Gloucestershire
COUNTY COUNCIL

Minerals & Waste Core Strategies

Joint Technical Evidence Paper

WCS-MCS-9

Proposals Map

Living Draft

January 2008

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Contents

Section 1
Introduction

1. This report supports Gloucestershire's Minerals and Waste Core Strategies and is part of the evidence base.

2. The purpose of this report is to outline the statutory requirements for a proposals map DPD and update on the progress with Gloucestershire's proposals map.

Section 2
Statutory Requirements For Proposals Maps

3. PPS 12 states that local planning authorities must include within the local development framework an adopted proposals map in accordance with Regulation 6 of the Town and Country Planning (Local Development) (England) Regulations, 2004.

4. The adopted proposals map should express geographically the adopted development plan policies of the local planning authority and must be revised as each new development plan document (DPD) is adopted. It should always reflect the up-to-date spatial plan for the area; including where a policy is deleted or when a saved policy ceases to be part of a development plan.

5. The adopted proposals map should:
   I. identify areas of protection, such as nationally protected landscape and local nature conservation areas, Green Belt land and Conservation Areas; and
   II. illustrate locations and identify sites for particular land use and development proposals included in any adopted development plan document and set out the areas to which specific policies apply (ie illustrate in map form all site specific policies in all the adopted development plan documents).

6. District planning authorities must also include on their adopted proposals map, minerals and waste matters including safeguarding areas, minerals consultation areas and any minerals and waste allocations which are adopted in a development plan document by the county council.

7. Separate inset maps may be used to show policies for part of the authority's area, such as the policies for area action plans, which must all be shown on the adopted proposals map. Where inset maps are used, the geographical area they will cover will be identified on the main adopted proposals map. The boundaries of each inset map must be shown precisely on the adopted proposals map but the policies shown on the inset must not appear on the main adopted proposals map.

Illustrative material at the participation on preferred options stage

8. At the participation on preferred options stage in accordance with Regulation 26, local planning authorities should prepare a map or maps to accompany the pre-submission proposals document. This may, for example, identify various sites and alternatives which are being considered for development and or areas of land to which policies would relate.

Section 3
Local Government Advice Relating to the Gloucestershire Minerals and Waste Proposals Maps

9. A meeting was held at Shire Hall on 6th July 2007 between officers from the Government Office for the South West (GOSW) and officers from Gloucestershire County Council (GCC).

10. The content and format of the proposals map at Preferred Options Submission stage was discussed during the meeting and the advice from GOSW was that GCC already had saved proposals maps within the local plans and to use those, but indicate how it is intended to be changed.

11. GOSW concluded that it was not necessary to produce a proposals map at Preferred Options stage.

Section 4

The progress of the Gloucestershire Minerals Proposals Map at Preferred Options stage.

Saved aspects of the Minerals Local Plan

12. The direction issued by the Secretary of State on 18th September 2007 saved policies A3 - Working in Preferred Areas; A4 - Working Outside of Preferred Areas; A5 - Crushed Rock Preferred Areas (FoD); A6 - Crushed Rock Preferred Areas (C'wolds); and A7 – Sand & Gravel Preferred Areas.

13. In addition to saving the policies relating to preferred areas, the direction saved the whole of Chapter 10 of the Minerals Local Plan (MLP) which contains the Inset Maps and Proposals.

14. Chapter 10 of the MLP has been included as Appendix A in this report.

15. Policy E15 relating to settlement protection boundaries in the Water Park was saved by the direction and the relevant maps (originally displayed as Appendix F in the MLP) have been included as Appendix B in this report.

Mineral Consultation Area and Mineral Safeguarding Area

16. The Minerals Consultation Area (MCA) map that formed Appendix I of the MLP was not officially saved by the direction. However, the MCA was originally delineated in 1981 and provisions for this is set out under paragraph 7(3)(c) of Schedule 1 of the Town and Country Planning Act. As such the MCA still exists until such a time when it will be replaced and therefore has been included as Appendix C. The Preferred Option for Resource Management supports the delineation of Mineral Safeguarding Areas (MSAs) and the future delineation of more refined Mineral Consultations Areas (MCSs). This is likely be delineated in the Proposals Map DPD that will accompany the Development Control Policies DPD. More detail on this is proposed in Technical Paper MCS-G *Mineral Resources and Safeguarding.*

17. The Mineral Core Strategy key diagram is accompanied by a diagrammatic version of local characteristics and existing infrastructure and a diagrammatic version of minerals resources and minerals workings and shown as Appendix D of this report.

Likely format of the submitted Minerals Proposals Map

18. The volume of information that is required on proposals maps will be substantial and will be difficult to present in one hard copy format. It is likely that the submitted version will merely contain simplified versions of the proposals map with the basic areas delineated and references to the joint minerals and waste proposals map webpage.

19. The current proposals map webpage http://www.gloucestershire.gov.uk/index.cfm?articleid=10580 will be updated along with the interactive proposals map and it is anticipated that all the detailed information required for sites such as policies and environmental constraints will be available

as a series of layers which can be selected as required. This will enable the user to focus in on just the constraints or areas they are particularly interested in rather than being faced with a mass of symbols and graphics on a printed map.

Section 5
The progress of the Gloucestershire Waste Proposals Map at Preferred Options stage.

Saved aspects of the Waste Local Plan

20. The direction issued by the Secretary of State on 5th October 2007 did not save any of the policies relating to sites or the sites themselves.

21. In the consideration of any proposals for waste management proposals the determination will need to take account of the action of this direction. The schedules of saved WLP policies are retained as the development plan until replaced as and when new Development Plan Documents are adopted. At this stage the earliest that this will be is 2009. In the case of any unsaved polices the County Council has sought legal opinion and has been advised that any unsaved policies from the WLP may be a material consideration (where appropriate) in the determination of planning applications in the absence of new style plans. In particular there will be unsaved WLP policies, which will be a material consideration in certain applications. The weight to be given to the material consideration, in the determination of a proposal, will be a matter for the decision-maker.

22. In instances where there is a relationship with unsaved WLP site related policies, 4,5, 6 and 7, these are likely to be significantly material in the absence of any revised Waste Site Allocations DPD. The case officer and the Planning Committee as decision-maker will need to come to a view as to what 'weight' to attach to such instances alongside any other material considerations when determining any planning applications.

23. As such Chapter Four of the WLP which refers to Facilities and Preferred sites has been included in Appendix E.

Locational Strategy at Preferred Options Stage

24. Three diagrams within the Waste Core Strategy support the spatial portrait (figures 4, 5, and 6). These are contained within Appendix F.

25. The preferred options for the Waste Core Strategy locational strategy are WPO7a, WPO7b, WPO7c and WPOd. Three diagrams have been prepared which relate to these options and until the final locational strategy has been developed, all three diagrams are relevant to the proposals map. As such they have been included in Appendix G of this report.

Likely format of the submitted Waste Proposals Map

26. The volume of information that is required on proposals maps will be substantial and will be difficult to present in one hard copy format. It is likely that the submitted version will merely contain simplified versions of the proposals map with the basic areas delineated and references to the joint minerals and waste proposals map webpage.

27. The current proposals map webpage http://www.gloucestershire.gov.uk/index.cfm?articleid=10580 will be updated along with the interactive proposals map and it is anticipated that all the detailed information required for sites such as policies and environmental constraints will be available as a series of layers which can be selected as required. This will enable the user to focus in on just the constraints or areas they are particularly interested in rather than being faced with a mass of symbols and graphics on a printed map.

Appendix A

Chapter 10 of the adopted Minerals Local Plan

Chapter 10
INSET MAPS AND PROPOSALS

SUMMARY OF INSET MAPS	
Area Profile Number	**Name of Preferred Area**
1	Stowe Hill/Clearwell
2	Drybrook
3	Stowfield
4	Daglingworth
5	Huntsman's
6	Dryleaze Farm
7	Cerney Wick
8	Horcott/Lady Lamb Farm
9	Kempsford/Whelford

10.1 Introduction

10.1.1 The following area profiles for the Preferred Areas for future mineral development provide detailed information on the possible constraints [mainly environmental] and Proposals which need to be addressed and considered at the application stage of development. Proposals are indicated in **bold text** under the sub-heading "Proposals" with each associated inset map to which they relate. In some cases explanatory information associated with the Proposals is indicated in normal text. The Proposals associated with each Preferred Area are not necessarily comprehensive but must be taken into account by mineral operators at the planning application stage. Applications which do not satisfy the Proposals for each Preferred Area will not be permitted. The Mineral Planning Authority (MPA) will assess whether applicants have successfully met the Proposals for each area in its consideration of the application. Applicants are advised to discuss whether the have met the requirements of the Proposals at an early stage with the MPA. However, the Proposals must be viewed in conjunction with, and should not be seen as replacing, the other policies of this Plan, in particular those policies relating to Development Control and the Environment. Inset Maps showing the extent of each Preferred Area are appended to each area profile. Diagrams Suffix A indicate the location of a range of environmental and other constraints within or adjacent to the Preferred Areas. The diagrams do not form part of the Proposals Map but are intended for advisory and guidance purposes only. Operators are advised to also consult with the Proposals Map of the District Plan relevant to a particular site for further clarification of constraints for example boundaries of Areas of Outstanding Natural Beauty. Where these constraints relate to particular Policies this is indicated in the environmental constraints table relating to each site. Some delineation's indicated on the diagrams relate to important natural features which may not be implicitly recognised in the policies of the Plan, such as ancient semi-natural woodland. In particular applicants are reminded that in all cases they should be mindful of the provisions of the Environment Agency's publication entitled 'Policy and Practice for the Protection of Groundwater'. The Proposals Map shows the location of each area in the County.

GLOUCESTERSHIRE MINERALS LOCAL PLAN
ENVIRONMENTAL AND OTHER CONSTRAINTS

KEY FOR DIAGRAMS SUFFIX A

1. PRINCIPAL ENVIRONMENTAL CONSTRAINTS

RAMSAR — NOT APPLICABLE

SPECIAL AREA OF CONSERVATION — NOT APPLICABLE

SPECIAL PROTECTION AREA — NOT APPLICABLE

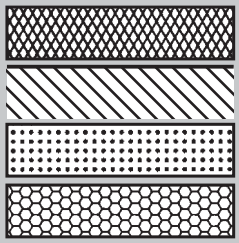
2. PRIMARY ENVIRONMENTAL CONSTRAINTS

SCHEDULED ANCIENT MONUMENT

AREA OF OUTSTANDING NATURAL BEAUTY (AONB)

SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

HISTORIC PARK AND GARDEN



3. SECONDARY ENVIRONMENTAL CONSTRAINTS

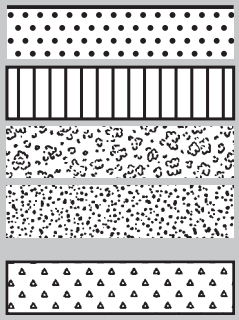
SPECIAL LANDSCAPE AREA (SLA)

KEY WILDLIFE SITE

ANCIENT WOODLAND SITE

ANCIENT SEMI-NATURAL WOODLAND

REGIONALLY IMPORTANT GEOLOGICAL AND GEOMORPHOLOGICAL SITE (RIGS)



4. HIGHWAYS (source: County Lorry Strategy, June 1996)

PREFERRED ROUTE FOR LONG DISTANCE LORRY TRAFFIC

ROUTE OPEN TO LORRY TRAFFIC BUT LONG DISTANCE MOVEMENT NOT ENCOURAGED

5. PUBLIC RIGHTS OF WAY

THAMES PATH NATIONAL TRAIL

POSSIBLE FUTURE ROUTE OF THAMES PATH NATIONAL TRAIL

FOOTPATH

BRIDLEWAY

ROAD USED AS A PUBLIC PATH

6. OTHER CONSTRAINTS

SETTLEMENT PROTECTION BOUNDARY IN THE UPPER THAMES VALLEY SAND AND GRAVEL RESOURCE AREA (as designated in the Upper Thames Policy Review, 1993)

THAMES SEVERN CANAL PROTECTION LINE

PLEASE NOTE: the list of environmental constraints is not exhaustive and must be viewed in conjunction with the individual proposals and other policies of this Plan.

GLOUCESTERSHIRE MINERALS LOCAL PLAN PROPOSALS MAP

No.	Name of Site		
1	STOWHILL/CLEARWELL	6	DRYLEAZE FARM
2	DRYBROOK	7	CERNEY WICK
3	STOWFIELD	8	HORCOTT / LADY LAMB FARM
4	DAGLINGWORTH	9	KEMPSFORD / WHELFORD
5	HUNTSMANS		

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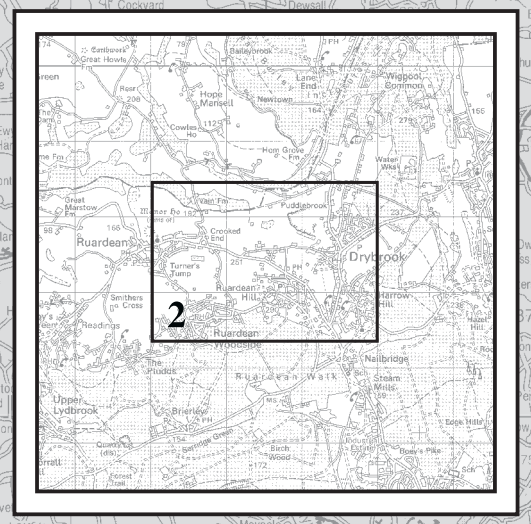
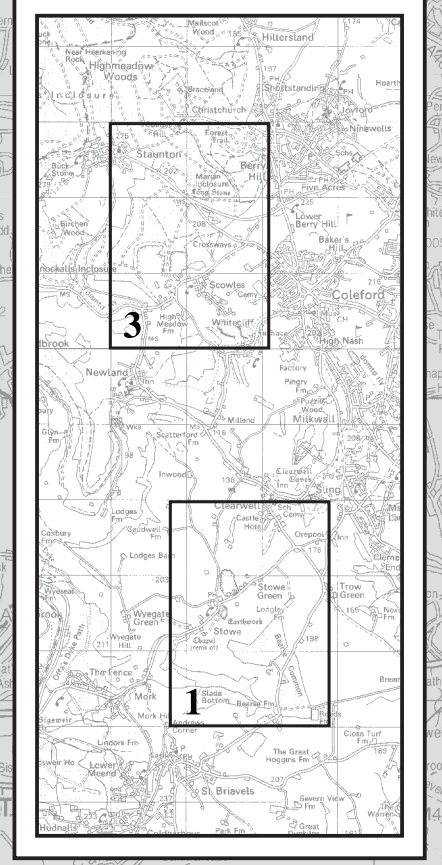
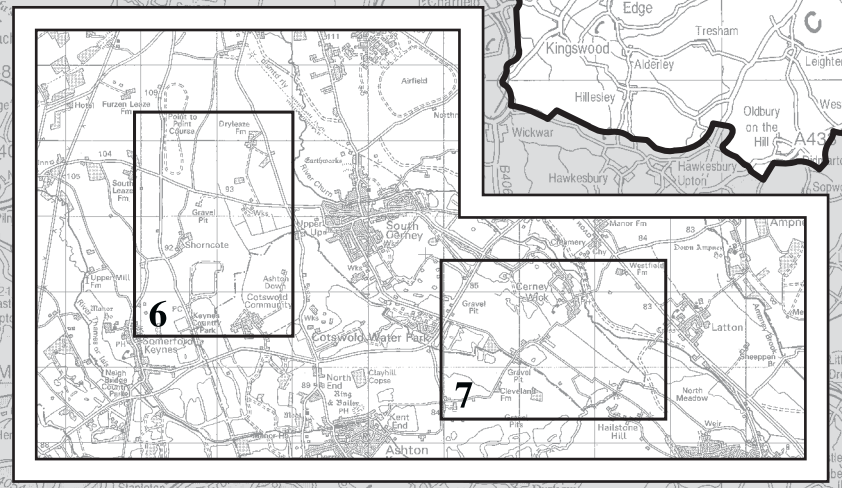
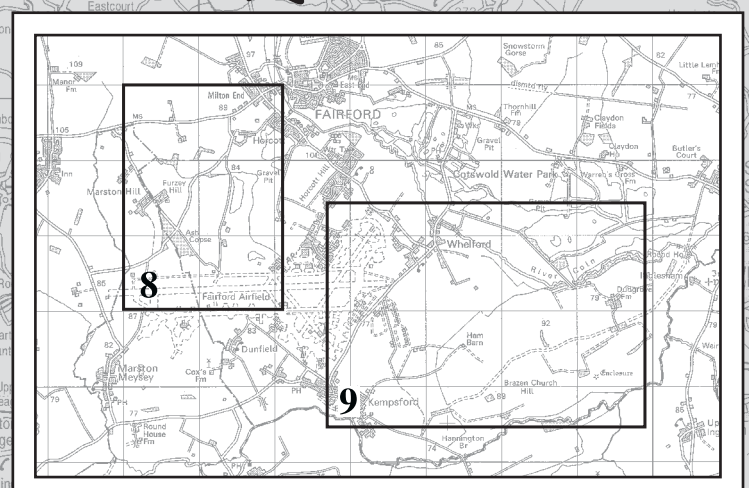
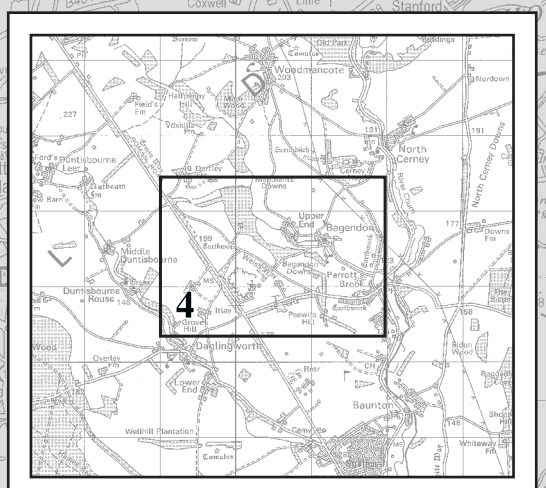
GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

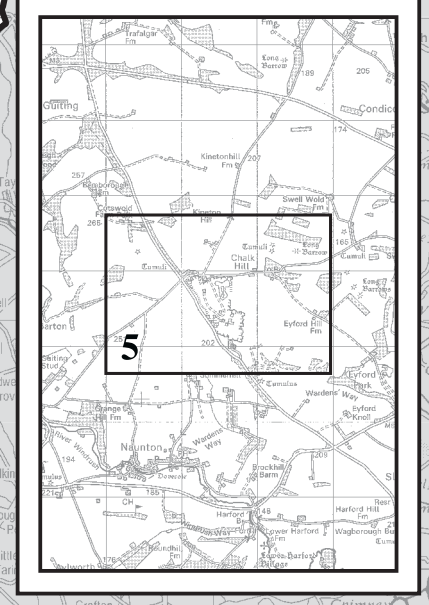












Inset Plan 1
Inset Plan 2
Inset Plan 3
Inset Plan 4
Inset Plan 5
Inset Plan 6
Inset Plan 7
Inset Plan 8
Inset Plan 9

Scale: 1:250,000 and 1:100,000

No. 1 Crushed Rock - Forest of Dean
Stowe Hill/Clearwell Preferred Area

Location:

The area lies 0.5 km south of Clearwell and forms an extension to Stowe Hill and Clearwell Quarries. The area extends from Stowe Hill in the west to Longley farm in the east and is bounded in the south by Orles Wood and to the north by a minor road from the B4228.

Site Description:

The current land use of the area is predominantly arable farmland with bordering woodland. Access to existing quarries is provided by an improved minor road from the B4228.

Grid Reference: SO 50 NE **Site Area:** 40.9hectares

Geological Resource:

The geological resource in the area forms part of an extensive outcrop of massive grey detrital limestone with shale partings, a formation in the Carboniferous Lower Limestone Shales. The existing workings at Stowe Hill and Clearwell Quarries indicate 12 or 14 metres of workable limestone in the area which can be used for a variety of aggregate end uses and also for building stone.

Potential Mineral Yield:

Approximately 8 million tonnes from the Preferred Area. There may be also some additional resources (around 1.75 mt) adjacent to and north of Mork Road, associated with the existing Clearwell Quarry. These resources remain for the longer term subject to technical and environmental suitability.

Type of Proposal:

Extension to existing quarry, for the working of limestone for mainly aggregate purposes.

Planning History:

The existing active quarries of Clearwell and Stowe Hill have had a number of extensions. Stowe Hill Quarry has had some extensions granted on appeal and now has an operational area of 4 hectares, although an extension of 12 hectares (3.27 million tonnes) was approved in 1997 subject to conditions. The quarries now operate as one unit consolidated in this planning permission. A tunnel beneath the road that separates the two quarries has been constructed to serve the 'new' extension to the quarry. Quarrying has ceased in the northern quarry.

ENVIRONMENTAL CONSTRAINTS [See Plan 1A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7, 11,12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	None	Special Landscape Area	Tree Preservation Order: *DF TPO 91, DF TPO 125.*
Nature Conservation	None	Possible Site of Special Scientific Interest (see paragraph on Ecology, for Inset 1)	Gloucestershire Wildlife Trust Key Sites: *Bearse Common/Orles Wood* Regionally Important Geological Sites: *Slade Brook.*	N/A
Archaeology	None	National: *SMR 17610 & 19894.*	Local: *SMR 4391, 5752, 5726, 5727, 5728, 5810, 6488, 6489, 9474, 9748, 10823, 10824, 10825, 10826, 11050, 13698, 17611, 17612, 17613.*	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 1A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7, 11,12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Historic Built Environment	N/A	Historic Garden: *Clearwell Castle* Listed Buildings: *N^os 70-79 Clearwell Castle.* Conservation Area: *Clearwell.*	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Major Aquifer.*	N/A	N/A
Agricultural Land	N/A	*Grade 3a - 28.1ha*	*Grade 4 - 11.8 ha.*	N/A
Highways	N/A	N/A	N/A	Local Highways Network: *Access via minor road to B4231 designated as a route open to lorry traffic but long distance movements not encouraged.*
Public Access	N/A	N/A	N/A	Public Rights of Way: *N^o 67, N^o 66, No68 abuts the boundary*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Stowe – 20 individual properties on access road, Clearwell Castle, Longley Farm.*
Tourism and Recreation	N/A	N/A	N/A	Tourist Facility: *Clearwell Castle.*

Proposals:

- **Agriculture -** The site includes 28.1 hectares of grade 3a land. The working would be relatively shallow and therefore it could be possible to restore it satisfactorily back to agriculture at a lower level (DEFRA). **Proposals for mineral working should aim to restore land satisfactorily back to agricultural use.**

- **Archaeology -** Flint finds indicate prehistoric activity. There are earthworks present but the date and significance are unknown. There is potential for the further evidence of medieval activity in this area. **Therefore applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how; either by in situ preservation where appropriate, or by a programme of archaeological investigation for remains of lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated.**

- **Ecology -** The most interesting flora is located at the borders of the existing quarry. The creation of new limestone faces may subsequently be exploited by limestone flora and fauna. Areas of semi-improved grassland could be retained to provide a source of seed and invertebrates for the colonisation of new limestone faces. The retention of bordering hedges and mature trees would provide a sympathetic approach to quarrying. Slade Brook which lies ¾ km south west of Stowe Hill Quarry is designated as a Regionally Important Geological Site. English Nature is currently examining new information which has come to light regarding traventine dams in this area in order to establish whether they merit Site of Special Scientific Interest designation. **Mineral operators will need to identify the impact of the mineral working on this area and identify appropriate mitigating measures if possible. This should be indicated with preliminary hydrological monitoring.**

- **Highways - Mineral operators are requested to discuss arrangements for the improvement of access with the MPA in advance of the submission of a planning application. In particular an improvement to the access via Mork road, between the quarry entrance and the B4228 at Orepool, would be required.**

This may be dependent on future levels of production output from the quarry. An agreement on routing of lorries to and from the quarry via the B4231 would also be needed to protect the amenity of residents of surrounding villages.

- **Hydrology - Mineral operators are required to carry out preliminary hydrological monitoring in advance of the submission of a planning application to ensure that ground and surface water can be safeguarded. The depth and characteristics of the water table needs to be established and no work should be carried out below the water table. If dewatering is required it will be necessary for the operators to agree measures to mitigate against any adverse effect on the water environment.**

- **Landscape - Mineral operators are requested to carry out a full assessment of landscape impact through any extension of mineral working. Landscape impact should be mitigated through the retention of existing hedges and mature trees. Preliminary landscaping and tree planting would be required in advance of mineral operations.**

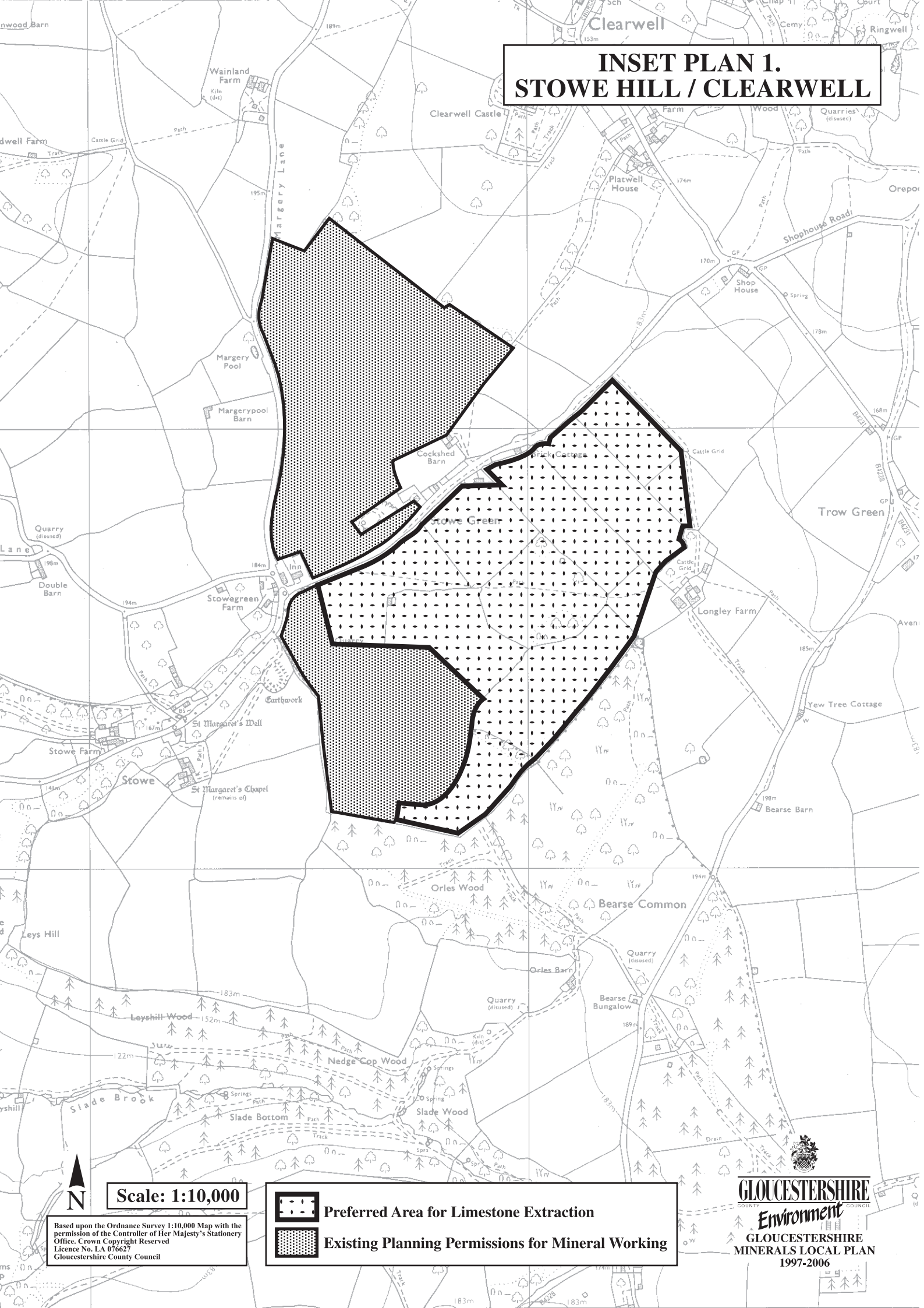
- **Operational Issues - Any proposals for extension of mineral extraction at Stowe Hill Quarry would require all aggregate to be processed through the relocated plant in Clearwell Quarry to the north of Mork Road. All aggregate would be moved from Stowe Quarry through the purpose built tunnel under Mork Road.**

- **Public Rights of Way - Satisfactory arrangements would be required for the diversion of the Public Right of Way.**

- **Restoration - The restoration proposals submitted with any planning application should focus on returning land back to agricultural use at a lower level. There are also some areas of semi-improved grassland which should be retained to provide a source of seed and invertebrates for the colonisation of new limestone faces. The importation of fill material is not currently permitted, and restoration proposals submitted with any application are likely to be treated on the same basis.**

- **Environmental Assessment –** Any proposal for mineral working over the whole Preferred Area which is in excess of 25 ha, would be a Schedule 1 development under Town and Country Planning (Environmental Impact Assessment) Regulations 1999. An Environmental Impact Assessment (EIA) may be required for any lesser proposal for mineral working within the Preferred Area as this would be a Schedule 2 development. Although not within a 'sensitive area' as defined in Regulation 2(1) there is likely to be significant effects on the environment due to the scale and duration of operations and in particular if extraction involves more than 30,000 tonnes per year. **Any proposal for mineral working within the "Preferred Area", over 25 ha will require an EIA. Any proposal for mineral working within the "Preferred Area" less than 25 ha should also be accompanied by an EIA. Subject to the provisions of a 'screening opinion' under the Regulations, an EIA should accompany any major application for mineral working less than 25 ha within the Preferred Area, as development under Schedule 2 likely to have significant effects on the environment.**

INSET PLAN 1.
STOWE HILL / CLEARWELL



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Scale: 1:10,000

Preferred Area for Limestone Extraction

Existing Planning Permissions for Mineral Working

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GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

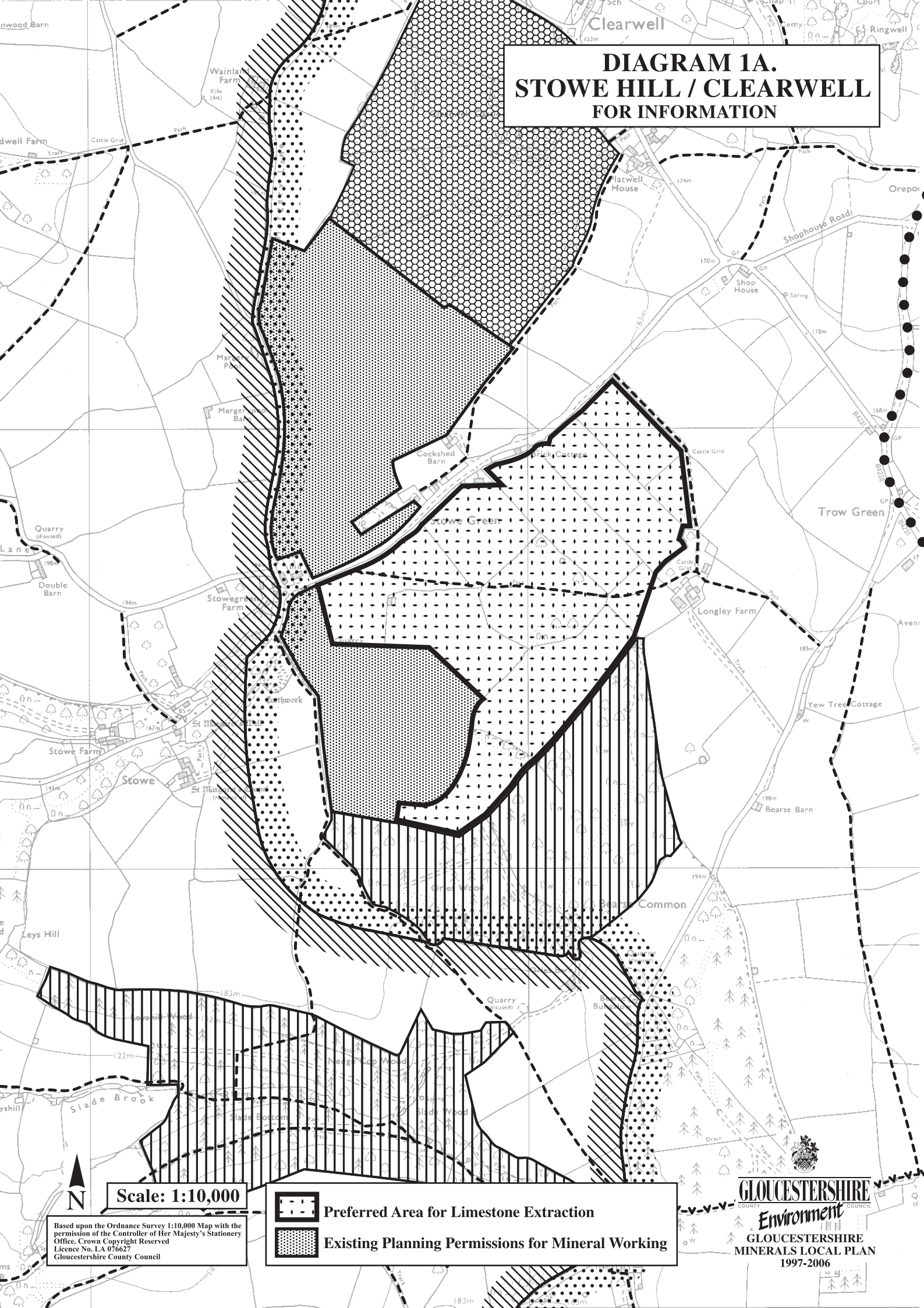
DIAGRAM 1A.
STOWE HILL / CLEARWELL
FOR INFORMATION
Clearwell
Ringwell
Wainlode Farm
Platwell House
Shophouse Road
Shop House
Cockshed Barn
Brick Cottage
Stowe Green
Trow Green
Quarry (disused)
Double Barn
Stowegreen Farm
Longley Farm
Yew Tree Cottage
Bearse Barn
Stowe Farm
Stowe
Leys Hill
Bears Common
Quarry (disused)
Slade Brook
Scale: 1:10,000
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Preferred Area for Limestone Extraction
Existing Planning Permissions for Mineral Working
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Environment
GLOUCESTERSHIRE
MINERALS LOCAL PLAN
1997-2006

No. 2 **Crushed Rock - Forest of Dean**
Drybrook Preferred Area

Location:

The area lies 500 metres north west of Drybrook and to the east of Ruardean. It forms an extension to the existing Quarry.

