-Glasgow City Centre”.

1.24 **Strategic Policy 4** states that the sustainable development of the Glasgow and the Clyde Valley metropolitan area will be supported through the development of the Strategic Transport Network as identified on Diagram 12 and Schedule 4. Schedule 4(ii) Strategic Transport Network - Development Proposals includes a link to Glasgow Airport and increased rail capacity at Central Station/Crossrail (Glasgow City Centre) and related station improvements among public transport schemes to be investigated and confirmed through local plans; lists Renfrewshire under the heading of rail stations; and improvements to the M8 between junctions 26 and 29 (in particular) and access roads to the Airport as a road scheme.

1.25 Paragraph 9.18 states that Schedule 4(ii) identifies better transport links between areas of need and areas of opportunity, and that these include links with the CGAs – including better access to the rail network. Paragraph 9.19 states that the schemes in Schedule 4(iv) are needed to fill recognised gaps in the Strategic Road Network which will have a significant impact upon the competitiveness of the metropolitan area over the 25 year period:

- M74 completion
- M8 between Junctions 26 and 29, stating that improvements to the junctions that serve this stretch of the motorway and related access roads are critical to ensuring improved accessibility by road to Glasgow International Airport and that the potential for improvements to this part of the Strategic Road Network therefore needs to be safeguarded as set out in Schedule 1(e).

#### *Other matters*

1.26 **Joint Policy Commitment 3** includes the Renfrewshire Local Plan among local plans that are to be reviewed as a matter of priority, referring to Bishopton (CGA) as an issue.

## **The adopted Renfrewshire Local Plan**

1.27 The Renfrewshire Local Plan (CD/44), adopted in March 2006, was prepared to conform to the approved structure plan. **Policy SS2: Royal Ordnance Bishopton**, states :

“The Council:

(a) requires the environmental renewal and future development potential of the Royal Ordnance Bishopton site to be assessed.

(b) will require the proposed development of the site to be the subject of a master plan.

(c) will require the master plan to be compatible with the structure plan’s strategic planning framework and with local plan policies.

(d) will assess the acceptability of the master plan and will consider, among other things:

- the extent of the remediation of the site which will be achieved,
- infrastructure provision including community facilities and services, and
- the impact of the proposals on the existing settlement of Bishopton.

Pending the Council’s decision on the future use and development of the land, the site will be safeguarded for its established use”.

CD/50 is an extract from the report of the local plan inquiry regarding Policy SS2.

## **2. THE RATIONALE FOR THE PROPOSAL TO DESIGNATE BISHOPTON AS A COMMUNITY GROWTH AREA**

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### **Brief summary of the positions of the participants**

#### *The Glasgow and the Clyde Valley Structure Plan Joint Committee*

2.1 The Third Alteration is founded on the principles of sustainable development. This is in line with SE policy, which advocates prioritising the renewal and re-use of vacant, derelict and contaminated land, especially in locations accessible by public transport.

2.2 The main reasons for the proposal to designate a CGA at Bishopton were the prospect of a large, previously developed, contaminated site becoming available, coincident with an emerging need for additional development land, in a location that fitted well with the east-west corridor of growth envisaged in the structure plan and with the strategic transport network and where redevelopment would secure remediation.

2.3 Before Bishopton was included in Schedule 1(c), its sustainability was assessed against other potential urban expansion areas, using the standard template in TR/06, and against 19 sustainability indicators as part of the SEA.

2.4 The SE stated in its comments on the Consultative Draft version of the approved structure plan that Bishopton should be identified as an Urban Renewal Area (reference doc/C2). Scottish Ministers (CD/12) dismissed concerns regarding large scale development at Bishopton when they approved the plan (CD/12), stating that it provided sufficient strategic context for discussions on its future. The NPF stated in 2004 that good transport links made Bishopton a preferred location for long-term expansion.

2.5 Consultation responses (reference docs/IS24-IS30) to the Discussion Document (reference docs/IS22 and 23) that preceded the Consultative Draft Third Alteration were generally favourable.

2.6 The Consultative Draft Third Alteration drew upon the Cass Associates 2001 and 2002 reports on the ROF site as evidence of the work required by Strategic Policy 2 of the approved structure plan. Although the proposal for Bishopton prompted 2,500 objections, which were maintained during consultation on the Finalised Draft Third Alteration, no new evidence emerged regarding the site, its remediation, or the capacity of the transport network, that merited altering the proposal. The “precautionary approach” advocated by BAG also seeks a momentum to a decision.

2.7 The master plan approach to development advocated for the site is consistent with SE policy regarding such development areas and their programming and as been successfully used at other locations, notably at Ravenscraig. Strategic Policy 9, in particular 9B(ix) and 9C(i) and (viii), provides a strategic context for considering specific proposals in CGAs.

2.8 The presence of contamination is not, in itself, a barrier to future development and the Joint Committee (JC) knew that remediation would be subject to other specific procedures and overseen by the relevant regulatory authorities. The Envirocentre report (BAG/6) was not commissioned by anyone concerned with promoting the structure plan proposal. Network Rail and Scotrail had not objected to a CGA, and the JC understood that projects such as GARL and the M74 extension would allow transport capacity issues to be addressed within the development timescale envisaged for the ROF site. The Joint Transport Strategy (JTS, CD/21) and paragraph 8.14 of the Third Alteration pick up on the statement in paragraph 16 of SPP 17: Planning for Transport (CD/16). Devolving detailed consideration of these issues to the local planning authority is in line with the plan-led system and the rules of subsidiarity set out in SPP 1.

2.9 While the structure plan's long-term strategy for housing land would not be undermined if Ministers did not confirm a CGA at Bishopton, any such decision would oblige the planning authorities to consider a less well located, and potentially less sustainable, greenfield location to meet long-term needs. "Pulling" Bishopton because it involved the development of contaminated land would also fly in the face of SE guidance, undermine investor confidence, and "send the wrong signal" to others involved in the development process, with potential adverse consequences for the achievement of an MDS which is predicated on the remediation and redevelopment of vacant, derelict and contaminated land.

### ***Renfrewshire Council***

2.10 RC has no evidence that would preclude the identification of land at the ROF as a CGA. The Third Alteration provides a strategic context for the consideration of specific proposals for the site through the development control process. RC has consistently supported the principle of development there (CD/31-CD/34 and RC/2 and RC/3) on the basis that its nature and scale would be decided on the basis described above. In January 2006, it endorsed the proposal for a CGA and agreed that the detailed acceptability of development should be assessed through the submission of planning applications, including a master plan. A master plan is the appropriate mechanism for considering contamination and transport issues in detail. The prospective developers of the site have indicated that they can remediate the site and make adequate transport provision as part of a comprehensive development.

2.11 PAN 37: Structure Planning (CD/2) emphasises the strategic nature of structure plans, acknowledging that there may be infrastructure or other constraints such as land acquisition or decontamination works with potentially long lead-in times which must be overcome before development can take place and that the structure plan will provide the long term strategic planning framework within which detailed land use policies and proposals can be drawn up with confidence. It also states that structure plans should identify the strategic relationships between land use and transport, be selective, focus on essentials, deal with issues of more than local significance, and be genuinely strategic.

2.12 PAN 33: Development of Contaminated Land (CD/4) imposes a duty on planning authorities to deal with contaminated land and expects them, in preparing development plans, to promote the re-use of brownfield land, including contaminated

sites. It also makes clear that the allocation of a site in a local plan does not in itself approve its suitability for the purpose proposed, that only investigation by the developer or applicant can confirm this, and identifies a planning application as the stage at which contamination should be assessed in detail. The PAN also advises planning authorities not to be deterred from allocating contaminated land for development on the grounds that a high level of remediation would be required for the new use, and that high remediation costs may be more easily borne by a new high value use.

2.13 While the Council does not intend to determine any of the applications that have been submitted for the site until Scottish Ministers have made their decision on CGA designation, it is continuing to process them and has appointed external solicitors and environmental consultants to provide specialist advice. The HSE has been consulted on the applications (RC/1) and has not made any negative comments.

2.14 The applications are likely to be determined before the local plan is reviewed. The Council has no specific proposal to review the plan. In any event, a review would not address many of the concerns expressed by BAG.

### *Cass Associates*

2.15 The identification of Bishopton as a CGA is consistent with Scottish planning policy, which aims to ensure that development and changes in land use occur in suitable locations and are sustainable. Bishopton's relationship with the trunk road network and a high frequency rail route gives it a special advantage in securing integration between land use and transportation.

2.16 The approved structure plan recognises the locational and environmental advantages of accommodating strategic growth at the ROF site, which is the only site at Bishopton that can accommodate development in a sustainable, co-ordinated and managed way. Redeveloping the site as part of a mixed-use CGA can deliver sustainability benefits in terms of accessibility, decontamination and reuse of land for beneficial new uses, infrastructure, the potential to integrate with the existing village, and improved facilities and services, all without impacting on the green belt.

2.17 If the CGA did not encompass the ROF site, the opportunity for decontamination and renewal at a strategic scale would be lost and the advantages of locating new development in a key transport corridor would not materialise. In that event, BAE Systems would place the site (which has a lawful use and the necessary licences to continue as an ordnance factory) on a care and maintenance basis while it considered its position.

2.18 The reference to "local planning" in paragraph 8.14 of the Third Alteration should be interpreted as encompassing development control. In any event, national planning policy does not require the structure plan/local plan/planning application sequence always to be followed. The master plan application has placed much more information in the public domain than would a local plan review.

### ***Mrs Godman***

2.19 While the principle of housing development on the former ROF site is welcome, local residents have legitimate concerns regarding transport capacity, contamination and remediation. While these issues are likely to be able to be addressed, some unanswered questions remain. Existing traffic problems must not be made worse and stringent and rigorous decontamination measures are required. Although a contaminated former ROF site in Chorley appears to have been redeveloped satisfactorily, does Scotland have the legislation and regulation required to ensure a satisfactory outcome at Bishopton and does RC have available the expertise needed to ensure that public safety requirements are met?

### ***Bishopton Action Group***

2.20 BAG was formed in response to the public outcry that occurred in February 2005, when the local community first learned of the development proposals for the former ROF site.

2.21 The JC has never undertaken any consultation on the principle of development at Bishopton. BCC (BAG/11) expressed concern that there was no record of consultation before the proposal to designate Bishopton as an Urban Expansion Area emerged in the Consultative Draft Third Alteration. The Working Group did not reach a consensus on the preferred option for the site and members were bound by confidentiality (BAG/1-BAG/5).

2.22 The NPF, which promoted Bishopton from a “potential” to a “preferred” location for development before its potential had been assessed, has erroneously been used to support CGA designation. BAG/15 shows that there was no evidence or justification for the word “preferred”. There is also no evidence to support the NPF’s reference to “good transport links”.

2.23 The Third Alteration fails to comply with the requirements of SPP 1 in relation to the need to identify priorities for the provision of infrastructure, identify limitations on development, and support and encourage sustainable patterns of travel. BAG also questions the logic of a growth strategy that selects CGAs and specifies housing capacities without considering contamination and transport constraints.

2.24 The Third Alteration relies unduly on general criteria such as the Guiding Principles for Sustainable Development to justify a CGA and fails to address the proposed long-term nature, scale and location of change, as required by paragraph 33 of SPP 1. It is unacceptable to abrogate responsibility for these major issues to master plans. They should be independently assessed before any decision is taken to designate Bishopton as a CGA, in order to establish that the type of development that is envisaged is practical and economically viable. Paragraph 16 of SPP 17 states that transport cannot be an afterthought in the development process, that accessibility should be factored into the preparation of development plans from the outset, and that structure plans should include a development strategy which is prepared in the full knowledge of transport infrastructure and services, environmental and operational constraints, proposed or committed new transport projects, and demand management schemes.

2.25 Furthermore, the master plan process for Bishopton is not working. The outline master plan application contains inadequate and misleading information. Major issues remain unresolved and proposals for the site are fragmented into 5 planning applications, which will be considered separately.

2.26 The Renfrewshire Local Plan has never identified the nature and scale of development envisaged for the ROF site. Joint Policy Commitment 3 of the Third Alteration identifies the plan as a priority for review, referring to Bishopton (CGA) as an issue. The plan should be reviewed before any applications for the site are determined, so that local residents have the opportunity to influence its policies for the ROF site, albeit that a review is likely to examine the site in less detail than the development control process. The Bishopton Community Liaison Group (CLG), which the applicants initiated to help deliver the development, seldom meets and has not engendered confidence.

2.27 While it is accepted that the ROF site requires to be remediated, it is unique and needs to be treated as such. Given its exceptional nature, declining to designate it as a CGA would not set a precedent for the rest of the structure plan area. The JC acknowledges that deleting Bishopton as a CGA would not undermine the long term strategy for housing land. However, if Bishopton is identified as a CGA, a precautionary approach should be taken and further provisos regarding transport capacity and remediation introduced.

### **Bishopton Community Council**

2.28 BCC is opposed to development at Bishopton in the terms set out in the Third Alteration and expressed the concerns of the community, including on transport, contamination and remediation, throughout the structure plan consultation period. While the CLG has been very constructive, a CGA would have a detrimental effect on the quality of life in the present community, contrary to the aspirations of the structure plan. Telescoping the timescale for development from the “long-term potential” referred to in the approved structure plan came as a shock to the village. Over 90% of the 34% of the electorate who voted in a referendum on the BAE/Redrow proposal in April 2005 were opposed to it. Over 1,700 of signatures from the 981 (of over 2,000) households in the village who responded to a survey in June 2006 also opposed the proposal.

### 3. CONTAMINATION AT THE FORMER ROYAL ORDNANCE FACTORY SITE AT BISHOPTON AND MEASURES FOR REMEDIATION

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#### Background and context

##### *The Regulatory framework*

3.1 The main statutory provisions regarding the remediation of contaminated land are contained in Part IIA of the Environmental Protection Act 1990 (EPA, CD/26 and SEPA/2) and in the Contaminated Land (Scotland) Regulations 2000 and 2005 (CD/27 and CD/28). These are supported by guidance in the Contaminated Land Statutory Guidance: Edition 2, published in May, 2006. The provisions of Part IIA were introduced into the 1990 Act by Section 57 of the Environment Act 1995.

3.2 Part IIA allows local authorities to designate land as “contaminated land” and to require its remediation. Local authorities and SEPA both have duties and powers for the administration and enforcement of Part IIA. For general purposes, the regulator is the local authority. Where the local authority has designated land under Part IIA as a “special site”, responsibility for regulation passes to SEPA. SEPA is empowered to notify the local authority of any sites it considers should be designated a “special site”. SEPA also has responsibilities with regard to the protection of the water environment (see paragraph 3.15) and has to be consulted if the local authority considers that land might be “contaminated land” due to pollution of the water environment.

3.3 When the EiP was held, none of the ROF site was designated as contaminated land under Part IIA. However, it is not disputed that at least parts of the site are affected by contamination. RC had undertaken a differentiation exercise to identify which areas of the site would have been designated a “special site” under Part IIA and SEPA had agreed to provide advice to RC on those areas. The Council had also consulted SEPA on the master plan outline application and was awaiting SEPA’s response.

##### *Site investigations and the identification of remediation options*

3.4 The Planning Framework for Regeneration Final Report of December 2002 (CD/30) reports that a desk study had been undertaken to provide an initial assessment of the potential for contamination on the site and to assist in drawing up a decommissioning plan. Cass/4.1 lists subsequent work. The more recent documents in this list include:

- May 2005 a Preliminary Risk Assessment (CD/36)\* based on a visual Assessment of the site and information on site history (CD/35)\*
- May 2006 a Generic Quantitative Risk Assessment (CD/37)\*
- May 2006 an Outline Remediation Strategy (CD/42)\*
- May 2006 an Air Quality Assessment – Remediation Through Burning (CD/43)\*
- October 2006 a Detailed Remediation Strategy (Cass/4.4)<sup>o</sup>

- October 2006 a Verification Plan (Cass/4.10)<sup>o</sup>

\* submitted to Renfrewshire Council with the outline master plan application.

<sup>o</sup> submitted to Renfrewshire Council with the detailed application for remediation and reclamation earthworks.

3.5 The works envisaged in the Detailed Remediation Strategy are expected to be phased over a period of 15 years. The basic approach (illustrated in Figure 5 in Cass/4.2) is to treat contaminated material using a variety of techniques, including heat treatment and soils washing, encapsulation and excavation and removal. Material judged following treatment to be rendered suitable for retention on the development site is intended to remain *in situ* and/or to be re-used elsewhere on the site. Material unsuitable for re-use would be landfilled, either on-site or taken elsewhere. Section 7.7 of the strategy identifies 510 buildings in the intended core development area, 170 on land intended as recreational open space, and 20 in other areas, as potentially contaminated by explosives residues, and requiring treatment by “firing” to destroy all traces of explosives. However, it also states that alternatives to burning will be adopted where these can be used without compromising the health and safety of operatives.