Site Description:

The current land use is predominantly arable farming and a number of properties along Morse Lane lie near to the site.

Grid Reference: SO 641.179 **Site Area:** 11 hectares

Geological Resource:

The area is part of the extensive hillside outcrop of Lower Dolomite that is currently worked at Drybrook Quarry. Survey information has indicated that an extension is technically feasible and between 25 and 75 metres of stone could be worked.

Potential Mineral Yield:

Up to 4.5 million tonnes

Type of Proposal:

Extension to existing limestone quarry.

Planning History:

In recent years a number of permissions have been granted to Drybrook Quarry allowing extensions in depth and area. In 1992 permission was granted on appeal for the extraction of 6 million tonnes of limestone and in 1996 the working hours of the lime crushing plant were changed. The Quarry plant was relocated into the Quarry as part of the appeal decision.

ENVIRONMENTAL CONSTRAINTS [See Plan 2A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7, 11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	None	Special Landscape Area	
Nature Conservation	None	None	None	N/A
Archaeology	None	National: *SMR 4371, 6834.*	Local: *SMR 5666, 10552.*	N/A
Historic Built Environment	N/A	None	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Major Aquifer.*	N/A	N/A
Agricultural Land	N/A	Agriculture Land Grade: Grade 2 - 78% Grade 3a - 2%	Grade 3b - 20%	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 2A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7, 11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Highways	N/A	N/A	N/A	Local Highways Network: *Access via minor road to the A40 to the north and the A4136 to the south both designated as routes open to lorry traffic but long distance movements not encouraged.*
Public Access	N/A	N/A	N/A	Public Rights of Way: *No 10, 11, 43.*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Drybrook, Whitehill Farm, Hawthorns Farm, numerous properties on Morse Lane, Ruardean.*
Tourism and Recreation	N/A	N/A	N/A	*None*

Proposals:

- **Agriculture/Ecology/Restoration -** 10 hectares of Grade 2 land adjoins the existing quarry. This land is sloping and sufficiently steep in places to downgrade it to Grade 3b and the incidence of Grade 3b within the Grade 2 may well affect the overall land use The field pattern is relatively small and the surrounding land use is predominantly grass. Restoration back to agriculture is not considered likely**. The site includes a large area of semi-improved grassland and an assessment of grassland diversity patterns should form part of any application. Ecological features should be built into any restoration programme.**

- **Archaeology -** There is little survey information present at this site. **Therefore applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how; either by in situ preservation where appropriate, or by a programme of archaeological investigation for remains of a lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated.**

- **Hydrology - In relation to hydrology, proposals for the extension of mineral working should be carried out in line with all the conditions attached to the planning permission for the existing quarry. In particular no mineral working should take place below the 175 metre (AOD) level and no mineral working should take place below the water table. In addition there should be no breach of the underlying Shale bed.**

- **Highways -** There is concern about the impact of quarry traffic on the residents of Drybrook. An extension to the existing quarry might provide an opportunity for a new highway access which would enable lorries to reach the strategic road network with less impact on Drybrook**. Operators are encouraged to discuss the potential for a new highway access with the MPA at an early stage. In addition, operators should discuss highway improvements and traffic management and mitigation with the MPA prior to the submission of a planning application. If no acceptable alternative access can be found then the rate of production should be maintained at or near to existing levels. A commuted payment for road maintenance would be required.**

- **Landscape -** A stony ridge line runs in an east westerly direction along the face of the existing quarry from a northerly view. The ridge curves in a westerly direction across the northern part of the 'Preferred Area'. The whole face is extremely visible from Drybrook and the surrounding Ruardean area. **Proposals for mineral working would require very careful landscape considerations to mitigate impact. In particular there should be no breaking of the ridge described above and no working on west or north sides of the ridge and substantial landscaping measures should be incorporated in the proposals.**

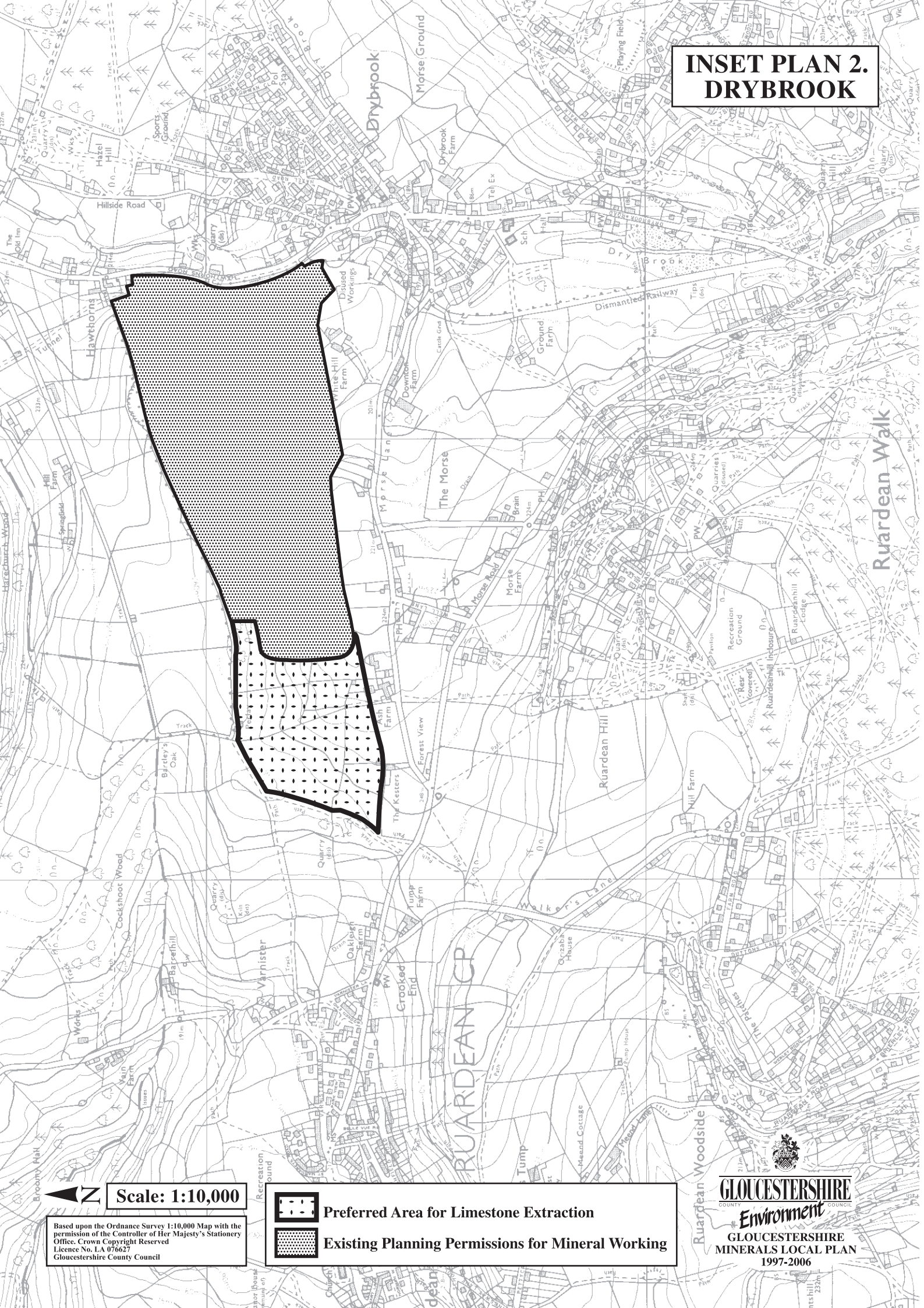
- **Operational - Any proposals for the extension of mineral extraction at Drybrook Quarry would require that all aggregate should be processed through the relocated plant in the existing quarry. In addition operators should carefully consider ways of minimising the impact of operations such as noise and dust**

on the amenity of local residents bearing in mind the proximity of Drybrook and Ruardean to the existing quarry and Preferred Area.

- **Public Rights of Way - Satisfactory arrangements would be required for the diversion of any Public Rights of Way affected by the extension of mineral workings. Operators should consider the creation of new routes to mitigate the reduction in public access which would result from development of the Preferred Area.**

- **Environmental Assessment –** Any proposal for mineral working in the Preferred Area would not be a Schedule 1 development under Town and Country Planning (Environmental Impact Assessment) Regulations 1999. However an Environmental Impact Assessment (EIA) may be required for any mineral working within the Preferred Area as this would be a Schedule 2 development. Although not affecting a 'sensitive area' as defined in Regulation 2(1) there is likely to be significant effects on the environment due to the scale and duration of operations and in particular if extraction involves more than 30,000 tonnes per year. **Subject to the provisions of a 'screening opinion' under the Regulations, an EIA should accompany any major application for mineral working within the Preferred Area.**

INSET PLAN 2. DRYBROOK



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Preferred Area for Limestone Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

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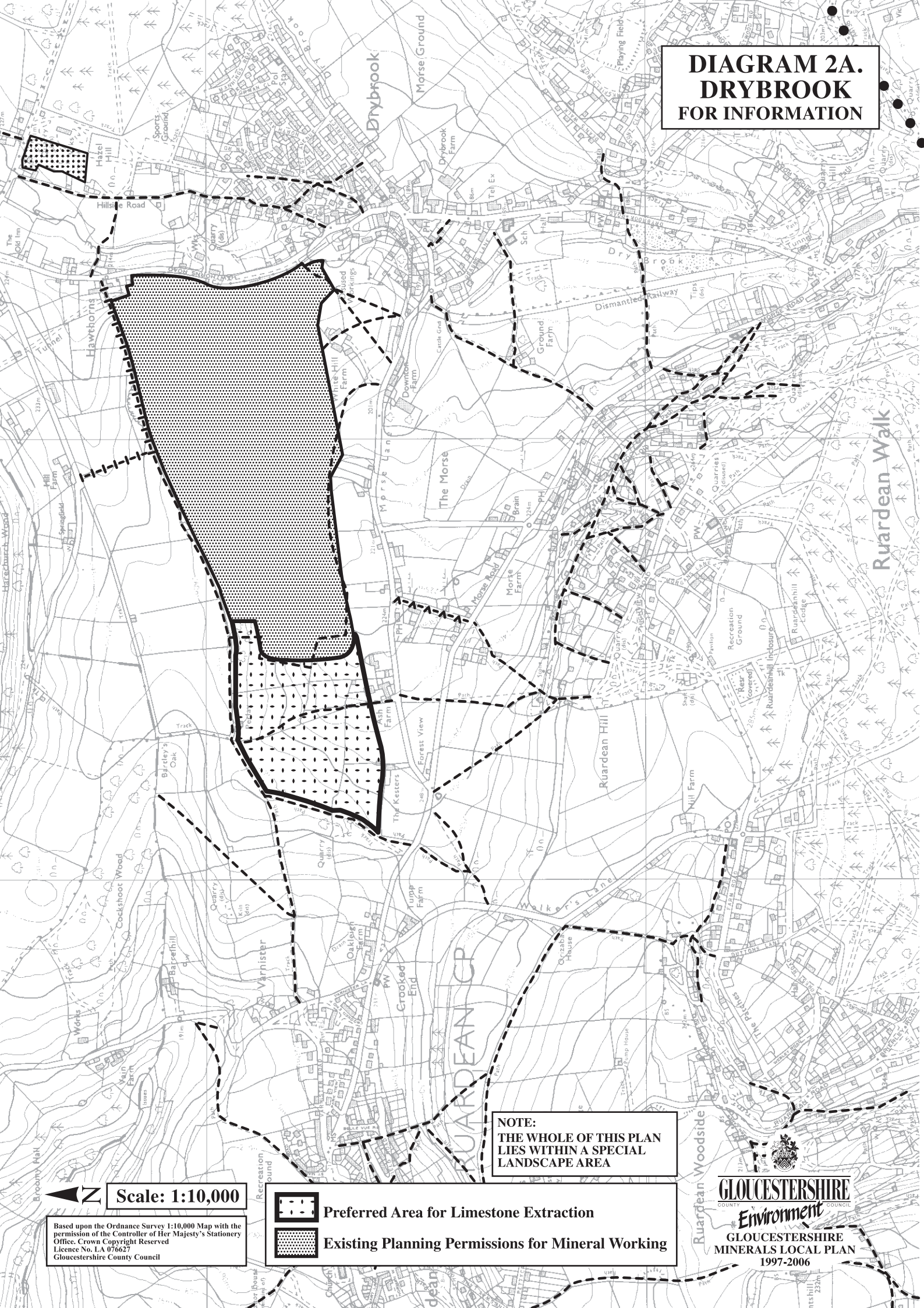
DIAGRAM 2A.
DRYBROOK
FOR INFORMATION



NOTE:
THE WHOLE OF THIS PLAN LIES WITHIN A SPECIAL LANDSCAPE AREA

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Scale: 1:10,000

Preferred Area for Limestone Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

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No. 3 Crushed Rock - Forest of Dean
Stowfield - Preferred Area

Location:

The Preferred Area is located 1 km north west of Coleford and extends towards Staunton in the north. The Preferred Area forms an extension to the existing quarries of Stowfield and Roger's.

Description:

The area is almost entirely woodland which has a new purpose built access from Stowfield Quarry. Stowfield quarry is the largest limestone quarry in the County.

Grid Reference: SO 51 NE **Site Area:** Approx. 14.5 hectares

Geological Resource:

The area is defined on an extensive exposure of Lower Dolomite. The part of the area which extends northwards of the existing quarry which has been investigated, indicate up to 100 metres of good quality stone. It is reasonable to infer that additional resources of Lower Dolomite are also to be found in the land between Roger's and Stowfield quarries**.**

Potential Mineral Yield:

Up to 10.2 million tonnes within all parts of the Preferred Area. In addition the operators at the quarry suggest that a further 7.9 million tonnes may be available below the existing quarry floor (but still within the Lower Dolomite formation) in the northern part of the existing quarry and Preferred Area. Resource availability will be dictated by how successfully operators can mitigate the impact on constraints as outlined in the Proposals (see below).

Type of Proposal:

Extension to existing quarry for the working of limestone for mainly aggregate purposes.

Planning History:

Since 1959 various permissions for quarry extensions and ancillary development have been granted. The last permission in 1996 was for a substantial extension (for an additional 9 million tonnes), creating a quarry of 64 hectares with a new purpose built access.

ENVIRONMENTAL CONSTRAINTS [See Plan 3A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7, 11,12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	Area of Outstanding Natural Beauty: *Wholly within the Wye Valley AONB.*	None	N/A
Nature Conservation	None	Site of Special Scientific Interest: *Dingle Wood abuts the Area of Search*	Gloucestershire Wildlife Trust Key Sites: *Blakes wood - covers central section of the Area.* Ancient Woodland Site: *Blakes Wood*	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 3A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7, 11,12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Archaeology	None	Scheduled Ancient Monument: SMR 20499. National: *SMR 4398, 13916, 13913, 13920, 13949, 13956.*	Local: *SMR 4397, 5099, 5637, 6031, 6043, 6119, 6121, 6126, 6183, 6184, 13923, 13933, 13934, 13935, 13936, 13939, 13945, 13946,13958, 14880).*	N/A
Historic Built Environment	N/A	Conservation Area: *Staunton.* Listed building: *Staunton Church*	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Major Aquifer.*	N/A	N/A
Agricultural Land	N/A	None	None	N/A
Highways	N/A	N/A	N/A	Local Highways Network: *A4136 - designated as route open to lorry traffic but long distance movements not encouraged.*
Public Access	N/A	N/A	N/A	Public Rights of Way: *N^{o} 18 abuts the area.*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Church Farm is adjacent to the Area, Scowles, Staunton & High Meadow Farm.*
Tourism and Recreation	N/A	N/A	N/A	Permissive footpath through Blake's Wood.

Proposals:

- **Archaeology -** There are many features identified which relate from earlier industrial exploitation of the landscape. Of particular significance is the evidence of Scowles resulting from the extraction of iron-ore. Survey work commissioned by English Heritage has recommended that all scowles which retain their surface form should be preserved. In particular the scowles in Blakes Wood have been added to the schedule of ancient monuments in June 1999. They should therefore be regarded as areas of national importance. **Future proposals for mineral working should include a full archaeological evaluation. In particular any mineral working in the area of Blakes Wood should assess the full extent of the scowles. Proposals for mineral working should be developed in such a way so as these scowles are preserved in situ and excluded from any areas proposed for mineral working.**

- **Ecology – Mineral operators will need to take account of the identification of a significant buffer zone to the north of Dingle Wood Site of Special Scientific Interest and are urged to discuss these matters at an early stage with the Mineral Planning Authority and English Nature.** Part of a County Site of Nature Conservation (Blakes Wood) lies within the Area of Search. This is partly semi-natural woodland and partly planted ancient woodland site. **Proposals for mineral working should be developed in such a way which leaves the surface vegetation intact or possibly to take an innovative approach leading to the creation of a landscape similar to that of the nearby Puzzle Wood or some of the ancient scowles, with mineral extraction and restoration continuing contemporaneously.** Mineral operators should be aware that this will require original, long-term scientific work and extensive critical surveys. **With any approach mineral operators will be required to establish the extent and protect any subterranean bat roosts.**

- **Environmental Assessment –**There are a range of primary constraints within the Area of Search which indicate that it is likely that any major proposals for mineral development would fall within Schedule 2 of the Town and County Planning (Environmental Impact Assessment) Regulations 1999. **Any proposal for mineral working within the "Preferred Area" should also be accompanied by an EIA as development under Schedule 2 likely to have significant effects on the environment.**

- **Highways** - Mineral operators are encouraged to discuss at an early stage proposals for traffic management measures on the local highways network. **Quarry traffic movement to and from the quarry should continue via the new access onto the A4136 as part of any proposals to extract minerals from within the 'Preferred Area'.**

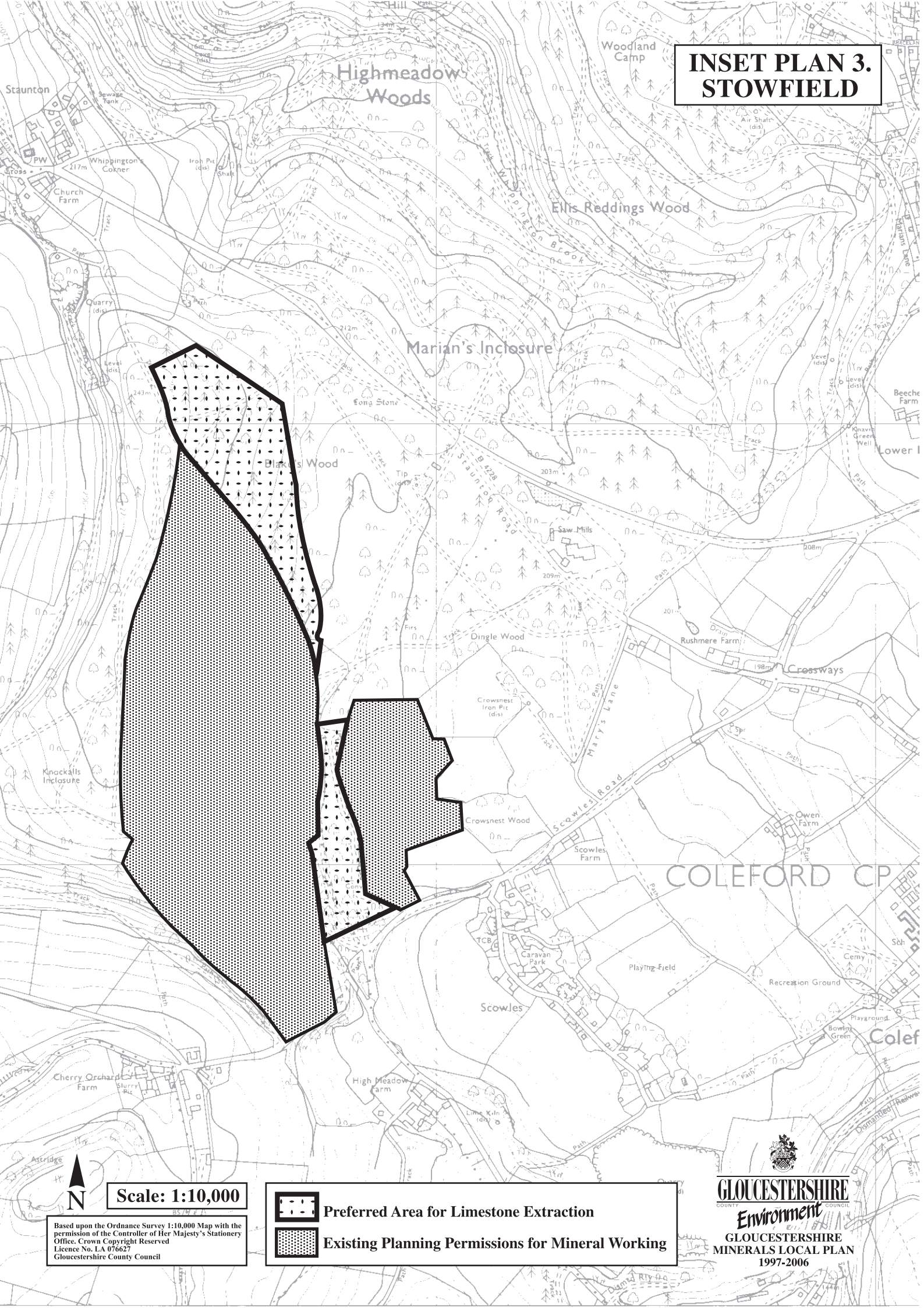
- **Hydrology - There is a large potable groundwater supply at Redbrook which must be protected.** There are also many smaller licensed and unlicensed supplies in the vicinity. Ground conditions in the vicinity of Staunton make septic tank effluent disposal problematical. The result is a layer of sewage effluent below the ground surface around Staunton**. Proposals for mineral working should not breach the clay layer. Any proposals for mineral working would require pre-application monitoring of groundwater conditions. In particular the location of the impermeable base to the Lower Dolomite formation should be ascertained. Proposals for mineral working should not breach this impermeable layer.**

- **Landscape - A detailed landscape assessment and scheme to mitigate landscape impact is required. A substantial screen of trees should be left to the north, east and west of any extension. This should possibly be augmented by internal planted bunding to serve as screening. Any extension in the Preferred Area to the north of the existing quarry must leave the north-south ridge, which runs along the west side of the current permission intact, as it is a major landscape feature of the area.**

- **Operational Issues - Any proposals to extract minerals from within the 'Preferred Area' will require that limestone should be processed through the existing plant. Any new, replacement or temporary plant should be located within a similar part of the quarry.**

- **Restoration - Any proposals for mineral working will require a restoration scheme which should take account of all the issues raised above such as ecology and archaeology. Account should also be taken for the potential for public access.**

INSET PLAN 3. STOWFIELD



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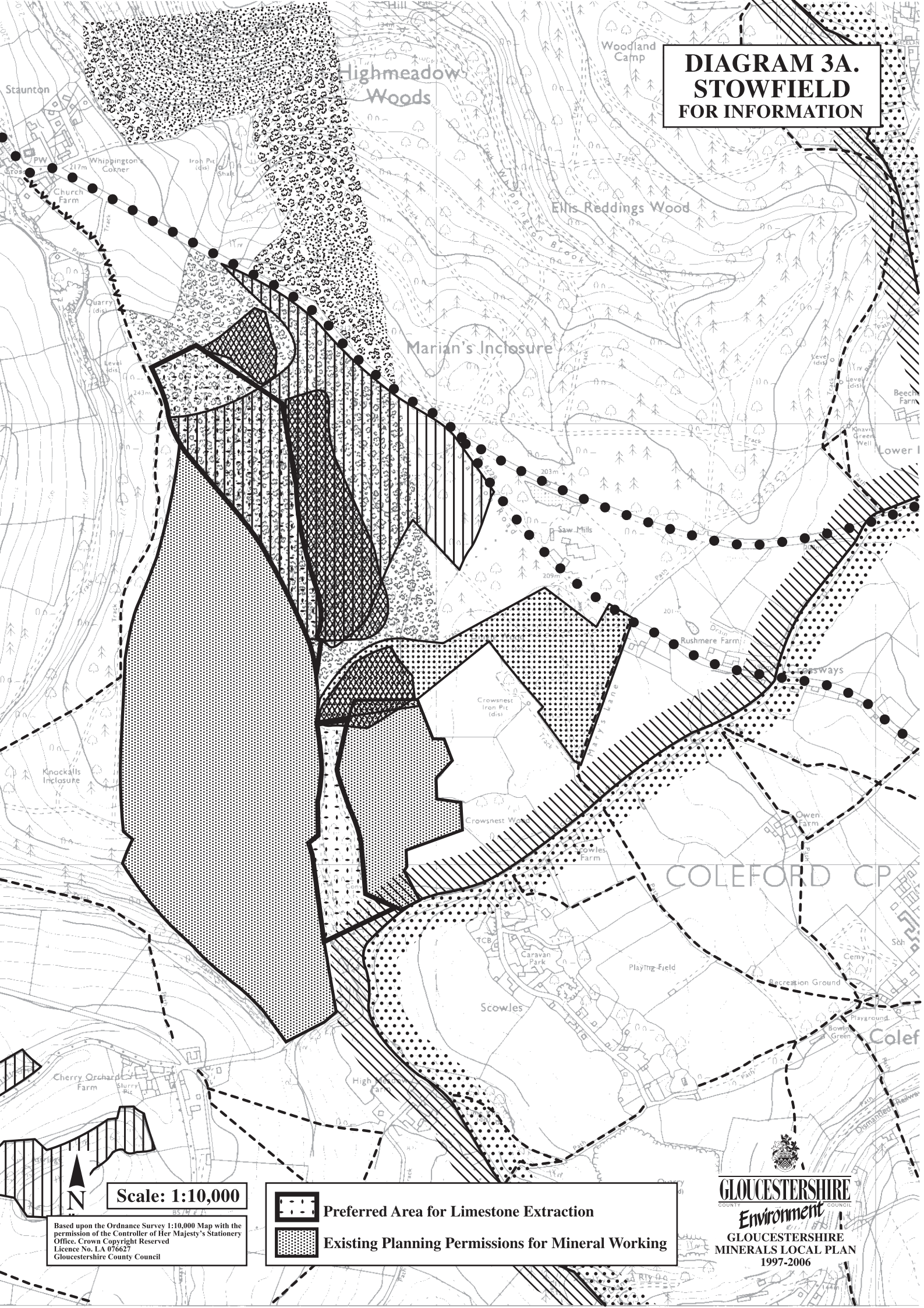
Preferred Area for Limestone Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006



No. 4 **Crushed Rock - Cotswolds**
Daglingworth - Preferred Area

Location:

The area lies approximately 3.4 km north of Cirencester on the east side of the A417 Gloucester to Cirencester Road. It forms an extension to the north-west edge of the existing Daglingworth Quarry.

Site Description:

The area lies within the Cotswold AONB and is currently used for agricultural purposes. It is bordered by the A417 and a narrow stretch of mature woodland which runs between the existing quarry and the site. Access to the existing quarry is from the improved A417.

Grid Reference: SP 001 062 **Site Area:** 18 hectares

Geological Resource:

The geological resource in the area comprises limestone's of the Great Oolite Group which lie above the Fullers Earth Clay to a depth of about 30 metres. It is also believed that considerable workable limestone lies beneath this level.

Potential Mineral Yield:

Approximately 9 million tonnes.

Type of Proposal:

Extension to existing quarry, for the working of limestone for mainly aggregate purposes.

Planning History:

Daglingworth Quarry has been worked since 1947 when Planning permission was first granted for continuance of quarrying. Since then there have been numerous permissions allowing extensions to the quarry and the erection of ancillary plant. The latter was replaced in 1988 and the existing quarry now covers an area of approximately 26 hectares. There is a brick making plant (ARC/Powell Duffryn) not working at present time.