### **Brief summary of the positions of the participants**

#### ***The Glasgow and the Clyde Valley Structure Plan Joint Committee***

3.6 In proposing Bishopton as a CGA, the JC exercised the type of strategic planning judgement it employed in identifying the Clyde Waterfront, the Clyde Gateway and Ravenscraig as Metropolitan Flagship Initiatives. These have now been incorporated into the NPF and the Regeneration Policy Statement as development priorities in a national context.

3.7 Identifying Bishopton as a long-term CGA is consistent with national policy and guidance on targeting degraded land. PAN 33 describes proposing development as a means of increasing the value of a contaminated site, thus covering the cost of remediation, as a perfectly acceptable approach and consistent with SE policy on sustainable development. Many contaminated sites throughout the world have been successfully remediated and put to productive use.

3.8 Assessing contamination on the ROF site, and the measures required for its remediation, needs detailed technical expertise at a site-specific level. Paragraph 8.14 of the Third Alteration therefore regards these as more appropriate for master planning and planning applications. That said, the Joint Committee had more information on the ROF site, including the results of work done by 2005, than it had when it identified other contaminated locations for development. It also took into account the regulatory framework that would govern remediation and was aware that RC intended to commission independent technical advice. Matters would never move forward if detailed information on individual sites had to be obtained before they could be identified for development in a structure plan.

## *Renfrewshire Council*

3.9 While the ROF site remains closed to the public and undeveloped, RC regards it as suitable for its current use and is unlikely to designate it under Part IIA of EPA. Baseline dust monitoring (essentially for heavy metals) has not revealed anything untoward so far. If the site was to be designated under Part IIA, much of it would be likely to be a special site and SEPA would be responsible for enforcing remediation. The site differentiation exercise referred to above would inform any action that became necessary in that context.

3.10 Contamination and remediation issues are therefore being considered in the context of the current planning applications, using the “suitable for use” approach in PAN 33. Where initial investigations indicate significant levels of contamination, PAN 33 places the onus on a developer to undertake a site-specific risk assessment, before planning permission is granted, to propose measures to ensure that risks are appropriately addressed, and to undertake the remediation necessary to make the land suitable for the use proposed. If planning permission(s) were granted for the ROF site, remediation requirements would be imposed and enforced through planning conditions, which could include a prohibition on burning, and through building control requirements.

3.11 RC has therefore to be satisfied, before granting planning permission, that the applicants have properly assessed the potential for contamination and have incorporated the necessary remediation measures in the development. PAN 33 also requires the authority to consider the remediation plan and to decide whether it addresses unacceptable risks to human health and the wider environment during the restoration process and in its end use. The Council’s Environmental Services Department’s Environmental Protection Division is assessing the information that the applicants have provided regarding contamination and their proposals for remediation and will comment on these to the Council’s Department of Planning and Transport. It is being supported in this work by Atkins, the Council’s specialist consultant, which is providing an independent assessment of the applicants’ information. The Council has also appointed BMT Cordah to advise on air quality issues. SEPA has agreed to provide advice to the Council as planning authority on matters on which it is best placed to do so. Atkins, which has access to the requisite specialist expertise, including from toxicologists and analytical chemists, considers that site investigations are being undertaken in accordance with published guidance and have progressed beyond what it would normally expect at this stage in the planning process. RC is forwarding all the issues raised by BAG to Atkins, which is taking them into account in its review.

3.12 The Council’s current level of understanding of the nature and extent of contamination on the ROF site can be summarised as follows:

- there is a significant amount of information available about the site over the last 20 years;
- different types and levels of contamination arising from known uses affect different parts of the site;
- there are significant relatively uncommon substances compared to those normally encountered in dealing with contaminated land;

- because of the size of the site, despite the large number of samples taken, details of the nature and extent of contamination are currently at a lower level of resolution than would normally be expected. The applicants acknowledge that more detailed sampling will be required to inform the nature and feasibility of remedial options. RC expects that, by the end of what is an on-going process, it will have sufficient information for its purposes.

3.13 The Council has also sought more information on the Stage 1 Remediation Strategies that have been submitted so that it can decide whether the applicants have addressed the risk satisfactorily for the purposes of the master plan outline application. If the master plan was granted outline planning permission, a detailed, Stage 2 Remediation Plan would be reserved for future approval.

3.14 Burning of buildings and materials is generally subject to control by the Council under EPA Part III, the Clean Air Act 1993 and the Environment Act 1995 Part IV. However, burning “where there is no other safe and practical method” of disposal is exempt from these controls. The Council therefore intends meet the HSE to establish whether, given that explosives residues are involved, this exemption would apply to the ROF site.

### ***The Scottish Environment Protection Agency***

3.15 The remediation of contaminated land typically includes activities subject to regulation by SEPA in relation to waste management, the protection of the water environment, and the control of emissions to air. Any activities within contaminated sites that will impact on the water environment require to be authorised by SEPA under the provisions of the Water Environment and Water Services (Scotland) Act 2003 and the Water Environment (Controlled Activities) Scotland Regulations 2005 (CAR, SEPA/1).

3.16 SEPA is currently providing advice on other large regeneration projects in the structure plan area, including Ravenscraig and the Clyde Gateway. These are similar in scale to the ROF site and are likely to involve similar complex contaminated land issues. While the range of potential contaminants found at any site will be unique, the approaches to investigation and assessment are the same, irrespective of whether the site is being investigated under the statutory contaminated land regime or through the planning system.

3.17 It is SEPA’s practice not to designate under Part IIA of EPA land that is the subject of development proposals. As regards the ROF site, SEPA’s focus would be in 3 areas:

- where requested by the planning authority, an advisory role in relation to planning applications;
- as a consultee on applications or Environmental Statements; and
- as the regulator of specific activities associated with the remediation and development of the site.

3.18 Typical activities regulated by SEPA in relation to enabling works would comprise: the movement, treatment, re-use and disposal of waste soil and other

materials (on and off-site), including to landfill, and the disposal or treatment of any contaminated groundwater or surface water. SEPA does not have powers to regulate burning on the site, although the treatment and disposal of wash water run-off from buildings prior to burning would come under its control.

3.19 Waste management activities are authorised typically through a Waste Management Licence (WML, although small scale and/or low risk activities are exempt) or a Pollution Prevention and Control (PPC) permit. SEPA cannot issue such authorisations unless any planning permission required is in place. Authorisations cover the type and quantities of waste; technical requirements, including emissions to air and noise control (at PPC permit sites); odour, litter, and liner design (on landfill sites); the minimisation and recovery of waste (at PPC sites); with PPC applications for thermal treatment, measures to ensure that only residual waste is incinerated; other treatment and operational methods; and final restoration. In considering applications under these headings, SEPA also has regard to flooding, drainage, pollution control, the control of surface water and impact on biodiversity.

3.20 Treating contaminated soils on site, in the context of a working plan that incorporates measures to prevent pollution of the environment or harm to human health, is becoming more common. Contaminated material can also be landfilled to facilities that must be designed to prevent pollution of the environment or harm to human health. The Ravenscraig remediation plan used an on-site landfill, which was deemed to be the best environmental option for the purpose. The “misconception” to which BAG refers (see paragraph 3.37) was expressed in the context of advice that remediation should be done properly.

3.21 At the development stage, SEPA would regulate construction activities (which would have to comply with CAR), the management of surface water, the management and disposal of waste water, and engineering works within the water environment.

### *Cass Associates*

3.22 The large amount of information available regarding the ROF site, together with experience at similar sites elsewhere, demonstrates that neither contamination, nor the measures required for its remediation, preclude the identification of Bishopston as a CGA. While it is impossible ever to have a totally complete picture, the contaminated land regime takes a risk-based approach. Contamination and remediation also do not raise issues of sufficient concern regarding the viability of development. BAE/Redrow Homes have prepared a development appraisal for their scheme and regularly update its financial viability.

### *Contamination*

3.23 A comprehensive desk study of the processes that could have resulted in contamination on the site has been completed. Intrusive investigations (described in Cass/4.1), which include large numbers of soil, groundwater and surface water samples and focus on locations such as burning grounds, have revealed contamination in soils and water. Cass/4.2 summarises the extent and nature of this contamination, which has been assessed in accordance with current UK policy and guidance. It also shows that, on most of the site, contamination is not a concern. Sources of

contamination identified in other areas will have to be remediated to make the site suitable for the new uses proposed. These sources are similar to contaminants found and successfully dealt with at other sites, some of which are described in Cass/4.9. Options have been identified for most of the contaminants found and, in some cases, work has reached the end of the “Options Appraisal” stage in Figure 1: The Process of Managing Land Contamination in Contaminated Land Report (CLR) 11: Model Procedures for the Management of Land Contamination (CD/18). In other cases, the significance of risk is still being assessed. A review of Department for the Environment, Food and Rural Affairs (DEFRA) assessment values (see paragraph 3.34) was prompted by suggestions that the current values are too conservative.

### *Remediation*

3.24 Work on identifying the measures required for remediation is much more advanced than is usually the case for a site being considered for inclusion in a structure plan. The remediation methods proposed accord with Government guidelines and good practice and have been used successfully on other sites in the UK with similar contamination profiles. If outline planning permission for mixed development is granted, the Options Appraisal work will be completed and a Detailed Remediation Strategy firmed up and submitted to the planning authority.

3.25 Contaminated material will be treated on site to minimise waste and maximise re-use. Cass/4.5 provides details of available technologies. Only materials that could not be re-used would go to the on-site landfill. The only materials expected to be exported from the site would be for recycling elsewhere or surplus crushed aggregates. In the unlikely event that hazardous or special waste was encountered, this would be taken off-site for disposal at a specially licensed landfill facility. It is not intended to seek a licence for a hazardous waste disposal facility on the site.

3.26 Explosives residues in soils that pose a risk due to toxicity would be dealt with in a manner similar to other organic contaminants – using techniques such as bioremediation, soils washing, and engineering solutions. Explosives fragments and any ammunition devices encountered would be remediated by physical separation and destruction by burning or by surface heat treatment with confirmatory soil sieving. Burning is an approved method of treatment and has been undertaken on the site throughout its life.

3.27 Buildings with explosives residues have to be decontaminated before they can be demolished. The HSE recognises burning, which allows the burned remains to be crushed and re-used and exposes operatives to less risk than chemical cleaning or washing, as good practice. Buildings are prepared and left ready to light when weather is suitable. Safety distances would be discussed with the HSE. Under the Manufacturing and Storage of Explosives Regulations 2005, this could be significantly less than 100 m. However, remediation by burning is not “a method required”. A workable alternative solution – involving stripping out, washing and controlled demolition - has been devised and is being considered for the nitrocellulose buildings which are large and close to the village. That said, subject to the HSE’s consent, buildings could be burned on the ROF site if it was not redeveloped as it would continue to be a licensed Explosives site.

3.28 Remediation is monitored and regulated using the density of sampling employed at the investigation stage. At verification stage, following remediation, sampling is carried out at 25 m centres where housing is the end use, and at 50 m centres where commercial use is intended.

3.29 BAE Systems Environmental has considerable experience in the investigation, assessment and remediation of sites where explosives and explosives components have been manufactured, processed or stored. Successful schemes include Waltham Park, on the former RO Waltham Abbey - which Bishopton was built to replace and which undertook very similar potentially contaminative processes, such as the manufacture of propellants, nitrocellulose and nitroglycerine, and Buckshaw Village on the former RO Chorley site, which undertook ammunition, tracers and pyrotechnic manufacturing, ammunition filling and demilitarisation. While every site is unique, Bishopton was not the only propellant manufacturing site in the UK. Chorley also decommissioned ammunition and the processes carried out at an Ordnance site at Wrexham were very similar to those undertaken at Bishopton. Chorley Borough Council was not aware that remediation at Chorley caused public concern. The local Primary Care and Hospital Trusts, with whom the Council held regular liaison meetings, also never raised it as an issue. About 400 buildings were burned at Chorley, and 300 at Waltham Abbey.

## ***Bishopton Action Group***

### *Contamination*

3.30 BAG considers that the range and extent of contamination on the ROF site make satisfactory remediation virtually impossible that the remediation works that are envisaged will involve significant health risks. The Joint Committee was not presented with the Envirocentre's critique of Cass Associates' 2001 report (BAG/6), ignored the concerns of the Working Group, and did not take a balanced view. Experience at Corby shows that planning authorities can and do make mistakes that can have devastating effects on human health. The potential dangers of locating development next to an Environmental Test Facility and a hazardous waste landfill site have also not been considered, nor have the implications of remediation for community woodland and wildlife resources.

3.31 BAG's toxicology advisers, Professor Dayan and Professor Midgley, have advised that the evaluation of risks requires knowledge of the toxicants present and that disturbance in the course of remediation will create the potential for harmful exposures. They also point out that site investigations and the developer's remediation strategy focus on known "hot spots" and question whether knowledge of the site's history is sufficiently comprehensive to form a sound basis for the detection of highly toxic, carcinogenic and tetragenic pollutants. The number and complexity of processes undertaken on the site creates the potential for contamination outwith the normal range for Explosives Works identified in the DEFRA CLR 8 report that formed the basis of the investigations. It is also surprising that none of the substances encountered are acknowledged to be "unknown". Although a great deal of skilled analytical and assessment work has been done on many samples according to current UK recommended principles, not all substances have been searched for. This targeted approach may also have affected the basis for discarding high results as "outliers". The mix and integration of processes undertaken at Bishopton were different from those undertaken at other ROF sites and will have produced a different "contamination signature". Analytical traces from other locations should be compared.

3.32 Dr Johnson, another BAG scientific adviser, commented that the evaluation of the site undertaken to date has effectively been "by the book" in terms of the information and supporting evidence considered. However, the ability of the programme to have sufficient diagnostic resolution is questionable. Identifying the ROF site as the basis of a CGA before its suitability for development has been established is counter-intuitive. It would be more logical, and consistent with PAN 33, to establish its suitability for development first. This requires much more information. As long as this information is incomplete, the Third Alteration does not accord with the advice in paragraph 28 of PAN 33 and Ministers do not have the reassurance that is required to agree that Bishopton should be identified as a CGA. It is wrong to delegate detailed assessment to a local level.

3.33 The output of any quantitative risk assessment is probabilistic and the fact that the developers are resorting to anecdotal evidence from former employees is indicative of the limited information available on the site's history. Unplanned as well as planned events occur. Results to date are remarkably uniform, probably

because investigations have focussed on known “hot spots” and on substances that investigators expect to find. However, unexpected contamination has been found on adjacent agricultural land. The site has not been assessed for some substances, including radioactivity and the absence of evidence that a substance is present does not mean that it is not there. The incidence of sampling equates to only 1 per 0.4 ha, mostly specific points. A 25 m grid, possibly 10 m for proposed residential areas, would be more appropriate. Some investigations are being left to Stage 2 or validation stage. SEPA is currently monitoring watercourses at the site only for farm chemicals. The length of time that substances will remain, should be considered, as well as their toxicity.

3.34 Mr McIntosh has collected anecdotal information about chemicals and explosives that he has been told were dumped at Bishopton. Former employees are reluctant to speak out because of the Official Secrets Act. As the Chorley site is only half the size of Bishopton, if it is similar to Bishopton as claimed, it must have posed only half the risk. BAG also understands that it was remediated to a lower standard than applies now. If Bishopton did proceed, it might not meet any future standards. Some DEFRA guidelines values are currently being reviewed.

#### *Remediation*

3.35 Uncertainties and gaps in information at the assessment stage mean that the remediation strategy is also potentially flawed. Furthermore, some of the methods proposed are unsatisfactory. SEPA has previously referred to a “misconception” that remediation is always beneficial.

3.36 Burning buildings is technically illegal, may well breach the Stockholm Convention (BAG/C/21), borders on the irresponsible, and has probably been selected to reduce costs. It is also not the only method available. Control over temperature, the weather, or what is in buildings, cannot be guaranteed. Uncontrolled combustion is likely to lead to the production of products of incomplete combustion, including toxic trace metals in vapour form, or in association with fine particles, and possibly asbestos. A demonstration of burning intended to reassure residents was a terrifying experience and had completely the opposite effect.

3.37 Dr van Steenis has advised that the inhalation of PM2.5 particles containing vaporised heavy metals, polychromatic hydrocarbons, pesticides and other contaminants arising from development of the ROF site would cause many health risks. Health damage and premature death would occur mostly within 5 km of the site, and much further afield if buildings were burned. BAG/C/23 shows areas at risk with the prevailing winds. Diseases including deaths that may be expected include birth defects and stillbirths, raised infant mortality, heart-related diseases, cancers, clinical depression and suicides, and obesity.

#### *Bishopton Community Council*

3.38 The Community Council has little confidence that the developers and regulators would ensure that the ROF site is remediated safely and supports BAG in its representations on these issues. If the CGA is agreed, the strict supervision and monitoring of all clearance, contamination, and remediation must be independently

assessed. That said, the Chorley site is far more enclosed by residential development than the Bishopton site.

***Houston Community Council***

3.39 Houston Community Council's main concerns are the potential for toxic contamination to leak into watercourses on the site, the potential for smoke from fires to affect the surrounding agricultural area; and the potential for contaminants to leak from the landfill facility or to be dispersed in transit to it. It also seeks reassurance that the site will be carefully monitored and the requisite standards of regulation rigorously enforced, and that the landfill site will not be used to dispose of commercial waste from elsewhere.

## **4A. ROAD CAPACITY ISSUES**

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### **Factual background**

4.1 Access to and from Bishopton to the M8 eastbound is either via the B815 Ferry Road and the M898 to join the M8 at junction 30 or via the A8 and the A726 to join the M8 at junction 29 (St James Interchange). The most direct means of access westbound is via the A8 to junction 31 north-west of the village. The M8 has 2 lanes in each direction between junctions 31 and 29 and 3 lanes in each direction nearer Glasgow. Except where the motorway viaduct crosses the White Cart, between junctions 27 and 28, there is also a hard shoulder.

4.2 Of the 3 roads between the ROF site and the A8, Newton Road varies from 5.6-6.2 m in width. Rossland Crescent varies between 5.5-5.7 m in width. Station Road is over 6 m wide, except at the rail overbridge, where it is 4.5 m wide. Old Greenock Road runs to the north of the A8 to join the A726 at Erskine.

4.3 In March 2005 (Cass/2.5) the Scottish Executive - Trunk Roads Network Management Division (SE-TRNMD), after assessing a STAG Part 1 appraisal (Cass/2.4) submitted by JMP Consultants on behalf of BAE/Redrow, confirmed that it was content for two options - a new motorway junction where the A8 crosses the M8, plus associated local road, public transport, walking and cycling improvements; and a new connection to junction 30 plus associated local road, public transport, walking and cycling improvements - to proceed to a STAG Part 2 appraisal. It also stated that this meant that, in principle, the Executive would support a new motorway access to facilitate the redevelopment of the Bishopton site. As well as a satisfactory Part 2 submission, this agreement was dependent on the delivery of the proposed business element of the development, the developer acquiring and providing any land required for the new junction and underwriting costs related to the promotion of new roads orders, and the delivery of a sustainable travel package, including park and ride.

### **Agreed matters**

4.4 The participants agree that the extent of the strategic road network that ought to be taken into account in considering capacity issues comprises the M8 between junctions 31-25/25a and eastwards to the Kingston Bridge. They also agree that the road has a practical capacity of about 2,000 vehicles/lane/hour and that the eastbound flow between junctions 30-29 in the weekday am peak is typically 2,500 vehicles/hour.

4.5 The participants also agree that the relevant area to consider as far as the local road network is concerned comprises the junctions within Bishopton considered in the TA\* together with Ferry Road and the Red Smiddy roundabout at the A8/A726 south-east of Bishopton, which are also considered in the TA. BAG's transport adviser considers that a CGA at Bishopton would have traffic impacts on Paisley and Renfrew town centres and on Phoenix Park but accepted that these could be left for consideration in the context of planning applications for the ROF site.

\* the Station Road bridge, Station Road/A8 Greenock Road junction, A8 Greenock Road/Kingston Road junction, Rossland Crescent/A8 Greenock Road/B815 Ferry Road, A8 Greenock Road/Newton Road, Station Road/A8 Greenock Road junction, A8 Greenock Road/Kingston Road junction, A8 Greenock Road/Newton Road (4-arm) junction, Old Greenock Road/Ferry Road, Old Greenock Road/Kingston Road, and the signalised junction at Greenock Road/Ferry Road.

## **Brief summary of the positions of the participants**

### ***The Glasgow and the Clyde Valley Joint Structure Plan Committee***

4.6 The JC was satisfied, when it proposed a CGA at Bishopton, that the strategic transport case for development had been made. While there are capacity constraints in the strategic road network to the west of Glasgow, the JC was one of the main contributors to the Joint Transport Strategy (JTS, CD/21) and was directly involved in developing plans for investment that would address these constraints. It was also aware that these plans had Ministerial commitment and would be delivered in a timescale compatible with the development of the ROF site.

4.7 The main capacity constraint on the strategic road network is between junctions 26 and 29 on the M8 and at the Kingston Bridge. The Third Alteration, the JTS, and its predecessor, the Regional Transport Strategy for Western Scotland 2025 (RTS, CD/22), include integrated policy responses to these transport constraints. The Third Alteration acknowledges the constraint between junctions 26 and 29 and that a detailed assessment is required in order to realise development potential in the corridor. Its response is made up of several strands and Strategic Policy 3 and Strategic Policy 4 have to be read together. A structure plan cannot go into detail on every development location, but Schedule 3(b) lists the Airport-Tunnel-Glasgow City Centre stretch of the Central Corridor as a priority for the management of travel demand.

4.8 Transport Scotland (TS) did not suggest at consultation draft stage that a lasting road capacity constraint would prevent the achievement of the MDS and had accepted the principle of a new M8 junction at Bishopton. While a structure plan cannot commit Scottish Ministers to expenditure, this decision implies that Ministers acknowledge that they must address capacity constraints within the plan period. The eastern extension of the M74, which will relieve the Kingston Bridge, is included in the SE's strategic investment programme and is currently at tender negotiation stage. It is expected to be finished in August 2011, before any substantive development at Bishopton is complete.

### ***Strathclyde Partnership for Transport***

4.9 The SPT, which is funded by its constituent councils and the SE, has a co-ordinating role in transport planning in the structure plan area. The JTS has been submitted to Scottish Ministers for approval. It is the first joint strategy prepared under the Transport Scotland Act 2005, which provides for statutory regional transport partnerships, and sets out a broad strategy to which TS and local authorities are expected to adhere. As and when it is approved, it will supersede the RTS.

4.10 The JTS covers a 15-year period that is coincident with the development timescale envisaged in the master plan application. It identifies the ability of the existing transport network to cope with travel demands arising from development at Bishopton as a major issue for its delivery and states that the SPT will work with its partners to ensure that provision is made for efficient transport links as proposals are developed. Target Programmes for Larger Physical Works include GARL and Bishopton is mentioned as part of the context for key interventions. While the SPT has no statutory roads powers, it can contribute to road schemes. These could include works for a CGA at Bishopton. Local bus services would also have to be improved and routed through the site, with the developers providing the necessary infrastructure and probably underwriting the cost of services for a time. The SPT would be able to offer to manage any bus contracts. A new road link to the M8 would encourage car use, but would also enable commercial journeys in both directions. It would also allow a direct Bishopton/Glasgow bus service to be introduced, although instituting such a service would be a commercial decision for an operator.

### ***Transport Scotland***

4.11 The development of a CGA at Bishopton requires a STAG appraisal because it is likely to involve transport interventions that will impact upon the motorway and trunk road network. The STAG Part 2 report referred to above will require to include a full TA addressing trunk road impact, and any necessary mitigation. As matters stand, both of the options being taken forward could be ruled out at Part 2 stage. Design Manual Roads and Bridges (DMRB) Stage 2 and Stage 3 assessments will also be required.

### ***Operational characteristics of the strategic road network***

4.12 The definition of capacity in TA 46/97, DMRB Vol. 5 (TS/1), namely “the maximum sustainable hourly lane throughput”, relates to a network unconstrained by weaving and joining movements arising from junctions. “Congestion”, defined as arising when hourly traffic demand exceeds the maximum sustainable hourly throughput, causes flow to break down with speeds varying considerably, a drop in average speeds, a reduction in sustainable throughput, and/or the formation of queues. Capacity is one element of the Level of Service (LoS) measure of the performance of the motorway network, which ranges from A: Free flow, B: Reasonably free flow, C: Stable flow, D: Approaching unstable flow, E: Unstable flow to F: Forced or breakdown flow.

4.13 The M8 east of Junction 29 currently experiences congestion, particularly during the weekday am peak. Table 1 in the TS statement is a summary analysis of the M8 between junction 28 and junction 25 (Cardonald) at that time. It suggests that by 2011, taking no account of any weaving, merging or diverging traffic that will impact upon assumed capacity, some sections will experience LoS F, without CGA traffic. It also indicates that an additional 2,500 new houses at Bishopton are likely to cause LoS to deteriorate further. The fact that the Transport Model for Scotland (TMfS) on which the table is based, assume 21% growth in the period 2005-2011, compared with a national figure of 12% over the same period, suggests that it takes account of expected future development.

*Note 2:* post-Examination correspondence on this last issue is summarised at paragraphs 4.32-4.35.

4.14 Possible measures to mitigate the capacity issues expected to arise by 2011 include hard shoulder running, new lanes, high occupancy lanes, automatic traffic management (ATM) measures such as variable speed limits, and encouraging the use of public transport. “Peak spreading” is also likely. These measures are likely to be considered in the Strategic Transport Projects Review (STPR), which is due to conclude in August 2008, although not all are likely to be practical due to cost or corridor constraints. Similar measures will be required to mitigate the impacts of the ROF site. The measures proposed by the developers to mitigate these impacts have still to be provided to TS.

4.15 A Statement of Common Ground shows that TS has accepted the person trip assessment and trip distribution proposed by JMP and is satisfied with the conclusions of the Public Transport Study (Cass/2.3) that informed the STAG Part 1 process. However, for the characteristics in the person trip assessment to be realised, a mixed development at the ROF site has to deliver employment uses in tandem with housing. If outline planning permission is granted, TS would advise a suspensive condition limiting development to 400 houses before the new junction is opened and requiring a supply of employment land to be maintained thereafter to ensure that a critical mass of local employment opportunities is available. To maximise the potential for non-car trips, a condition requiring suitable provision to be made for public transport would also be sought.

4.16 Mode-share targets and findings from the traffic modelling remain to be resolved. As the developers intend to produce a revised TA, which will include a new traffic modelling section, TS cannot confirm the suitability or otherwise of the surrounding road network to accept traffic from the ROF site, or any mitigation that might be required. That said, there is no evidence at this stage that there are capacity issues that could not be addressed and would therefore preclude designating a CGA at Bishopton.

### ***Renfrewshire Council***

4.17 The ROF site is exceptional in being located adjacent to an existing railway station with frequent services to a major conurbation. The Working Group recognised transport as a key issue if the site was developed and that new links between the site, the A8 and junctions 29 and 30 on the M8 would be required. This stretch of road currently carries about 40,000-50,000 vehicles per day (vpd) compared with a potential capacity of over 60,000 vpd and thus has spare capacity. An initial traffic analysis was undertaken in the context of preliminary work on a master plan and RC Traffic & Transportation officials were able to advise at Consultative Draft Third Alteration stage that transport issues had been investigated beyond what would be normal for an area to be identified for development in a structure plan. They were also able to say that, subject to detailed analysis, transport solutions appeared to be sustainable and probably deliverable.

4.18 RC has still to take a formal view on the TA including the developer’s recent offer to form a direct link to the A8 to the south of the village before any houses on

the ROF site are occupied. It also acknowledges that there are sensitivities associated with some local roads, but sees no reason at this stage why capacity problems on the local road network could not be addressed by new infrastructure and by imposing conditions. As it regards all these matters as issues for the development control process it considers that there are no transport-related reasons that preclude the Third Alteration from identifying Bishopton as a CGA. The 1986 Guidelines for Development Roads (BAG/T/1) are guidelines and apply to new roads. Implementation of the type of traffic calming and street design measures that RC introduced in 1996 allow these guidelines to be reduced.

### *Cass Associates*

4.19 Cass Associates agrees that road capacity issues should not preclude the designation of Bishopton as a CGA. While noting that the M8 is busy and subject to commuter pressures, it considers that this will not incur critical levels of service solely on account of traffic from the ROF site. Tables in Cass/2.6, which assess the impacts of a CGA at Bishopton on the M8 between junctions 30 and 25/25a, applying a range of assumptions, are considered to support this contention, and to illustrate sensitivity to changes in assumptions. Cass/2.6 also comments that the TMfs growth assumptions are very high, as the Scottish Road Traffic database (SRTDb) indicates recent growth of 2-2.5% per annum. Flow on the M8 between junctions 26-30 generally does not exceed capacity. The queuing that occurs is due to incidents, lane closures, and tailbacks from exit ramps. Congestion elsewhere is due to capacity problems on the north and west flanks of the M8. The M74 extension is likely to reduce peak period travel times on the M8 through Glasgow.

4.20 The STPR is more likely to consider traffic control and management techniques rather than road widening as a means of increasing capacity. The view expressed following the M74 extension inquiry (Cass/2.2) that widening would encourage commuter use, whereas a degree of peak hour congestion encourages the use of public transport, is gaining support.

4.21 Studies to date have not revealed any significant traffic capacity issues on the local road network. A master plan that would allow the CGA to be linked to the village without detrimental impacts on existing infrastructure can be developed. BAE/Redrow Homes' most recent proposal is to build a southern link to the A8 concurrently with the first phase of 400 houses on the ROF site, to open this link before any of these houses were occupied, and to have also opened a northern link before the 901<sup>st</sup> house was occupied.

4.22 The STAG Part 1 report considered transport accessibility across all modes. Nothing in the Part 2 work so far has undermined the Part 1 findings in that regard and sufficient work has been done to inform the planning authority and the developer that substantial improvements in bus services can be achieved. The ROF's proximity to the station provides the opportunity to improve rail services, supporting facilities, and car/bus/rail integration. Incoming employment related traffic in the am peak and outgoing traffic in the pm peak would be going against the main direction of travel at those times.

### ***Bishopton Community Council***

4.23 “The devil is in the detail” as far as transport capacity is concerned. Using existing local roads for even 400 houses is wholly unacceptable and a new junction to the A8 north and south of the village should be in place prior to any development on the ROF site. The M8 was to be extended to Langbank before the Clydeport Container Terminal at Greenock began to operate. However, this did not happen, and huge numbers of container lorries passed through Bishopton for a time.

### ***Houston Community Council***

4.24 Houston Community Council’s main concern is the prospect of increased heavy goods traffic using the B789 and B790 serving Houston and Crosslee. Reopening the unclassified Moss Road north of Linwood would provide a more direct and safer route to the site from the A737. The developers’ proposal to form an access for construction traffic from the B790, albeit a development control issue, is a particular concern, as overhead bridges to the east of the junction would require very high loads to come through the villages to the west.

### ***Bishopton Action Group***

4.25 The Third Alteration should clearly flag up the transport issues raised by a CGA at Bishopton. However, none of the Transport diagrams show Bishopton and it is not mentioned in Schedule 1(e) or in Strategic Policy 3. The SE stated in 1999 that funding to increase capacity on the M8 was unlikely to be available in the foreseeable future (CGVSPJC/C2). The structure plan should make clear that the SE is still not committed to upgrading the M8.

4.26 The Third Alteration also fails to identify a clear and consistent framework that would encourage sustainable patterns of travel. The master plan application originally proposed that the first phase of development would use sub-standard existing roads. The developers’ recent rephrasing proposal for an A8 link to the south of the village illustrates the lack of a proper appraisal of transport infrastructure in the structure plan.

4.27 While the roads in the village generally have adequate technical capacity to accommodate traffic from the ROF site, they are unsafe even for current levels of use. There is no justification for making conditions worse. Station Road, Rossland Crescent, Newton Road, Ferry Road and Kingston Road do not meet the minimum road widths set out in RC’s Guidelines for Development Roads or those in the Department for Transport booklet Safety and Street Works and Road Works Code of Practice (BAG/T/2). The railway overbridge makes Station Road unsuitable as a vehicular access to the site, and unusable by buses or emergency vehicles. Visibility at the Kingston Road/A8, Kingston Road/Old Greenock Road and Old Greenock Road/Ferry Road junctions is substandard and inadequate corner radii oblige buses to overrun the opposing carriageway. None of these matters can be improved unless adjoining land is acquired. Although traffic calming would allow the dimensions in the Guidelines to be reduced, Kingston Road would still be a problem. Severing the ROF site from the village would be equally unsatisfactory and it is impossible to provide a suitable level of permeability without compromising road safety. Outwith

the village, safety on Ferry Road would be further compromised and congestion at the Red Smiddy roundabout would be made worse.

4.28 The strategic road network would also be unable to cope with the extra traffic demand. Applying the capacity figure of 2,050 vehicles/lane/hour in the DMRB, gives the M8 between junctions 30 and 28 a maximum capacity of 2,100 vehicles/lane/hour and a maximum capacity of 6,150 vehicles/lane/hour between junctions 28 and 27. Traffic on the M8 on 20 March 2007, when roadworks at the White Cart Viaduct were underway and the eastbound flow between Erskine and St James in the am peak (0730-0830) was 3,569 vehicles, produced a 4.2 km tailback to the A8 overbridge south-east of Bishopton. This illustrates the effect of a CGA at Bishopton.

4.29 The TA predicts that the Bishopton development will generate 1,215 am peak trips towards St James, with 514 continuing to Glasgow, Renfrew and Braehead. The 5,379 houses proposed in Inverclyde (BAG/T/4), can reasonably be assumed to generate twice as much traffic on the M8. On this basis, a further 2,420 and 1,028 trips would be introduced, producing a total am peak eastbound flow of almost 6,000 vehicles, compared with its capacity of just over 4,100. While traffic management and an additional lane would allow the M8 accommodate traffic from a CGA at Bishopton, using the hard shoulder for the latter purpose is not an option at the White Cart Viaduct.