ENVIRONMENTAL CONSTRAINTS [See Plan 4A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7,11 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	Area of Outstanding Natural Beauty: *within the Cotswold AONB.*	None	N/A
Nature Conservation	None	N/A	Gloucestershire Wildlife Trust Key Sites: *Bagendon Grove, Oysterwell House. Stancombe Wood, Five Acre Grove.*	N/A
Archaeology	None	National: *SMR:,4126, 4679, 4681.*	Local: *SMR: 2033, 2045, 7542 adjacent to boundaries.*	N/A
Historic Built Environment	N/A	Conservation Areas: *Bagendon.*	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Major Aquifer.*	N/A	N/A
Agricultural Land	N/A	None	Agriculture Land Grade: *Grade 3b - 100%*	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 4A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7,11 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Highways	N/A	N/A	N/A	Local Highways Network: *Access to A417 Preferred route for long distance lorry traffic.*
Public Access	N/A	N/A	N/A	Public Rights of Way: *N^{o} 3.*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *High Tun Farm to the south-west, Bagendon to the north-east of Area*
Tourism and Recreation	N/A	N/A	N/A	None

Proposals:

- **Archaeology -** The area is of high archaeological potential. Both earlier prehistoric and late iron age-early Roman features may be present and these may include features of national importance. The linear earthwork following the south-eastern boundary of the area should be preserved in situ. Other features present on the site which are contemporary and associated with the late iron-age-early Roman settlement of Bagendon, are likely to be assessed as being of national importance meriting preservation in situ. **Any applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how; either by in situ preservation where appropriate, or by a programme of archaeological investigation for remains of a lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated.**

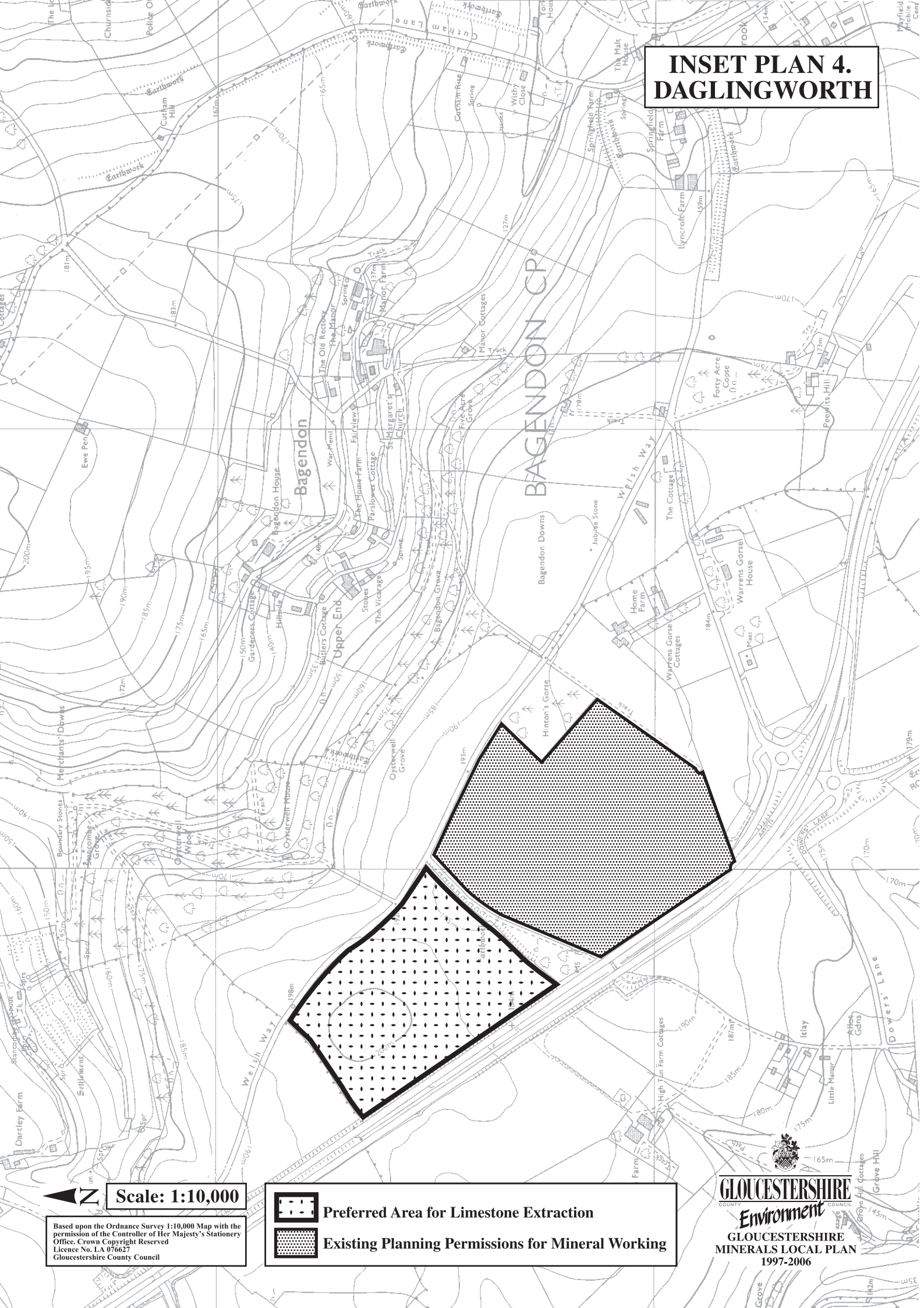
- **Environmental Assessment -** The Preferred Area lies within the Cotswolds Area of Outstanding Natural Beauty (AONB). Any major proposals for mineral development would fall within Schedule 2 of the Town & Country Planning (Environmental Impact Assessment) Regulations 1999. **Any major proposals for mineral working should be accompanied by an Environmental Impact Assessment, as there is a likelihood of significant environmental effects.**

- **Hydrology -** The site is located on a major aquifer and groundwater flow is likely to be rapid as a consequence of the fissured nature of the limestone. Spring flow is common, as is the tendency for streams to lose water to ground in certain sections. Pollution attenuation mechanisms are limited to dilution and oxygenation. In addition, Thames Water's Baunton public water supply boreholes are a few kilometres from the site and must be safeguarded in terms of maintaining groundwater levels and subsequent spring flows to the River Churn. The geology is complex, with faulting and spring flow a problem. **Mineral operators are required to carry out a preliminary hydrogeological assessment of conditions at the site in advance of the submission of a planning application to ensure that ground and surface water can be safeguarded. There should be no extraction of minerals below the maximum level of the seasonal water table.**

- **Landscape – As the whole Preferred Area lies within the AONB, mineral operators are required to undertake a full assessment of the impact of mineral working through the extension of mineral working. Similar bunding and tree planting which is present at the existing quarry will be required to mitigate any impact in the Preferred Area. Subject to taking account of the archaeological interest present, operators should undertake landscaping and extensive planting well in advance of mineral extraction in order to mitigate likely landscape impact which could result from extension of the quarry into the Preferred Area.**

- **Operational - A strip of land between the Southeast of the 'Preferred Area' and the existing quarry will need to be retained as a linear feature to preserve the archaeological feature. This also retains a number of mature trees and a Public Right of Way. Any proposals for extension in the 'Preferred Area' would require that all aggregate should be processed through the plant retained in the existing quarry. All minerals would be moved by the construction of a tunnel built under the linear feature for processing through existing plant.**

INSET PLAN 4. DAGLINGWORTH



Scale: 1:10,000

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Preferred Area for Limestone Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

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DIAGRAM 4A.
DAGLINGWORTH
FOR INFORMATION
Bagendon
BAGENDON CP
Welsh Way
Preferred Area for Limestone Extraction
Existing Planning Permissions for Mineral Working
Note: The whole of this plan lies within the Cotswold AONB
Scale: 1:10,000
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MINERALS LOCAL PLAN
1997-2006

No. 5 **Crushed Rock – Cotswolds**
Huntsmans - Preferred Area

Location:

The Area forms several extensions to Huntsman's Quarry. The quarry is located in an elevated part of the northern area of the Cotswolds AONB approximately 1.7 km north of Naunton and 3.7 km east of Temple Guiting, in Temple Guiting and Naunton Park.

Site Description:

The current land use of the Areas and surrounding land is mainly open arable farmland of large fields interspersed with small woodland areas. The land form is characteristic, with a dry valley running from north-west to south-east across each preferred area. Most of the 132 ha of the existing quarry has been progressively restored to agriculture apart from a present working area of some 10 ha and the new permission area which is still yet to be worked.

Grid Reference: SP 120 260 **Site Area:** Approximately 62 hectares.

Geological Resource:

The existing quarry is situated where limestone's of the Great Oolite group are widely exposed as horizontal or slightly inclined beds. The quarry itself works limestone beds forming the boundary between the Great and Inferior Oolite group, including rock units known as Chipping Norton limestone (a fine grained sandy limestone), "Fullers Earth Clay" (mudstone with thin limestone), "Cotswold Slates" (fine grained sandy limestone) and Taynton (Oolitic limestone). The Preferred Areas are located where Cotswolds Slates and associated strata are believed to be present in workable quantities.

Potential Mineral Yield:

Around 7.5 million tonnes. Additional resources (around 2.5 million tonnes) are known to exist to the eastern extent of the permitted areas which are now largely worked out but which retain the processing plant. These resources remain for the longer term subject to technical and environmental suitability.

Type of Proposal:

The extension to the existing quarry for the working of limestone for mainly aggregate purposes.

Planning History:

The original permission for Huntsman's Quarry was granted for quarrying and the working of stone in 1950. Since that time there have been numerous permissions granted for the extension of the quarry - most recently in 1996 for a 37 ha extension (5.1 million tonnes) of the quarry to the west of the existing site, following the completion of a legal agreement in respect of highway matters.

ENVIRONMENTAL CONSTRAINTS [See Plan 5A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7,11 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	Area of Outstanding Natural Beauty: *within Cotswold AONB.*	None	N/A
Nature Conservation	None	Site of Special Scientific Interest: *Geological SSSI on quarry face.* *Barton Bushes SSSI West of the Preferred Area.*	None	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 5A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E 2, – 3,4,5,6,7,11 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Archaeology	None	Scheduled Ancient Monument: *Western Site – SMR 208, SMR 11068; Northern Site - SMR 562, 563.* National: *SMR 11014, 11015.*	None	N/A
Historic Built Environment	None	N/A	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Major Aquifer.*	N/A	N/A
Agricultural Land	N/A	Agriculture Land Grade: *Grade 2 - 10%* *Grade 3a - 9%*	*Grade 3b - 62%* *Grade 5 - 19%*	N/A
Highways	N/A	N/A	N/A	Local Highways Network: *Access via minor road network.*
Public Access	N/A	N/A	N/A	Public Rights of Way: N^{o} 1, 3, 33.
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Stonefield, Eyford Hill Farm, Huntsman's Barn, Nosehill Farm, Wood Barn, Chalkhill Farm, Keepers Lodge, Chalkhill Cottage, Chalkhill, Tinkers Barn, Stonefield.*
Tourism and Recreation	N/A	N/A	N/A	Tourist Facility: *Cotswolds Farm Park.*

Proposals:

- **Agriculture/Restoration -** Detailed surveys of land vary from 3b to 3a. The existing quarry is being progressively restored to agriculture following mineral extraction**. As it is dry, proposals for mineral working within the 'Preferred Area' should incorporate this method of progressive restoration. The restoration scheme should also take account of the ecological interest and geological features present**.

- **Archaeology -** This area is exceptionally rich in archaeological evidence of settlement and burials of prehistoric and Roman date. There is a Bronze age round barrow which is a Scheduled Ancient Monument (SAM) and part of a round barrow cemetery which extends into the adjacent fields. Additional Bronze Age burial sites may be present in the immediate vicinity. The SAM is excluded from the western part of the 'Preferred Area'. **However, the setting of the SAM in the western part of the 'Preferred Area' must be taken into account when considering proposals for mineral development in this area ensuring that it is preserved *in situ.* Similar consideration should apply to the Scheduled Ancient Monument which lies adjacent to but outside the northern section of the 'Preferred Area'. There is a high probability that there will be other areas of archaeological interest, and therefore any applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how; either by in situ preservation where appropriate, or by a programme of archaeological investigation for remains of a lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated**.

- **Ecology/Geological Features -** Huntsman's Quarry supports a population of Cotswolds Pennycress (Thlaspi perfoliatum), a nationally rare plant that is specially protected under Schedule 8 of the Wildlife and Countryside Act 1981. With appropriate management and restoration conditions, new working could create opportunities to increase population size. Immediately to the west of the Preferred Area is another SSSI (Barton Bushes) which is of biological interest. There is also a geological SSSI associated with Huntsman's

Quarry. **Proposals for mineral extraction within the 'Preferred Area' will need to secure a greater or equivalent geological interest in the restoration of workings.**

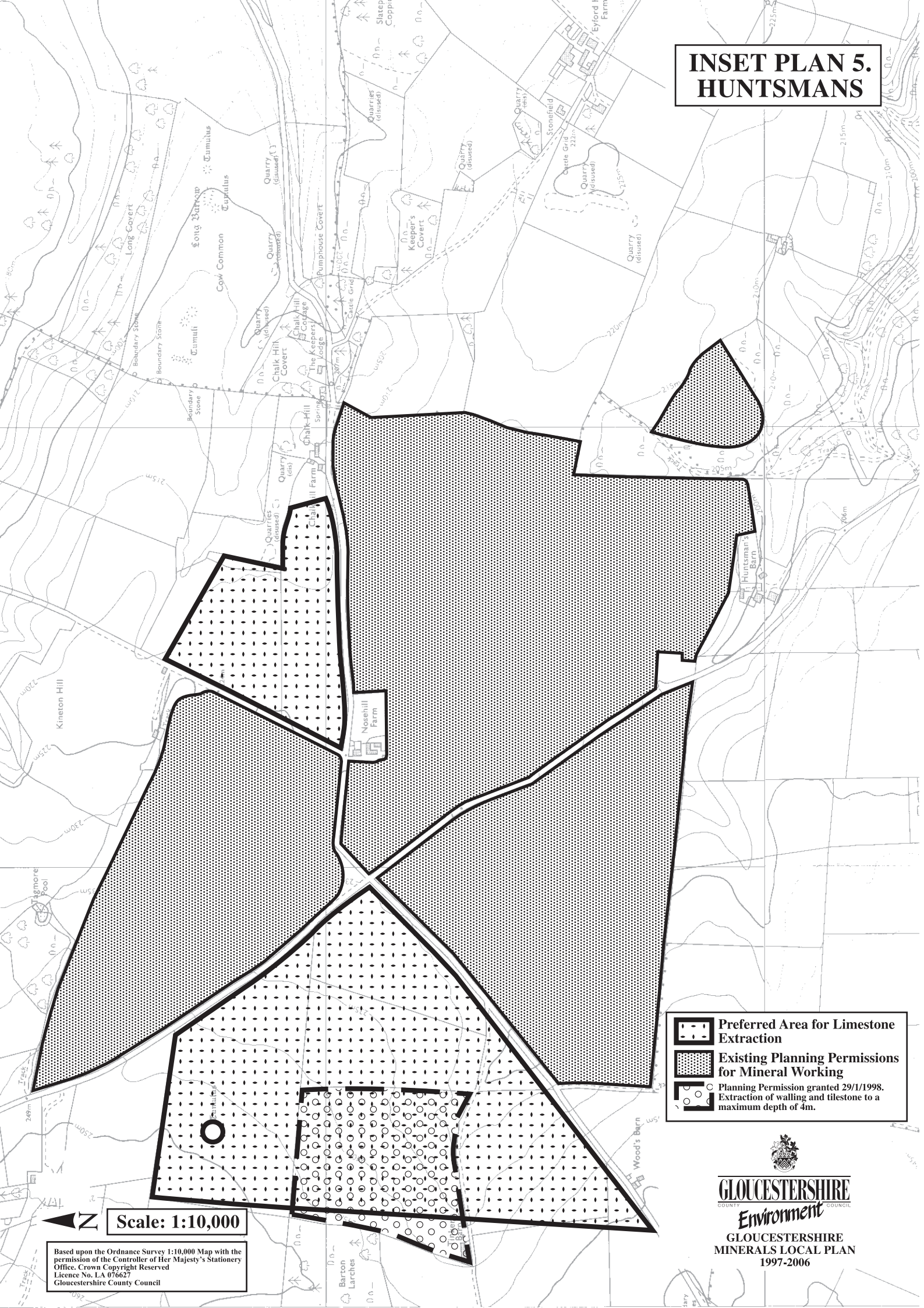
- **Environmental Assessment -** Any proposal to work the majority of the Area of Search will be a Schedule 1 development under the Town and Country Planning (Environmental Impact Assessment) Regulations 1999. As the site lies within the Cotswolds Area of Outstanding Natural Beauty (AONB), Any major proposals for mineral development would fall within Schedule 2 of Town & Country Planning (Environmental Impact Assessment) Regulations 1999. **Any major proposal for mineral working in excess of 25 ha will require an Environmental Impact Assessment (EIA). Any proposal for mineral working within the "Preferred Areas" less than 25 ha should also be accompanied by an EIA as development under Schedule 2 likely to have significant effects on the environment.**

- **Hydrology** –The site is located on a major aquifer and groundwater flow is likely to be rapid as a consequence of the fissured nature of the limestone. Spring flow is common, as is the tendency for streams to lose water to ground in certain sections. Pollution attenuation mechanisms are limited to dilution and oxygenation. The geology is complex with faulting and spring flow a problem. **Mineral operators are required to carry out a preliminary hydrogeological assessment of conditions in advance of the submission of a planning application to ensure that ground and surface water can be safeguarded. There should be no extraction of minerals below the maximum level of the seasonal water table.**

- **Landscape - As all of the 'Preferred Area' lies within the AONB, mineral operators are required to undertake a full assessment of the impact of mineral working through the extension of mineral working.**

- **Operational - Any proposals for extension into the 'Preferred Area' would require that all minerals should be processed through the existing plant. With regard the western section of the 'Preferred Area' minerals should be moved through the proposed access tunnel. A similar tunnel may be required for any mineral working within the northern section of the 'Preferred Area'. Mineral operators are advised to discuss any proposals with the MPA at an early stage prior to the submission of a planning application.**

INSET PLAN 5. HUNTSMANS



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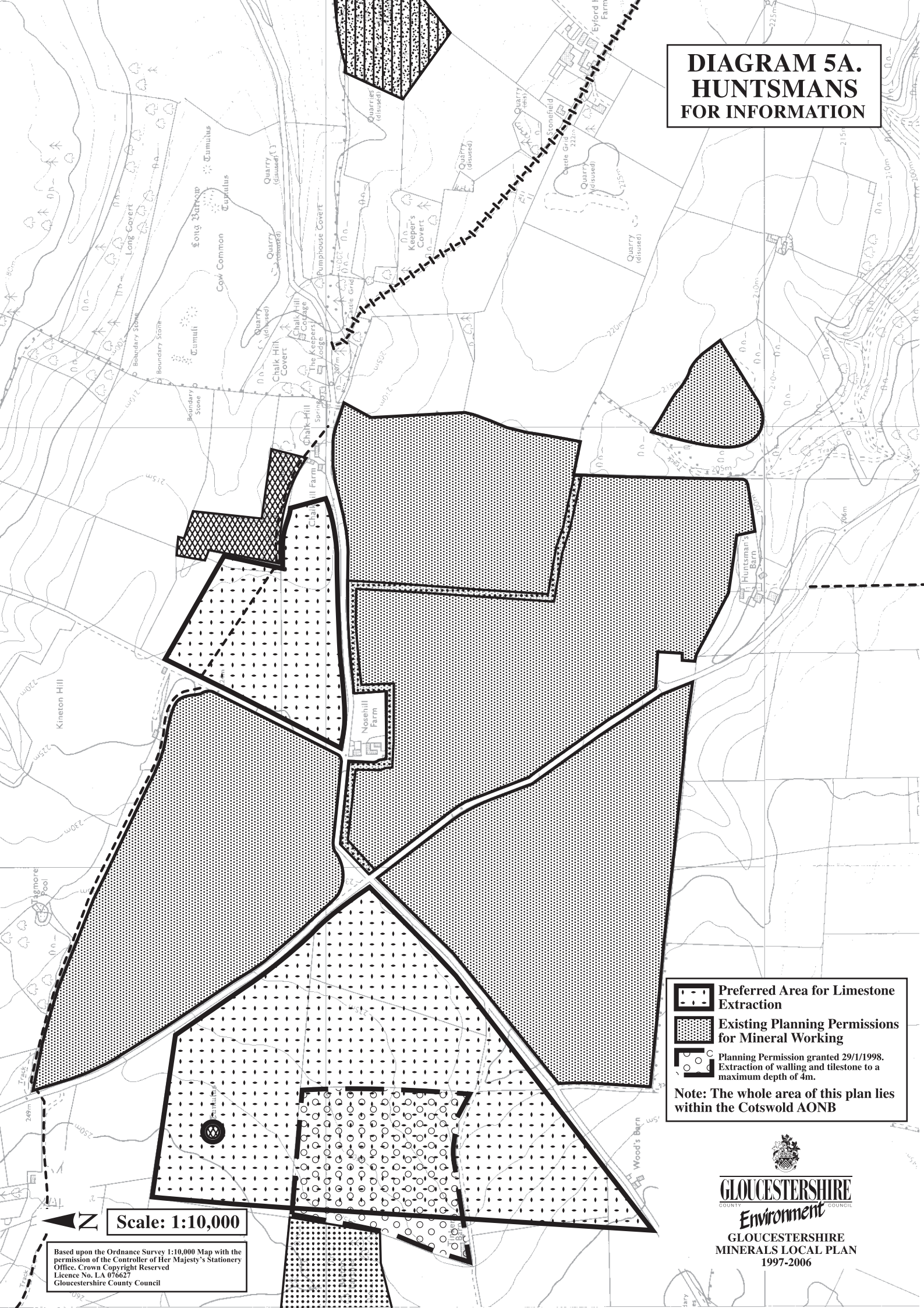
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

DIAGRAM 5A.
HUNTSMANS
FOR INFORMATION



No. 6 Sand & Gravel
Dryleaze Farm - Preferred Area

Location:

This area comprises land adjacent to an area already permitted for sand and gravel extraction much of which is actively being worked as Shorncote Pit. It extends northwards from the Ewen-South Cerney road to Dryleaze Farm.

Site Description:

The area is principally slightly undulating agricultural land adjoining wider areas already committed to sand and gravel extraction. The Ewen-South Cerney road provides access to the existing working at Shorncote Pit, and runs along the southern boundary of the area.

Grid Reference: SU 09 NW **Site Area:** 37 hectares.

Geological Resource:

The whole area, including Shorncote Pit, lies on deposits of the First Terrace which is found as a north-south trending tongue of deposits associated with an old tributary of the Thames. The deposits are underlain by Middle and Upper Jurassic strata [Cornbrash and Kellaway Beds]. Existing planning permissions suggest that the terrace deposits are between 1 and 6 metres in thickness and lie beneath about 0.5 metres of overburden. The existing working of Shorncote Pit yields both sand and gravel and limestone [Cornbrash].

Potential Mineral Yield:

c 1 ¼ Million tonnes.

Type of Proposal:

Extraction of sand and gravel, possibly as an extension to existing sand and gravel workings (see Shorncote Planning History).

Planning History:

South of the Preferred Area several planning permissions for sand and gravel extraction have been granted, principally in relation to Shorncote Pit which has been worked since 1988 and has had a number of extensions. It is being progressively reclaimed to create a substantial landscaped lake for low intensity sport and recreational use. Also, approval was given in 1991 for the extraction of a shallow limestone horizon [Cornbrash], upon which the sand and gravel of Shorncote Pit rests, to facilitate proposals for the site. A recent planning permission granted was for an extension eastwards of Shorncote Pit in 1996. However this area will be restored to ground level with rock and other mineral waste from elsewhere in Shorncote Pit.

ENVIRONMENTAL CONSTRAINTS [See Plan 6A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	None	Regionally Important Geological Sites: *Shorncote Quarry NB. It lies in a working area which has planning permission*	N/A
Nature Conservation	None	None	None	N/A
Archaeology	None	National: *SMR: 2354, 2355, 2356, 2370, 2372 & 3364.*	Local: *SMR: 15477 & 2361.*	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 6A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Historic Built Environment		Listed Buildings: *Nº 194 and 195.*	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Minor Aquifer.*	N/A	N/A
Agricultural Land	N/A	Agriculture Land Grade: *DryleazeFarm Grade 2 - 24% Grade 3a - 42%*	*Grade 3b - 14% Grade 4 - 20%.*	N/A
Highways	N/A	N/A	N/A	Local Highways Network: *Access via minor roads/ Western Spine Road to A419 - Preferred route for long distance lorry traffic*
Public Access	N/A	N/A	N/A	N/A
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Shorncote, Glebe Farm, Old Manor Farm, Manor Farm, Tudmoor Cottages, Dryleaze Farm and Dryleaze Farm Cottages.*
Tourism and Recreation	N/A	N/A	N/A	Tourist Facility: *Cotswold Water Park.*

Proposals:

- **Agriculture** - This area comprises agricultural land; about two-thirds is mapped as either Grade 2 or 3a, predominantly the latter, and is therefore classified as the best and most versatile land. **Therefore release of such land for sand and gravel extraction will be subject to its physical characteristics being restored as far as it is practicable to do so, to what they were when it was last used for agriculture.**

- **Archaeology -** Extensive cropmarks of probable bronze age and iron age in the area indicate that this is one of high archaeological potential**. Therefore applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how, either by in situ preservation, or by a programme of archaeological investigation for remains of lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated**.

- **Ecology - An area of broad-leaved scrub with flowing ditch in the southeast corner of the Dryleaze Farm area will require further investigation as part of any application submitted by operators**.

- **Highways** - Access to Shorncote Pit is currently from the Ewen-South Cerney road and access to Dryleaze Farm would be from the same road**. Developer contributions are likely to be required for local improvements to the road network.**

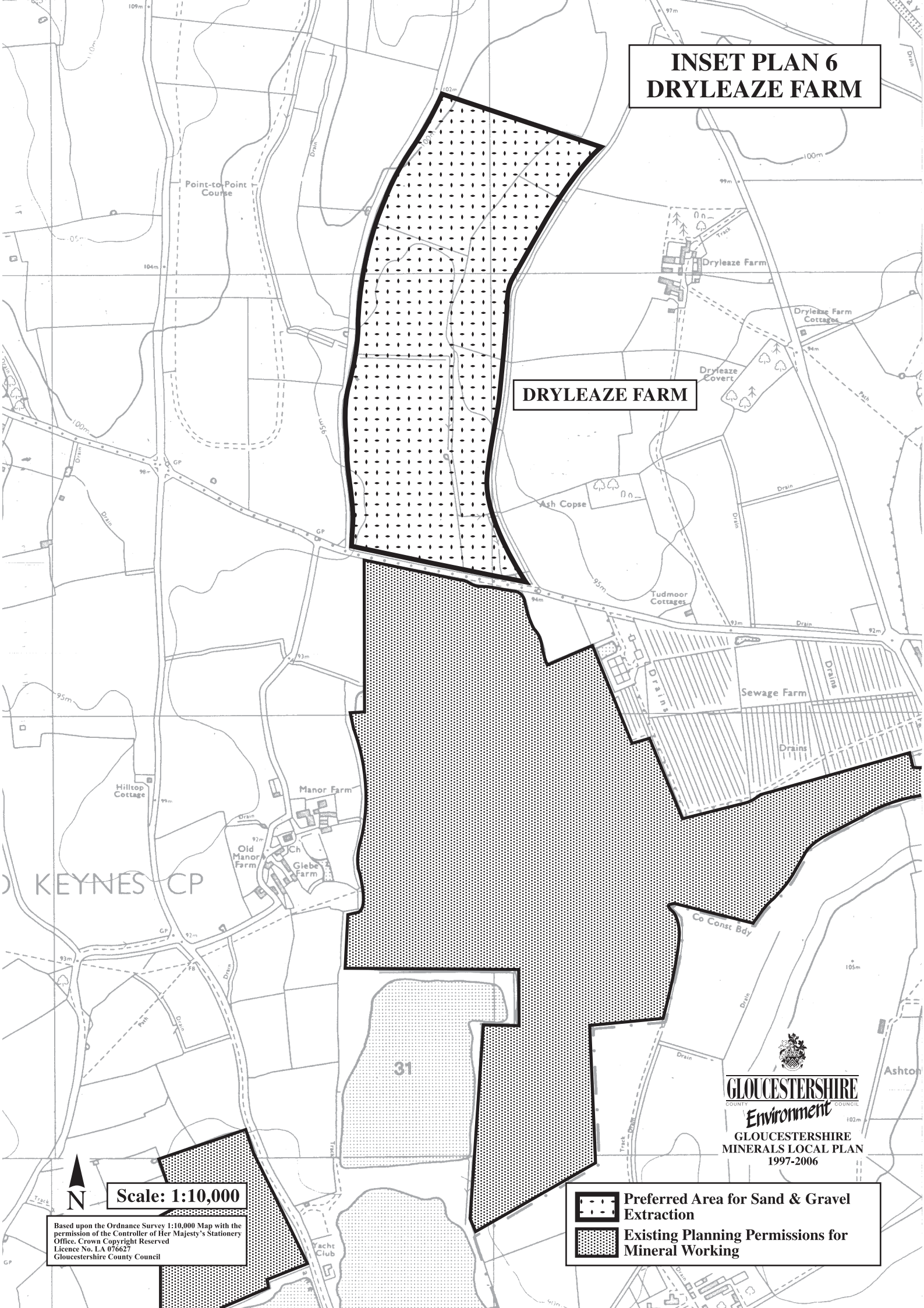
- **Hydrology** - Investigations by the Environment Agency suggest that there could be an area of floodplain associated with the watercourse passing through the site which will require further investigation and protection. **Ground and surface water monitoring schemes must be carried out at least two years prior to proposed extraction working (and afteruse) must ensure no flood risk to adjoining land or settlements.**

- **Landscape - The working of this area will extend the visual influence of the Cotswold Water Park (CWP) in a northerly direction where the land is more undulating and therefore concerns**

will need to be addressed by a landscape and visual impact assessment and appropriate mitigating measures.

- **Restoration - Where practicable the areas should be restored to agriculture with provision for water based nature conservation. Restoration schemes accompanying any proposal for mineral working will need to incorporate opportunities for meeting Local and National Biodiversity targets. The MPA will be guided by the Gloucestershire Biodiversity Action Plan and Cotswold Water Park Biodiversity Action Plan in the consideration of such proposals. Restoration schemes will also need to balance this potential with other restoration issues on the site taking account of the other proposals relating to this Preferred Area**.