### **Post-Examination correspondence**

4.30 It was agreed that, as TS was not able to confirm at the Examination whether the modelling on which Table 1 is based took account of traffic likely to be generated on the M8 by future developments at Inverclyde and, specifically, whether it reflected the programming in the housing land supply in Inverclyde envisaged in Table 11 of the Third Alteration, I would ask TS to clarify this matter and that the other participants in the transport capacity sessions would have an opportunity to comment.

4.31 TS responded that the 2005 TMfS assumed 36,200 households in Inverclyde at that date, a further 4,200 households by 2012, and another 4,000 households by 2022. It also stated that Table 4.3 in TR 6/06, which underpinned the figures in Table 11, estimates the number of household in Inverclyde as 37,649 in 2004, 38,691 in 2011 and 40,140 in 2018. On this basis, while the years did not match precisely, it was reasonable to conclude that the data underpinning the TMfS model takes into account the traffic likely to be generated on the M8 by future developments at Inverclyde.

4.32 The only comments received were from Miss Goldie and from BAG. Miss Goldie stated that increased housing at Inverclyde would result in increased commuting and add to the overload on the M8, which was virtually unusable during the White Cart Viaduct repairs and that further planned work posed new challenges, even with current traffic levels.

4.33 BAG stated that Table 1 only considered effects until 2011 and thus did not take account of an additional 4,000 houses planned in Inverclyde by 2022. It also suggested that differences in the figures in TR 6/06 and those used in the TMfS suggested that the traffic modelling exercise might be unreliable. In any event, if the

LoS on the M8 would deteriorate in 2011 as predicted in Table 1, what would conditions be like in 2022? Table 1 shows an increase in 1,000 vehicles over the White Cart Viaduct in the am peak between 2005-2011. It is therefore reasonable to assume that there would be a further 1,000 vehicles over the following 6 years. BAG's transport adviser had explained at the EiP that this would cause one lane to be fully taken up and a tailback all the way to Bishopton. Moreover, the figures in Table 1 reflect the situation when only 400 houses had been completed at Bishopton. It would have been sensible to model the effect of development at 2025, when development would be complete.

## **4B. RAIL CAPACITY ISSUES**

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### **Factual background**

4.34 Bishopton Station is located on the Inverclyde Line (Glasgow Central to Gourock/Wemyss Bay). Network Rail owns and maintains the track and signalling on the Inverclyde line and owns the station infrastructure at Bishopton (NR/Appendix 3). Train services are operated by First Scotrail, under a 7-year franchise extending to 2011, using rolling stock leased from a leasing company. First Scotrail also devises train timetables, which must be compatible with the needs of other users of the line and leases and manages most of the stations, including Bishopton (NR/Appendix 4). TS is responsible for enforcing the service standards set out in the franchise and also has an input to the setting of fares.

4.35 The current off-peak service at Bishopton comprises 4 trains in each direction (3 in each direction after 19.00) with additional services at peak times in the morning and evening. In the morning, 7 east-bound trains leave Bishopton between 07.30 and 08.31, arriving in Paisley between 07.37 and 08.37 and Glasgow Central between 07.48 and 08.48. In the evening, 4 trains leave Glasgow Central between 17.00 and 18.00, arriving at Bishopton between 17.28 and 18.07. Trains departing Glasgow Central at 16.55 and 18.05 also stop at Bishopton. Between Paisley and Glasgow Central, trains share the route with services to and from Ayrshire.

4.36 The maximum number of coaches that can be operated on the line is 6. However, due to rolling stock allocation, only one of the 7 morning peak services to Glasgow (the 8.08 from Bishopton) is scheduled to operate as a 6-coach set. The others are 3-coach sets, each with capacity for approximately 200 seated passengers.

4.37 Bishopton has a station building on the eastbound platform and additional waiting shelters on each platform. The eastbound platform is accessed from Station Road via steps and across the station forecourt. The platforms are linked within the station by an overhead footbridge and there is a pedestrian ramp to the westbound platform from Station Road just west of the rail overbridge. There are 240 parking spaces associated with the station - 20 in the station forecourt, where there is also a dropping off area, 120 on the opposite side of station road, where there is also a bus turning circle and shelter and 100 in the former ROF car park to the south-west of the station (NR/Appendix 5). The station has the 49<sup>th</sup> highest level of passenger use in Scotland. The level of use is rising rapidly, from 477,000 in the 2004/05 financial year to 517,000 to March in 2006/07.

### **Brief summary of the positions of the participants**

#### ***The Glasgow and the Clyde Valley Joint Structure plan Committee***

4.38 Bishopton's location on the existing rail network was an important factor in the proposal to designate it as a CGA. However, the JC acknowledges that there are capacity constraints on the rail network south and west of Glasgow. It understands that these are due to the limited capacity of the track between Shields Junction and Paisley and limited platform capacity at Glasgow Central Station.

4.39 Strategic Policy 4 of the approved structure plan, the RTS, and the JTS, identify the need to address these constraints. The RTS and the JTS also promote investment in this corridor, particularly GARL, which will introduce new track between Shields Junction and Paisley and increase platform capacity at Central Station. The Third Alteration maintains this priority focus and sets out clearly the improvements that are required. The SE document Scotland's Railways (CD/20) and Network Rail's Route Utilisation Strategy (RUS, CD/19) also acknowledge capacity constraints and set out measures to relieve them.

4.40 The JC regards Scottish Ministers commitment to, and the Scottish Parliament's confirmation of, GARL as a transport priority as a response to policy demands for increased capacity on the rail corridor west through the metropolitan area. The Third Alteration, as and when it is approved, will influence the prioritisation and allocation of funding to improve rail capacity. As far as Bishopton is concerned, designation as a CGA is a pre-requisite to making an informed decision on this issue. It is unrealistic to expect funding to be committed before, or at the time, the plan is approved.

#### ***Strathclyde Partnership for Transport***

4.41 Peak hour trains to Glasgow operate close to, or at, standing capacity between Paisley Gilmour Street and Glasgow Central, with standing common between Bishopton and Paisley. New Disability Discrimination Act 1995 (DDA) compliant rolling stock decreased the seating available, although overall capacity increased slightly due to additional standing space.

4.42 Trains arriving at Bishopton in the am peak and departing in the pm peak in both directions have adequate capacity to deal with the increase in passengers likely to be generated by any additional employment created on the ROF site. However, the construction of 2,500 houses over a 15 year period will put additional demands on capacity on eastbound trains at am peak times and on trains from Glasgow in the pm peak.

4.43 Operational options for reducing capacity problems include longer trains, particularly in the am peak; additional services in the peaks; different stopping patterns between Paisley and Glasgow, which could standardise the journey time for services to/from Bishopton; and replacing the existing 3-car units with new 4-car units when rolling stock is being replaced. The RUS recommends that additional rolling stock is provided for Ayrshire and Inverclyde services. There could also be an opportunity to stop the 17.25 Glasgow Central to Gourock train at Bishopton, although effects on timetables and other services would have to be addressed.

4.44 As far as new infrastructure is concerned, GARL will provide increased platform capacity at Glasgow Central Station, additional track between Shields Junction and Paisley, and a link from Gilmour Street to the Airport. It has been approved under special Parliamentary procedures, and will be taken forward by the SPT in conjunction with Network Rail and other partners. Work is expected to begin in mid-2008 and to take 2½ years to complete. Tender documents are being prepared. Parliamentary approval implies that funding will be made available and, although this

has not yet been formally allocated, there is no reason to think that the project will not proceed.

4.45 As well as creating additional platform space at Glasgow Central, GARL will allow additional services to operate between there and Paisley. While there will not necessarily be additional services to/from Inverclyde, this increased capacity between Paisley and Glasgow will reduce standing time for passengers to and from Bishopton.

4.46 SPT expects to submit a business case for the Crossrail scheme in Autumn 2007 for consideration by the Scottish Parliament. This will link Glasgow Central and Glasgow Queen Street stations, with connections to the South Side suburban line and Queen Street Station Low Level.

4.47 The park and ride facilities at Bishopton Station are very heavily subscribed, operate close to, if not in excess of, capacity and there is over-flow parking into local streets. The current outline application proposes that land will be set aside for 100 additional spaces if required. However, Bishopton is not intended to operate as a strategic park and ride facility, but to serve any development on the ROF site, the existing village, and Erskine. Security and public liability, maintenance and ownership would need to be discussed with the owner/developer, Network Rail and First ScotRail, together with pedestrian safety along Station Road. The environmental dis-benefits of any additional car traffic in the locality would also have to be considered. If necessary, a “staggered hours” regime could be devised to protect some spaces for non-peak rail journeys. A bus interchange and cycle and walking routes from the ROF site to the station would also be required.

### ***Network Rail***

4.48 Rail services from Paisley Gilmour Street to Glasgow Central currently have an average load factor of 84% across what Network Rail regards as the morning rail peak, namely 0.700 am-10.00 am. Three trains leaving Bishopton in each peak carry more passengers than there are seats, two of these in the Glasgow/Paisley section only. One requires fewer than 10 passengers to stand between Bishopton and Glasgow, exceeding Scottish Ministers’ target that passengers should not stand for more than 10 minutes. Passengers can be left at Bishopton if the 08.08 service arrives with only 3 carriages.

4.49 Table 11 in the RUS predicts that peak load factors on the Ayrshire/Inverclyde services will rise from 87% to 93% by 2026, on the busiest part of the Ayrshire/Inverclyde line. The figure at Bishopton is likely to be lower, although it is difficult to say by how much. While a CGA at Bishopton would increase pressure at peak times, overcrowding on the line requires to be addressed, irrespective of whether a CGA is developed.

4.50 That said, as matters stand, there are no rail capacity issues that preclude the designation of Bishopton as a CGA and there are options available to cope with the predicted increase in demand. The ROF master plan application indicates that the development that is proposed would generate about 320 outward train trips by residents (roughly equivalent to 4-5 coaches or two 3-coach sets) and 100 inward trips by employees in the am peak.

4.51 Although the track between Glasgow and Paisley Gilmour Street is heavily used at peak times and it would be difficult to run additional trains at present, there is adequate platform and signalling capacity at Glasgow Central for all peak period services through Bishopton to be 6 coach units. However, additional rolling stock would have to be purchased. Buying additional 4-coach trains would increase capacity by 42%, even if only one such unit replaced the existing 3-coach trains, because seats could be provided in the whole of the 4<sup>th</sup> carriage. Operating 8-coach trains (by combining two 4-coach units) would increase capacity by 42% for the existing 6-coach train and by 180% for the 3-coach trains, although platforms would have to be lengthened. However, unless another source of funding is identified, the cost of implementing these options would have to be borne by the public purse.

4.52 The Transport Act 2004 obliges Scottish Ministers to specify the new rolling stock they wish to buy. Transport Scotland, which acts a “facilitating intermediary” between First Scotrail and the leasing company, is currently considering the rolling stock strategy for the purchase of additional rolling stock for 2009-2014 for new services, including GARL and the Airdrie to Bathgate line, the replacement of existing rolling stock, and to accommodate passenger growth. It is likely to opt for 4-coach units, as these make the most efficient use of hardware, and for a solution that is consistent with the STPR. The Rail Arbiter will decide, in 2008/09, what provision is desirable, and the minimum level of funding that Transport Scotland should provide.

4.53 GARL includes the upgrade of the Paisley Gilmour Street to Shields corridor to provide the track capacity to implement the intention of operating 4 trains per hour in each direction between Glasgow Central and Glasgow Airport, calling at Gilmour Street. The business case for the scheme includes an assumption that some of this additional capacity would be available for passengers travelling between Paisley and Glasgow, releasing capacity on the existing services for passengers travelling to other stations on the Inverclyde and Ayrshire lines. However, the Crossrail project is at an early stage and the form it will take is not yet known. It will probably not affect rail capacity on the Bishopton line, although it could allow a wider choice of destinations.

4.54 Additional parking over and above that proposed in the planning application is likely to be required. This should be provided before the development is completed, together with enhanced waiting facilities, and improved accessibility to the station, particularly for pedestrians.

### ***Renfrewshire Council***

4.55 The Council expects to identify rail-related parking requirements in the context of planning application(s) for the ROF site and to agree this with the developer. It also recognises that it may be necessary to manage the existing and future parking provision to restrict use by residents from outwith Bishopton.

### ***Cass Associates***

4.56 There is no reason for rail capacity issues to preclude Bishopton being identified as a CGA. Matters have moved on from the time when development

locations were identified without any financial commitment for supporting infrastructure being in place. Developers are now expected to choose more sustainable locations and to contribute towards the facilities required for their developments. The ROF site is ideally placed to take advantage of the location of the rail station, and the opportunity to provide a high level of transport integration, with an emphasis on improving bus services, rather than increasing park-and-ride facilities. The Public Transport Study for the ROF site (Cass/2.3) found that 40-50% of those using the car parking at the station came from outwith Bishopton. That said, there is ample land on the site to provide additional parking if required.

4.57 Although Paisley and Glasgow bound trains are busy in the morning peak, this is not an uncommon situation. The capacity available in both directions at other times, and the station's proximity to the ROF site, suggests that rail will continue to provide a very good level of accessibility. Increasing all peak-hour trains to 6 carriages would increase passenger capacity by 60%.

4.58 Bishopton can take advantage of the unprecedented priority currently being given to rail investment in Scotland. The Public Transport Study concluded that committed major infrastructure projects will improve rail accessibility to a programme compatible with development on the ROF site. The Crossrail project will increase platform capacity at Glasgow Central substantially above what will be provided by GARL. The diversion of some services will also relieve pressure at the station. The STAG 1 Part 1 report simply flagged up rail capacity as an issue that had to be addressed. No-one has previously suggested that the former Georgetown station should be reopened.

### ***Bishopton Action Group***

4.59 There are rail capacity issues that preclude the identification of Bishopton as a CGA unless they are addressed. Scottish Transport Statistics show that rail passenger use in Scotland increased by over 20% between 2004 and 2006. The SE's commitment to sustainable transport makes this level of growth likely to continue. BAG understands that passenger growth on the Gourock route mentioned in First Scotrail's letter of 23 March 2007 (BAG/T/7 peaked at only 9% due to capacity constraints.

4.60 Current train services through Bishopton do not have the capacity to accommodate the increase in eastbound passengers that would be generated by a CGA at Bishopton in the morning peak. Even on the basis of 5% passenger growth, demand would be 3,244 persons compared with a capacity of 3,135, including standing room. The more likely scenario, 10% growth, would make matters worse, increasing demand to 4,288 persons.

4.61 Although GARL would allow capacity to be increased to 3,990 persons, housing developments at Inverclyde would generate demand for 674 trips, producing a total demand of 3,918 trips, assuming 5% growth, and 4,962 trips, assuming 10% growth. On this basis, the strategic rail network does not have the potential to safely accommodate the additional passenger demand that would be generated.

4.62 BAG had understood that restrictions on platform capacity at Glasgow Central ruled out the provision of more 6-coach trains. In any event, investment in new rolling stock will be required. There is no evidence that this investment will be made. The Third Alteration should flag up the need for investment to increase capacity and should not identify Bishopton as a CGA unless this investment is committed at the same time. BAE/Redrow Homes has not considered the option of reopening the former station at Georgetown to serve a CGA separately from Bishopton. The existing ramp at the station is not DDA compliant.

### ***Bishopton Community Council***

4.63 The 8.08 service rarely has 6 carriages and people are frequently left on the platform. Increased parking has attracted commuter use from outwith Bishopton, and it operates effectively as a strategic park and ride facility. Improving facilities to accommodate a CGA on the ROF is likely to involve a long lead in time. The Third Alteration should identify the sources of funding for these and state that they have to be put in place.

### ***Miss Goldie***

4.64 Miss Goldie states that, between mid-February and mid-March 2007, she travelled regularly from Bishopton to Glasgow, leaving between 7.30-8.30. Travel logs for this period, show that, on all these occasions, passengers were standing by the time the train left Bishopton, and provide a commentary on conditions. A travel log provided by Councillor Langlands describes similar experiences. Photographs show parking in streets around the station, including Poplar Avenue, Gledstane Road and Station Road, and in the car parks provided for rail travellers, mostly taken when few spaces were available.

### **Post-Examination correspondence**

4.65 The relevant participants were not able to confirm at the Examination whether the modelling on which the Predicted am Peak Load Factors in Table 11 in the RUS takes account of the proposal for a CGA at Bishopton and whether it takes account of the programming in the housing land supply in Inverclyde envisaged in Table 11 of the Third Alteration. It was therefore agreed that clarification would be sought.

4.66 Network Rail responded that the RUS forecast picks up development at Bishopton, so far as it is included in the forecasts that TS provided to Network Rail consultants. That said, increase in passenger demand across the region might be concentrated at particular stations, such as Bishopton. The model does not attempt to identify changes at individual stations, but simply to predict changes in the total number of passengers travelling to Glasgow at the busiest time of the day. TS advised that the rail forecasts provided to Network Rail, which Network Rail then refined for the RUS, were based on assumptions similar to those used in the road modelling and took into account proposed growth at Bishopton and Inverclyde. These forecast a base load factor from Ayrshire and Inverclyde of 73% in 2016 on average, with a sensitivity test increasing this to 80%. Within that average, load factors were forecast to be greater on the Ayr than the Inverclyde routes.

4.67 The only comments received were from Miss Goldie and from BAG. Miss Goldie described the fact that the RUS model did not attempt to identify changes at individual stations and Network Rail's acknowledgement that any increase in demand might be concentrated at particular stations as important, considered that this pointed to the need for a very rigorous assessment of current and projected passenger use at Bishopton, and stated that the model might not adequately reflect current, far less projected, use.

4.68 BAG found the differences in the load factor figures described by TS and those in the RUS confusing. It also:

- questioned whether the figures for Inverclyde Council were up-to-date, stating that the land supply figures in BAG/T/4 were only approved by Scottish Ministers in January 2006;
- pointed to the statement on page 34 of the RUS that in Ayrshire/Inverclyde "severe overcrowding is still likely to occur and will be further exacerbated by 2026";
- interpreted the omission of any reference to Greenock, Gourock, Weymss Bay and Inverkip as meaning that these locations had not been modelled; and
- stated that Network Rail's "generalised" forecasts did not adequately address how overcrowding affects Bishopton and Bishopton Station.

## 5. CONCLUSIONS AND RECOMMENDATIONS

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### **The scope and remit of the Examination**

5.1 The Examination was held in order that Scottish Ministers could be provided with the additional information that they decided in December 2006 they required before reaching a decision on whether, and, if so, in what terms, to approve the Third Alteration. This information relates to the following issues in relation to the proposal to designate Bishopton as a CGA:

- do either the presence of contamination within the former ROF site at Bishopton, or the measures required for its remediation, raise issues of sufficient concern to preclude the identification of Bishopton as a Community Growth Area?
- does the capacity of the road and rail network preclude the identification of Bishopton as a Community Growth Area?

My conclusions therefore address these questions. They are based on the material lodged by the participants, the discussion at the Examination, and my site inspections. Other planning issues raised by the proposal to identify a CGA at Bishopton that are not encompassed by these questions are outwith the remit of the Examination. The same applies to criticisms that there was inadequate consultation regarding structure plan proposals for Bishopton.

5.2 As a strategic planning document, the Third Alteration is not site-specific and does not specify the boundaries of the area that any CGA that might be developed at Bishopton would cover. However, Ministers' questions are predicated on the understanding that the area that would be developed would include land at the former Royal Ordnance Factory (ROF). This is also the understanding of the planning authorities, others with a proprietorial and/or professional involvement in the planning process, and local residents, many of whom are strongly opposed to the identification of Bishopton as a CGA. I have drafted my report on the basis that that a CGA would include land at the ROF.

5.3 The information that has become available as a consequence of the planning applications that have been submitted for the ROF site, in particular the master plan outline application, which proposes a mixed residential and employment-related development similar in scale to that envisaged in the Third Alteration, is helpful in addressing the questions that Ministers have asked. However, determination of these applications is a matter for the local planning authority, Renfrewshire Council. At the time of the Examination, the Council, which supports the principle of a CGA on the ROF site, had not reached a view on the applications. It does not intend to determine them until Ministers have made their decision on the Third Alteration but does not expect determination to await a review of the adopted Renfrewshire Local Plan. BAG takes exception to this latter stance, pointing out that Strategic Policy 3 in the Third Alteration identifies the local plan as a priority for review and refers to Bishopton (CGA) as an issue. While the discussion on this matter at the Examination was helpful in understanding the planning context in which the development of any CGA

at Bishopton might unfold, whether the determination of applications should await a local plan review is not a matter on which Ministers have stated they wish to be further informed.

### **Statutory requirements regarding the form and content of structure plans**

5.4 Section 7 of the Town and Country Planning (Scotland) Act 1997 sets out the form and content of structure plans. It requires this to be a written statement that, among other things:

(a) formulates the planning authority's policy and general proposals in respect of the development and other use of land in the area covered by the plan (including measures for the conservation and natural beauty and amenity of the land, the improvement of the physical environment and the management of traffic).

5.5 Regulation 7(1) of the Town and Country Planning (Structure and Local Plans) (Scotland) Regulations 1983 requires a structure plan, in addition, to contain:

(a) the existing social, economic and physical structure of the plan area and the needs and opportunities for change;

(b) the resources likely to be available for the carrying out of the policies and general proposals formulated in the plan; and

(c) the broad criteria to be applied as respects the control of development .... including guidance on the application of these criteria, where appropriate, in local plans.

### **National policy and best practice advice regarding the form and content of structure plans**

5.6 SSP 1 sets out key principles and priorities for the land use planning system to guide policy formulation and decision making towards the goal of sustainable development. It states that, under current arrangements, structure plans should provide a long-term vision, looking forward at least 10 years, as part of an overview of an area's development requirements, considering the functions and inter-relationship of places, expressing the settlement strategy for the area, and identifying priorities for urban and rural regeneration. It expects policies to reflect and identify priorities for the provision of infrastructure, support and encourage sustainable patterns of travel, and promote the protection and enhancement of the built and natural environment. While describing brevity, clarity and precision as key requirements, it makes clear that structure plans must go beyond the expression of general criteria and indicate the proposed long-term nature, scale and location of change.

5.7 PAN 37 stresses the distinction to be made in structure plans between development that is essentially committed and longer-term requirements, the scale and general direction of which the plan seeks to guide, acknowledging that there may be infrastructure or other constraints, such as decontamination works with potentially long lead-in times which must be overcome before development can take place. Against this background, it states that the plan will provide the long-term strategic framework within which detailed land use policies and proposals can be drawn up

with confidence; and that the generation of a long-term integrated development strategy requires a number of issues to be addressed, including :

- identifying the strategic relationship between land use and transport and their impact on sustainable development; and
- identifying environmental constraints ....

5.8 Paragraph 17 advises that policies and proposals should support the settlement strategy, provide a basis for development control decisions and be selective and focus on essentials. It points out that, as structure plans are not site-specific documents, they are dependent on local plans and on other agencies, groups and mechanisms for the achievement of the settlement strategy in general and delivering specific policies and proposals in particular and that, while a structure plan is not a project management or programming document, it should identify priorities for ensuring the efficient and effective implementation of the strategy, including local plan preparation or review and private and public investment decisions.

### **The evolution of the concept of a Community Growth Area at Bishopton**

#### *The approved structure plan*

5.9 The approved structure plan identifies Bishopton as a Location with Long Term Potential for Development on account of its potential in relation to renewal issues and its relationship to the strategic transport network. In common with the Third Alteration, this identification is predicated on the understanding that any development would encompass land on the ROF site. The approved plan promotes the evaluation of this potential, through master plans that would test feasibility and impacts, as a means of enhancing the plan's responsiveness to changing circumstances. This evaluation is also stated to be without prejudice to the general need to limit further expansion in the short-term, and Strategic Policy 2 requires any significant proposals for development to be confirmed in terms of their impact and need through a subsequent Alteration to the plan. It is clear from paragraph 7.35(A) that Ministers approved the plan in the knowledge that the ROF site occupies countryside and has a largely rural setting.

5.10 Objections to Scottish Ministers regarding the plan's references to Bishopton related to its potential to adversely affect economic development initiatives in Ayrshire and concerns by housebuilding interests over uncertainties regarding land availability and remediation costs. Ministers did not accept these objections, stating that they considered "the Bishopton site" to be of potential importance, had encouraged stakeholders to take forward discussions about its future, and that the plan provided an appropriate strategic context for these discussions. They also made clear that the implications of any specific proposals for development would require to be very carefully assessed.

#### *The National Planning Framework*

5.11 The foreword to the NPF, which was published after the structure plan was approved, describes it as a perspective, not a prescriptive master plan or blueprint. Irrespective of the reason for the language used, the statement in paragraph 155 that

“good transport connections make Bishopton the preferred location for long-term expansion to the west of Glasgow” is consistent with a structure plan that identifies Bishopton as the only location to the west of Glasgow with long-term potential for development. However, this does not mean that Scottish Ministers are obliged to commit expenditure to facilitating development there. The foreword to the Framework makes clear that, while it is one of the factors that Ministers will take into account in coming to decisions on policy and spending priorities, it does not remove the dilemmas that they face in making decisions on these matters.

#### *The adopted Renfrewshire Local Plan*

5.12 The Renfrewshire Local Plan was prepared to conform to the approved structure plan. Policy SS2, which applies to the ROF site, is consistent with Strategic Policy 2.

#### *The Third Alteration*

5.13 The structure plan Alteration that Strategic Policy 2 stated would confirm the impact of, and need for, development at Bishopton has been subsumed into the wider review of the structure plan contained in the Third Alteration. The Joint Committee states that it drew on the 2001 and 2002 reports (CD/29 and CD/30) on the ROF site as evidence of the further work required by Strategic Policy 2.

5.14 Bishopton is located within the east-west Corridor of Growth that the structure plan identifies as one of 3 strategic themes by which its Strategic Vision will be achieved. Bishopton’s physical accessibility by a range of means of transport, including rail, make it well-placed in locational terms to accommodate new development in accordance with sustainability principles. The presence of a large, previously developed, now largely redundant, site adjoining the village, where development could fund remediation is a further potential advantage. Accordingly, in those respects, Bishopton “ticks many of the right boxes” as a strategic development location.

5.15 However, paragraph 8.14, while stating that the locations identified in Schedule 1(c) “shall be developed” in accordance with master plans approved by the relevant planning authority, makes clear that requirements for supporting infrastructure and services, including linkage to existing and planned extensions to the fixed public transport network or park and ride facilities, and treatment of any associated derelict or contaminated land, require to be established through master plans and, where necessary, through legally binding agreements. It also makes clear that liaison with the SE will be required on trunk road issues and, where necessary, prior agreement reached.

5.16 The development of CGAs, which are envisaged as contributing to housing and other needs primarily in the period to 2018, is therefore contingent on trunk road and contamination and remediation issues being satisfactorily addressed. The Third Alteration also acknowledges, albeit not expressly in relation to Bishopton, that development at a number of locations is dependent on improvements to road and rail infrastructure and that, if these requirements cannot be delivered, the planning status of the development proposals concerned will need to be reassessed.

5.17 The evidence indicates that the structure plan's long-term strategy for housing land would not be undermined if the Third Alteration did not identify Bishopton as a CGA. However, the planning authorities would be obliged to consider alternative options for long-term needs, possibly in less sustainable locations. In any event, any such consideration would involve a different mix and weighing of development factors. Any CGA at Bishopton that did not encompass the ROF site is likely to comprise greenfield and green belt land. A decision not to identify Bishopton as a CGA because it would involve the development of contaminated land could also undermine investor confidence and have adverse consequences for the achievement of the MDS, which seeks to secure the remediation and redevelopment of vacant, derelict and contaminated land.

5.18 The identification of Bishopton as a CGA is not a "specific development proposal" and would not, in itself, result in development on the ground. However, irrespective of whether a decision not to identify a CGA would have adverse consequences such as those described above, it would be undesirable for the structure plan to identify a Strategic Development Location if there was reason to conclude that the nature and extent of contamination, the measures required for its remediation, and/or any capacity constraints in the road or rail network were unlikely to be addressed so that Bishopton could realise its locational advantages and development could proceed within the type of timescale envisaged in the Third Alteration.

### **Contamination and remediation at the Royal Ordnance Factory site**

5.19 In reaching my conclusions on contamination and remediation issues, I adopt the account of the factual background and context in paragraphs 3.1-3.5 of this report.

#### *Contaminated land and the planning system*

5.20 Parts of the ROF site are affected by a range of contaminants. These include explosives residues, heavy metals (including arsenic, lead and antimony), organic compounds (including PCBs and PAHs) and asbestos. Some sources of contamination are impacting on, or have the potential to impact on, the water environment. Some of the contaminants that have been identified pose risks to, and can have adverse effects on, human health. There is no dispute that, in order to be suitable for development, at least some parts of the site require to be remediated.

5.21 The development of contaminated land is regulated under a number of environmental protection regimes. Local authorities and SEPA both have powers for the administration and enforcement of Part IIA of EPA, which includes a statutory definition of "contaminated land". If the ROF site was to be designated as "contaminated land" under Part IIA, this would trigger a requirement, irrespective of whether new uses were to be introduced, for the land to be remediated by the person(s) responsible for the contamination. However, while the site remains closed to the public or is the subject of proposals for development, it is unlikely to be designated as "Part IIA contaminated land".

5.22 However, PAN 33 makes clear that "Part IIA contaminated land" does not necessarily include all land where contaminants are present. It also makes clear that

planning authorities need to consider “contaminated land” in its broadest sense and that contaminated sites, for planning purposes, may be regarded as any site where the presence or suspected presence is an obstacle to development, regardless of whether development is proposed.

5.23 PAN 33 encourages planning authorities, in preparing development plans, to encourage and promote the re-use of brownfield sites, including contaminated sites. In this context, it advises them not to be deterred from allocating contaminated land for development on the grounds that a high level of remediation would be required for the new use and that high remediation costs may be more easily borne by a new high value use. Paragraph 28 nevertheless counsels caution, stating that effective policy making should be based on adequate and accurate information and that any survey preparatory to drawing up development plans should identify, as far as possible, the physical and chemical constraints on land within the plan area.

5.24 The PAN confirms that the SE regards the “suitable for use” approach as the most appropriate way of dealing with the historic legacy of contaminated land, that this approach focuses on the risks caused by contamination, that these risks will vary from site to site, and that they need to be assessed on a site-by-site basis. It identifies the following key stages in the remediation process:

- site characterisation (comprising site investigation and risk assessment);
- formulation of a restoration strategy;
- detailed design specification; and
- implementation and post works activities (including monitoring).

These stages are reflected in other relevant guidance, including the Contaminated Land Reports (CLR) published by DEFRA, which are also applied in Scotland.

5.25 The requirement for a site-specific risk assessment recognises that each site is unique. PAN 33 confirms that there are no statutory standards for acceptable concentrations of contaminants in soil, as decisions are made on a site-by-site basis. It also makes clear that, as far as the remediation process is concerned, there is no firm dividing line where site investigation ends and risk assessment begins. Formulation of a remediation strategy is therefore an iterative process.

5.26 The assessment of the risks associated with the development of contaminated land is based on the source-receptor-pathway approach. As well as introducing new receptors onto a site by changing its use, development can create new pathways by which sources of contamination can reach existing receptors on land outwith the site concerned. Documents produced by BAG link the incidence of disseminated contaminants with adverse health effects.

5.27 PAN 33 makes clear that, where development is proposed, the potential risks from contamination should be assessed, before planning permission is granted, to ensure that it is suitable for the new use(s) being proposed and, where necessary, to avoid unacceptable risks to human health and the environment, by remediating the land before the new use commences. It also makes clear that it is the responsibility of the developer to undertake an adequate risk assessment and to propose measures to ensure that risks are appropriately addressed, that it is the responsibility of the

planning authority to consider whether the assessment is adequate, and that any remediation proposed should ensure that all the receptors are adequately protected.

5.28 Acknowledging that assessing the significance of contamination and the associated risks requires careful professional judgement, the PAN states that planners should obtain advice from relevant experts in other local authority departments, who may indicate that organisations such as SEPA and the HSE should be consulted. RC has consulted SEPA and the HSE on the ROF applications. At the time the Examination was held, SEPA had not responded to the consultation. The HSE had not made any negative comments. SEPA had agreed to provide support to the Council as planning authority on matters on which it was best placed to do so.

5.29 In summary, it is Government policy that it is desirable in principle that contaminated land should be remediated, but that it should be demonstrated, at least before planning permission is granted, that this can be undertaken without posing unacceptable risks. The aim is therefore to manage, not to eliminate, risk. The presence of contaminants on the ROF site could preclude development if it was concluded that these contaminants were likely to pose risks that could not be satisfactorily addressed.

5.30 The amount of information that it is appropriate to obtain before formulating planning policy will depend on the stage in the planning process that is under consideration. Structure plan policy lies towards the beginning of the development continuum and it is unrealistic to expect individual sites to be surveyed in detail before deciding on strategic policy. However, it is undesirable for a structure plan to encourage unrealistic expectations on the part of potential developers by identifying for development a site known to be contaminated if it is unlikely to be practical to remediate the site safely to a satisfactory standard. It is also undesirable to give rise to needless public anxiety by identifying such a site for development.

#### *Current knowledge regarding the nature and extent of contamination on the ROF site*

5.31 The Envirocentre report concluded that no irreversible decision should be made on the future of the ROF site while there were still many issues that needed to be addressed. This conclusion was based on a review of the Development Strategy Final Report (CD/29), which pre-dated any detailed site investigations. CD/29 also pre-dated the risk assessments listed at paragraph 3.4, which draw, among other things, on a desk study and site investigations.