- **Environmental Assessment -** Any proposal for mineral working over the whole Preferred Area which is in excess of 25 ha, would be a Schedule 1 development under Town and Country Planning (Environmental Impact Assessment) Regulations 1999. An Environmental Impact Assessment (EIA) may be required for any lesser proposal for mineral working within the Preferred Area as this would be a Schedule 2 development. Although not within a 'sensitive area' as defined in Regulation 2(1) there is likely to be significant effects on the environment due to the scale and duration of operations and in particular if extraction involves more than 30,000 tonnes per year. **Any proposal for mineral working within the Preferred Area, over 25 ha will require an EIA. Any proposal for mineral working within the "Preferred Area" less than 25 ha should also be accompanied by an EIA. Subject to the provisions of a 'screening opinion' under the Regulations, an EIA should accompany any major application for mineral working less than 25 ha within the Preferred Area, as development under Schedule 2 likely to have significant effects on the environment.**


INSET PLAN 6
DRYLEAZE FARM
DRYLEAZE FARM
Point-to-Point Course
Dryleaze Farm
Dryleaze Farm Cottages
Dryleaze Covert
Ash Copse
Tudmoor Cottages
Sewage Farm
Drains
Hilltop Cottage
Manor Farm
Old Manor Farm
Glebe Farm
Ch
KEYNES CP
Co Const Bdy
31
Yacht Club
Ashton
GLOUCESTERSHIRE
COUNTY COUNCIL
Environment
GLOUCESTERSHIRE
MINERALS LOCAL PLAN
1997-2006
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Preferred Area for Sand & Gravel Extraction
Existing Planning Permissions for Mineral Working

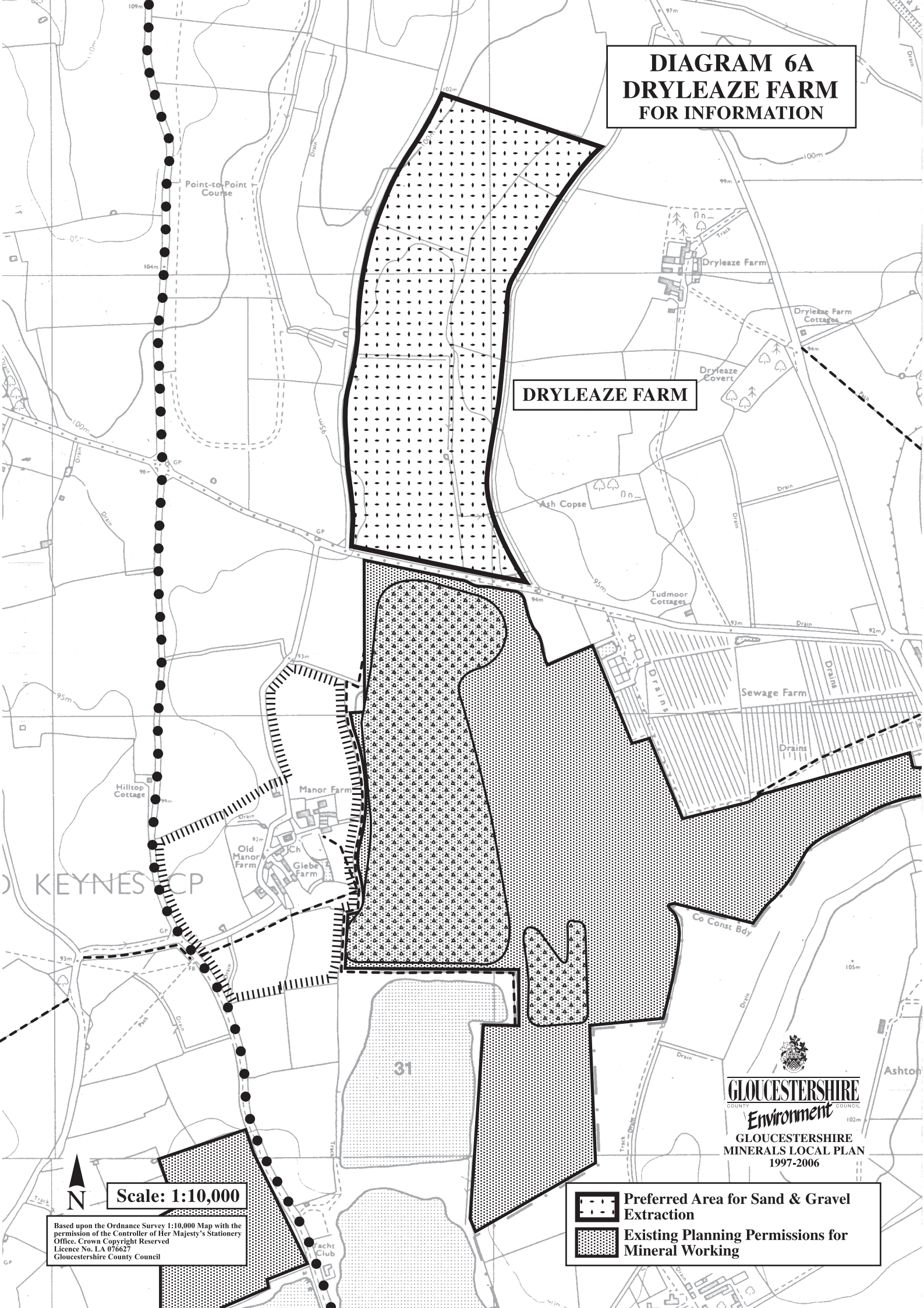
DIAGRAM 6A
DRYLEAZE FARM
FOR INFORMATION
DRYLEAZE FARM
Point-to-Point Course
Dryleaze Farm
Dryleaze Farm Cottages
Dryleaze Covert
Ash Copse
Tudmoor Cottages
Sewage Farm
Drains
Hilltop Cottage
Manor Farm
Old Manor Farm
Ch
Glebe Farm
KEYNES CP
Co Const Bdy
31
Ashton
Yacht Club
GLOUCESTERSHIRE
COUNTY COUNCIL
Environment
GLOUCESTERSHIRE
MINERALS LOCAL PLAN
1997-2006
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Preferred Area for Sand & Gravel Extraction
Existing Planning Permissions for Mineral Working

No. 7 **Sand & Gravel**
Cerney Wick - Preferred Area

Location:

This area lies to the south and west of Cerney Wick, bounded by the county boundary, and to the north west by the "Western Spine Road".

Site Description:

The area comprises of a parcel of land peripheral to an existing planning permission for sand and gravel extraction. Together with other permitted areas it forms part of Area of Search (B) as defined in the UTPR (1993). The current land use is mainly agricultural with scattered small holdings. To the northwest and south are extensive lakes in a variety of recreational uses.

Grid Reference: SU 09 NE **Site Area:** 16.5 hectares.

Geological Resource:

The area comprises deposits of the First Terrace that border the River Thames which overlie Oxford clay. Existing planning permissions indicate that these terrace deposits have an average thickness of around 2 metres in the north and 3 metres in the south, but with considerable lateral variations. The Preferred Area appears to contain sand and gravel deposits of potential economic utility.

Potential Mineral Yield:

0.5 million tonnes (depending upon the outcome of hydrological investigations).

Type of Proposal:

Sand and gravel extraction, possibly as an extension to existing workings (see Planning History).

Planning History:

Two areas have been granted for planning permissions for sand and gravel extraction within the overall Area of Search since it was designated. However, only 10 hectares of one 33 hectare permission have been worked, and a further 53 hectare site has yet to be worked. The reclamation of these sites will be to a landscaped lake and to a water based nature conservation area.

ENVIRONMENTAL CONSTRAINTS [See Plan 7A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	None	None	N/A
Nature Conservation	North Meadow National Nature Reserve (candidate SAC)	Site of Special Scientific Interest: *Elmlea Meadows*	Gloucestershire Wildlife Trust Key Sites: *Cerney Wick Copse*	N/A
Archaeology	None	National: *SMR: 3042 & 3043*	None	N/A
Historic Built Environment	N/A	N/A	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Minor Aquifer*	N/A	The entire area is in the floodplain of the River Thames and Churn.
Agricultural Land	N/A	Agriculture Land Grade: *Grade 2 - 9%* *Grade 3a - 19%*	Grade 3b - 72%	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 7A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Highways	N/A	N/A	N/A	Local Highways Network: *Access via Western Spine Road to A419 Preferred route for long distance lorry traffic*
Public Access	N/A	N/A	N/A	Public Rights of Way: *Nº BSC 25, 43, 46, 47and Thames Path – A*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Cerney Wick, Wickwater Farm and Hailstone House.*
Tourism and Recreation	N/A	N/A	N/A	Tourist Facility: *Cotswold Water Park.*

Proposals:

- **Agriculture -** This area comprises agricultural land, three quarters of which is mapped as being Grade 3b; the remainder is the best and most versatile land [Grade 2 and 3a]. Because of the distribution of the latter there would be no objection from an agricultural viewpoint to the extraction of sand and gravel.

- **Archaeology -** The Upper Thames Valley terrace deposits contain evidence of extensive Prehistoric and Roman settlement; in this area linear earthworks are recorded and burials. It is considered to be of high archaeological potential**. Therefore applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how, either by in situ preservation, or by a programme of archaeological investigation for remains of lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated**.

- **Ecology/Hydrology- The impact of mineral extraction on surface and ground water hydrology, particularly the water table regime will need to be fully evaluated. Potential mineral developers will need to liase with the Environment Agency to ensure protection of the local aquatic ecosystem, in particular the stability of the hydrological regime. Pre-application monitoring (of at least two years duration) will be a pre requisite of any studies of the relationship between ecology and hydrology. The disused railway line which abuts the area forms a valuable tree-lined wildlife corridor worthy of preservation. In addition as this area is affected by the flood plain of the rivers Churn and Thames there must be no obstruction of flood flow routes or storage capacity. Further water courses must be retained in an undisturbed corridor agreed with the EA.**

- **Highways** - Access to existing planning permissions is from the Western Spine Road. **Future access to the Preferred Area will be required to make appropriate connection to the Western Spine Road without using adjoining narrow country lanes.** In this context Weight Restriction Orders (WRO) are in place on local lanes to protect the amenities of local residents. **Developer contributions maybe required for local improvements to the road network.**

- **Landscape - The possibility of preserving the character of this small scale area following mineral extraction, rather than being incorporated into the larger water landscape of the surrounding area, should be considered**.

- **Public Rights of Way -** The bridleway along the disused railway, must be safeguarded, and measures taken to preserve its identity.

- **Settlements - The individual properties on the lane running south west from Cerney Wick towards Wickwater Farm must be safeguarded in accordance with policies of this Plan on 'buffer zones'. Cerney Wick must also be safeguarded; the Settlement Protection Area defined**

about this settlement on the Proposals Map of the UTPR [1993] represents an appropriate 'buffer zone' in both landscape and amenity terms.

- **Restoration - Restoration schemes accompanying any proposal for mineral working will need to incorporate opportunities for meeting Local and National Biodiversity targets. The MPA will be guided by the Gloucestershire Biodiversity Action Plan and Cotswold Water Park Biodiversity Action Plan in the consideration of such proposals. Restoration schemes will also need to balance this potential with other restoration issues on the site taking account of the other proposals relating to this Preferred Area**.

- **Environmental Assessment –** Although in terms of scale, significance and sensitivity of location an EIA may not be required as part of any planning application, there will still be a requirement for a 'screening opinion' as to whether this would be the case. Operators are advised to establish whether an EIA is required at an early stage with the MPA preferably prior to the submission of a planning application.

INSET PLAN 7. CERNEY WICK

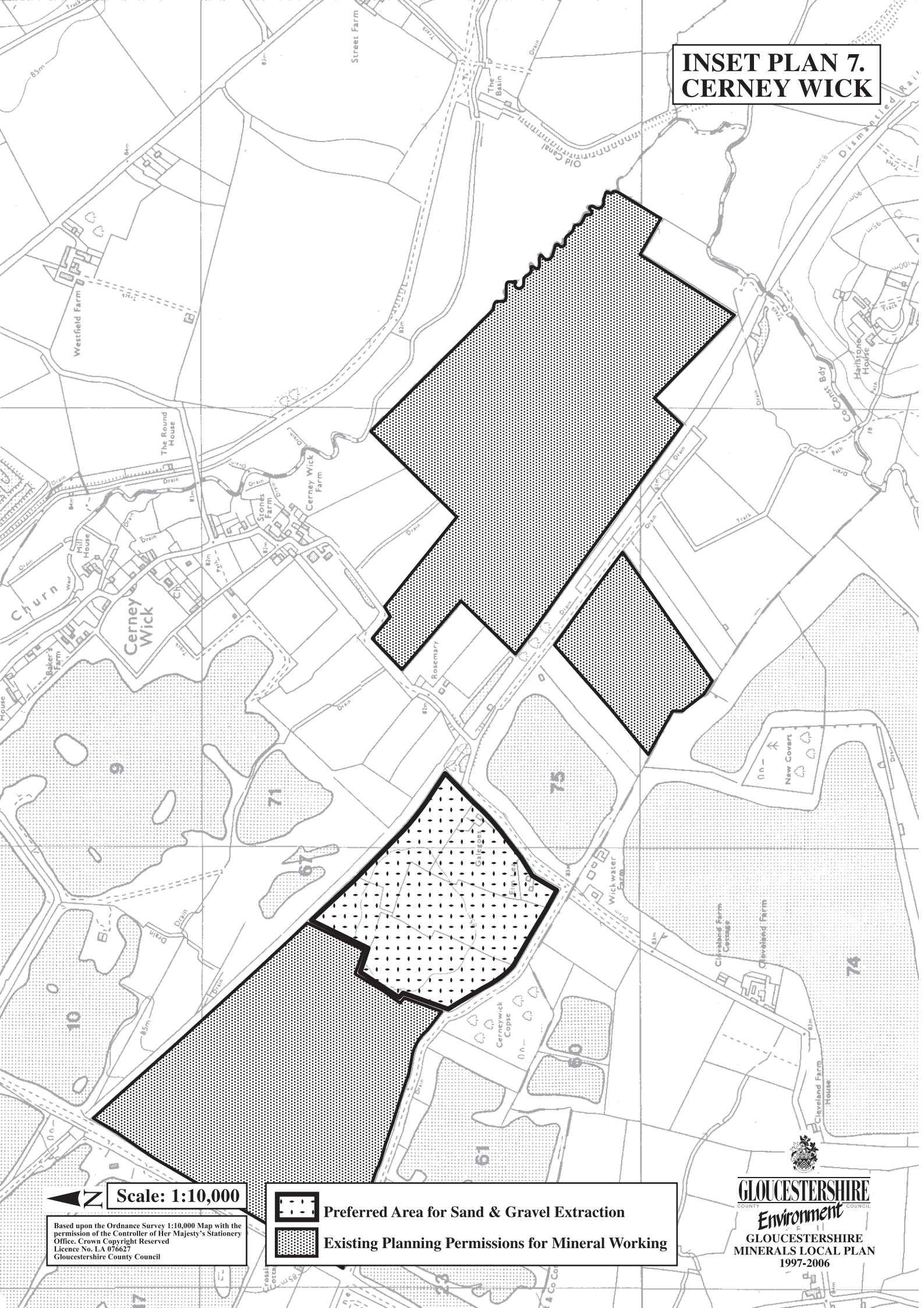
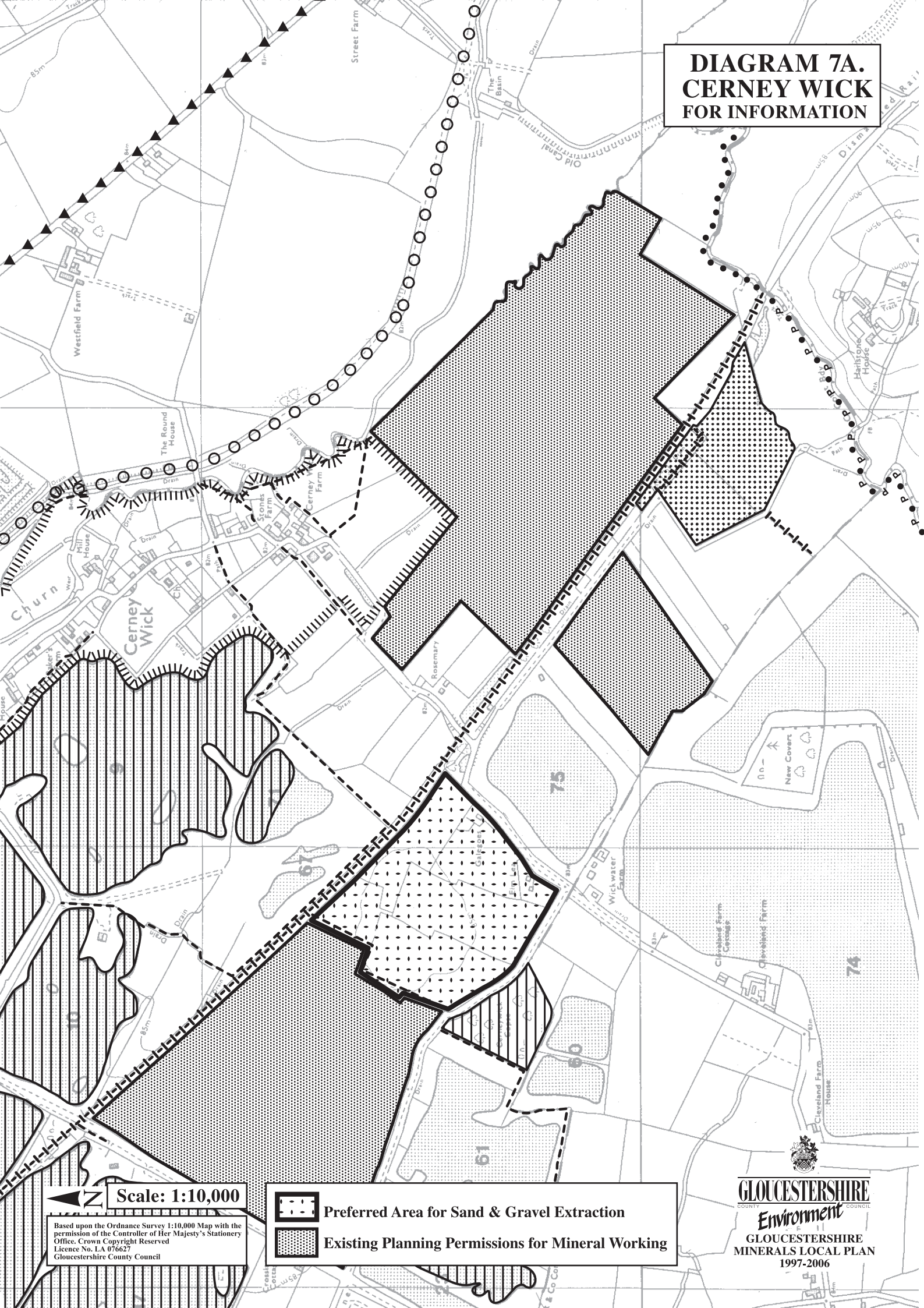


DIAGRAM 7A.
CERNEY WICK
FOR INFORMATION



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Preferred Area for Sand & Gravel Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE
MINERALS LOCAL PLAN
1997-2006

No. 8 **Sand & Gravel**
Horcott/Lady Lamb Farm – Preferred Area

Location:

This area comprises two tracts of land. One is a triangular shaped parcel of land associated with Lady Lamb Farm lying to the west of Fairford and south of the A417, between the county boundary with Wiltshire and the existing sand and gravel workings of Horcott Pit. The second area is a strip of land immediately to the west of Horcott Pit.

Site Description:

The land is currently in agricultural use, with several small areas of woodland. Immediately to the east of this area along its whole length is the extensive excavations of an active sand and gravel working. The latter is known as Horcott Pit and extends over 102 hectares of land between Fairford and the northern perimeter of Fairford Airfield.

Grid Reference: SU 19 NW **Site Area:** c 100 hectares

Geological Resource:

The area lies on the northern flank of Thames terraces. The deposits here belong to the older second, third and fourth terraces and tend to be patchily distributed over an area between Fairford and Meysey Hampton. However the terrace deposits of particular interest are to be found in a relatively narrow band down the western side of Horcott Pit and adjoining, and around, Lady Lamb Farm, overlying Kellaway Beds or Oxford Clay. The sand and gravel here has an estimated mean thickness of about 2.5 - 3 metres under about 0.5 metres of overburden.

Potential Mineral Yield:

Up to 3.0 million tonnes.

Type of Proposal:

Extraction of sand and gravel; possibly as an extension to existing sand and gravel workings (see Planning History).

Planning History:

There is no recorded sand and gravel extraction from the whole Preferred Area, although the adjoining Horcott Pit is working a series of planning permissions for sand and gravel extraction granted between 1954 and 1963. An area of land previously part of the Horcott Pit planning permissions, but where the permission has lapsed, is included in the Preferred Area.

ENVIRONMENTAL CONSTRAINTS [See Plan 8A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	None	Regionally Important Geological Sites: *Horcott Pit is near, but not adjacent, to the Preferred Area. NB. It lies within a working area which has planning permission.*	N/A
Nature Conservation	None	None	Gloucestershire Wildlife Trust Key Sites: *Lake 1- Cotswold Water Park.*	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 8A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11, 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Archaeology	None	Scheduled Ancient Monument: *SMR 3203.* National Areas of Archaeological Importance: *SMR 2416, 2417, 2505, 3155, 3200, 3201, 3202, 3223, & 3224.*	None	N/A
Historic Built Environment	N/A	Listed Buildings: *Nº 198 and 199.*	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Minor Aquifer.*	N/A	N/A
Agricultural Land	N/A	Agriculture Land Grade: *Grade 2 - 13%* *Grade 3a - 65%*	Grade 3b - 22%	N/A
Highways	N/A	N/A	N/A	Local Highways Network: *A419 - Preferred route for long distance lorry traffic.*
Public Access	N/A	N/A	N/A	Public Rights of Way: *BFA 6 and 10.*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Horcott, Meysey Hampton, Fairford a number of scattered properties and farms within this area.*
Tourism and Recreation	N/A	N/A	N/A	Tourist Facility: *Cotswold Water Park.*
Other	N/A	N/A	N/A	Military Airbase: *Fairford*

Proposals:

- **Agriculture -** This area comprises agricultural land, over two-thirds of which is mapped as being the best and most versatile land (Grade 2 and 3a but mainly the latter. The remainder is generally Grade 3b**). Therefore release of such land for sand and gravel extraction will be subject to its physical characteristics being restored as far as it is practicable to do so, to what they were when it was used for agriculture.**

- **Archaeology -** The Upper Thames Valley terrace deposits contain evidence of extensive Prehistoric and Roman settlement; this area in particular is of high archaeological potential because of the presence of a wide range of Prehistoric settlements, field systems and burials. Ring ditches and settlements have been identified as potentially of national importance immediately north of Horcott Pit, these will be considered for scheduling as ancient monuments by English Heritage. The range of periods represented in this area suggests that further land in this area may also merit scheduling**. Outside areas of national importance [which are to be safeguarded from mineral working] applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how, either by in situ preservation, or by a programme of archaeological investigation for remains of lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated. A scheduled ancient monument immediately to the north of Horcott Pit is excluded from the Preferred Area; however a further area within the latter will need to be safeguarded as a setting to the monument**.

- **Cross-boundary issues -** Sand and gravel deposits of Lady Lamb Farm extend westwards into Wiltshire. Mineral operators are advised to discuss with the Wiltshire Mineral Planning Authority as to whether these contiguous resources can be worked within that administrative boundary.

- **Ecology/Hydrology - Small areas of woodland (including Lady Lamb's Copse) in this Preferred Area should be safeguarded, and all trees removed should be replaced on a one for one basis as part of subsequent restoration. In addition a small pond adjoining the north edge of Horcott Pit will require further investigation**. An ordinary watercourse runs west to east along the southern boundary of the two areas, but through the northern tip of the long thin area. This watercourse follows a gently meandering route within a strongly wooded corridor along the entire length. **This linear habitat needs to be preserved within an appropriate buffer strip.**

- **Highways -** Although part of this area adjoins the A417, the use of that road by mineral traffic is unlikely to be acceptable due to their impact on Fairford and on villages to the west**. In practical terms, therefore, the only acceptable means of access would be via Totterdown Lane to access the "Eastern Spine Road". Developer contributions will be required for road improvements to the Eastern Spine Road, and the local road network**.

- **Landscape -** Mineral working at Lady Lamb Farm could be very visible with open views from the A417 and Fairford, because of its modest topographic elevation. **As a consequence detailed landscape and visual impact assessment will be essential in this area.**

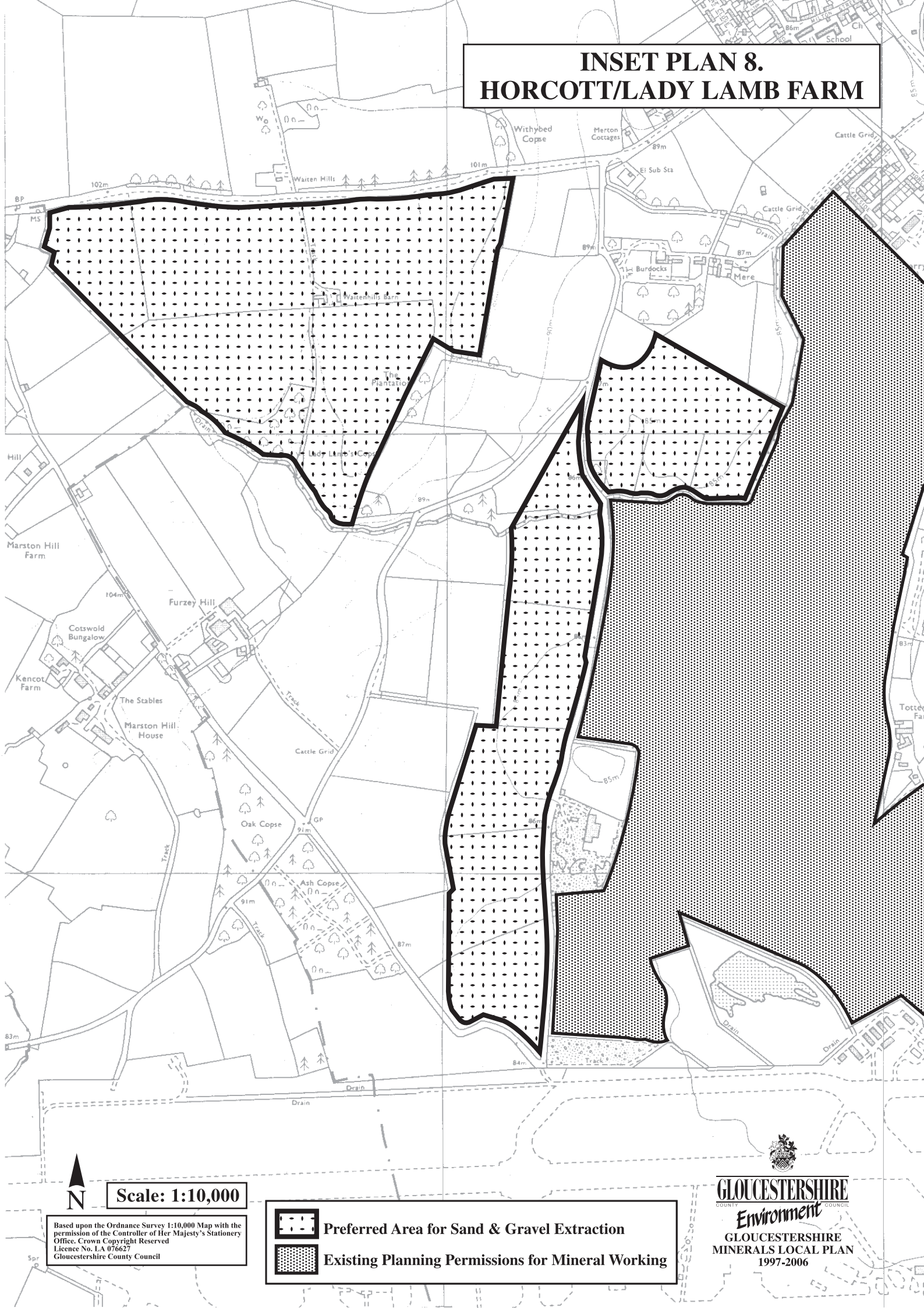
- **Settlements** - Individual properties lying to the north of the area and west of Horcott must be safeguarded in accordance with policies of this Plan on 'buffer zones'.

- **Restoration - Restoration schemes accompanying any proposal for mineral working will need to incorporate opportunities for meeting Local and National Biodiversity targets. The MPA will be guided by the Gloucestershire Biodiversity Action Plan and Cotswold Water Park Biodiversity Action Plan in the consideration of such proposals. Restoration schemes will also need to balance this potential with other restoration issues on the site taking account of the other proposals relating to this Preferred Area.**

- **Environmental Assessment –** Any proposal for mineral working over the whole Preferred Area which is in excess of 25 ha, would be a Schedule 1 development under Town and Country Planning (Environmental Impact Assessment) Regulations 1999. An Environmental Impact Assessment (EIA) may be required for any lesser proposal for mineral working within the Preferred Area as this would be a Schedule 2 development. Although not within a 'sensitive area' as defined in Regulation 2(1) there is likely to be significant effects on the environment due to the scale and duration of operations and in particular if extraction involves more than 30,000 tonnes per year. Any proposal for mineral working within the Preferred Area, over 25 ha will require an EIA. **Any proposal for mineral working within the "Preferred Area" less than 25 ha should also be accompanied by an EIA. Subject to the provisions of a 'screening opinion' under the Regulations, an EIA should accompany any major application for mineral working less than 25 ha within the Preferred Area, as development under Schedule 2 likely to have significant effects on the environment**.

- **Operational - Any proposals for mineral extraction from the Lady Lamb Farm land, comprising the separate parcel of land in the north west of the Preferred Area, would require that all mineral removed should be processed through plant located in the mineral working areas to the south east of the existing lane (classification 3/173).**

INSET PLAN 8.
HORCOTT/LADY LAMB FARM



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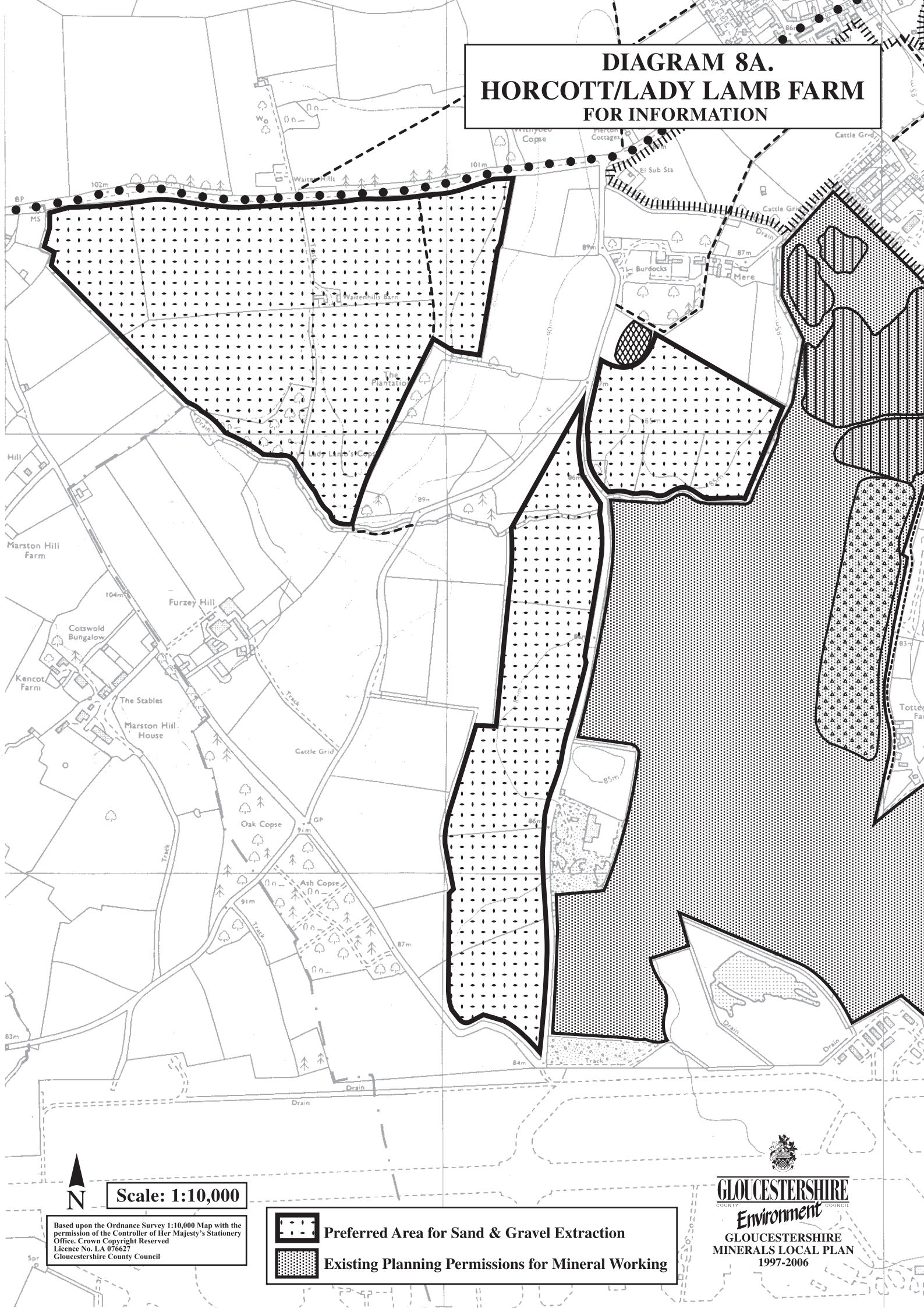
Preferred Area for Sand & Gravel Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

DIAGRAM 8A.
HORCOTT/LADY LAMB FARM
FOR INFORMATION



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Preferred Area for Sand & Gravel Extraction

Existing Planning Permissions for Mineral Working

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

No. 9 **Sand & Gravel**
Kempsford/Whelford – Preferred Area

Location:

This area lies directly to the east of Fairford Airfield and the Whelford - Kempsford road, between, and adjoining, the River Coln and the settlements of Whelford and Kempsford. It terminates eastwards against a clay ridge that runs between Brazen Church Hill and Dudgrove Farm.

Site Description:

The area comprises land that was defined in Areas of Search (C) and (D) in the UTPR (1993) but is without planning permission (see Planning History). The Preferred Area is principally flat lying agricultural land; the northern part of the area is bisected by the River Coln. The northern end of the area adjoins existing and past major sand and gravel workings that stretch between Fairford and Lechlade alongside the A417. Immediately to the west lies Fairford Airfield.

Grid Reference: SU 19 NE **Site Area:** 185 hectares

Geological Resource:

The area lies on deposits of the First Terrace bordering the River Thames. Beneath these deposits lies Oxford clay which also forms the low ridge bordering the eastern edge of the area. Existing planning permissions indicate the terrace deposits reach a thickness of 6 metres but that depths are generally no greater than 3 metres and thinning eastwards. Overburden appears to be no more than 0.5 metres.

Potential Mineral Yield:

Up to 6 million tonnes.

Type of Proposal:

Extraction of sand and gravel; possibly as an extension to existing sand and gravel workings (see planning History).

Planning History:

Several planning permissions have been granted for sand and gravel extraction since the Area of Search designation in the UTPR (1993). 19 hectares at Stubbs Farm is currently being worked for both sand and gravel and clay. An additional permission has been granted to the west of these workings within the Preferred Area, but is subject to the completion of a legal agreement. Permission has also been given for sand and gravel extraction at Manor Farm to be followed by progressive restoration to agriculture. However, it has not yet been worked. Similarly, there is a further permission at Dudgrove Lane adjoining the Claydon Pike/Warren Farm Pit lying to the north of the area which is yet to be worked.

ENVIRONMENTAL CONSTRAINTS [See Plan 9A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Landscape	None	None	None	N/A
Nature Conservation	None	Site of Special Scientific Interest: *Lake 11 - Cotswold Water Park.*	Gloucestershire Wildlife Trust Key Sites: *Lake 14 – Cotswold Water Park. Jenner's Farm Field*	Tree Preservation Order: *N^{o} 3.*
Archaeology	None	Scheduled Ancient Monument: *SMR 349* National Areas of Archaeological Importance: *SMR 2424, 3004, 3156 and 3273.*	Local Areas of Archaeological Importance: *SMR 3033, 3052, 3157, 3163, 3064 & 9297*	N/A

ENVIRONMENTAL CONSTRAINTS [See Plan 9A]				
Category of Constraint	**Principal Policy E1**	**Primary Policy E2, – 3,4,5,6,7,11 12, & 13**	**Secondary Policy E8, 9, 10.**	**Other Policy E14 - 21, DC1 - 6**
Historic Built Environment	N/A	Conservation Areas: *Kempsford*	N/A	N/A
Water Environment	N/A	Groundwater Vulnerability: *Minor Aquifer.*	N/A	N/A
Agricultural Land	N/A	Agriculture Land Grade: *Grade 2 – 60% Grade 3a – 10% Grade 3b – 30%*	None	N/A
Highways	N/A	N/A	N/A	Local Highways Network: *A419 - Preferred route for long distance lorry traffic.*
Public Access	N/A	N/A	N/A	Public Rights of Way: *BKD 16, 28, 27.*
Local Amenity	N/A	N/A	N/A	Settlements/Properties: *Fairford, Whelford, Kempsford, Jenner's Farm, Whelford Mill, Moor Ground Cottages, Townsend Farm, adjacent to Fairford Airfield.*
Tourism and Recreation	N/A	N/A	N/A	Tourist Facility: *Cotswold Water Park.*
Other	N/A	N/A	N/A	Thames - Severn Canal Protection Line

Proposals:

- **Agriculture -** This area comprises agricultural land, which is mapped predominantly as being principally the best and most versatile land. However, along the River Coln the land either side drops to Grade 3a. **Therefore release of such land for sand and gravel extraction will be subject to its physical characteristics being restored as far as it is practicable to do so, to what they were when it was last used for agriculture.**

- **Archaeology -** Cropmarks in the area indicate an extensive landscape of Prehistoric and Roman settlement with two areas of particular complexity. The whole is of high archaeological potential with the two areas potentially of national importance in the vicinity of Kempsford which will be considered for scheduling as ancient monuments by English Heritage. The range of periods represented in this area suggests that further land in this area may also merit scheduling. **Outside areas of national importance [which are to be safeguarded from mineral working] applications for mineral extraction must be accompanied by an archaeological evaluation to identify fully any archaeological constraints present, and indicate how, either by in situ preservation, or by a programme of archaeological investigation for remains of lesser significance, the impact of mineral extraction on the archaeological remains will be mitigated.**

- **Ecology** – Lake 11 which is adjacent the Preferred Area is an SSSI. **Species rich hedges should be retained and their local Biodiversity preserved. In addition the relationship between ecology and drainage of the area should not be adversely affected (in particular with Jenner's Farm Field Key wildlife site) by sand and gravel extraction. Further ecological studies may be required; particularly in relation to wooded areas**.

- **Highways - Access to this area would be required to be made directly from the Cotswold Water Park "Eastern Spine Road," and developer contributions will be required for improvements to the Eastern Spine Road**.

- **Hydrology -** The River Coln bisects the area and has a significant flood plain. **There must be no obstruction of flood flow routes or storage capacity. Dudgrove Brook also flows across the area and as a main river must, along with the River Coln, be retained in an undisturbed corridor agreed with the EA. In addition a ground and surface water-monitoring scheme must be implemented at least two years prior to extraction.**

- **Landscape - There is ample scope for mineral working to provide for significant local amenity/landscape enhancement of the area around the northern fringes of Kempford. In addition, in the area flanking the southern banks of the Coln, the possibility of preserving the character of a small scale field pattern should be considered**.

- **Settlements - Whelford and Kempsford must be safeguarded; the Settlement Protection Areas defined about these settlements on the Proposals Map of the UTPR [1993] represents an appropriate 'buffer zone' in both landscape and amenity terms, and is consistent with the MLP policies on the matter.**

- **Restoration - Restoration schemes accompanying any proposal for mineral working will need to incorporate opportunities for meeting Local and National Biodiversity targets. The MPA will be guided by the Gloucestershire Biodiversity Action Plan and Cotswold Water Park Biodiversity Action Plan in the consideration of such proposals. Restoration schemes will also need to balance this potential with other restoration issues on the site taking account of the other proposals relating to this Preferred Area.**

- **Environmental Assessment –** Any proposal for mineral working over the whole Preferred Area which is in excess of 25 ha, would be a Schedule 1 development under Town and Country Planning (Environmental Impact Assessment) Regulations 1999. An Environmental Impact Assessment (EIA) may be required for any lesser proposal for mineral working within the Preferred Area as this would be a Schedule 2 development. Although not within a 'sensitive area' as defined in Regulation 2(1) there is likely to be significant effects on the environment due to the scale and duration of operations and in particular if extraction involves more than 30,000 tonnes per year. **Any proposal for mineral working within the Preferred Area, over 25 ha will require an EIA. Any proposal for mineral working within the "Preferred Area" less than 25 ha should also be accompanied by an EIA. Subject to the provisions of a 'screening opinion' under the Regulations, an EIA should accompany any major application for mineral working less than 25 ha within the Preferred Area, as development under Schedule 2 likely to have significant effects on the environment.**

INSET PLAN 9.
KEMPSFORD / WHELFORD

KEMPSFORD CP

Whelford

Canal (disused)

Scale: 1:10,000

N

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE
MINERALS LOCAL PLAN
1997-2006

Preferred Area for Sand & Gravel Extraction

Existing Planning Permissions for Mineral Working

DIAGRAM 9A.
KEMPSFORD / WHELFORD
FOR INFORMATION

KEMPSFORD CP

Whelford

Scale: 1:10,000

N

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE
MINERALS LOCAL PLAN
1997-2006

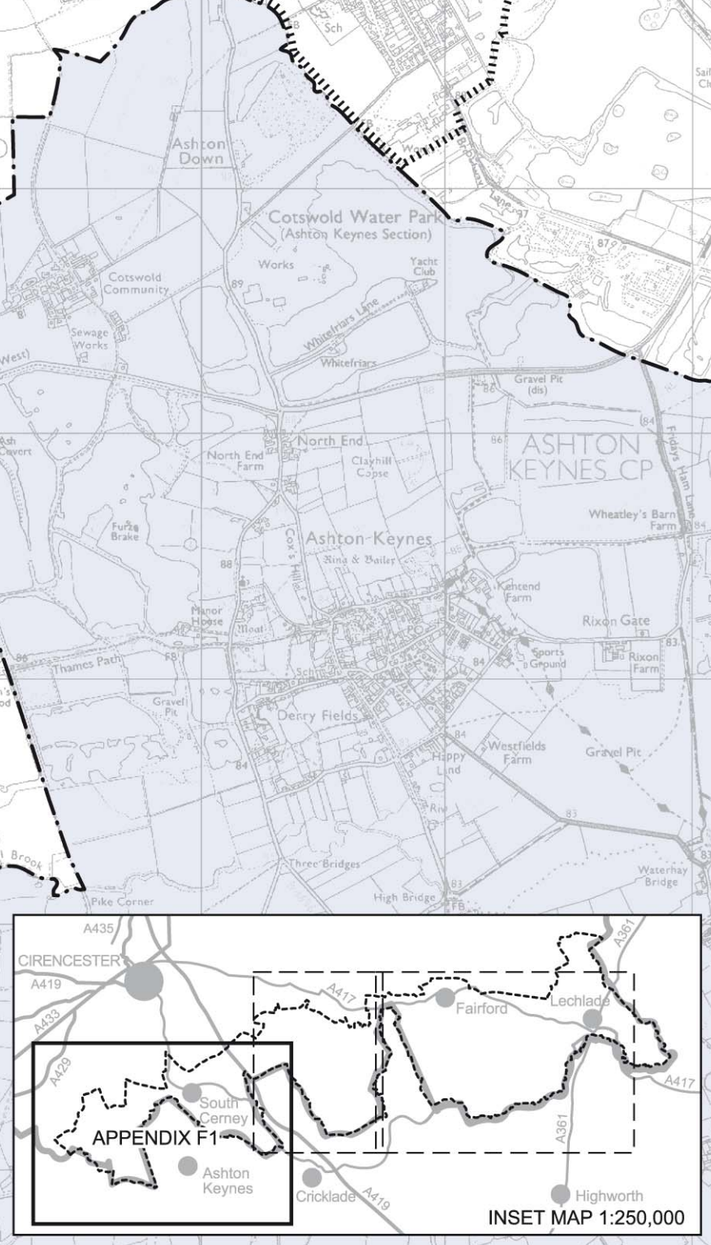
Preferred Area for Sand & Gravel Extraction

Existing Planning Permissions for Mineral Working

Appendix B

Settlement Protection Boundaries in the Water Park (originally displayed as Appendix F in the Minerals Local Plan)

APPENDIX F1
COTSWOLD WATER PARK
SETTLEMENT PROTECTION BOUNDARIES



N

Scale: 1:25,000

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Gloucestershire County Council

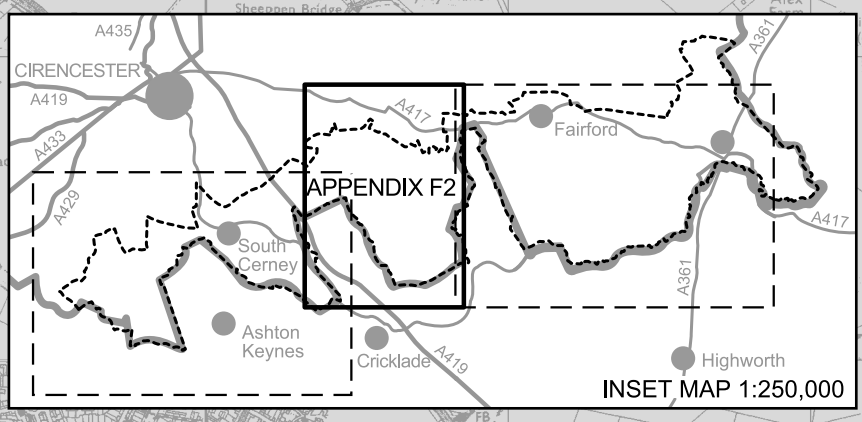
Settlement Protection Boundary in the Upper Thames Valley Sand and Gravel Resource Area (as designated in the Upper Thames Policy Review, 1993)

Gloucestershire County Boundary

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

APPENDIX F2
COTSWOLD WATER PARK
SETTLEMENT PROTECTION BOUNDARIES



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Scale: 1:25,000

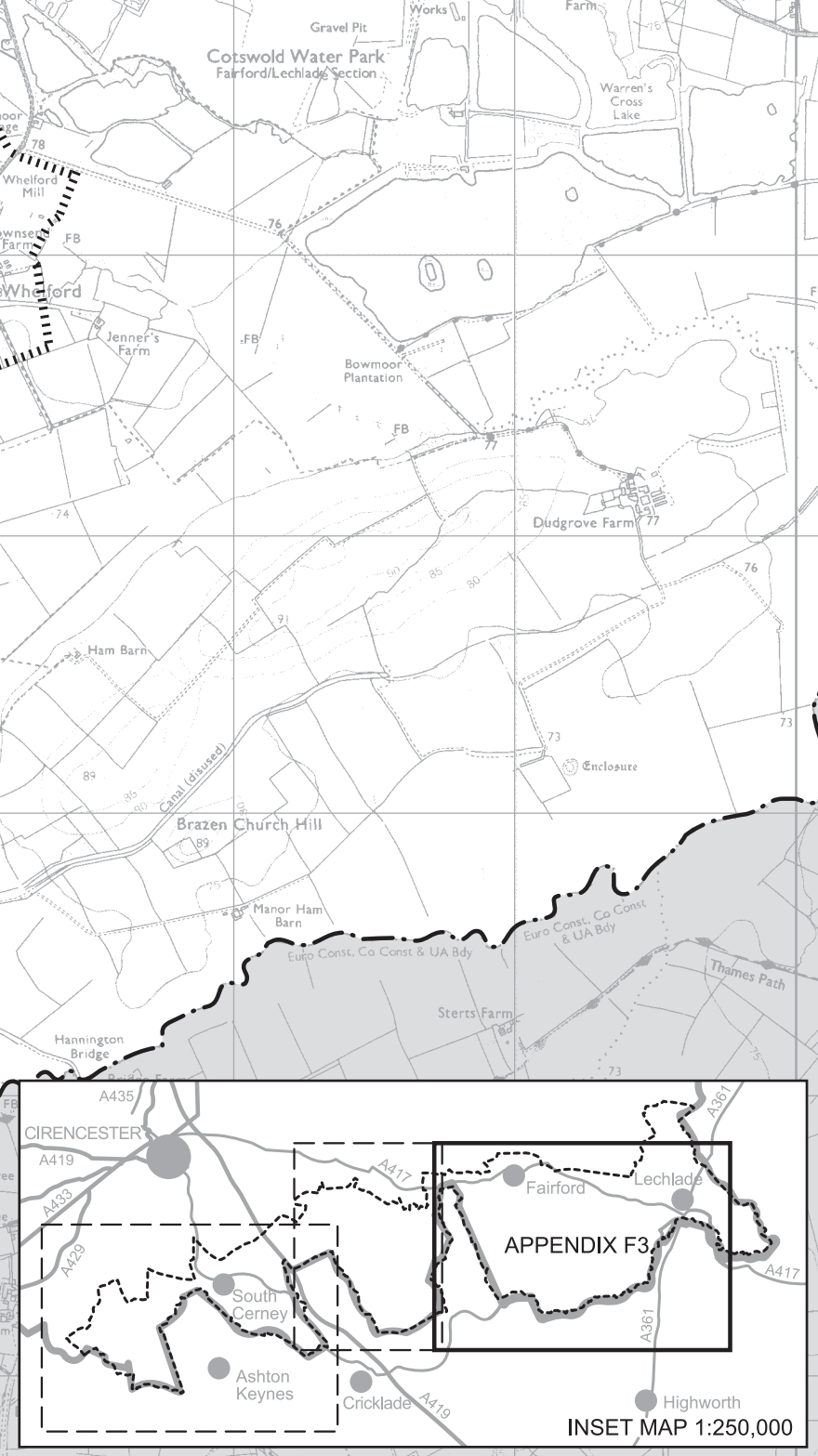
Settlement Protection Boundary in the Upper Thames Valley Sand and Gravel Resource Area (as designated in the Upper Thames Policy Review, 1993)

Gloucestershire County Boundary

GLOUCESTERSHIRE
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

APPENDIX F3
COTSWOLD WATER PARK
SETTLEMENT PROTECTION BOUNDARIES



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Scale: 1:25,000

Settlement Protection Boundary in the Upper Thames Valley Sand and Gravel Resource Area (as designated in the Upper Thames Policy Review, 1993)

Gloucestershire County Boundary

GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

Appendix C

The Minerals Consultation Area map that originally formed Appendix I of the Minerals Local Plan

APPENDIX I
MINERAL CONSULTATION AREAS

N

Scale: 1:63,360

Mineral Consultation Area

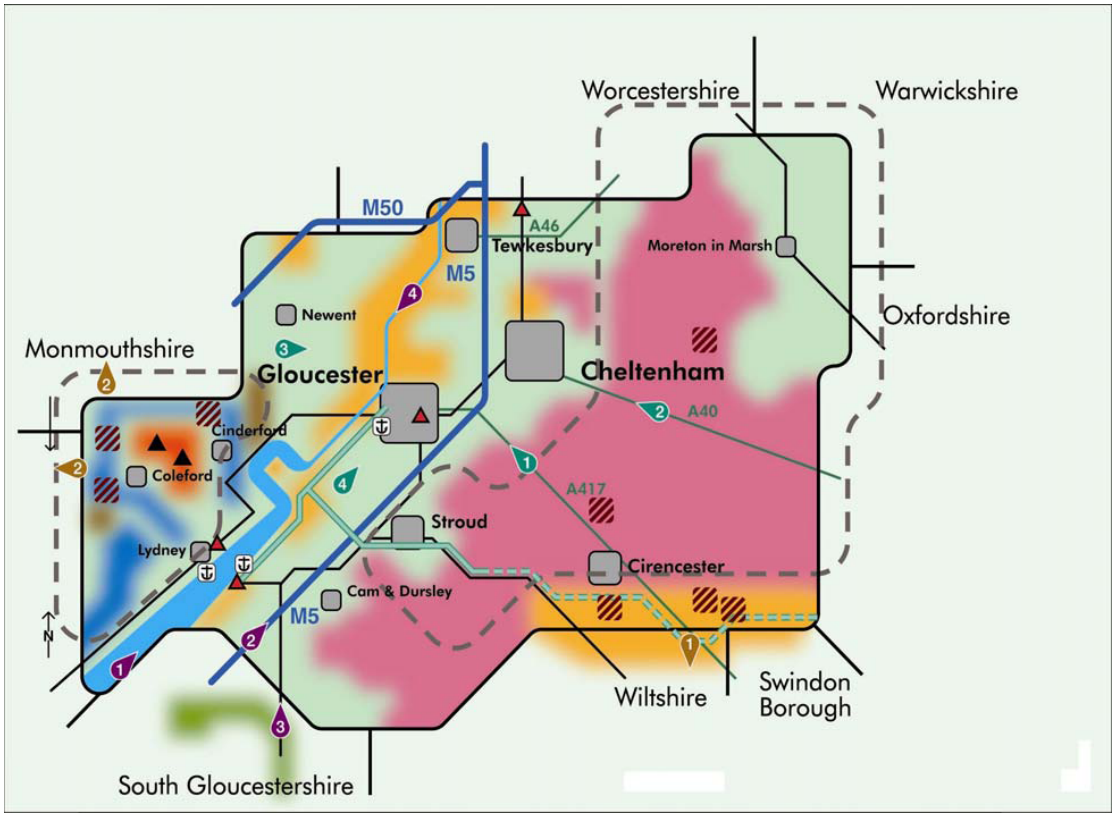
GLOUCESTERSHIRE COUNTY COUNCIL
Environment

GLOUCESTERSHIRE MINERALS LOCAL PLAN 1997-2006

Appendix D

Minerals Core Strategy Key Diagram supported by a diagrammatic version of the spatial portrait of minerals resources and a diagrammatic version of local characteristics and existing infrastructure

The MCS key Diagram



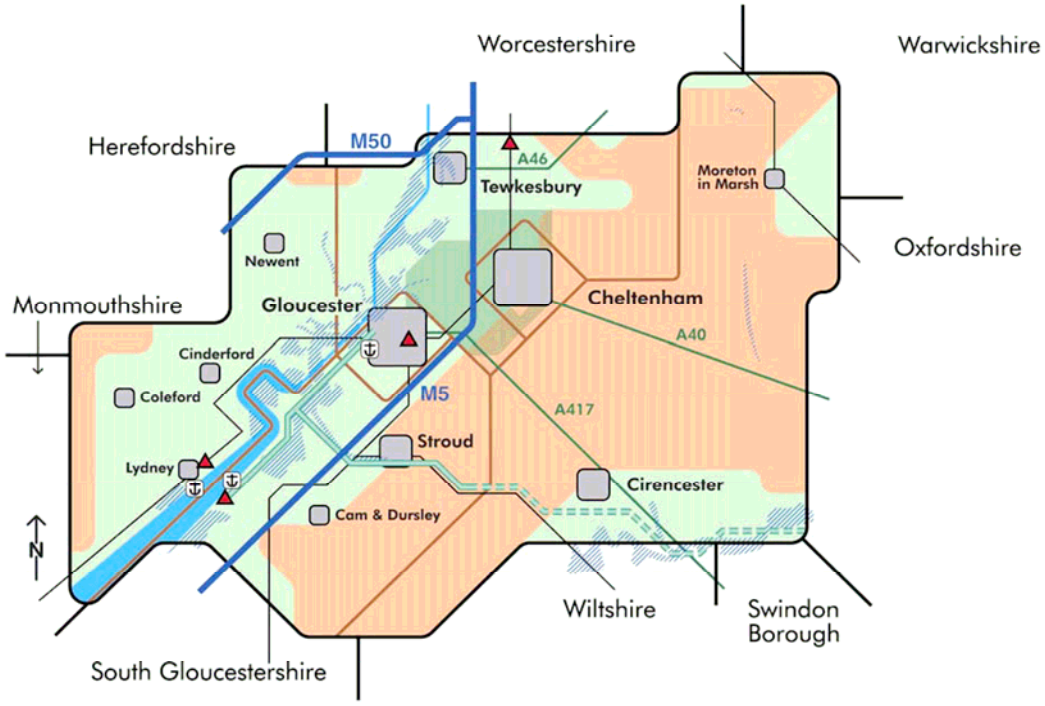
Key Part A – Characteristics & Infrastructure

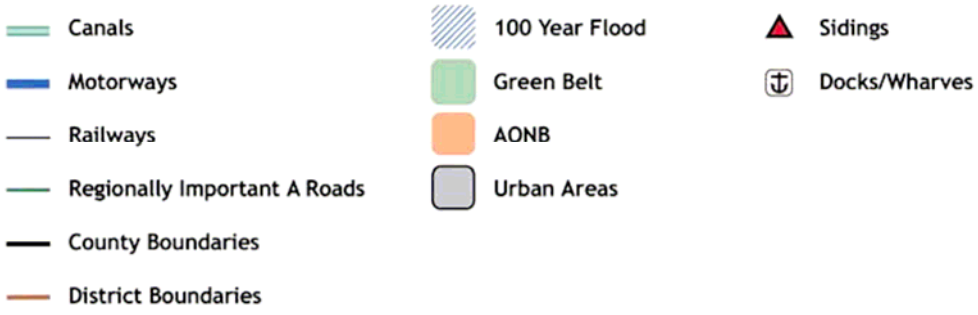
- Devonian Sandstone
- Carboniferous Sandstone
- Carboniferous Limestone
- Carboniferous Limestone (from South Gloucestershire)
- Jurassic Limestone
- Sand and Gravel
- Coal Resources
- Canals
- Railways
- Regionally Significant Freight Route
- Sidings
- Docks/Wharves
- Preferred Areas for future working "saved" from the Adopted Minerals Local Plan
- Urban Areas
- Sphere of Influence for Local Building Slate

Key Part B –Mineral Supply Opportunities*

- **Internal Supply**
- **Inward Supply**
- **Outward Supply**

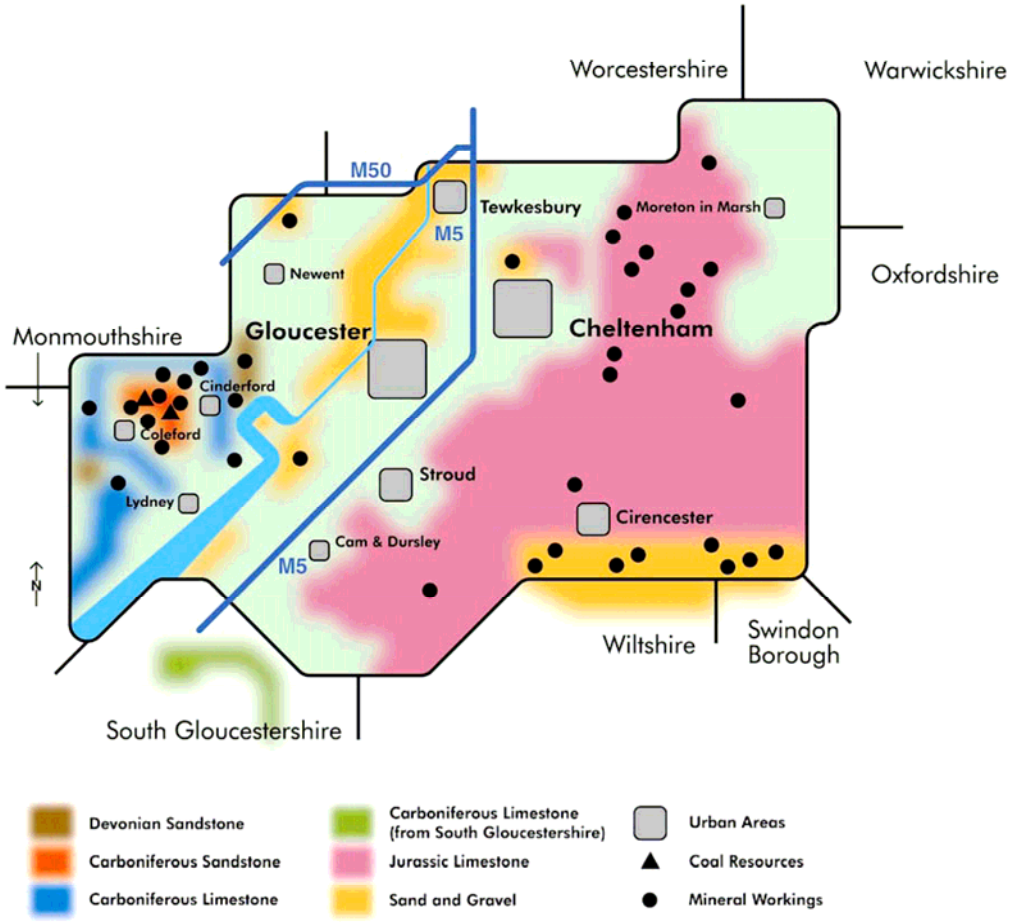
Spatial Portrait of local characteristics and existing infrastructure





Spatial Portrait of minerals resources and mineral workings *

* Minerals workings setout in this diagram represent those, which were in production during 2005. It does not represent all permitted mineral sites in the county including those, which did not provide a return during 2005 or have yet to be commenced. It also does not include workings classified as 'dormant' and in need of a further permission before working can recommence. More information on mineral workings in Gloucestershire can be found within Technical Evidence Paper MCS-A (Sand & gravel), MCS-B (Crushed Rock) and MCS-C (Natural Building and Roofing Stone).



Appendix E

Chapter 4 of the Waste Local Plan

CHAPTER FOUR: FACILITIES AND PREFERRED SITES

WASTE MANAGEMENT FACILITIES

4.0 In order to meet the required capacity targets (Chapter 3), a number of suitable sites have been identified in this Chapter of the Plan. The Plan allocates specific sites, or small areas of search, together with a range of potentially acceptable waste management options. The objective is to achieve a range of waste management facilities that are the best practicable environmental options in Gloucestershire by encouraging, and allowing for, future improvements in technology. No one process can deliver an integrated waste management system for Gloucestershire. A combination of facilities and sites will be required to meet the demands for sustainable waste management in the County.

4.1 The following information sheets provide a guide to the various waste management options currently available. This however is not an exclusive list, merely an indication of potential options. The County Council will welcome new proven sustainable technologies as they come forward. The type of processes required now and in the future will depend upon the type of waste that needs to be dealt with. In order to simplify matters, the waste processes have been grouped as:

- Physical Waste Management Processes
- Biological Waste Management Processes
- Physio-Chemical Waste Management Processes

4.2 The potential contribution from alternative waste technologies has been recognised and the Plan has a flexible approach towards new technological developments, in accordance with guidance. The Plan will treat such proposals in accordance with the policies of the Development Plan.

4.3 There are a number of planning issues and considerations that are common to the development of all types of facility. These are dealt with in detail in Chapter 5 but the following should be borne in mind:

- There may be an element of double handling to separate wastes into useful commodities for markets.
- An Environmental Statement may be required to accompany planning proposals depending on size, scale and sensitivity of the site. It will be required for facilities on 'Strategic Sites'.
- Environmental impacts, such as traffic, noise, odour and dust can be controlled through planning conditions.
- The potentials for using alternative modes of transport to road need to be considered, i.e. water and rail.
- Landscape treatment and planting can be designed in to site development to reduce visual impact by screening, and bunding.
- The development of strategic sites is important if an effective network of facilities is to be established.
- Location needs to balance factors such as the industrial nature of waste management, with the need to reduce the cost of transporting and to be close to the markets for using the products and outputs.

4.4 The sites are divided into two groups, ‘Strategic’ and ‘Local', according to their capacity and the area they are likely to serve. A benchmark capacity of 50,000 tonnes per annum, based upon the likely requirement for Environmental Impact Assessment (EIA) when planning permission is sought, is used to distinguish between “Strategic” (50,000 tonnes and above) and “District” (or “Local”) (below

50,000 tonnes) sites. EIA is explained further at paragraphs 5.115-6 of the Plan. Some sites will have just one waste management facility but larger ones could have a range of them. This will depend upon the potential of a given site and the integrated approach to waste management proposed by a developer. Where appropriate the County Council will encourage associated markets for the recovered wastes to exist side by side with waste treatment facilities. This is to reduce transport across the County and encourage the re-use of resources within the County. The Waste Planning Authority acknowledges that some of the sites identified are in proximity to residential and other sensitive land uses. There is a public perception of harm from certain waste management processes. All development will have some environmental impact. Full consideration of the details of the environmental impact of any development is a matter for the planning application stage.

4.5 The Waste Local Plan makes provision for the development of waste management facilities, by developing planning policies and site-specific proposals to promote new facilities. The Structure Plan makes provision for a network of primary and secondary waste management facilities in the County including energy from waste facilities in or near to the Gloucester/Cheltenham area. These facilities will be subject to the provisions of this Plan, including the need to demonstrate BPEO and, for waste to energy plant proposals, prior consideration of recycling and composting options. It is important to develop a combination of different types of waste management facilities, as successful waste treatments depend upon the composition of the waste produced. As waste management becomes more sustainable, the composition of the waste will change. The demand for different types of waste management practices will therefore also change over time. The policies in the Plan dealing with the waste to energy process do not preclude other waste management options.

4.6 It is therefore important to retain flexibility to promote new technologies and proposals through the policies of the Waste Local Plan as a more sustainable waste management system evolves for Gloucestershire.

PHYSICAL WASTE MANAGEMENT PROCESSES

Household Waste Recycling Centres (also known as Civic Amenity Sites)

Special, Degradable and Inert Waste

These sites provide a facility for the delivery and sorting of household waste by the public. There is often scope for ancillary recycling activities on the site to recover materials such as metals, paper, glass and engine oil. The centres are also a source of organic wastes for composting. Wastes collected could easily be fed into a materials recovery facility to be assimilated with waste from other sources.

Advantages:

- Household waste recycling centres can be a valuable supply of source separated wastes.
- Provides the public with the opportunity to recycle their household waste.

Disadvantages:

- Impacts on the immediate locality.
- Increased traffic movements close to site, due to public access.