5.32 A considerable amount of information on the nature and extent of contamination on the ROF site is now available. The site investigations that have been done include the collection and analysis of soil, surface water and groundwater samples. The consultant that RC has appointed to provide specialist advice considers that work has progressed beyond the stage it would normally expect at outline planning application stage. However, RC considers that, notwithstanding this progress, because of the large size of the site, knowledge of the nature and extent of contamination is still at a lower degree of resolution than would normally be expected for the purposes of determining an outline planning application. While CLR 4: Sampling Strategies for Contaminated Land (BAG/C/16) describes one of the intentions of its guidance as being to locate concentrations of contaminants (“hot

spots”) which could lead to unacceptable risks to human health, each site is unique. It is therefore possible that significant contamination exists outwith the locations, such as burning grounds, waste tips, and picrite lagoons, on which the investigations have focussed.

5.33 BAG’s advisers agree that investigations, to the extent that these have been done, have followed recognised practice. Their main concerns relate to gaps in knowledge, principally that the incidence of sampling is inadequate; that the range of substances searched for is incomplete; and that the analyses that have been done are not sufficiently comprehensive. They therefore consider that further investigations are required before deciding whether the Third Alteration should identify Bishopton as a CGA.

5.34 The planning authority and the prospective developers agree that further information regarding contamination on the site is needed before detailed remediation proposals can be drawn up and neither suggests that the site’s large size justifies taking a less rigorous approach than if the site had been smaller. However, both consider that the appropriate planning context for taking this process forward is the development control or development management process. They also envisage that, if planning permissions were granted, conditions would be imposed requiring final proposals for remediation to be submitted, to and approved by, the planning authority, and controlling the execution of these proposals.

5.35 All the participants therefore agree that knowledge of the nature and extent of contamination on the site is incomplete and that more work is required. It is unlikely, on a site of the size and historical complexity of the ROF site, that all the events with the potential to result in contamination were recorded and the site owners acknowledge that anecdotal accounts can assist in obtaining up a more complete picture. RC stated that it was continuing to seek further information in the context of the planning applications and that the applicants were complying with its requests.

5.36 It is not possible to “prove a negative”. Accordingly, while there is sufficient information available to be able to say that the substances that have been identified are there, it is not possible to conclude that substances that have not been identified are not there. It is also possible that additional substances, and/or higher concentrations or different associations of substances known to be present could come to light in the course of further work.

#### *The measures required for the remediation of the site*

5.37 The remediation strategy as it stands proposes the use of methods that have been successfully employed at other locations. However, this strategy is based on current knowledge of the nature and extent of contamination on the site. As this knowledge is incomplete, the strategy could alter as more information becomes available. The final strategy will also depend on the specific nature and disposition of uses on the site. These have still to be decided. Against this background, there is no evidence that there is likely to be an irreconcilable conflict between remediation and nature conservation interests and the remediation strategy in Cass/4.4 includes proposals for ecological mitigation, including an Ecological Management Plan. The Third Alteration does not mention an Environmental Test Facility, which is a matter for RC to consider.

5.38 The remediation of other RO sites, specifically Chorley, where techniques similar to those proposed at Bishopton were employed, are reported to have proceeded satisfactorily and without adverse public or health authority reaction. BCC, whose representatives visited Chorley, describe it as far more enclosed by residential areas in the Bishopton site. However, it cannot be assumed that these techniques would be equally suitable for Bishopton. While some sites are more similar than others, no two sites are identical. Experience of applying these techniques at other locations is nevertheless likely to be useful.

5.39 The remediation methods employed at Chorley included the *in situ* burning of the pre-prepared shells of buildings contaminated with explosives residue, which the CBI Code of Practice describes as a recognised technique for decommissioning and decontamination. It has the advantages of allowing burned rubble to be re-used and of reducing the risk to operatives. However, smoke from fires would have the potential to affect a wide area. Local concerns regarding the environmental effects of this remediation method are therefore readily understandable. In the event that this method was employed, it would not be subject to regulation by SEPA and might not be subject to regulation by the local authority. It would be regulated by the HSE, which the evidence indicates is likely to focus on on-site safeguarding distances rather than potential effects further afield. However, as alternatives to burning are available, burning is not “a measure required” for remediation. Chemical treatment, steam cleaning, pressure washing and/or grit blasting are envisaged for buildings closer to residences.

5.40 SPP 1 states that, even where legal or administrative measures outwith the planning system may exist for controlling a particular activity, this can still be a consideration to which weight is given in reaching a planning decision and that if a consideration is material in planning terms, it must be taken into account in reaching a decision. For example, the planning authority should have regard to the impact of a proposal on air or water quality, although the regulation of emissions or discharges will fall to be dealt with under other legislation. PAN 51: Planning, Environmental Protection and Regulation (CD/5), having explained that a planning permission carries no weight so far as environmental protection regimes are concerned, and that while each means of control should be used as required by its own legislation, when two or more are relevant to the same project, it is imperative that they complement each other.

5.41 It would be open to RC as planning authority, in the context of the policy and best practice advice in SPP 1 and PAN 51, to impose conditions on any planning permissions that encompassed remediation regulating or prohibiting burning. On the basis that burning is not “a measure required” any such conditions would not make remediation impractical.

5.42 The evidence indicates that the establishment of a landfill facility on the ROF site for the deposit of special or hazardous waste is also not “a measure required” for the remediation of the site. There is no suggestion that the intention of conveying any such material off-site to a suitably licensed facility elsewhere is unlikely to be a practical proposition. The on-site landfill that is proposed would require to be licensed by SEPA, which has regulatory powers in relation to the movement,

treatment, re-use and disposal of waste materials (on and off-site) and the disposal or treatment of any contaminated groundwater or surface water.

5.43 Scientific knowledge and techniques evolve over time. It is therefore possible that the standard of remediation that is regarded as satisfactory now will be overtaken by enhanced standards. However, it would be unfair to anticipate, in the literal sense, that this will be the case. Accordingly, while the presence of contamination on the site, and the measures employed in remediation require rigorous examination, there is no basis to impose more exacting standards on the ROF site than on other locations.

5.44 It would be inappropriate for the structure plan to insist that contamination and remediation proposals for the site are independently assessed or to specify measures for monitoring and enforcement. There are matters for the bodies charged with duties and responsibilities for regulating the development of contaminated land to decide. RC has appointed specialist consultants, which the evidence indicates has a range of relevant scientific expertise at its disposal. Any decision on whether to institute public health monitoring would be a matter for the local health authorities in the area.

5.45 Drawing these matters together, any development of the nature and scale that the Third Alteration envisages at Bishopton is never likely to be straightforward. The fact that the ROF site is affected by contamination and requires to be remediated to make it suitable for housing and other uses that would bring people onto the site is a further complication. If these matters were unlikely to be addressed within the type of timescale envisaged in the plan, there would be a real danger that its development strategy would be unrealistic. That would be undesirable as it would not provide the long-term planning framework that PAN 37 expects, in order that detailed land use policies and proposals can be drawn up with confidence.

5.46 While it is impossible to foresee all eventualities, the questions that Scottish Ministers have asked are framed in very specific terms, namely whether the factors to which these refer raise issues of sufficient concern to preclude the identification of Bishopton as a CGA

5.47 In that regard, the investigations have been undertaken at the ROF site, particularly over the last two years, have provided a considerable amount of information regarding the contamination present. While this has allowed a strategy for remediation to be formulated, the nature and extent of contamination, and the measures required for its remediation, merit further investigation. It is essential that these matters are rigorously scrutinised before any development is allowed to proceed. Scottish Ministers stated when they approved the current structure plan that any specific proposals for development required to be very carefully assessed.

5.48 As stated at paragraph 5.36, it is impossible to “prove a negative”. However, there is no evidence that there is contamination on the ROF site that raises issues of sufficient concern to preclude identifying Bishopton as a CGA. There is also no evidence that the “measures required” for the remediation of the site will give rise to issues of sufficient concern to preclude its identification. In that latter regard, my conclusions at paragraphs 5.41 and 5.42 are pertinent. Paragraph 8.14 of the Third Alteration makes the development of CGAs contingent on the treatment of associated derelict or contaminated land. Strategic Policy 9C(iii) requires developers to make

appropriate provision for remedial environmental treatment and Strategic Policy 9C(viii) refers to paragraph 8.14. Having had regard to published policy and advice, I consider that these provide sufficient safeguards for structure plan purposes and that no substantive alterations to the terms of the plan are required in respect of these matters. Scottish Ministers' approach to the development of contaminated land is based on managing, not eliminating, risks and on the type of site-specific risk based assessments that can only be undertaken effectively in the context of specific development proposals.

5.49 However, to make clear that it encompasses all the matters listed in the subsequent bullet points, the second sentence in paragraph 8.14 should refer to "Requirements, including for supporting infrastructure and services....". In addition, for clarity, and to be consistent with Scottish Ministers' policy, "satisfactory" should be inserted before "treatment" in the second bullet point in the paragraph. These changes are listed in paragraph 5.88 as recommendations (1) and (2).

### **Road capacity**

5.50 In reaching my conclusions on road capacity issues, I adopt the account of the factual background in paragraphs 4.1-4.3.

5.51 SPP 17 states that development plans should be co-ordinated with Regional and Local Transport Strategies, relate the settlement strategy to the capacity of the transport network, and identify where additional transport infrastructure is required. It also makes clear that development likely to affect trunk and other strategic roads should be managed so as not to adversely impact on the safe and efficient flow of strategic traffic, and that new motorway or trunk road junctions will only be considered exceptionally and will require significant developer funding. Against this background, the SPP states that accessibility should be factored into the preparation of development plans from the outset, and that structure plans should include a development strategy which is prepared in the full knowledge of transport network infrastructure and services, environmental and operational constraints, proposed or committed new transport projects, and demand management schemes.

5.52 The objectives that these principles are intended to achieve include reducing the need to travel and the provision of high quality public transport to encourage modal shift away from car use. SPP 17 therefore advocates locating new developments where a range of means of transport is available and emphasises the need for accessibility by public transport. Bishopton fits this description.

5.53 However, a CGA would also generate private car traffic. The JTS identifies the ability of the existing transport network to cope with travel demands arising from the development of the ROF site as a major issue regarding its delivery. The Third Alteration acknowledges that there are capacity constraints on the strategic road network to the west of Glasgow, including on the M8. Schedule 1(e) includes "M8 West Upgrade" as a Joint Transport Priority to be safeguarded and investigated and paragraph 9.19 describes improvements to the junctions between junctions 26 and 29 and related access roads as critical to ensuring improved accessibility by road to the Airport.

5.54 Paragraph 8.15 acknowledges that there are outstanding strategic planning requirements that will need to be met if development in CGAs is to be acceptable. It also states that development at some locations is dependent on improvements to road and rail infrastructure; that, if these requirements cannot be delivered, the planning status of these areas will need to be reassessed; and that these considerations will be taken into account in the implementation of Strategic Policy 9C. However, it does not draw an express correlation between the development of a CGA at Bishopton and increasing capacity on the M8.

5.55 The TA (CD/41) submitted with the master plan outline application assesses a development of 2,600 houses, 138,000 sq m of employment land, 12,000 sq m of community facilities and a primary school. It predicts that 50% of development traffic at 2011 would use the M8 in the period between 0700-0800 hours, which TS states observed data indicates is the busiest hour. Most residential traffic at this time is likely to be eastbound. Employment uses on the site are likely to generate primarily westbound traffic on the strategic network at this time.

5.56 The participants in the road capacity session of the Examination agree that the parts of the strategic road network that ought to be considered in assessing capacity issues for structure plan purposes comprise junctions 31-25/25a on the M8 and to the Kingston Bridge. They also agree that the relevant area to consider in relation to the local road network comprises the junctions within Bishopton considered in the TA, together with Ferry Road between Bishopton and the M898, and the Red Smiddy roundabout at the A8/A726 south-east of the village. These are also considered in the TA. The BAG statement on road capacity does not suggest that impacts on Paisley and Renfrew town centres and at Phoenix Park should be considered at the Examination. I agree that it would be appropriate for these, and the traffic concerns raised by Houston Community Council, to be addressed in the context of planning applications for the ROF site.

#### *The capacity of the local road network*

5.57 As it is not practical to connect a CGA encompassing land at the ROF site to the strategic road network other than via the local road network in and around Bishopton, the capacity of the local network is also a relevant consideration for structure plan purposes. This is because, if there were likely to be insurmountable problems in achieving suitable connections, it would be impractical to develop a CGA. It would also be desirable, in the interests of community integration and access to existing services, for a CGA at the ROF site to have to have some means of direct vehicular connection with the existing village. BAG's transport adviser agreed that it would be unsatisfactory if a development on the site was to be severed from the village.

5.58 Providing local connections would increase traffic on the existing roads between the ROF site and the village. These roads do not meet the technical specifications contained in the 1986 Guidelines for Development Roads. However, the specifications are guidelines and were drafted to apply to the construction of new roads. The introduction of traffic calming measures would increase the ability of these roads to accommodate additional traffic without significantly compromising

safety. Nevertheless, they are residential streets and are unsuitable for use by large volumes of through traffic.

5.59 A development on the ROF site would not rely on these residential streets for access to the wider road network as there is scope to provide direct connections to the A8 north and south of the village. The Environmental Statement for the master plan outline application states that neither of the existing routes to the M8 south-east of Bishopton are appropriate for the level of traffic likely to be generated by development on the site and proposes direct connections. The original proposal was to provide a southern link when there were 400 occupied houses on the ROF site. A more recent proposal is to provide a southern link (which would be the obvious route to the M8 for eastbound traffic) before any houses were occupied, and to open a northern link before the 901<sup>st</sup> house was occupied.

5.60 RC, as planning authority, has not yet taken a view on this aspect of development phasing. However, the fact that alternative proposals have been made indicate that there is flexibility in timing and that providing a degree of integration while also limiting additional traffic in the village need not be mutually exclusive. While this issue will require to be very carefully handled in order that a suitable balance is struck between these two considerations, there is no evidence that, given the potential for traffic calming, this could not be achieved through the development management process.

#### *The capacity of the strategic road network*

5.61 Although not reported in the Third Alteration, the trunk road authority accepted in May 2005 the principle of a new M8 junction south-east of Bishopton to facilitate redevelopment on the ROF site. This followed the appraisal of a STAG Part 1 submission when it was concluded that two of the options (both with east-facing motorway slips) in the submission were worth taking forward. As both options could be ruled out at STAG Part 2 stage a new junction cannot be guaranteed. However, as there is no indication at this stage that this is likely to be the outcome, Ministers should consider the Third Alteration on the basis that a new junction has been accepted in principle.

5.62 TA 46/97 defines “capacity” as “the maximum sustainable hourly lane throughput” in the context of a network unconstrained by weaving and joining movements arising from junctions, and “congestion” as arising when hourly traffic demand exceeds this throughput, causing flow to break down with speeds varying considerably, a drop in average speeds, a reduction in sustainable throughput, and/or the formation of queues. The Level of Service (LoS) measure, which takes account of a range of factors including capacity, provides a useful picture of the overall level of performance of the motorway network, ranging from A: Free flow, B: Reasonably free flow, C: Stable flow, D: Approaching unstable flow, E: Unstable flow to F: Forced or breakdown flow.

5.63 A new junction at Bishopton would introduce additional traffic onto the M8 at a location between junctions 30 and 29. On the basis of the figures that were agreed at the Examination, namely a practical capacity of about 2,000 vehicles/lane/hour and

a typical eastbound flow in the weekday am peak of 2,500 vehicles/hour, there is currently spare capacity on the M8 between these two junctions.

5.64 However, the evidence indicates that the M8 east of Junction 29 currently experiences congestion, particularly during the morning peak, with an eastbound LoS at some locations in the range D to E. In practice, weaving and joining movements associated with junctions are likely to affect traffic flow. The TA identifies lack of available capacity at junction 29, the difficulty of providing additional capacity at the A726 approach to the junction, and the capacity of the M8 east of St James Interchange, which it describes as a critical section of infrastructure serving the West of Scotland, as key risks with regard to the motorway network.

5.65 The evidence also indicates that future traffic growth will exacerbate this position, even without the development of the ROF site. On the basis of the figures provided by TS, the eastbound LoS at 2011 would deteriorate to F on some parts of the road between junctions 26 and 29. Adding 50% of development traffic from Bishopton would leave these levels unchanged, other than at junctions 25-25A where the level would fall from D to E. While the housing figures summarised at paragraph 4.31 do not coincide, they are of a similar order. In any event, the TMfS, on which these figures are based, is intended to predict future traffic conditions. The fact that it assumes traffic growth of 21% between 2005-2011, compared with a national figure of about 12% over the same period, also suggests that it takes account of programmed development in the area.

5.66 The traffic scenario presented in the BAG road capacity statement is based on a traffic count on the M8 between junctions 30 and 29 while roadworks were underway further east on the motorway. In the absence of information on any redirection or voluntary rerouting associated with these roadworks, this scenario cannot be assumed to be representative of the consequences of adding traffic from a CGA at Bishopton to the M8. It also appears to take no account of the potential for a new motorway junction south-east of Bishopton to allow Bishopton traffic to avoid the roundabout at St James Interchange. The scenario also appears to combine the traffic from the residential component of a CGA at Bishopton at 2011 with the programmed output of the housing land supply in Inverclyde for the period from 2006 until sometime after 2013. These two situations may not coincide.