Site Requirements:

The facilities are generally small scale dealing with householders waste. Facilities may be ancillary and provide 'front end' recycling to an existing waste management operation. Facilities need to be located near to centres of population to maximise accessibility and ensure usage, often on edge of town locations. It needs an area of hardstanding to site recycling bins. Sites should be carefully designed to ensure that maximum recycling / recovery is achieved, and have good access with space for manoeuvring vehicles. The facilities could be either fully or partially enclosed, and be on an impermeable surface if they are likely to cater for oils, or similar polluting liquids. Surface water drainage needs careful design, and should be routed by an interceptor.

Inert Recovery & Recycling

Inert Waste

Inert Recovery and Recycling facilities re-use, recycle and transfer inert waste. They include construction and demolition wastes, the recycling of secondary aggregates at centralised processing facilities or on site. Facilities can be mobile, for example this would be appropriate for large scale demolition operations thus enabling waste to be recycled close to where it arises. A range of materials such as crushed concrete, road planings, minerals wastes and some industrial wastes can be recycled and utilised as substitutes for primary aggregates. Waste collected is delivered by skip or bulk vehicle for crushing, screening and grading for re-use. Unusable residues are used in landfill engineering.

Advantages:

- Reduces the amount of waste landfilled.
- Reduces the need for quarrying primary minerals.
- Mobile facilities enables on site recycling, which reduces double handling and unnecessary transport journeys.

Disadvantages:

- Recycled material may not be of high enough quality and specification to meet certain uses, thus reducing its market potential.
- Noise, dust and visual intrusion can be a problem.
- Storage of materials may be unsightly.
- May generate large goods vehicle movements.
- Removal of inert materials from the waste stream can delay restoration of mineral workings.

Site Requirements:

Hardstanding is required for stockpiles of material; and locating crushing, screening and grading machinery. Some elements of the operation and storage may be enclosed, but it is mostly undertaken in the open air. Suitable locations may be found in appropriate industrial areas, brownfield land, or associated with operational quarries or landfill sites. Facilities should be located away from residential areas.

Materials Recovery Facilities

Special, Degradable and Inert Waste

A Materials Recovery Facility [MRF] includes multi stream separation facilities, recycling treatment facilities and community recycling schemes. Such a facility receives sorted or unsorted waste, which is then separated into recyclable and non-recyclable components. Facilities that receive unsorted wastes are sometimes referred to as 'dirty MRFs'. A MRF may store waste waiting to be processed. Useful materials are processed into new products and non-recoverable materials go for further treatment or final disposal. Smaller facilities may deal with just one specific type of waste, larger facilities may sort over 30 different types of material.

Advantages:

- Can operate at various scales.
- A network of facilities is required if recycling is to make a significant impact on reclaiming materials from the waste stream.
- It will ensure that collected materials are sorted and supplied to the reprocessing industry.
- Can be added to existing waste operations.

Disadvantages:

- May increase local vehicular movements.
- Impacts on the locality similar to any other industrial process.

Site Requirements:

Industrial buildings and a storage area (possibly in the open) would be required. A facility can range from a small-scale local recycling operation to a strategic large scale facility dealing with 5,000 to 100,000 tonnes per annum and sites of 1-1.5 hectares could be appropriate. A building of sufficient size to accommodate a large tipping hall to deposit and load materials would be required. It would also need to accommodate equipment to wash, sort, grade, crush and bale materials, as well as storage and loading facilities for recovered materials. The facility should retain flexibility so that different materials from different sources can be sorted at different times to meet the variations of recyclables markets. Suitable urban locations would include industrial estates or warehouses or on appropriate brownfield land. There may be benefits in reduced traffic movements if located adjacent or close to a Household Waste Recycling Centre (Civic Amenity Site), or other waste management facility.

Metals Recycling Facilities

Inert and Special Waste

Metal recycling facilities is used as a generic term to cover traditional scrapyards, car breakers, vehicle dismantlers, metal recycling sites and sites used for the storage of abandoned vehicles. Car breakers or vehicle dismantlers contribute to metal recycling and the re-use of car parts, which avoid the waste stream altogether. Traditional metal recycling sites are recovery and bulking up facilities which concentrate on providing metals as high quality input to the smelting industry.

Advantages:

- Allows for the efficient recovery of metals for recycling
- Bulking up can reduce the overall number of vehicular movements

Disadvantages:

- Traditionally viewed as 'bad neighbour' development
- May increase vehicular movements locally
- Impacts on the locality including dust, noise, ground pollution and adverse visual impact where outside storage is involved.

Site Requirements:

Facilities can vary in size from small to large-scale operations. Due to their noisy, unsightly and industrial character, they will require careful siting in appropriate industrial areas. Modern facilities require industrial buildings able to accommodate workshops and storage space in addition to metal processing and sorting equipment. Small facilities could be accommodated as part of a larger waste management facility. Where possible, enclosing operations will help reduce environmental impacts. Facilities will need a suitable impermeable hard standing and to route surface water drainage via an interceptor to meet Environment Agency requirements.

Waste Transfer Station

Special, Degradable and Inert Waste

A Waste Transfer Station is a depot where waste from collection vehicles is stored temporarily prior to transportation in bulk to be recycled, composted or to other treatment and disposal facilities. Waste Transfer Station is a generic term which is used to cover operations that deal with all types of wastes, including special waste, clinical waste, inert waste, household/industrial/commercial waste and construction waste; and also includes different methods of transfer e.g. skip transfer, road to water and road to rail. Some stations may handle only one waste type; others may handle more, and may also include some small scale recycling.

Advantages:

- Appropriately located transfer stations provide a bulking up facility which can supply other waste management centres and industries.
- Reduces transport by allowing larger vehicles and different transport systems to be used to transport waste over larger distances if required.
- Network of facilities will ensure that collected materials are sorted and supplied to the reprocessing industries.
- Reduces the overall number of vehicular movements.

Disadvantages:

- May increase vehicular movements locally.
- May have environmental impacts on the immediate locality.

Site Requirements:

A Transfer Station can be a small facility serving the local community, or deal with between 5,000 to 50,000 tonnes per annum. An industrial style building would normally be required. The sites should be of sufficient size for sorting the waste and having good accessibility to receive delivery of collected waste and to transfer it in bulk by road, rail or water to other waste management facilities. Transfer facilities are needed in both rural and urban areas to provide an integrated network across the County. Locations could be on appropriate industrial or brownfield sites. Facilities will need a suitable impermeable hard standing and to route surface water drainage via an interceptor to meet Environment Agency requirements.

BIOLOGICAL WASTE MANAGEMENT PROCESSES

Anaerobic Digestion

Degradable Waste

Anaerobic Digestion is the biological degradation of organic wastes in the absence of oxygen. It produces methane gas, which can be used to generate electricity; therefore, it is also classed as a waste to energy technology; it has been used successfully for many years to treat sewage sludges, and the residue is suitable for use as a soil improver.

Advantages:

- It can produce a useful soil improver that can be used in land reclamation.
- It is a process that allows good control including containment of potential pollutants.
- The process traps methane, a greenhouse gas, which can be used as a renewable energy source.

Disadvantages:

- Requires a high degree of waste segregation to produce a marketable residue.
- It may not be economic due to the large capital investment required.
- There is a possibility of pollution from liquid effluent and other emissions/material.

Site Requirements:

Facilities can stand-alone or be part of a larger waste management site. It is industrial by nature, and would probably require an input of up to 50,000 tonnes of waste per year. A large industrial building and a large upright vessel would be required, with areas for sorting the different types of organic wastes. Buildings would also be needed to store ancillary equipment. Locations could be on appropriate industrial or brownfield land, near to the main source of waste to reduce transport costs.

Composting

Degradable Waste

Composting is the aerobic decomposition of organic waste to form a compost or soil improver, using windrows on a hardstanding or composting in large containers. Facilities can be centrally run sites and community or farm operations. Community operations combine groups of households whose organic wastes are combined to create larger volumes of compost. Home composting has long been undertaken by private households but wormeries [containers for a colony of worms] are also now being used to break down organic material into a fertile compost. The Environment Agency have a presumption against composting processes within 250m of a workplace or the boundary of a dwelling, unless it can be demonstrated via a site-specific risk assessment, that the bioaerosol levels are and can be maintained at appropriate levels.

Advantages:

- Removes a significant element of the waste stream as a useful material.
- Reduces the need for peat as humus in horticulture and land restoration.
- If the standard is high enough, compost can be used in agriculture and horticulture. There is potential for a large and reliable market for the compost with a wide geographical spread.
- Composting schemes can be farm based, thus assisting farmers to diversify their operations.
- Heat generated offers opportunities for horticultural heating schemes.
- Low cost to get established, and is suitable for small-scale production.
- Home composting reduces the volume of waste, and reduces transport.
- In-vessel composting gives better control over the process and emissions.

Disadvantages:

- Residues may be contaminated with heavy metals, residual glass, plastics & other materials. Quality is an issue.
- Without careful management the windrow method can produce odours, and emissions which can be a health hazard.
- Liquid effluent is produced which is potentially polluting.
- In vessel composting has a relatively high cost.

Site Requirements:

Composting can be carried out in the open in linear heaps (windrows) or as a semi-industrial process in a building (in-vessel composting). The scale of operations can vary considerably from small community schemes to large-scale centralised commercial facilities, which would have an impact on the appropriate siting. Small facilities may only require an area of hardstanding and drainage for composting; a covered area for screening and storing materials; and a small building for equipment storage. The compost is usually stored in the open. It could be located at existing landfill sites, quarries, appropriate industrial sites, brownfield land or in "redundant" buildings. Facilities will need a suitable impermeable hard standing and to route surface water drainage via an interceptor to meet Environment Agency requirements.

Fermentation

Agricultural wastes and clean biodegradable wastes (Green waste and segregated kitchen waste)

Fermentation treatment is confined mainly to agricultural wastes, but can be extended to pre-treated municipal solid waste to produce liquid fuel (ethanol, methanol). Waste fermentation uses organisms in the absence of oxygen to break waste down into a liquid fuel and a stable solid residue, followed by distillation. The process is similar to beer and wine making. This process is classed as waste to energy recovery technology.

There are two main bio-fuels produced, bio-ethanol and bio-diesel, which can be used as substitutes for petrol and diesel, or blended with them to reduce air emissions.

Advantages:

- Helps to reduce the consumption of non-renewable fossil fuels by producing a renewable (bio) fuel (ethanol) offering carbon dioxide neutral combustion (i.e. carbon dioxide emitted during combustion is offset by that absorbed during plant growth).
- Produces a cleaner less toxic fuel than oil-based fuels that can be used in road vehicles and in existing hydrocarbon infrastructure (e.g. internal combustion engine).

Disadvantages:

- The process is still being developed and tested.
- Financial costs are likely to be higher than composting but the process is less capitally intensive than incineration.
- There are some environmental concerns surrounding increased use of ethanol, which could cause increased emissions of nitrogen oxides and volatile organic compounds and an increase in smog.

Site Requirements:

Industrial buildings. Suitable urban locations would include industrial estates or warehouses or on appropriate brownfield land. Where treatment is restricted to agricultural wastes a rural location proximate to agricultural waste arisings may be appropriate in order to minimise the distance that waste is transported.

Mechanical Biological Treatment (MBT)

Residual Household, Commercial and Industrial Waste

MBT is a generic term used to describe hybrid technologies that use a combination of biological and mechanical steps to process waste. They are designed to process the residual fraction of MSW or C&I waste ie the fraction that remains after separate collection of materials has been carried out. These processes can use aerobic or anaerobic processes for biological processing; the mechanical step is designed to separate materials so that greater value can be achieved from the waste and/or allow the biological process to work effectively. Mechanical processing can take place before and/or after the biological process.

The design of these plants is determined by the anticipated end-use of the processed materials; many were originally designed to biologically stabilise waste prior to landfilling. Other output options include low-grade composted materials, production of solid recovered fuels or biogas. In most cases it is normal to remove materials that have economic value such as glass, stones and metals (typically up to 10% - 15% wt). Biological processing will naturally produce carbon dioxide and water vapour and will divert biodegradable waste from landfill. The weight loss from drying can be up to 25% wt.

If landfilled, the stabilised waste can have substantially less biodegradable content than raw waste. If composted the waste is considered to be "stabilised waste" and has limited and prescribed applications. If used as a fuel, it is still considered to be waste but is upgraded to have higher energy content and less pollution burden than raw MSW or C&I waste. Additionally, it has high renewable power content and produces less carbon dioxide per unit of energy than coal. Biogas can be created if the bio-fraction is anaerobically digested. The resulting gas can be burnt to create renewable electricity.

Advantages:

- Reduces the mass of waste inputted.
- Based upon a combination of existing proven techniques for treating residual fraction of MSW.
- Permits further recycling from the residual fraction.
- Enables energy content of waste to be recovered / can increase calorific value where drying takes place.
- Will divert high levels of biodegradable municipal waste and C&I waste.
- Lower environmental and visual impact than thermal processes.
- Can be modular, easy to add incremental capacity.
- Highly flexible, can convert to make different products and/or accept different feeds, eg separately collected biowaste. There can be designed to be part of an integrated system.

Disadvantages:

- Needs secure end markets to be available to deliver highest landfill diversion performance.
- Economics driven by security of end markets.
- No UK plant experience (yet), although some under construction.
- Traffic movements needed for input and output flows.
- Still produces a residue which may require further treatment.

Site Requirements:

Can be part of larger integrated waste facility. Buildings look like industrial units. Minimum throughput typically 20,000 tpa (although can be designed for much higher throughputs). Land take dictated by residence time; eg 85,000 tpa plant needs >1ha; any height constraints will also increase footprint.

PHYSIO-CHEMICAL WASTE MANAGEMENT PROCESSES

Waste To Energy Recovery Technologies

Special and Degradable Waste

Waste to Energy Recovery involves recovering value from waste in the form of energy – direct heat and/or electricity. It includes a potentially wide range of facilities. Technological development in this area is fast moving. There are technologies that have been well developed for waste management. Some technologies have been developed but still require full scale testing and other technologies are at the design and early development stage. Where waste to energy recovery forms part of an integrated waste strategy, the potential for including Combined Heat & Power (CHP) technology should be considered to maximise energy recovery. The types of Waste to Energy Recovery facilities available in the future is likely to expand, but at present it includes the following techniques:

- **Anaerobic Digestion with energy recovery** (Biological Process)
- **Feedstock Substitutes** (Physio-Chemical Process)
- **Feedstock Recycling** (Physio-Chemical Process)
- **Fermentation** (Biological Process)
- **Fuel Substitutes** (Physio-Chemical Process)
- **Gasification** (Physio-Chemical Process)
- **Incineration with energy recovery** (Physio-Chemical Process)
- **Plasma Arc** (Physio-Chemical Process)
- **Pyrolysis** (Physio-Chemical Process)

Of the above, those technologies that are considered fully developed and tested at a reasonable scale, and therefore represent proven technology, are currently Incineration with Energy Recovery, and Anaerobic Digestion.

Advantages:

- After recycling and composting, waste to energy plants provide the opportunity to recover value in the form of energy from the waste stream.
- Waste to energy is a form of renewable energy and helps reduce the use of fossil fuels and cut greenhouse gas emissions.

Disadvantages:

- Waste to energy technology suffers from the less stringent controls and pollution that occurred up to the early 1990's. Public perception seems often prejudiced by this historic technology and a fear of harmful emissions of dioxins, furans and heavy metals.
- There is a range of waste to energy technology, but many are still being developed and tested.

Feedstock Recycling

Mixed plastic waste

Feedstock recycling is a process whereby different types of plastic wastes are put through a chemical process (known as polymer cracking process) to create petroleum feedstocks or raw materials that can be used in refineries and petrochemical plants for making new products.

Mixed plastics are initially processed to produce agglomerate. The agglomerate subsequently feeds depolymerisation, cracking, separation and distillation processes to yield ethylene and propylene. These chemical feedstocks may then be used to produce fibres, plastics, detergents and adhesives. In the case of PVC-rich feedstocks, the polymer is decomposed at high temperatures from which hydrochloric acid is the main component recovered for subsequent re-use in the PVC production process as a raw material.

Advantages:

- This process would contribute to the plastics recovery rate.
- The process helps to increase the variety of plastics that are recycled into new and useful products.

Disadvantages:

- The low-density feedstock demands co-location between petrochemicals facilities and collection and bulking operations for mixed waste, which restricts the availability of potential locations for a facility.
- Impacts on the locality similar to any other industrial process.

Site Requirements:

Industrial buildings and a storage area would be required. A building of sufficient size to accommodate a large tipping hall to deposit and load materials would be required. Suitable urban locations would include industrial estates or warehouses or on appropriate brownfield land. Ideally the facility should be sited adjacent to existing petrochemicals facilities and collection/bulking operations for mixed plastic waste.

Feedstock Substitutes

Mixed plastic waste

Feedstock substitution is a process whereby mixed plastic waste is used as a substitute feedstock in blast furnaces in the iron and steel making process. Mixed plastic waste is used as a substitute source of carbon to coal, oil or natural gas. The carbon in the plastic waste acts as a reagent to reduce iron ore to the metal. The process has been adopted by the iron and steel industry in Germany. This process is classed as waste to energy recovery technology.

Advantages:

- This process would contribute to the plastics recovery rate.
- Helps to reduce the consumption of non-renewable fossil fuels.

Disadvantages:

- Impacts on the locality similar to any other industrial process.
- The process is still being developed and tested.

Site Requirements:

The process is connected to the iron and steel industry.

Fuel Substitutes

Municipal solid waste, tyres and spent solvents

This process involves the use high calorific value waste as a substitute to conventional fuels in industrial processes and power plants.

Wastes that can be burned in these industrial processes include municipal solid waste, tyres and spent solvents. Solid wastes are usually shredded. Examples of fuel substitutes include scrap tyres and solvent wastes used as a substitute for coal and petcoke in cement and lime kilns and packaging waste paper, biofuels and plastics used as substitute fuel in cement kilns.

Municipal solid waste can be used as a substitute for coal and to fuel incineration to achieve a more efficient burn, with less ash and emissions. This process is classed as waste to energy recovery technology.

Advantages:

- This process would contribute to the municipal solid waste recovery rate.
- Helps to reduce the consumption of non-renewable fossil fuels.

Disadvantages:

- The process is still being developed and tested.
- Environmental pressure groups have expressed concerns about releases of toxic pollution from the incineration of waste.

Site Requirements:

The process is connected to industrial processes and power plants.

Gasification

All combustible wastes, including wood, paper, plastics and some putrescibles not used for recycling

Gasification is a thermo-chemical process involving the conversion of waste into a gas via partial oxidation (using oxygen-rich air or oxygen) under the application of heat. The majority of the waste is converted into carbon fuel-rich gases with the remaining ash residue being virtually inert.

Feedstock waste requires pre-treatment to remove bulky or inert items and crushing and shredding to reduce particle size. This can provide opportunity to add recovery of recyclate at this stage. The waste is then fed into the heated reactor and is degraded by the heat to give a mixture of gases. The gas can be cooled and refined to produce a fuel product, some of which may be used to drive the process and the remainder sold for heat or power generation. The process is classed as waste to energy recovery technology.

Advantages:

- Because the process takes place in low oxygen conditions, the volume of process flue gas produced is significantly less than from incineration.
- Generally gasification plants are smaller than incineration with energy from waste plants (e.g. Grate and Furnace), and so would not inhibit recycling initiatives.
- Due to their energy value, the products have a relatively high value. There is potential for conversion of the products to higher value materials.

Disadvantages:
- Although using gasification as a means of dealing with municipal solid waste has commenced in some countries, the process has yet to prove itself as an economically viable and reliable.
- Potential for production of polluting gaseous emissions.

Site Requirements:

Gasification facilities are usually totally enclosed within an industrial style building and tend to be medium scale (circa 30,000 tonnes per annum and up) to make up for the high up front investment costs. Where there is a desire to have a front end MRF, the minimum area required would be in the order of 4 to 5 ha.

Incineration with Energy Recovery

Degradable and Special Waste

A variety of combustion systems have been developed from boiler plant technology and there are more novel techniques such as molten salt and fluidised bed incinerators. The incineration process involves waste being burnt to generate heat which is used to generate high-pressure steam which in turn generates electricity. Some of the electricity can be used for the operation of the plant and the remainder exported to the national grid. The surplus heat from the turbines can be used for local industrial and domestic heating schemes. Using Combined Heat and Power (CHP) technology helps maximise energy recovery but is dependent on purpose designed development or industrial processes nearby. Recyclable materials are extracted from the waste before being burnt. The ash from incineration can be used in the plastics industry and in the manufacture of building blocks. The remaining residues are finally disposed to landfill. Incineration without energy recovery would normally be unacceptable, except in specialised cases such as the destruction of clinical waste.

Advantages:
- Waste incineration has become a highly technical waste management option, capable of handling the volumes of waste which will remain after re-use, recycling and composting.
- It potentially provides a renewable source of energy until it begins to prejudice recycling, composting or other measures higher up the waste hierarchy.
- It is among the most strictly regulated waste management options, and the proposed Waste Incineration Directive will apply stringent emission limits to virtually all types of waste incinerator.
- There is potential for the recovery and industrial use of residues from incineration process.

Disadvantages:
- It is perceived as a more polluting technology than other methods.
- Incinerators might divert some waste away from recycling initiatives.
- Large plants are expensive and future choice may be restricted.
- Potential environmental and visual impact of a major site is substantial.
- Some ash requires landfilling especially that which is toxic.

Site Requirements:

Incinerators can range from small-scale plants to large installations. Some burn systems achieve economies of scale which can lead to facilities taking 200,000 tonnes per year. Modular burn systems are smaller, taking 20,000 - 90,000 tonnes per year and are designed for local communities. For a strategic facility, a site of around 3-5 hectares would be required. The operations tend to be totally enclosed, but sites should also be able to accommodate a range of integrated waste management facilities dealing with household waste recycling, composting and materials recovery. These could be located on appropriate industrial areas, brownfield land and existing waste management facilities, and should be located near to major waste arisings to reduce transport costs. To enable surplus heat to be used for community heating schemes, the plant needs to be near suitable industrial or residential development.

Plasma Arc

Mixed wastes (Municipal Solid Waste, hazardous and industrial waste with a high organic content)

Plasma Arc is an alternative heat combustion system for mixed wastes that is being developed from processes already operating in the metal refining industry. The system uses plasma arc heating (energy released by an electrical discharge in an inert atmosphere) which raises the temperature of the waste to anything between 3,000-10,000^{o}c.

The process is very different to combustion (incineration) in that it uses energy from the plasma to thermally convert organic waste from a solid (or liquid) to gas through a process called “controlled pyrolysis” or “controlled gasification” and avoids the need for large volumes of air to support combustion.

The process converts organic material into hydrogen rich gas and non-combustibles to an inert slag. The gas is

suitable for generating electricity. The slag can be used as an aggregate in the construction, packaging and insulation industries.

Advantages:
- The volume of gases discharged is generally less than 10% of that generated by incinerators with the same waste processing capacity.
- Where electricity is generated it can be can be used remote from the location of the facility.
- Since there is no oxygen available there is no oxidation phase, as a result the formation of furans, dioxins, fumes and ashes is prevented.

Disadvantages:
- The process is still being developed and tested.
- Capital intensive.

Site Requirements:

Industrial buildings and a storage area would be required. A building of sufficient size to accommodate a large tipping hall to deposit and load materials would be required. Suitable urban locations would include industrial estates or warehouses or on appropriate brownfield land.

Pyrolysis

Organic waste

Pyrolysis involves the heating of organic waste in the absence of air (anaerobic conditions) to produce a mixture of gaseous and liquid fuels and a solid inert residue. Pyrolysis requires a consistent waste stream such as tyres or plastics to produce a usable fuel product. Feedstock waste requires pre-treatment to remove bulky or inert items, and crushing and shredding to reduce particle size. The waste is then fed into the heated reactor. The waste is degraded by the heat to give a mixture of gases.

The products gas, burnable liquid and solids can be cooled and refined to produce a fuel product, some of which may be used to provide the heat for the process and the remainder sold. Alternatively the fuel can be used on-site for power generation. Pyrolysis is typically used as a way of managing specific waste streams such as plastics and tyres, however technologies are advancing to manage more mixed waste streams such as MSW.

Advantages:
- Because these processes take place in low oxygen conditions, the volume of process flue gas produced is significantly less than from incineration. Hence, gas cleaning can be more efficient.
- Generally pyrolysis plants will be smaller than incineration with energy from waste plants (e.g. Grate and Furnace), and so will not inhibit recycling initiatives.
- More effective energy recovery than Anaerobic Digestion or landfill gas utilisation

Disadvantages:
- Although using pyrolysis as a means of dealing with municipal waste has commenced in some countries, the process has yet to prove itself as an economically viable and reliable means for dealing with such waste.
- Prefers a homogeneous feedstock.
- Potential for production of polluting gaseous emissions.
- Changes in calorific value of waste can cause changes in operating costs.

Site Requirements:

Pyrolysis facilities tend to be medium scale (circa 30,000 tonnes per annum) to make up for the high, up front investment costs. Where there is a desire to have a front end MRF, the minimum area required would be in the order of 4 to 5 ha. Pyrolysis facilities tend to be accommodated within an industrial style building.

SITE SELECTION

4.7 Government Guidance states that the identification of specific sites for development is the best way the planning system can make provision for future waste management facilities.

4.8 The Plan identifies a number of 'Preferred Sites', that might be appropriate to locate waste management facilities. The preferred sites are the cornerstone of the Plan's provision, and a principle mechanism for guiding waste management development.

4.9 The selection of sites commenced with an investigation of those locations that already suffer, or are allocated in local plans to suffer, some environmental degradation. These sites may already have waste management facilities or be previously developed, have redundant or derelict buildings, or be allocated for industrial uses. Waste facilities would generally integrate better into these types of location. Other factors such as transport infrastructure and environmental designations and sensitivities were also considered in the sifting process. National guidance, such as that in PPG 10 ("Planning and Waste Management"), was applied.

4.10 Some 30 sites were assessed by desktop surveys, expert consultation, visual site appraisal, and through scrutiny by some environmental groups and elected members of District and the County Councils. During the assessment process some sites were removed because of obvious unsuitability or because there were better sites nearby. Some sites were added. A number of waste management options have been identified at certain sites to allow flexibility as technology and other circumstances change.

4.11 The preferred sites are set out in Schedule One of this Chapter as "Strategic" sites, or in Schedule Two of this Chapter, as "Other" sites. Schedule One contains a list of sites, with an indication of the type of operation that might be suitable and a site profile with a location plan. Schedule Two contains a list of sites with an indication of the type of operation that might be suitable and a site profile with location plan. General Criteria for Development, which any development proposal should demonstrate, are set out at the beginning of the Schedule, with Site Specific Criteria for Development relevant to each individual site set out in its site profile.

4.12 The Plan seeks to give an indication of what might be acceptable on the preferred sites by way of waste management options, capacity and any amelioration expected. In applying the proximity principle, especially to residential and commercial areas, care has been taken to try to select processes that could be compatible with their surroundings. This includes waste to energy plants that the Government does view as acceptable in principle (Waste Strategy 2000 Part 1 paragraph 2.23). As technology advances, sustainability in waste practices improves, and as facilities and locations are reviewed, preferred management options and preferred site locations may change. Linkages between waste management options, and particularly re-use and recycling, are of particular advantage if transportation requirements are reduced.

4.13 Any waste development on these sites will still be subject to the normal planning process and inclusion in the list does not imply that a planning permission will automatically be granted or that other sites will be excluded. The normal consultation will take place at which members of the public, any interested bodies or organisations and statutory consultees may submit views for consideration. Any site brought forward which is not in the Plan will be assessed against the policies of the Plan. Policies set out in Chapter 5, provide both the steering mechanisms to guide development towards these sites, and the criteria to be used when considering

planning proposals. Policy 6 also helps to develop a network of facilities across the County on sites not identified as being “preferred sites”. Policies 4, 5 and 6 encourage additional waste management proposals on sites in locations that are on designated industrial land (employment), derelict despoiled and brownfield land, former or existing mineral workings and waste management facilities, existing or redundant buildings, suitable sites located to rail or water transport. The development of an integrated network of these waste management facilities will enable Gloucestershire to progress towards a more sustainable waste management system over the Plan period.

SCHEDULE ONE

List of Strategic Sites

Not all of the potential uses listed against each area would necessarily be developed on a particular site.

Development on all sites will be subject to planning permission and will be considered against the policies of the Development Plan.

		Waste to Energy Recovery (WtE)	WtE (Not including incineration)	Materials Recovery Facility	Inert Recovery and Recycling	Metals Recycling	Household Waste Recycling Centre	Anaerobic Digestion	Waste Transfer Station	Composting	Inert Landfill only	Landfill/ Landfill with Energy Recovery
Site 1	Wingmoor Farm West, Bishops Cleeve	❍		❍	❍	❍	●	❍	●	❍		●
Site 2	Wingmoor Farm East, Bishops Cleeve	❍		❍	❍	❍		❍	❍	❍		●
Site 3	Sudmeadow, Cory Environmental, Hempsted			❍	●	❍	●		●	●		●
Site 4	Industrial Estate, former Moreton Valence Airfield	❍		❍	❍	❍	❍	❍	❍	❍		
Site 5	Sharpness Docks, Sharpness		❍	❍	❍	❍	❍	❍	❍	❍		
Site 6	Reclaimed Canal Land, Netheridge (as an ancillary facility to Site 5)						❍		●			

Key:

● : Waste Management Option Currently Undertaken at Site

❍ : Potential for Waste Management Option at Site

● : Waste Management Option Currently Undertaken at Site & has further potential for this Waste Management Option

Note: The term "landfill" should also be taken to mean landraise. The Key to environmental and other constraints & features on the Inset Maps is at Page 40. Please see the information sheets on pages 44 to 94 for a brief review of the waste management options.

GENERAL DEVELOPMENT CRITERIA FOR 'STRATEGIC SITES'

4.14 An Environmental Statement may (as required by the Environmental Impact Assessment Regulations 1999) be required to accompany any planning application for a waste management facility. It should adequately cover all relevant environmental impacts of the proposed development, including air pollution. Permission will not be granted for waste processing development unless the Waste Planning Authority is satisfied that unacceptable impact would not be caused.

4.15 Planning applications for waste management development should also address the following:

- An evaluation should be carried out of the potential environmental impact of development, including noise, dust, fumes, smell and traffic, on the surrounding area and highway network. Appropriate measures would be required to ensure that there would be no unacceptable impact on the local community or the wider area.

- Any new plant should be a good quality design having regard to the location of the site.

- The potential impact on watercourses and groundwater should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- Any application should include details of the destination of recycled and recovered materials from the site, and the destination and disposal methods for residues from waste processing.

- A transport assessment will be required to address the traffic generation of the proposed development and its impact on the local road network.

- Identify where a facility on a strategic site may work in conjunction with the existing network of waste management facilities and potential markets for the recovered materials.

- Show that alternative sites have been considered, and indicate why the particular site chosen is preferential for the proposed development.

SCHEDULE TWO

List of Local Sites

Not all of the potential uses listed against each area would necessarily be developed on a particular site.

Development on all sites will be subject to planning permission and will be considered against the policies of the Development Plan.

		Waste to Energy Recovery (WtE)	WtE (Not including incineration)	Materials Recovery Facility	Inert Recovery and Recycling	Metals Recycling	Household Waste Recycling Centre	Anaerobic Digestion	Waste Transfer Station	Composting	Inert Landfill only	Landfill/ Landfill with Energy Recovery
Site 7	Gloucester Business Park	❍		❍		❍	❍	❍	❍	❍		
Site 8	Moreton in Marsh						❍					
Site 9	Phoenix House, Elmstone Hardwicke		❍	●				❍	❍	❍		
Site 10	Land Rear of Dowty, Staverton	❍		❍			❍	❍	❍	❍		
Site 11	Railway Triangle Site, Gloucester	❍		❍	❍	❍		❍	❍	❍		
Site 12	Land Adjacent to Sudmeadow, Hempsted	❍		❍		❍	❍	❍	❍	❍		
Site 13	Forest Vale Industrial Estate, Cinderford		❍	❍		◍	❍		❍			
Site 14	Canal Works, Lydney			❍		●	❍	❍	●			
Site 15	Lydney Industrial Estate, Sites A, B and C, Lydney	❍		❍	❍	❍	❍	❍	❍	❍	●	
Site 16	Wilderness Quarry, Mitcheldean		❍	❍	❍	❍	❍	❍	◍	❍		
Site 17	Wingmoor Farm South East, Bishops Cleeve			❍	❍			❍	❍	❍		●
Site 18	Foss Cross Industrial Estate, Calmsden						●			❍		
Site 19	Old Airfield, Moreton Valence				◍							
Site 20	Site Adjacent to Gasworks, Bristol Road, Gloucester	❍		❍	❍		❍	❍	❍	❍		
Site 21	Netherhills Pit, Frampton-on-Severn				❍							

Key: ● : Waste Management Option Currently Undertaken at Site ❍ : Potential for Waste Management Option at Site
◍ : Waste Management Option Currently Undertaken at Site & has further potential for this Waste Management Option

Note: The term "landfill" should also be taken to mean landraise. The Key to environmental and Other Constraints & Features on the Inset Maps is at Page 40. Please see the information sheets on pages 44 to 94 for a brief review of the waste management options.

GENERAL DEVELOPMENT CRITERIA FOR 'LOCAL SITES'

4.16 An Environmental Statement may be required to accompany a planning application for waste management facilities. It should adequately cover all relevant environmental impacts of the proposed development, including air pollution. Permission will not be granted for waste processing development unless the Waste Planning Authority is satisfied that unacceptable impact would not be caused.

4.17 Any application for waste management development should also address the following:

- An evaluation should be carried out of the potential environmental impact of development, including noise, dust, fumes, smell and traffic, on the surrounding area and highway network. Appropriate measures would be required to ensure that there would be no unacceptable impact on the local community or the wider area.

- Any new plant should be a good quality design having regard to the location of the site.

- The potential impact on the watercourses and groundwater should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- Any application should include details of the destination of recycled and recovered materials from the site, and the destination and disposal methods for residues from waste processing.

- A transport assessment will be required to address the traffic generation of the proposed development and its impact on the local road network.

- Identify how a facility on a 'local' site may work in conjunction with the existing network of waste management facilities and potential markets for the recovered materials.

- Show that alternative sites have been considered, and indicate why the particular site chosen is preferential for the proposed development.

KEY TO FOLLOWING INSET MAPS

GLOUCESTERSHIRE WASTE LOCAL PLAN
ENVIRONMENTAL AND OTHER CONSTRAINTS

ENVIRONMENTAL CONSTRAINTS

SCHEDULED ANCIENT MONUMENT

SEVERN ESTUARY SSSI, RAMSAR, SPA, pSAC, KEY WILDLIFE SITE

AREA OF OUTSTANDING NATURAL BEAUTY (AONB)

SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

GREEN BELT

PROPOSED AREA OF HIGH QUALITY LANDSCAPE (ESTUARINE/WATERCOURSE)

SPECIAL LANDSCAPE AREA (SLA)

KEY WILDLIFE SITE

LANDSCAPE CONSERVATION AREA

CONSERVATION AREA

BOUNDARY BETWEEN DEVELOPED/UNDEVELOPED COASTAL ZONE

HIGHWAYS

LAND SAFEGUARDED FOR HIGHWAY

PUBLIC RIGHTS OF WAY

PUBLIC FOOTPATH

PUBLIC BRIDLEWAY

ROAD USED AS A PUBLIC PATH

BYWAY OPEN TO ALL TRAFFIC

OTHER CONSTRAINTS

LAND ALLOCATED FOR HOUSING

NOTE: the list of environmental constraints is not exhaustive and must be viewed in conjunction with the individual proposals and other policies of this Plan.

GLOUCESTERSHIRE WASTE LOCAL PLAN PROPOSALS MAP PART A 'STRATEGIC SITES'

INSET MAPS

No.	Name of Site
1	WINGMOOR FARM WEST, SITES A & B, BISHOP'S CLEEVE
2	WINGMOOR FARM EAST, BISHOP'S CLEEVE
3	SUDMEADOW, HEMPSTED
4	INDUSTRIAL ESTATE, FORMER MORETON VALENCE AIRFIELD
5	SHARPNESS DOCKS, SHARPNESS
6	RECLAIMED CANAL LAND, NETHERIDGE

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ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

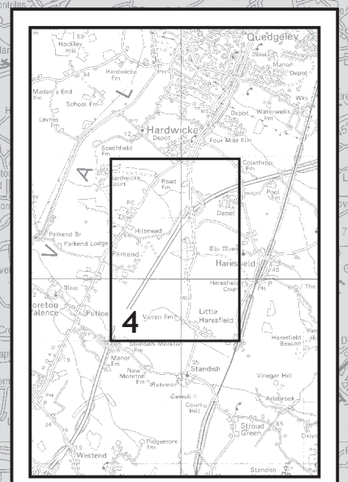
Inset Plan 1 & Inset Plan 2

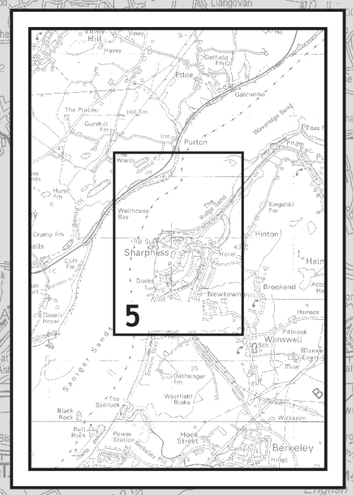
Inset Plan 3

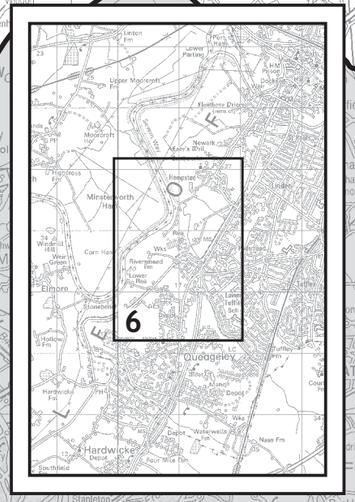
Inset Plan 6

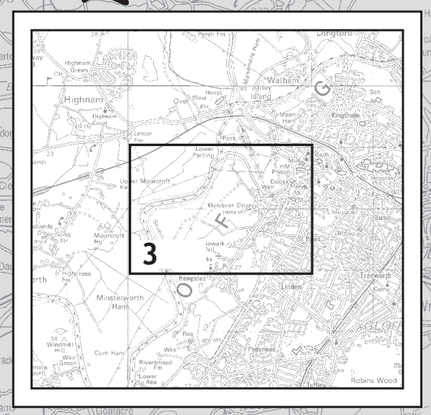
Inset Plan 4

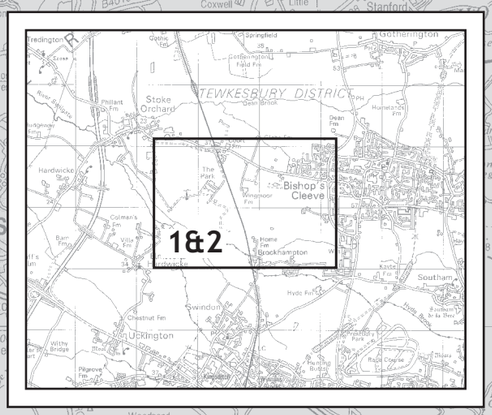
Inset Plan 5











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Scale: 1:250,000 and 1:100,000

GLOUCESTERSHIRE WASTE LOCAL PLAN PROPOSALS MAP PART B 'LOCAL SITES'

INSET MAPS

No.	Name of Site
7	GLOUCESTER BUSINESS PARK
8	MORETON-IN-MARSH, COTSWOLDS
9	PHOENIX HOUSE, ELMSTONE HARDWICKE
10	LAND AT REAR OF DOWTY, STAVERTON
11	RAILWAY TRIANGLE SITE, GLOUCESTER
12	LAND ADJACENT TO SUDMEADOW, HEMPSTED
13	FOREST VALE INDUSTRIAL ESTATE, CINDERFORD
14	CANAL WORKS, LYDNEY
15	LYDNEY INDUSTRIAL ESTATE, LYDNEY
16	WILDERNESS QUARRY, MITCHELDEAN

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ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

Inset Plan 8

Inset Plan 9

Inset Plan 10

Inset Plan 11

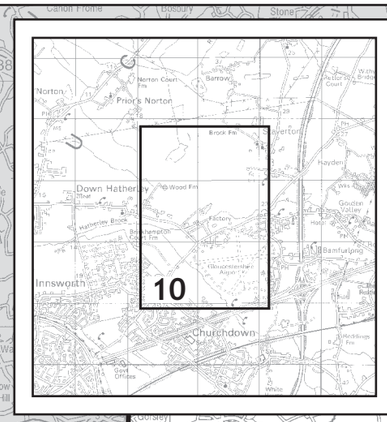
Inset Plan 12

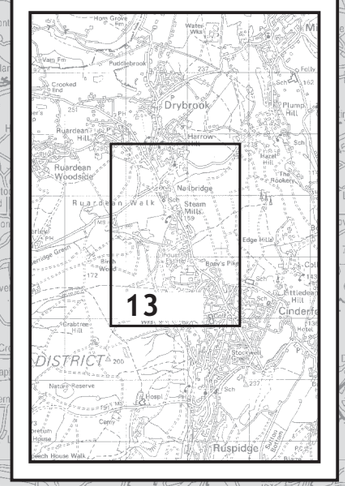
Inset Plan 7

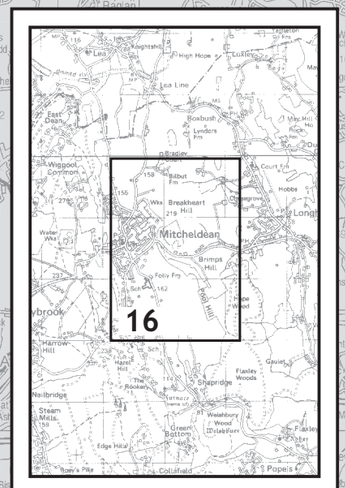
Inset Plan 16

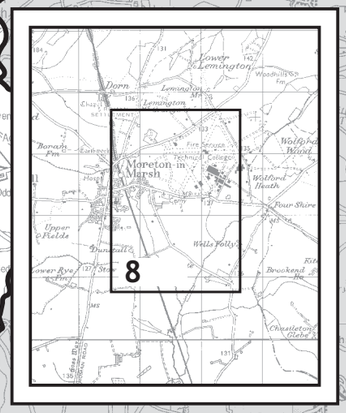
Inset Plan 13

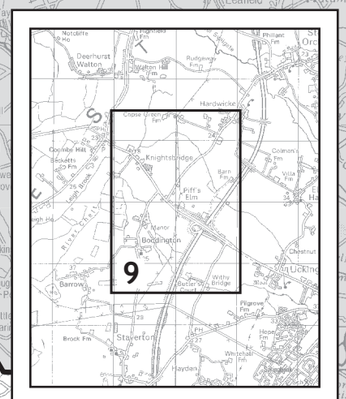
Inset Plans 14 & 15

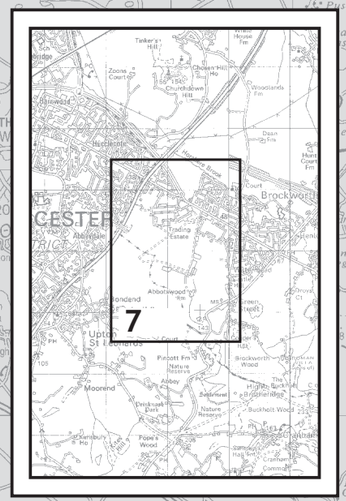


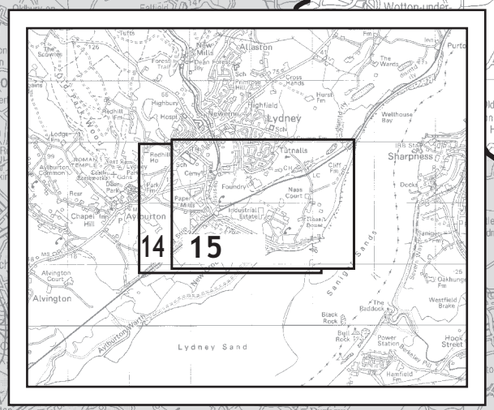


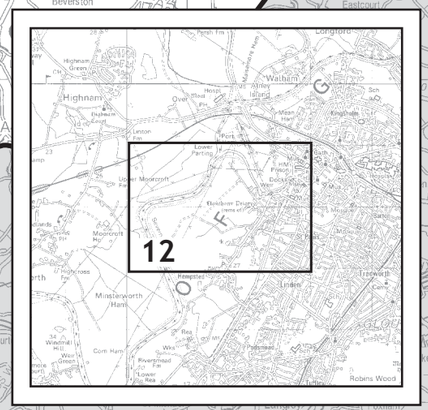


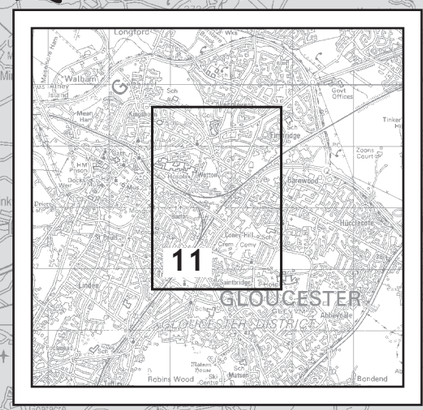












Scale: 1:250,000 and 1:100,000

GLOUCESTERSHIRE WASTE LOCAL PLAN PROPOSALS MAP PART B cont'd 'LOCAL SITES'

INSET MAPS

No.	Name of Site
17	WINGMOOR FARM SOUTH EAST, BISHOP'S CLEEVE
18	FOSS CROSS INDUSTRIAL ESTATE, CALMSDEN
19	OLD AIRFIELD, MORETON VALENCE
20	LAND ADJACENT TO GASWORKS, BRISTOL ROAD, GLOUCESTER
21	NETHERHILS PIT, FRAMPTON-ON-SEVERN

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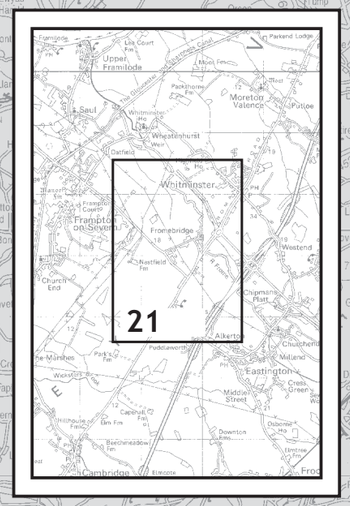
Inset Plan 17

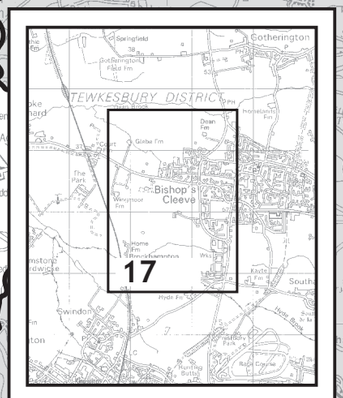
Inset Plan 18

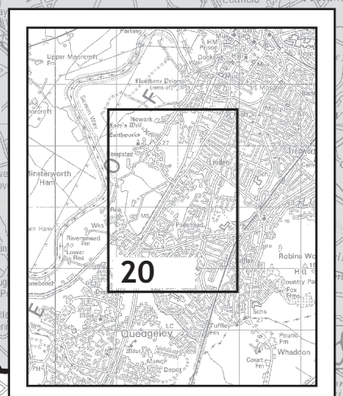
Inset Plan 19

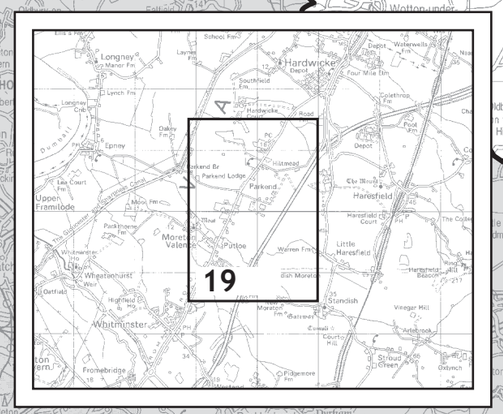
Inset Plan 20

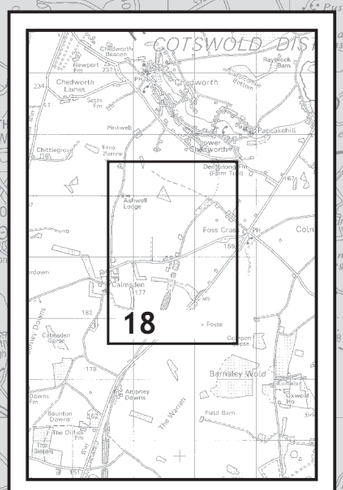
Inset Plan 21











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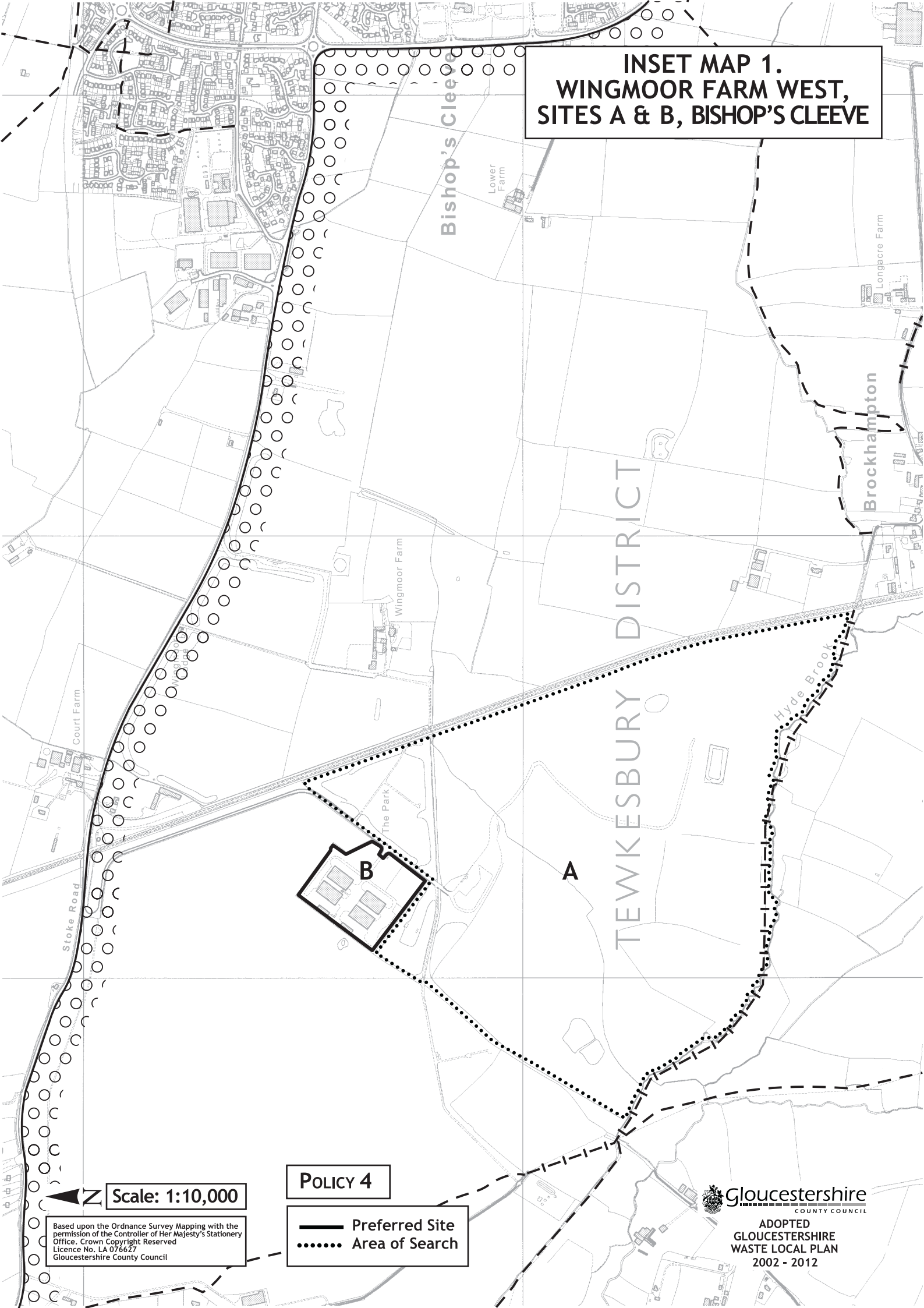
INSET MAP 1.
WINGMOOR FARM WEST,
SITES A & B, BISHOP'S CLEEVE
Bishop's Cleeve
Lower Farm
Longacre Farm
Brockhampton
TEWKESBURY DISTRICT
Wingmoor Farm
Court Farm
Stoke Road
The Park
Hyde Brook
A
B
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SITE PROFILE

Site Name: Wingmoor Farm West, Sites A & B, Bishop's Cleeve

Site No: 1

Site Area: 66.1 Hectares **District:** Tewkesbury Borough

Location: The sites are situated to the west of the residential area of Bishop's Cleeve and south east of the residential area of Stoke Orchard. A railway line bounds the site to the east and divides the site from the Wingmoor Farm East site (Site 2). The surrounding land uses are mainly agricultural and other waste management facilities.

Existing Operations: Landfill with Energy Recovery, a Transfer Station and a Household Waste Recycling Centre all exist on the site dealing with both household and commercial waste. Further Landfill and mineral extraction sites are in close proximity.

Further Information and History: The sites form a well-established waste management facility. Site A is a landfill site with energy recovery, and also includes a Household Waste Recycling Centre. Site B currently houses a waste transfer station in one of the existing buildings on the site. The owners have plans for re-development of the site and the replacement of existing buildings with modern commercial units for use classes B2 and B8. The sites lie almost in the centre of the County, in close proximity to Cheltenham and Bishops Cleeve and with access to Tewkesbury and Gloucester.

Constraints

Access: Main access to the site by road is from Stoke Road from the A435 to the east. Stoke Road to the west is restricted to vehicles passing through of less than 17 tonnes. HGVs use the existing highway network to reach the current landfill site. The adjacent railway line provides the opportunity for a potential on site rail connection.

Environmental: Within the Green Belt.
Visible from AONB.

Proximity to Dwellings: Approx 90m from several boundaries are individual farm units. The village of Brockhampton lies to the south of the site. Settlements of Bishop's Cleeve and Gotherington nearby to the north east, Brockhampton, Stoke Orchard and other small settlements around the south and west of the site.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site adjoins Hyde Brook. The potential impact on the watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

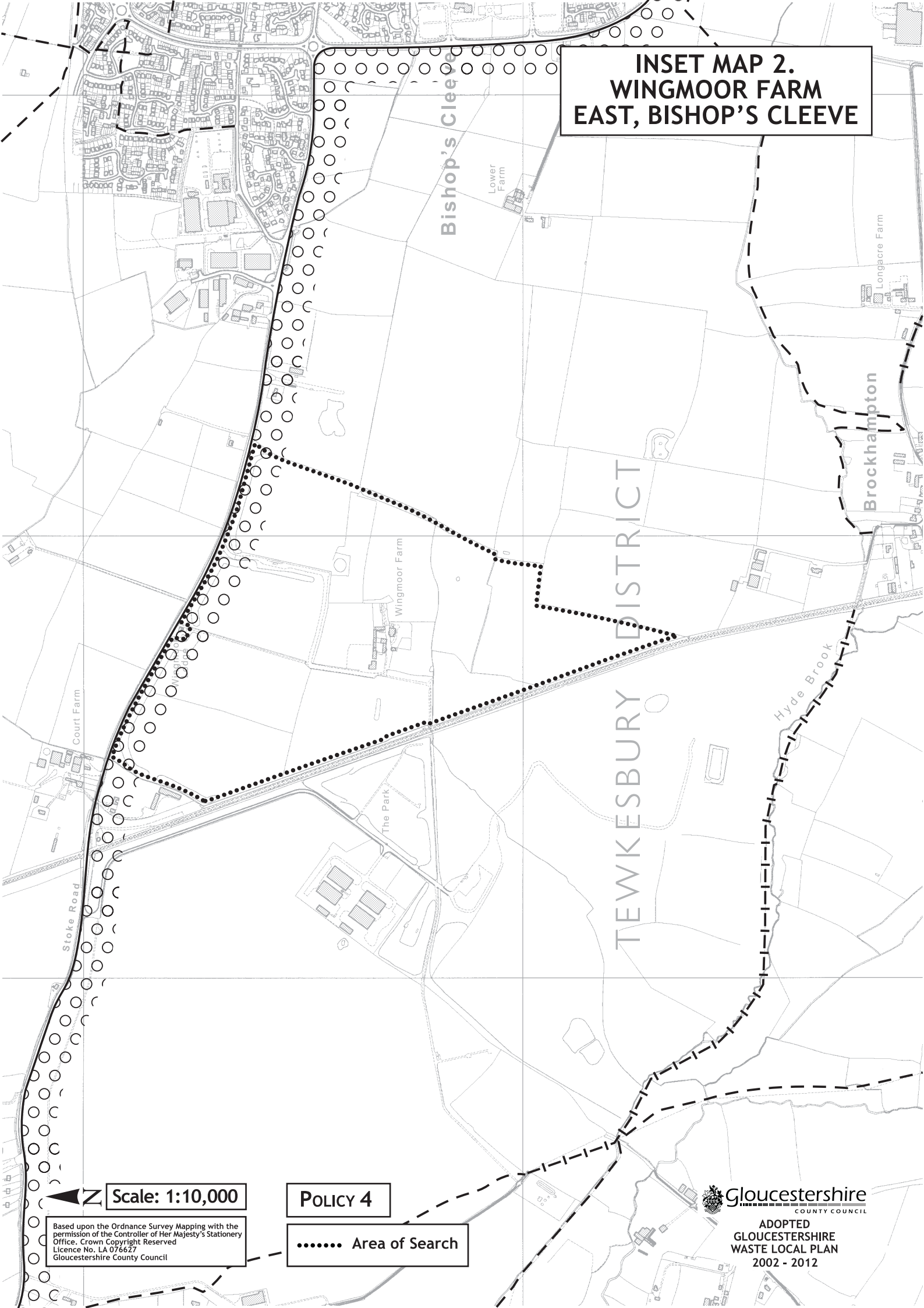
- New waste management facilities should be designed, and if necessary contained, to ensure that dust, odour, fumes, noise, litter and other effects do not have a materially adverse impact on nearby residents and businesses.

- Stoke Road requires improvement from the site to its junction with the A435 to make it more suitable for use by heavy lorries. Improvements are needed to Stoke Road to make it safer for pedestrians and cyclists from the A435 up to, and including, Stoke Orchard village. A Transport Assessment for any application for planning permission will be sought in accordance with Policy 39 assessing routes to connect with the M5, Cheltenham, Gloucester and Tewkesbury.

- The Green Belt status of the site may require demountable buildings to be provided on site A and their use limited to the duration of the landfill operations. Buildings on site B may need to be consolidated with those existing.[1]

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

[1] At the 5 year Review of this Plan the WPA will critically review the future waste management role of the site. The role of area A will be reviewed in particular, in the context of the expected timescale for future landfill and Green Belt policies.


INSET MAP 2.
WINGMOOR FARM
EAST, BISHOP'S CLEEVE
Bishop's Cleeve
Lower Farm
Longacre Farm
Brockhampton
TEWKESBURY DISTRICT
Wingmoor Farm
Court Farm
The Park
Hyde Brook
Stoke Road
N
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SITE PROFILE

Site Name: Wingmoor Farm East, Bishop's Cleeve

Site No: 2

Site Area: 48.7 hectares **District:** Tewkesbury Borough

Location: The site is situated to the west of the residential area of Bishop's Cleeve and south east of the residential area of Stoke Orchard. The railway line bounds the site to the west and forms the border with the Wingmoor Farm West Sites A & B (Site 1). The surrounding land uses consist mainly of agricultural land and other waste management facilities. The site also lies within the Green Belt defined in the District Local Plan.

Existing Operations: The site is used for the extraction of minerals and landfill/landraise of household, commercial and special wastes. Further landfill sites and a Waste Transfer Station are in close proximity.

Further Information and History: The site is a well-established waste management facility. It lies almost in the centre of the County, in close proximity to Cheltenham and Bishop's Cleeve and with access to both Tewkesbury and Gloucester.

Constraints

Access: Main access to the site by road is from Stoke Road from the A435 to the east. Stoke Road to the west is restricted to vehicles passing through of less than 17 tonnes. HGVs use the existing highway network to reach the existing landfill site. The adjacent railway line may provide the potential for an on site rail connection.

Environmental: Within Green Belt
Visible from AONB

Proximity to Dwellings: A farm lies to the north of the site. Settlements of Bishop's Cleeve and Gotherington nearby to the north east, Brockhampton, Stoke Orchard and other small settlements around the south and west of the site.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site adjoins Hyde Brook. The potential impact on the watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

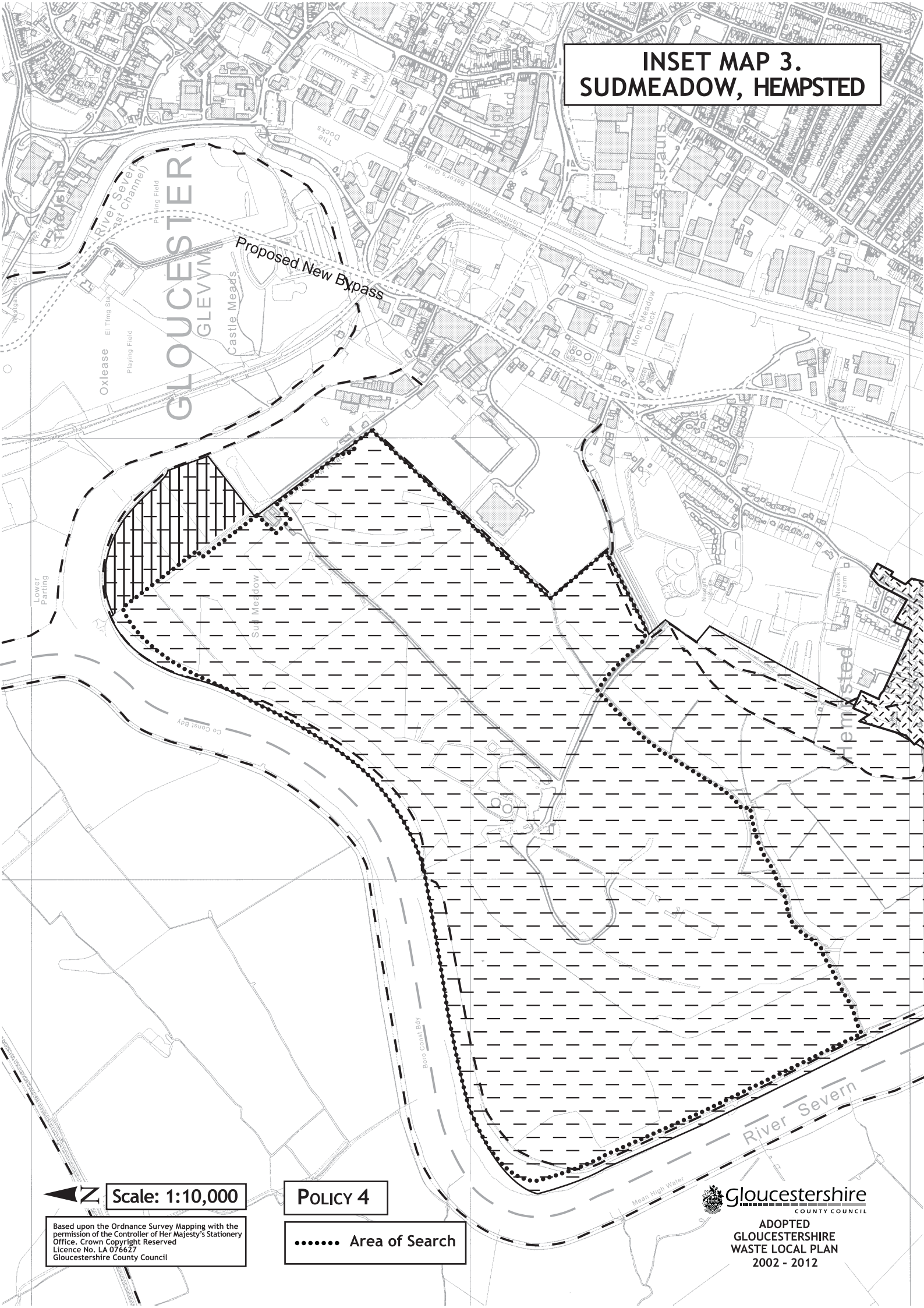
- New waste management facilities should be designed, and if necessary contained, to ensure that dust, odour, fumes, noise, litter and other effects do not have a materially adverse impact on nearby residents and businesses.