5.67 The tables in Cass/2.6 consider the periods to 2011 and to 2022, when, on the basis of the programming envisaged in the master plan outline application, development on the ROF site would be complete. These indicate, on the assumption that the capacity of the M8 is not enhanced that, at both years, there are likely to be locations where traffic generated by the scale and nature of development at Bishopton envisaged in the Third Alteration would cause the LoS to deteriorate. The effect will depend on the assumptions made regarding factors such as traffic growth and the degree to which peak period traffic is skewed. However, it is logical to conclude that, unless capacity is improved, congestion on the M8 will increase in future years, irrespective of a CGA at Bishopton. It is also logical to conclude that a CGA at Bishopton would make congestion worse. It is desirable for this situation to be avoided.

5.68 A range of practical options for increasing capacity is likely to be available. These include upgrading physical infrastructure and traffic management. TS, which is the trunk road authority, considers that, as matters stand, there is no evidence that capacity issues that would preclude designating Bishopton as a CGA could not be addressed. BAG's traffic adviser agrees that a CGA at Bishopton could be accommodated on the M8 if traffic management and an additional lane were to be introduced, but points out that using the hard shoulder for the latter purpose is not an option at the White Cart Viaduct.

5.69 However, unless funding is also made available, none of these options is likely to be put in place. Although the Joint Committee appears to have regarded acceptance of the principle of a new junction as implying that Scottish Ministers acknowledge that they must address capacity constraints on the M8 within the plan period, its representatives at the Examination acknowledged that a structure plan cannot commit Ministers to expenditure. Whether, when, and to what extent, funding is put in place depends on the outcome of the STPR, which is considering improving capacity on this route and other transport schemes. The outcome of this consideration is due to be announced in August 2008.

### **Rail capacity**

5.70 In reaching my conclusions on this matter, I adopt the account of the factual background in paragraphs 4.34-4.37.

5.71 Bishopton, and the ROF site in particular, are physically very accessible to a rail station that has frequent services to and from Glasgow, including at peak morning and evening travel times.

5.72 However, eastbound trains in the morning peak period are regularly oversubscribed, with standing common, particularly between Bishopton and Paisley. The JTS identifies the Glasgow Central to Paisley Gilmour Street line as a rail congestion constraint. Network Rail's records show that some passengers have to stand between Paisley and Glasgow, a journey time that exceeds Scottish Ministers' target that passengers should not have to stand for longer than 10 minutes.

5.73 The ROF master plan outline application predicts that the development that is proposed would generate about 320 outward train trips by residents (roughly equivalent to 4-5 coaches or two 3-coach sets) and 100 inward trips by employees in the am peak.

5.74 Westbound trains arriving at Bishopton in the am peak or eastbound trains departing in the pm peak do not appear to be oversubscribed. Existing services in these directions at these times, and off-peak services, are likely to have adequate capacity to accommodate increased passenger demand arising from a CGA.

5.75 Network Rail has not objected to the master plan application on rail network capacity grounds and confined its comments to station facilities and parking, which it considers require to be addressed. The best construction I can place on First Scotrail's letter of March 2007 is simply that the highest rate of passenger growth on the Gourock route was 9%, calculated over an unspecified part of the 2006/07

financial year. However, the RUS predicts that the Ayrshire-Inverclyde corridor will have overcrowding by 2016, with the morning peak load factor for trips into Glasgow rising from a base (at 2006) of 87% to 93% in 2026. It also states that, while the peak load factors in the intervening years improve, “severe overcrowding is still likely to occur and will be further exacerbated by 2026”.

5.76 The evidence indicates that the modelling on which these figures are based takes account of future development at Bishopton and of housing development expected in Inverclyde. The load figures to which TS refers appear to be those supplied to Network Rail, which Network Rail subsequently refined. The best construction I can place on the statement that Bishopton was included in a zone with Port Glasgow, Woodhall, Langbank and Paisley St James is that this formed one of the 23 zones identified for demand forecasting purposes. It does not follow that Greenock, Gourock, Wemyss Bay and Inverkip were not modelled and they may have been included in another zone. I have no evidence whether the 2004 household figures used in the modelling are different from the 2006 figures produced by BAG and, if so, to what extent.

5.77 Network Rail explains that the morning peak load figures relate to the busiest part of the Ayrshire-Inverclyde corridor and that the figures at Bishopton are likely to be lower. In any event, while the figures do not focus on individual stations, I am satisfied that some services to and from Bishopton are already oversubscribed. While this ought to be addressed, irrespective of the development of a CGA at Bishopton, a CGA is likely to increase pressure at peak times and make overcrowding worse. It is also desirable that this is avoided. The rapid rate of growth in passenger use of the station has also affected the surrounding area. The significant additional parking that has been provided attracts commuter use from other locations, can be oversubscribed, and parking in surrounding streets is a common occurrence. Pedestrian access to the station would also benefit from improvement. The eastbound platform is only accessible from the ROF site via a steep ramp, an overbridge, or along a part of Station Road without a pedestrian refuge.

5.78 Network Rail considers that, as matters stand, there are no rail capacity issues that preclude the designation of Bishopton as a CGA and that there are options available to cope with the predicted increase in demand. However, it points out that, unless another source of funding is identified, the cost of implementing these options would have to be borne by the public purse.

5.79 It would be unwise to rely on the Crossrail project to help to address capacity problems. This is at an early stage and a business case has still to be submitted for consideration by the Scottish Parliament. In any event, any contribution that it might make is unlikely to be significant. However, GARL has been approved under special Parliamentary procedures. At the time the Examination was held, tender documents were being prepared, work was expected to begin in 2008 and to take 2½ years to complete. Although funding has not been formally allocated, there is no evidence that the project will not be in place at, or around, 2011. As and when it is complete, GARL will provide increased platform capacity at Glasgow Central Station, additional track between Shields Junction and Paisley, and a link from Gilmour Street to the Airport. While the Airport link is unlikely to have direct implications for Bishopton, using some of the additional capacity created by the additional track

between Shields Junction and Paisley for Glasgow-Paisley services as envisaged would increase capacity for passengers travelling to other stations on the Inverclyde line, including Bishopton. Contrary to the understanding of some participants, there is currently sufficient platform capacity available at Glasgow Central Station to allow all peak period services through Bishopton to be 6-car units.

5.80 However, unless the capacity of the trains that stop at Bishopton is increased, none of these matters is likely to be of assistance in reducing the capacity problems affecting Bishopton. Capacity could be increased by providing 4-car or 6-car units, which could be accommodated at existing platforms, although operating 8-car trains (by combining two 4-car units) would require platforms to be lengthened.

5.81 Providing 4-car or 6-car trains would require additional rolling stock to be purchased and leased to First Scotrail. The SPT notes that the RUS recommends that additional rolling stock is provided for Ayrshire and Inverclyde services. Transport Scotland is currently considering a strategy for the purchase of additional rolling stock for 2009-2014 for new services, including GARL, the replacement of existing rolling stock, and to accommodate passenger growth. The outcome of this consideration has not been announced, although Network Rail expects 4-car units to be identified as the preferred option. The Rail Arbiter will decide, in 2008/09, what provision is desirable, and the minimum level of funding that Transport Scotland should provide.

### **Overall conclusions on road and rail capacity issues**

5.82 On the basis of my conclusions at paragraphs 5.50-5.81, I consider that there are transport capacity issues that ought to be addressed in order for a CGA at Bishopton to proceed.

5.83 In that regard, implications for the local road network and improvements to station infrastructure, and their timing, are local issues that can be addressed in the context of planning applications for the site. Strategic Policy 9C(i) of the Third Alteration places the onus on developers, in the context of the consideration of such applications, to provide the infrastructure necessary for their developments. However, capacity on the M8 and rail services has wider, strategic implications.

5.84 Measures to increase road capacity on the M8 are currently under consideration in the context of the STPR. A strategy is also being formulated for the purchase of additional rail rolling stock. The outcome of both of these considerations is expected to be known in 2008 and 2008/09 respectively. In both cases, it is reasonable to expect the terms in which the Third Alteration is approved to influence the prioritisation and allocation of funding. It is unrealistic to expect funding to be committed before, or at the time, the plan is approved. Scotland's Railways, which sets out the SE's vision for railways in Scotland, makes clear that the inclusion of projects in the NPF and in development plans will assist the delivery of the projects concerned and reflects this approach. As the Third Alteration envisages that a CGA would be developed to contribute to development needs primarily in the period to 2018, there would be an opportunity for capacity issues to be addressed. Accordingly, as matters stand, the capacity of the road and rail network does not preclude the identification of Bishopton as a Community Growth Area.

5.85 Drawing these matters together, I conclude that the Third Alteration ought to make clear that the development of a CGA at Bishopton will be contingent on transport capacity constraints being satisfactorily addressed. Although Strategic Policy 9C(i) requires developers to make appropriate provision for the infrastructure or facilities required to make their development acceptable, and refers to the requirements listed in paragraph 8.14, which include linkage to the fixed public transport network and associated infrastructure improvements, references to the M8, and to rail projects, are dispersed throughout the plan. The reference in paragraph 8.15 to dependency on improvements to road and rail infrastructure and possible reassessment is less than transparent and no express correlation is drawn between road and rail capacity improvements and the implementation of a CGA at Bishopton.

5.86 While there is no reason to alter Strategic Policy 1, which includes CGAs among locations that are to be given priority for investment, paragraph 8.14 ought to be altered to reflect my conclusion at paragraph 5.85. Given the reference in SPP 17 to new motorway junctions being considered only exceptionally, acceptance of the principle of a new M8 junction at Bishopton should be recorded. Wording along the following lines would be appropriate. “In the case of Bishopton, while the principle of a new junction to the M8 has been accepted, the development of a Community Growth Area will also depend on capacity problems on the M8 to the east of Bishopton being satisfactorily addressed and on improvements to rail capacity”.

5.87 The statement in paragraph 2.14 of the Supplementary Written Statement that “this potential has been assessed” is factually accurate as CD/30, which considers the potential for development at the ROF site, was produced after the 2000 structure plan was approved. I therefore see no need for this to be changed.

### **Recommendations**

5.88 I therefore recommend the following changes to the Third Alteration:

- (1) to make clear that it encompasses all the matters listed in the subsequent bullet points, the second sentence in paragraph 8.14 should refer to “Requirements, including for supporting infrastructure and services....”.
- (2) for clarity, and to be consistent with Scottish Ministers’ policy, “satisfactory” should be inserted before “treatment” in the second bullet point in the paragraph.
- (3) the following text should be inserted after the final bullet point in paragraph 8.14 “In the case of Bishopton, while the principle of a new motorway junction has been accepted, the development of a Community Growth Area will also depend on capacity problems on the M8 to the east of Bishopton being satisfactorily addressed and on improvements to rail capacity”.

## **Appendix 1**

### **List of Statements lodged by Participants**

<b>Bishopton Action Group</b>	Statement for Introductory Session
	Statement on Road Capacity
	Statement on Rail Capacity
	Statement on Contamination and Remediation
<b>Bishopton Community Council</b>	Statement covering all sessions
<b>Cass Associates</b>	Statement for Introductory Session
	Statement on Road Capacity
	Statement on Rail Capacity
	Statement on Contamination and Remediation
<b>Glasgow and the Clyde Valley Structure Plan Joint Committee</b>	Statement for Introductory Session
	Statement on Transport Capacity
	Statement on Contamination and Remediation
<b>Miss Goldie</b>	Note accompanying travel logs and photographs relating to rail capacity
<b>Mrs Godman</b>	Statement covering all sessions
<b>Houston Community Council</b>	Statement on Road Capacity
	Statement on Contamination and Remediation
<b>Network Rail</b>	Statement on Rail Capacity

**Renfrewshire Council**

Statement for Introductory Session

Statement on Road Capacity

Statement on Contamination and  
Remediation

**Scottish Environment  
Protection Agency**

Statement on Contamination and  
Remediation

Renfrewshire Council and SEPA also provided a joint statement setting out the contamination and remediation issues on which they were agreed.

**Strathclyde Partnership for Transport** Statement on Transport Capacity

**Transport Scotland**

Statement on Road Capacity

Transport Scotland also produced a Joint Statement listing Areas of Common Ground between it and BAE/Redrow Homes.

## **Appendix 2**

### **Documents Lodged by Participants**

## Core Documents

Document Title	Backs	Publication Description	File Code	Source of Document	BAR# (where/extract)	ISPL/EN
001 The Planning System	Scottish Planning Policy SPP1	Scottish Executive Development Department	Mar-00	<a href="http://www.scotland.gov.uk/Publications/2000/11/15/151117">http://www.scotland.gov.uk/Publications/2000/11/15/151117</a>	para 14, 15	Scottish Executive
002 Strategic Outline	Planning Advice Note PAN 17 (October 1999)	Scottish Office Job, Dept.	Oct-99	The Scottish Executive Development Dept Copyright 1999, 2001, 1999/2001 Y		Scottish Executive
003 Planning for Housing	Scottish Planning Policy SPP3	Scottish Executive Development Department	Feb-01	<a href="http://www.scotland.gov.uk/Resource/Doc/20010029/20010029.pdf">http://www.scotland.gov.uk/Resource/Doc/20010029/20010029.pdf</a>		Scottish Executive
004 Development of Contaminated Land	Planning Advice Note PAN 21 (October 2000)	Scottish Executive Development Department	Oct-00	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20000100">http://www.scotland.gov.uk/Resource/Doc/2000/20000100</a>	para 24	Scottish Executive
005 Planning, Environmental Protection and Regulation	Planning Advice Note PAN 24	Scottish Executive Development Department	Oct-00	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20000100">http://www.scotland.gov.uk/Resource/Doc/2000/20000100</a>		Scottish Executive
006 Planning for Transport	Scottish Planning Policy SPP17	Scottish Executive Development Department	Aug-00	<a href="http://www.scotland.gov.uk/Resource/Doc/214652/214652.pdf">http://www.scotland.gov.uk/Resource/Doc/214652/214652.pdf</a>	para 18	Scottish Executive
007 Planning for Transport	Planning Advice Note 19	Scottish Executive Development Department	Aug-00	<a href="http://www.scotland.gov.uk/Resource/Doc/214652/214652.pdf">http://www.scotland.gov.uk/Resource/Doc/214652/214652.pdf</a>		Scottish Executive
008 National Planning Framework for Scotland		Scottish Executive Development Department	2001	<a href="http://www.scotland.gov.uk/Resource/Doc/2001/2125211">http://www.scotland.gov.uk/Resource/Doc/2001/2125211</a>	Scottish Prospectus/Para 103	Scottish Executive
009 People and Place - Regeneration Policy Statement		Scottish Executive	2000	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20011115100">http://www.scotland.gov.uk/Resource/Doc/2000/20011115100</a>		Scottish Executive
010 Glasgow and the Clyde Valley Joint Structure Plan 2000 - Consultative Draft	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Glasgow and the Clyde Valley Structure Plan Joint Committee	Oct-99	The Glasgow and the Clyde Valley Structure Plan Joint Committee		GOVSP0
011 A Community Based Long Term Strategy for the River of Scotland/ Aberdeen Water						
012 Glasgow and the Clyde Valley Joint Structure Plan 2000 Collaborative for Success/Incorporating International	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Glasgow and the Clyde Valley Structure Plan Joint Committee	Aug-01	<a href="http://www.scotland.gov.uk/Resource/Doc/2001/2125211">http://www.scotland.gov.uk/Resource/Doc/2001/2125211</a>		GOVSP0
013 The Glasgow and the Clyde Valley Structure Plan 2000 Strategic Objectives - Approval with Modifications	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Scottish Executive Development Department	28-Apr-00	The Scottish Executive Development Department		GOVSP0
014 Recommendations Written Statement, Third Session of the 2000 Plan, 2000 The Transport Development Object	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Glasgow and the Clyde Valley Structure Plan Joint Committee	Apr-00	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20011115100">http://www.scotland.gov.uk/Resource/Doc/2000/20011115100</a>	Para 3, 4	GOVSP0
015 The Communities First Structure Plan 2000 - The Glasgow & Clyde Valley Structure Plan Object	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Glasgow and the Clyde Valley Structure Plan Joint Committee	May-00			GOVSP0
016 Glasgow & the Clyde Valley Joint Structure Plan - Written Statement 2000 The Transport Development Object	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Glasgow and the Clyde Valley Structure Plan Joint Committee	Apr-00	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20011115100">http://www.scotland.gov.uk/Resource/Doc/2000/20011115100</a>	Para 3, 4	GOVSP0
017 Assessment of Potential Areas for Urban Expansion	Glasgow and the Clyde Valley Joint Structure Plan 2000 Technical Report TR009	The Glasgow and the Clyde Valley Structure Plan Joint Committee	Apr-00	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20011115100">http://www.scotland.gov.uk/Resource/Doc/2000/20011115100</a>		GOVSP0
018 Statement of Feasibility and Contribution and Matters to be Noted under Review	Glasgow and the Clyde Valley Joint Structure Plan 2000	The Glasgow and the Clyde Valley Structure Plan Joint Committee	Jan-00	<a href="http://www.scotland.gov.uk/Resource/Doc/2000/20011115100">http://www.scotland.gov.uk/Resource/Doc/2000/20011115100</a>		GOVSP0
019 Model Procedure for the Management of Land Contamination	CLR 11	GOVSP0 and EA	2004	<a href="http://www.scotland.gov.uk/Resource/Doc/2004/20040101">http://www.scotland.gov.uk/Resource/Doc/2004/20040101</a>		GOVSP0
020 Scotland - Rail Litteration Strategy	Rail Litteration Strategy	Nature's Rail	2004	<a href="http://www.scotland.gov.uk/Resource/Doc/2004/20040101">http://www.scotland.gov.uk/Resource/Doc/2004/20040101</a>		Nature's Rail
021			2004			

Core Documents

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Dev Documents

Document Title	Series	Producing Organisation	Pub Date	Source of Document	AP20 required sections	AP20/2008
CD41	CD41	CD41	CD41	CD41	CD41	CD41
CD42	CD42	CD42	CD42	CD42	CD42	CD42
CD43	CD43	CD43	CD43	CD43	CD43	CD43
CD44	CD44	CD44	CD44	CD44	CD44	CD44
CD45	CD45	CD45	CD45	CD45	CD45	CD45
CD46	CD46	CD46	CD46	CD46	CD46	CD46
CD47	CD47	CD47	CD47	CD47	CD47	CD47
CD48	CD48	CD48	CD48	CD48	CD48	CD48
CD49	CD49	CD49	CD49	CD49	CD49	CD49
CD50	CD50	CD50	CD50	CD50	CD50	CD50
CD51	CD51	CD51	CD51	CD51	CD51	CD51

CD50 Extract from Renfrewshire Local Plan Inquiry Report regarding Policy SS2- Royal Ordnance Factory, Bishopston

CD51 Correspondence regarding Envirocentre Report

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## **Documents for Bishopton Action Group**

### **Introductory Session**

BAG/1	Bishopton Working Group Minutes 9 December 1999
BAG/2	Potential Uses/Engineering Solutions Sub Group Minutes 28 February 2001
BAG/3	Potential Uses/Engineering Solutions Sub Group Progress Report 28 March 2001
BAG/4	Appendix 1 Minutes of Framework of Potential Uses/Engineering Solutions Joint Sub Group Minutes 4 May 2001
BAG/5	Minutes of Bishopton Working Group 20 June 2001
BAG/6	Envirocentre Report 24 August 2001
BAG/7	Minutes of Planning Liaison Group Meeting 17 September 2003
BAG/8	James Barr Report August 2004
BAG/9	Submission Hugh McCafferty to Transport Minister 7 February 2005
BAG/10	Steer Davies Gleave Appraisal March 2005
BAG/11	Community Council's letter of Representation 3 June 2005
BAG/12	Local Planning Authority Liaison Meeting Minutes 24 August 2005
BAG/13	Local Planning Authority Liaison Meeting Minutes 29 September 2005
BAG/14	GCVSP Planning Liaison Meeting Minutes 8 November 2005
BAG/15	Letter from J E Swanney SE Planning Division 23 May 2006
BAG/16	BAG objection to Third Alteration to Structure Plan Written Statement June 2006
BAG/17	BAG objection to Third Alteration to Structure Plan Supplementary Written Statement June 2006
BAG/18	BAG objection to Third Alteration to Structure Plan Strategic Environmental Report (SEA) June 2006

- BAG/19 BAG objection to Third Alteration to Structure Plan  
Assessment of Potential Areas for Urban Expansion June 2006
- BAG/20 Scottish Executive EIA Guidance July 2006
- BAG/21 BAG response to outline planning application for ROF site  
November 2006
- BAG/22 BAG response to outline planning application for ROF site  
App A Transport November 2006
- BAG/23 BAG response to outline planning application for ROF site  
App B Review of GQRA November 2006
- BAG/24 BAG response to outline planning application for ROF site  
November 2006  
App E Effects on Woodland November 2006
- BAG/25 BAG response to outline planning application for ROF site  
November 2006  
App F Meteorology November 2006
- BAG/26 Applying the Precautionary Principle – An Overview May  
2005
- BAG/27 Practical Guidance on Applying the Precautionary Principle

### **Contamination and Remediation Sessions**

- BAG/C/1 NEJM – Long term Exposure to Air Pollution and  
Cardiovascular Events
- BAG/C/2 Health Effects Institute – Air Pollutants, Personal Activities  
and the Onset of Myocardial Infarction
- BAG/C/3 CHR The Challenge of Preventing Environmentally Related  
Disease in Young Children: Community-Based Research in  
New York City
- BAG/C/4 Migration Patterns of Children with Cancer in Britain
- BAG/C/5 Lung Cancer and Other Health Problems in a Scottish  
Industrial Town
- BAG/C/6 Industrial Air Pollution and the Country Doctor
- BAG/C/7 Should Regulators Pass Killing and Maiming in Cams??

BAG/C/8	Child Victims of Unwise Environmental and Vaccination Policies ...
BAG/C/9	Opencasting of Coal and its Effects on Health
BAG/C/10	Reference List (for Interest Only)
BAG/C/11	Sampling Strategies and Data Worth Analysis for Contaminated Land
BAG/C/12	Decision Analysis under Risk and Uncertainty at Contaminated Sites
BAG/C/13	Soil Sampling Derelict, Underused and Neglected Land
BAG/C/14	Michigan Open Burning Guide, Regulation and Alternatives
BAG/C/15	Emissions of Organic Air Toxins from Open Burning
BAG/C/16	Sampling Strategies for Contaminated Land
BAG/C/17	Validated Sampling Strategies for Contaminated Land
BAG/C/18	Handling Three Types of Correlation in Contaminate Land Site Assessment
BAG/C/19	Designing a Contaminated Land Soil Sampling Strategy for Human Health Risk
BAG/C/20	Optimized Contaminated Land Investigation at Minimum Overall Cost to Achieve Fitness for Purpose
BAG/C/21	Stockholm Convention on Persistent Organic Pollutants
BAG/C/22	Model Procedures for Management of Land Contamination
BAG/C/23	Risk Area with Prevailing Winds (attached to statement)

### **Transport Capacity Sessions**

BAG/T/1	Guidelines for Development Roads 1986
BAG/T/2	Safety at Street Works and Road Works
BAG/T/3	Design Manual for Roads and Bridges (extract)
BAG/T/4	Inverclyde Council Housing Land Supply 31 March 2006
BAG//T/5	Videos and Photographs (CD)

BAG/T/6	Traffic Count Figures - 20 March 2007
BAG/T/7	Scotrail Railway Voucher Letter of 23 March 2007 and Background Note
BAG/T/8	Letter of 15 February 2007 from Transport Scotland (Appendix A to statement)
BAG/T/9	E-mail of 22 February 2007 from Network Rail (Appendix A to statement)
BAG/T/10	Table 8.3 Data on Scotrail passenger train services (Appendix b to statement)

## **Documents for Cass Associates**

### **Introductory Session**

- Cass/1.1 Representations to the Glasgow and the Clyde Valley Joint Structure Plan
- Cass/1.2 Technical Report TR 6/06 Assessment of Potential Areas for Urban Expansion
- Cass/1.3 Curriculum Vitae for Participants

### **Transport Capacity Sessions**

- Cass/2.1 Extracts from Scottish Policy and Advice Documents
- Cass 2/2 Extract from M74 Public Local Inquiry Findings
- Cass/2.3 Public Transport Study
- Cass/2.4 STAG Part 1 Report
- Cass/2.5 Scottish Executive Letter May 2005
- Cass/2.6 Motorway Capacity and Level of Service
- Cass/2.7 Traffic Flow and Peak Spreading
- Cass/2.8 The STAG, DMRB and Transport Assessment Processes
- Cass/3.1 Extract from the RUS for Scotland
- Cass/3.2 Extract from the Consultative Draft Regional Transport Strategy

### **Decontamination and Remediation Sessions**

- Cass/4.1 Summary of Site Investigations
- Cass/4.2 Summary of Nature and Extent of Contamination at Bishopton
- Cass/4.3 UK Good Practice Documents
- Cass/4.4 Remediation Strategy
- Cass/4.5 Supplementary Information on Remediation Measures
- Cass/4.6 Regulatory Framework
- Cass4.7 BAE Systems Environmental Capability and Experience

- Cass/4.8 Evidence from former Executive Director Environmental and Community, Chorley Borough Council
- Cass/4.9 Remediation in Practice Across Scotland
- Cass/4.10 Verification Plan
- Cass/4.11 Public Exhibition Material

## Reference documents for the Glasgow and the Clyde Valley Structure Plan Joint Committee

Doc Ref	Core	Reference	Title
181		Reference	Glasgow & the Clyde Valley Structure Plan Joint Committee Minute of Agreement May 1999
182	Core CD1		Scottish Executive SPP 1 'The Planning System'
183	Core CD3		Scottish Executive PAN 37 (Revised) 'Structure Planning'
184		Reference	Scottish Executive HPPG3 (Revised 1996) 'Land for Housing'
185	Core CD3		Scottish Executive SPP 3 'Planning for Housing'
186	Core CD-4		Scottish Executive PAN 33 'Development of Contaminated Land'
187	Core CD-8		Scottish Executive 'National Planning Framework' 2004
188	Core CD9		Scottish Executive 'People and Places' Regeneration Policy Statement Feb 2005
189	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
190	Core CD13		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified) - Decision Letter Annex B
191	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
192	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
193	Core CD13		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Supplementary Written Statement - Third Alteration to the 2000 Plan
194	Core CD18		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
195	Core CD18		JC Technical report TR608 'Assessment of Potential Areas for Urban Expansion' April 2008
196	Core CD46		JC 'The Environment Report Part 3 - Assessment of the Structure Plan 2000' April 2008
197	Core CD15		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
198	Core CD1		Scottish Executive SPP 1 'The Planning System'
199		Reference	Scottish Executive SPP21 'Green Belt' April 2008
200	Core CD13		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
201	Core CD1		Scottish Executive SPP 1 'The Planning System'
202		Reference	December 2004 - JC Publication - 'The Future of Glasgow & the Clyde Valley 2025' Discussion Document
203		Reference	December 2004 - JC Publication - 'The Future of Glasgow & the Clyde Valley 2025' Discussion Document
204		Reference	Scottish Executive Feb 2005 - Response to Consultation on the Discussion Document
205		Reference	SPT Feb 2005 - Response to Consultation on the Discussion Document
206		Reference	Network Rail Dec 2004 - Response to Consultation on the Discussion Document
207		Reference	SEPA Jan 2005 - Response to Consultation on the Discussion Document
208		Reference	Renfrewshire Council 2005 - Response to Consultation on the Discussion Document
209		Reference	Case Associates Feb 1st 2005 - Response to Consultation on 'The Discussion Document' 2004
210		Reference	March 2005 JC Paper - Report on Consultations on The Discussion Document December 2004
211		Reference	March 2005 JC Paper - Consultative Draft Third Alteration 2005 (to the Approved 2000 Structure Plan)
212		Reference	May 2005 JC Publication - Consultative Draft Third Alteration 2005 (to the Approved 2000 Structure Plan)
213	Core CD14		JC Publication Background Report BR405 - Background Reports on Shipston
214	Core CD-47		JC Publication Background Report BR705 - Criteria for Assessing Potential Future Urban Expansion Areas
215		Reference	August 2005 JC Paper - Report on Consultations - Consultative Draft Structure Plan Alteration : May 2005
216		Reference	August 28, 2005 Letter from Shipston Action Group to Joint Committee Members
217		Reference	June 2005, Case Associates Consultation Letter on the Consultative Draft Structure Plan
218		Reference	August 2005 Renfrewshire Council - Consultation Letter on the Consultative Draft Structure Plan
219		Reference	June 2005 Renfrewshire Enterprise - Consultation Letter on the Consultative Draft Structure Plan
220		Reference	June 2005 SEPA - Consultation Letter on the Consultative Draft Structure Plan
221		Reference	June 2005 HSE - Consultation Letter on the Consultative Draft Structure Plan
222		Reference	June 2005 - Westrains - Consultation Letter on the Consultative Draft Structure Plan
223		Reference	June 2005 - Scottish Executive - Consultation Letter on the Consultative Draft Structure Plan
224		Reference	October 2005 - JC Publication - Draft Finalised Supplementary Written Statement - Consultation Document
225		Reference	Jan 2006 - JC Paper - Statement of Publicity and Consultation and Report on Matters Rept under Review
226		Reference	Jan 2006 - JC Paper - Report on Urban Expansion
227		Reference	Jan 2006 - JC Paper - Revision to the Environmental Report
T1	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
T2	Core CD6		SPP17 'Planning for Transport'
T3	Core CD7		Scottish Executive PAN 75 'Planning for Transport'
T4		Reference	March 2004 - JC Paper on SPP 17 'Planning for Transport'
T5	Core CD3		SPP3 'Planning for Housing'
T6	Core CD15		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
T7	Core CD18		JC Technical report TR608 'Assessment of Potential Areas for Urban Expansion' April 2008
T8	Core CD15		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
T9	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
T10		Reference	March 2004 - JC Paper on the Joint Transport Strategy
T11	Core CD21		SPT/Westrains 'A Joint Transport Strategy for Western Scotland to 2027'
T12	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
T13	Core CD22		March 2007 SPT - 'A Catalyst for Change - The Regional Transport Strategy for the West of Scotland'
T14	Core CD15		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
T15	Core CD20		Transport Scotland 'Scotland's Railways' Dec 2006
T16	Core CD19		Network Rail 'Rail Utilisation Strategy' March 2007
T17		Reference	SPT 'Web-site: Glasgow Airport Rail Link 2005/2007'
T18	Core CD1		Glasgow & the Clyde Valley Joint Structure Plan 2000 (as Modified)
T19	Core CD18		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
T20	Core CD15		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
T21	Core CD14		May 2005 JC Publication - Consultative Draft Third Alteration 2005 (to the Approved 2000 Structure Plan)
T22		Reference	Scottish Executive Press Release 03/05/2005 M74 Completion
T23	Core CD13		Glasgow & the Clyde Valley Joint Structure Plan April 2008 Written Statement
C1	Core CD19		Glasgow & the Clyde Valley Joint Structure Plan Consultative Draft 1999
C2		Reference	Scottish Executive Development Department - Glasgow and the Clyde Valley - Structure Plan Consultative Draft - Letter 18 November 1999
C3		Reference	March 2005 - JC Paper on Consultation Responses to the Draft Joint Structure Plan 1999
C4		Reference	May 2005 - JC Paper on Draft Joint Structure Plan and Report on Consultation
C5		Reference	April 2007 JC's Statement to the Introductory Session of the SP
C6	Core CD4		Scottish Executive PAN 33 'Development of Contaminated Land'
C7		Reference	Case Associates Feb 1st 2005 - Response to Consultation on 'The Discussion Document' 2004
C8	Core CD18		JC Technical report TR608 'Assessment of Potential Areas for Urban Expansion' April 2008
C9	Core CD45		JC 'The Environment Report Part 3 - Assessment of the Structure Plan 2000' April 2008
C10	Core CD17		January 2006 - JC Paper & Publication - Statement of Publicity and Consultation and Report on Matters Rept under Review - Structure Plan Third Alteration and Written Statement Finalised Draft 2008

## **Documents for Miss Goldie**

1. Travel Logs detailing rail commuter conditions - February/March 2007
2. Photographs of parking levels and traffic in Bishopton

## **Documents for Houston Community Council**

1. Google map of the local road network in relation to Houston and Crosslee
2. Google map showing Reilly Road/Turningshaws Road to illustrate the location of the landfill facility proposed at the ROF site.

## **Documents for Network Rail**

- |               |   |
|---------------|---|
| NR/Appendix 1 | Network Rail comments on the outline planning application for the regeneration of the ROF site to form a mixed use community growth area. |
| NR/Appendix 2 | Network Rail comments on the outline planning application for the regeneration of the ROF site to form a mixed use community growth area. |
| NR/Appendix 3 | Network Rail ownership in the vicinity of Bishopton Station   |
| NR/Appendix 4 | First Scotrail lease at Bishopton Station   |
| NR/Appendix 5 | Photographs of car parking at and around Bishopton Station  |

## **Documents for Renfrewshire Council**

- RC/1 List of Consultees on planning application for the regeneration of the ROF Site to form a mixed use community growth area
- RC/2 Report to Renfrewshire Council Planning Committee 8 June 2000
- RC/3 Report to Renfrewshire Council Planning and Development Policy Board 8 February 2005

## **Documents for the Scottish Environment Protection Agency**

- |        |  |
|--------|--|
| SEPA/1 | The Water Environment (Controlled Activities)(Scotland) Regulations 2005 : A Practical Guide |
| SEPA/2 | Part II and Part II A of the Environmental Protection Act 1990                               |
| SEPA/3 | European Directive 2000/60/EC - The Water Framework Directive                                |

## **Documents for Transport Scotland**

TS/1. Illustration – Levels of Service A-F

TS/2. Extract from Design Manual Roads and Bridges Volume 5 – TA46/97

TS/3 Scottish Transport Appraisal Guidance