- Stoke Road requires improvement from the site to its junction with the A435 to make it more suitable for use by heavy lorries. Improvements are needed to Stoke Road to make it safer for pedestrians and cyclists from the A435 up to, and including, Stoke Orchard village. A Transport Assessment for any application for planning permission will be sought in accordance with Policy 39 assessing routes to connect with the M5, Cheltenham, Gloucester and Tewksbury.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

- The Green Belt status of the site may require demountable buildings to be provided and their use limited to the duration of the minerals workings and landfill/landraise operations. [2]

[2] The future waste management role of the site will be reviewed in the context of the timescale of the existing landfill operations and Green Belt policies.


INSET MAP 3.
SUDMEADOW, HEMPSTED
Proposed New Bypass
GLOUCESTER
GLEVUM
River Severn
(East Channel)
Castle Meads
Oxlease
Playing Field
Sud Meadow
Lower Parting
Hempsted
Co Const Bdy
Boro Const Bdy
River Severn
Mean High Water
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SITE PROFILE

Site Name:	Sudmeadow, Hempsted.
Site No:	3
Site Area:	142 hectares **District:** Gloucester City
Location:	The site is situated on the western fringe of Gloucester, off Hempsted Lane. Bounded by the River Severn on two sides, part of the site lies in the flood plain. The residential area of Hempsted lies to the south-east. Surrounding land uses mainly consist of agricultural land, waterways, other waste management facilities, and industrial development.
Existing Operations:	Landfill with energy recovery, composting, recovery and recycling of inert material and a Household Waste Recycling Centre all exist on the site. Transfer stations, Materials Recovery Facilities, and metal recycling facilities are in close proximity.
Further Information and History:	The site is a well-established waste management facility. It lies in very close proximity to Gloucester and within reach of Cheltenham, Tewkesbury, Stroud and the Forest of Dean. The site meets the requirements of Structure Plan Policy and the Proximity Principle. However, Gloucester City Council maintained an objection to any expansion of the site at the Examination In Public of the Structure Plan. The site is not considered to be suitable for a large-scale waste to energy recovery operation in view of the impact upon the flood plain and the visual amenity of the approach to Gloucester City from the Forest of Dean.[3]

Constraints

Access:	Road access to the site is poor as the main access to the area is off Hempsted Lane, which in itself is only accessible at present by passing over a canal bridge. There may be a possibility of gaining access from the Gloucester South West by-pass when it is built, contributions to which may be sought. Whilst existing roads to the site are used by HGVs, a permanent Strategic facility would need a new access.
Environmental:	Within Flood Plain[4] - The site is within the 1947 floodplain. As such, some areas, with the greatest risk of flooding, may not be able to be used. The site is within a Landscape Conservation Area and adjoins a Key Wildlife Site.
Proximity to Dwellings:	Approx 100 houses lie around 180m from the South border of the site. Some adjacent land allocated for residential dwellings.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

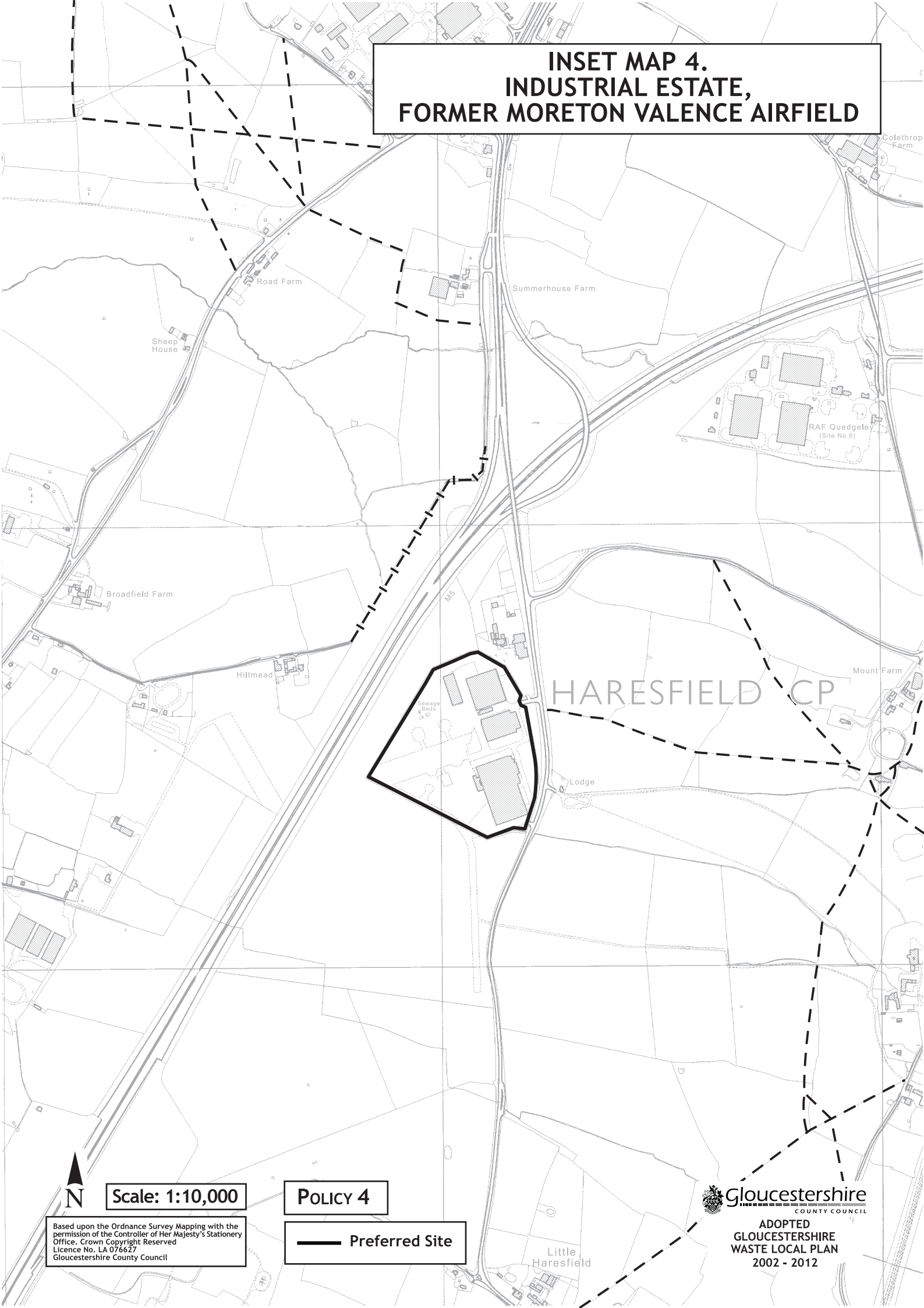
- The site adjoins the River Severn. The potential impact on watercourses should be assessed and,

[3] *Upon review of the Plan the WPA will reconsider whether Sudmeadow should remain a strategic waste management site.*

[4] *On the basis of evidence submitted to the Public Inquiry, landfill/landraise is projected to end at this site by 2013. The long-term development of the area is constrained by its impact on views of the City and flooding. Consequently any new proposals for waste management should be linked directly to the life of the landfill/landraise. Any applications for any major waste management development should be accompanied by a full Environmental Impact Assessment including landscape and flood risk inputs.*

where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- The risk and potential need for flood prevention and compensation measures should be considered as part of any proposal for development. Any proposals should satisfy the requirements of the Environment Agency in relation to flooding and the need to maintain flood capacity.


INSET MAP 4.
INDUSTRIAL ESTATE,
FORMER MORETON VALENCE AIRFIELD
Colethrop Farm
Road Farm
Summerhouse Farm
Sheep House
RAF Quedgeley (Site No 6)
Broadfield Farm
M5
Hiltmead
Sewage Beds
HARESFIELD CP
Mount Farm
Lodge
Little Haresfield
N
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SITE PROFILE

Site Name:	Industrial Estate on the former Moreton Valence Airfield
Site No:	4
Site Area:	11.2 hectares **District:** Stroud District
Location:	The site is situated to the south of Gloucester along the B4008 towards Stonehouse. The site forms part of an industrial estate, which comprises of derelict land and large warehouse style buildings (ex hangers). The buildings are currently used for storage and distribution purposes.
Existing Operations:	To the South West of the site (on the other side of the motorway) there is a transfer station/material recycling facility which also takes limited quantities of cement bonded asbestos.
Further Information and History:	The site is designated as employment land in the District Local Plan. It has good road access and is fairly close to the main urban area of Gloucester. It could also serve the needs of Stonehouse and Stroud without the requirements of transfer stations in these areas. The site meets the requirements of Structure Plan Policy and the Proximity Principle.

Constraints

Access:	The main access to the site is from the B4008, which has access to the A38 and the motorway network. The point of access and egress will need some highway improvement. The site would benefit from the M5 Junction 12 upgrading proposal and its further development may only be suitable after its completion. Contributions may be required to A38 and M5 junction improvements depending on the intensity of any proposed use. A Transport Assessment for any application for planning permission will be sought in accordance with Policy 39 assessing routes to connect with the M5, Cheltenham, Gloucester and Stroud.
Environmental:	Visible from AONB
Proximity to Dwellings:	A single dwelling lies approx 247m from the boundary. Land nearby allocated for Mixed Use.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 5.
SHARPNESS DOCKS, SHARPNESS

N

Scale: 1:10,000

POLICY 4

Preferred Site

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WASTE LOCAL PLAN
2002 - 2012

SITE PROFILE

Site Name: Sharpness Docks, Sharpness

Site No: 5

Site Area: Site A 17.2 hectares
Site B 8.4 hectares

District: Stroud District

Location: Sharpness is situated in the south west of the County adjacent to the River Severn. The dock area has historically been heavily industrialised with extensive dock development in the late 19th, early 20th Century. The Severn Estuary runs adjacent to the site.

Existing Operations: Several waste recycling companies are based in Sharpness handling plastics, office waste, metals and textiles. A company also holds a license for the re-use of incinerator ash.

Further Information and History: An existing industrialised area with several employment allocations in the District Local Plan, there is potential for the development of a Strategic waste management facility. The area suffers from unemployment, and needs new investment and regeneration. The sites can accommodate the expansion and development of associated industries adjacent to a Strategic waste facility.

The opportunity to make use of water and rail borne transport in relation to a waste management facility presents this area as a more sustainable option. Given the unique location of Sharpness in relation to sustainable transport opportunities, it may be considered as a possible option for the development of a regional scale facility. It was recommended at the Examination in Public for the Structure Plan for Gloucestershire, that the wider regional picture should be borne in mind. However, it is not the intention of the Plan that any waste imported into the County would be disposed of in the County. But imported waste could be processed here and the industrial benefits gained. The transportation of waste by road will have to be restricted to ensure the use of sustainable transport modes. Regional proposals would require much further detailed research and investigation

Constraints

Access: The area has a range of sustainable transport links. There is existing water borne transport infrastructure with access to the Gloucester – Sharpness Canal and Lydney Docks a short distance across the River Severn. Historically there have been good rail-links to the site, which could be reopened. Road access to the area is via the B4066 (which bypasses Berkeley) from the A38.

Environmental: Certain areas adjacent to / or within Conservation Area.
Part of Site A comprises a proposed Area of High Quality Estuarine Landscape (Estuarine/Watercourse).
Severn Estuary SSSI, RAMSAR, SPA, pSAC, and Key Wildlife Sites in close proximity.

Proximity to Dwellings: A small number of houses border one of the areas identified on the site

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also

address the following:

- The site adjoins the River Severn, Docks and Canal network. The potential impact on the watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- A Transport Assessment will be required to address the traffic generation of the proposed development and its impact on the local road network. A weight restriction may be placed on the "old" docks entrance and contributions sought towards the construction of the A38 to Mobleys Link.

- The sites lie within the historic docks area. An archaeological evaluation would be required to determine the impact any development may have.

- In relation to site area B the prominence of parts of the site will require a low profile building of sympathetic design.

- The northern section of area A should not be encroached upon without cogent justification in relation to area B and the southern part of A. Any waste facility will require careful design and siting to ensure compatibility with the estuarine landscape and the Sharpness Old Dock Conservation Area.

- The Conservation (Natural Habitats, & c.) Regulations, 1994 (SI 1994 No. 2716) and the Conservation (Natural Habitats, & c.) (Amendment) (England) Regulations 2000 (SI 2000 No. 192) must be complied with.

- At this location the water and rail infrastructure are seen as crucial in any strategic waste management development. The WPA will actively discourage any proposals for waste management development, which are not primarily based on use of the water and rail transport. In this respect the WPA encourages any prospective developers to discuss the transportation requirements of waste management facilities at an early stage.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

- Incineration is not considered to be appropriate at this site.

INSET MAP 6. RECLAIMED CANAL LAND, NETHERIDGE

SITE PROFILE

Site Name:	Reclaimed Canal Land, Netheridge *(as an ancillary facility to Site 5)*
Site No:	6
Site Area:	1 hectare **District:** Gloucester City
Location:	The site is situated on the western fringe of Gloucester, partly within land which currently forms the two mile bend at Netheridge. This will be reclaimed through the construction of this section of the Gloucester South West by-pass. Industrial and commercial development and the Gloucester to Sharpness Canal bound the site along with the Netheridge section of the By Pass (to be built).
Existing Operations:	Sewage Treatment Works, Transfer stations, Materials Recovery Facilities, and scrapyards are in close proximity to the site.
Further Information and History:	The site lies adjacent to what will become a major road junction. By placing a waste transfer facility here, in close proximity to waste arising from Gloucester and current waste management facilities, the waste could be transferred by barge to a strategic facility at Sharpness. Any residues requiring final disposal could be returned by barge to this site. The site meets the requirements of Structure Plan Policy and the Proximity Principle.

Constraints

Access:	Access to the site is most likely to be directly off the South West by-pass. There is however a complicated junction layout adjacent to the site and a bridge over what will be the new section of the canal. The site will be immediately adjacent to the canal infrastructure.
Environmental:	Adjacent to Landscape Conservation Area In close proximity to Key Wildlife Site
Proximity to Dwellings:	A small housing estate lies approx 250m to the west of the site

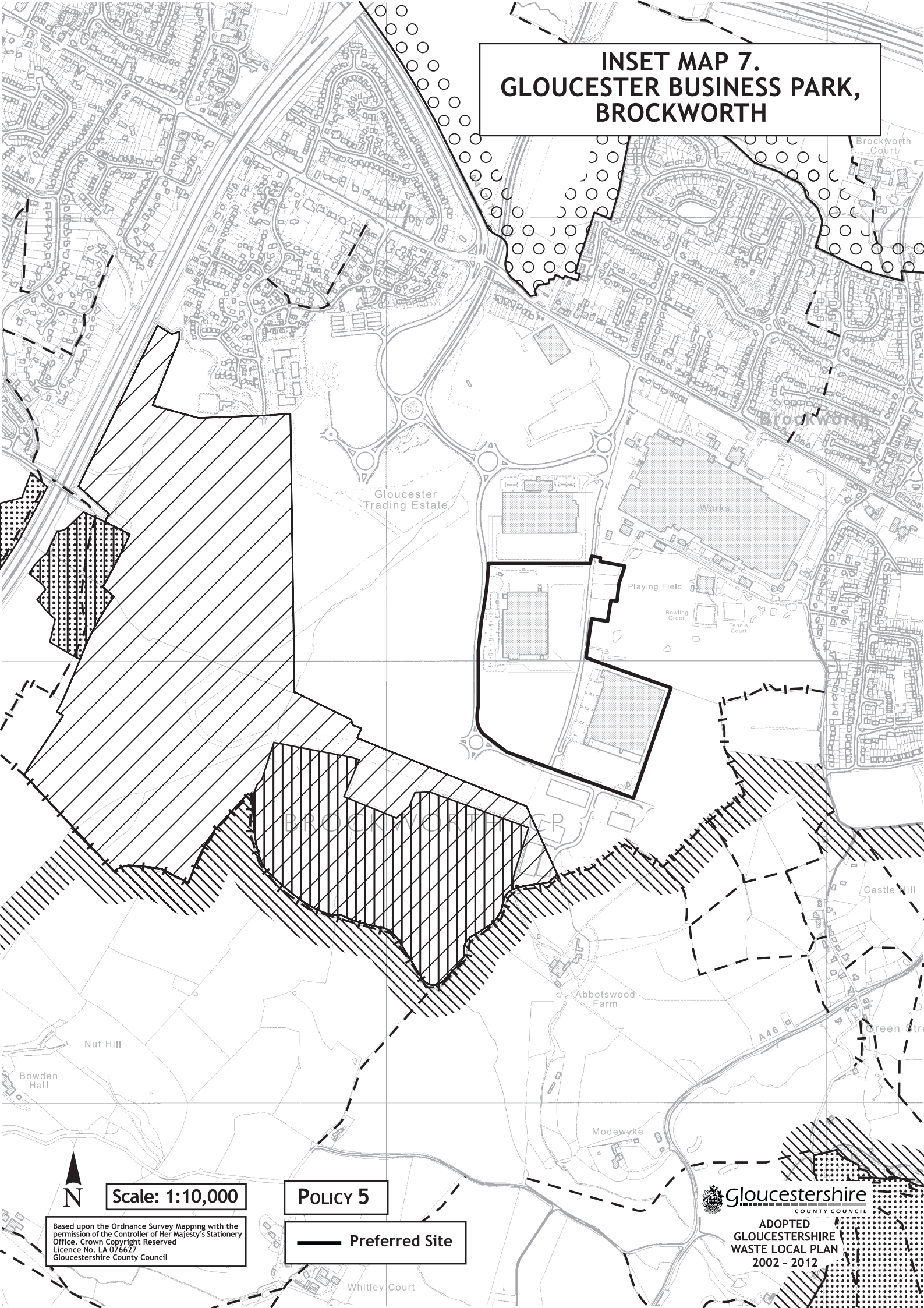
Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site adjoins the Gloucester to Sharpness Canal with the River Severn also in close proximity. The potential impact on watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- A Transport Assessment will be needed for the likely sources of waste passing through the facility and the types of road vehicle delivering and collecting them. The impact of traffic on the new by-pass and associated roads should be given particular attention.

INSET MAP 7.
GLOUCESTER BUSINESS PARK, BROCKWORTH



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SITE PROFILE

Site Name:	Gloucester Business Park, Brockworth		
Site No:	7		
Site Area:	15 Hectares	**District:**	Tewkesbury Borough
Location:	The site is situated just off the roundabout at the end of the Brockworth by-pass. The residential area of Brockworth lies to the north and east of the site with the residential area of Hucclecote lying to the west. The site is a former airfield, which is currently being developed into a Strategic Business Park. The surrounding land uses are, heavy industry, warehousing and proposed new housing development.		
Existing Operations:	None in immediate vicinity.		
Further Information and History:	Coopers Hill LNR which is part of the Cotswold Commons and Beechwoods Site of Special Scientific Interest and Cotswold Beechwoods Candidate SAC lies to the south of the site which would need to be carefully considered. The site meets the requirements of Structure Plan Policy and the Proximity Principle.		

Constraints

Access:	Access to the site has recently been improved by the A417/M5 underpass link. (not indicated on the inset map)
Environmental:	Hucclecote Meadows SSSI lies off the west boundary of the site between land allocated for housing and the M5 motorway. Coopers Hill LNR which is part of the Cotswold Commons and Beechwoods Site of Special Scientific Interest and Cotswold Beechwoods Candidate SAC lies to the south of the site. Part of the site lies Adjacent to AONB.
Proximity to Dwellings:	A row of houses borders the site. A large area of land is allocated for housing development adjacent to the west and south of the site.

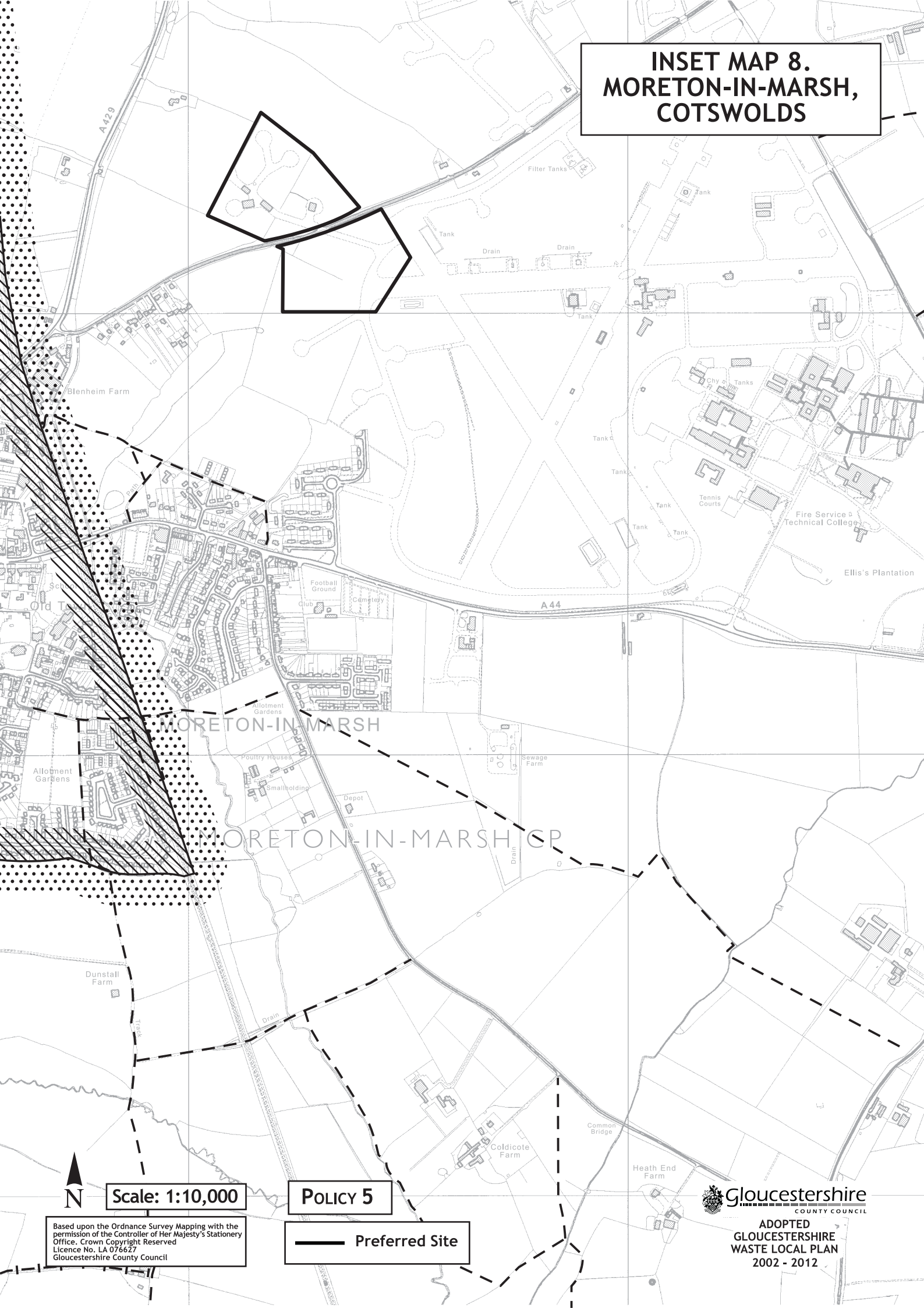
Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site lies within an extensive area of Roman Settlement. On the site itself Roman fields and burials have been found near the southern boundary. Archaeological evaluation would be necessary in order to determine the impact of any development.

- Because of the relatively high environmental quality of the site area and surrounding land uses and the strategic importance of the Business Park it will be necessary for operational areas to be fully enclosed and for vehicles servicing for the facility to conform to appropriate environmental standards. The type and volume of traffic generated and access arrangements will be scrutinised for compatibility with other land uses.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.


INSET MAP 8.
MORETON-IN-MARSH,
COTSWOLDS
A429
A44
Blenheim Farm
Filter Tanks
Tank
Drain
Chy
Tanks
Tennis Courts
Fire Service
Technical College
Ellis's Plantation
Football Ground
Club
Cemetery
Old Town
Allotment Gardens
Poultry Houses
Smallholding
Depot
Sewage Farm
MORETON-IN-MARSH
MORETON-IN-MARSH CP
Dunstall Farm
Track
Common Bridge
Coldicote Farm
Heath End Farm
N
Scale: 1:10,000
POLICY 5
Preferred Site
Based upon the Ordnance Survey Mapping with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright Reserved
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Gloucestershire
COUNTY COUNCIL
ADOPTED
GLOUCESTERSHIRE
WASTE LOCAL PLAN
2002 - 2012

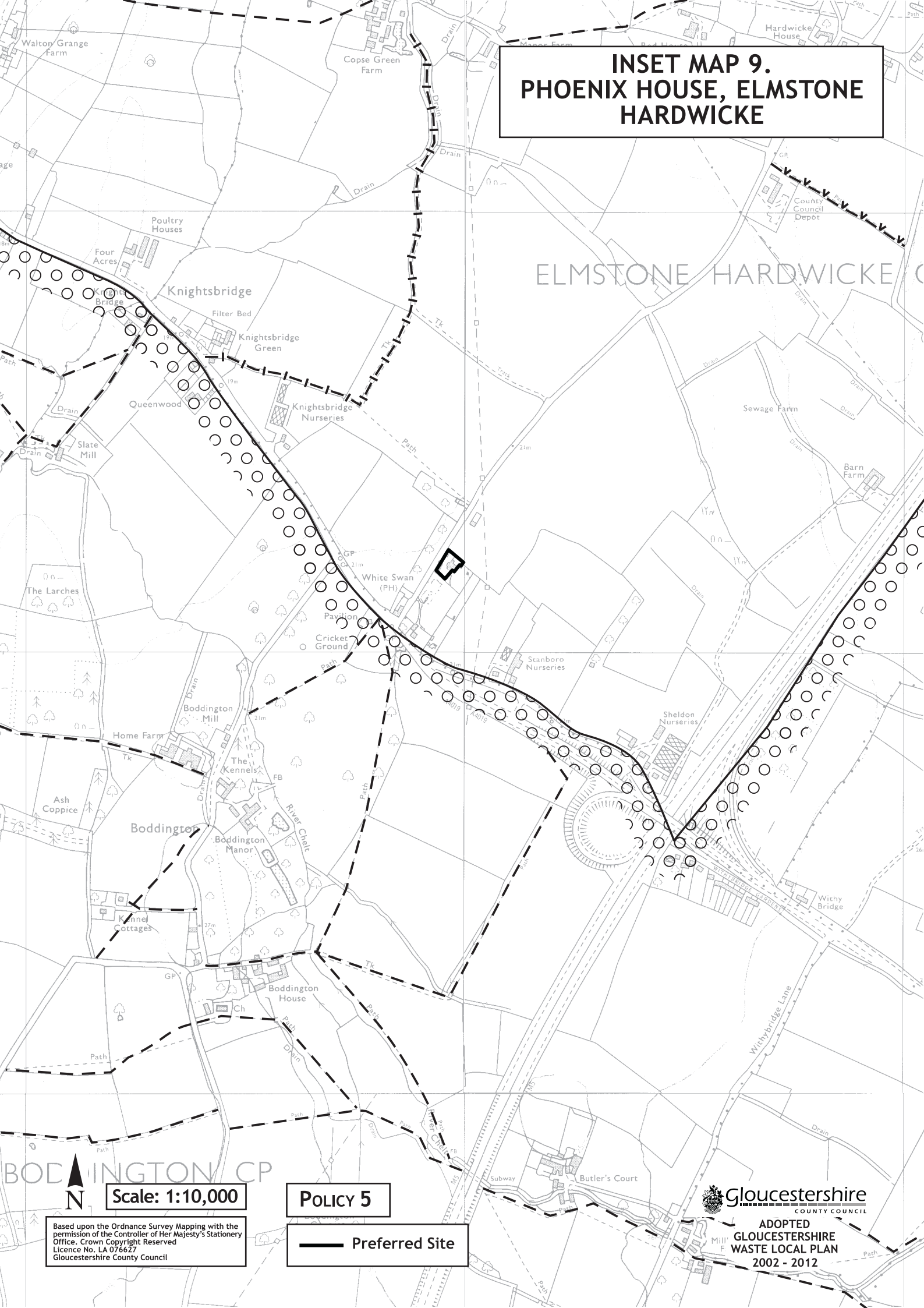
SITE PROFILE

Site Name:	Moreton in Marsh, Cotswolds
Site No:	8
Site Area:	5.3 hectares (North) **District:** Cotswold District 4.5 hectares (South)
Location:	The preferred sites are located off Todenham Road to the north of Moreton in Marsh. The sites comprise land that was formerly part of an airfield, with the southern parcel now within the Fire Services College, and the northern parcel in agricultural/storage use. The southern site is bounded to the south west by an allocation of 'protected open space' in the Cotswold District Local Plan. The northern parcel is bounded by agricultural land.
Existing Operations:	There is a metal recycling facility, a sewage treatment works and operations for the recovery and recycling of inert waste in the vicinity of Moreton-in-Marsh.
Further Information and History:	For a Household Waste Recycling Site serving the local area the sites meet the requirements of Structure Plan Policy and the Proximity Principle. Any such site would need to be located and designed to minimise impact on the open countryside and dwellings, sited away from the residential properties and would need some form of lighting restriction. Some natural screening exists in and around the sites, but additional screening would be required. The majority of the sites appear either undeveloped or derelict although there is some evidence of the northern parcel being used for agricultural purposes.

Constraints

Access:	The access to both sites is via the Todenham Road. Whilst there are existing turns for access and egress there may be a requirement to improve these for highway safety.
Environmental:	Lies within a Special Landscape Area Protection Policy on areas of nearby land Visible from AONB
Proximity to Dwellings:	A number of properties are located along Todenham Road. The nearest in both easterly and westerly directions being some 200m away. The Cotswold District Local Plan identifies the intervening area to the west as 'protected open space' whilst to the east are open fields.

INSET MAP 9.
PHOENIX HOUSE, ELMSTONE HARDWICKE



Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name:	Phoenix House, Elmstone Hardwicke		
Site No:	9		
Site Area:	0.02 hectares	**District:**	Tewkesbury Borough
Location:	The site is on Stoke Road, off the A4019 Cheltenham to Tewkesbury road, near its junction with the M5 motorway. The surrounding land uses consist mainly of agricultural land.		
Existing Operations:	A Material Recovery Facility exists on the site.		
Further Information and History:	The site has an established waste management use, previously accommodating an incinerator, without adaptation for energy recovery, which mainly dealt with animal carcasses and animal wastes.		

Constraints

Access:	Access is via Stoke Road onto the A4019.
Environmental:	In close proximity to Green Belt. Visible from AONB.
Proximity to Dwellings:	A number of dwellings, a public house and a guesthouse lie within 500m of the site.

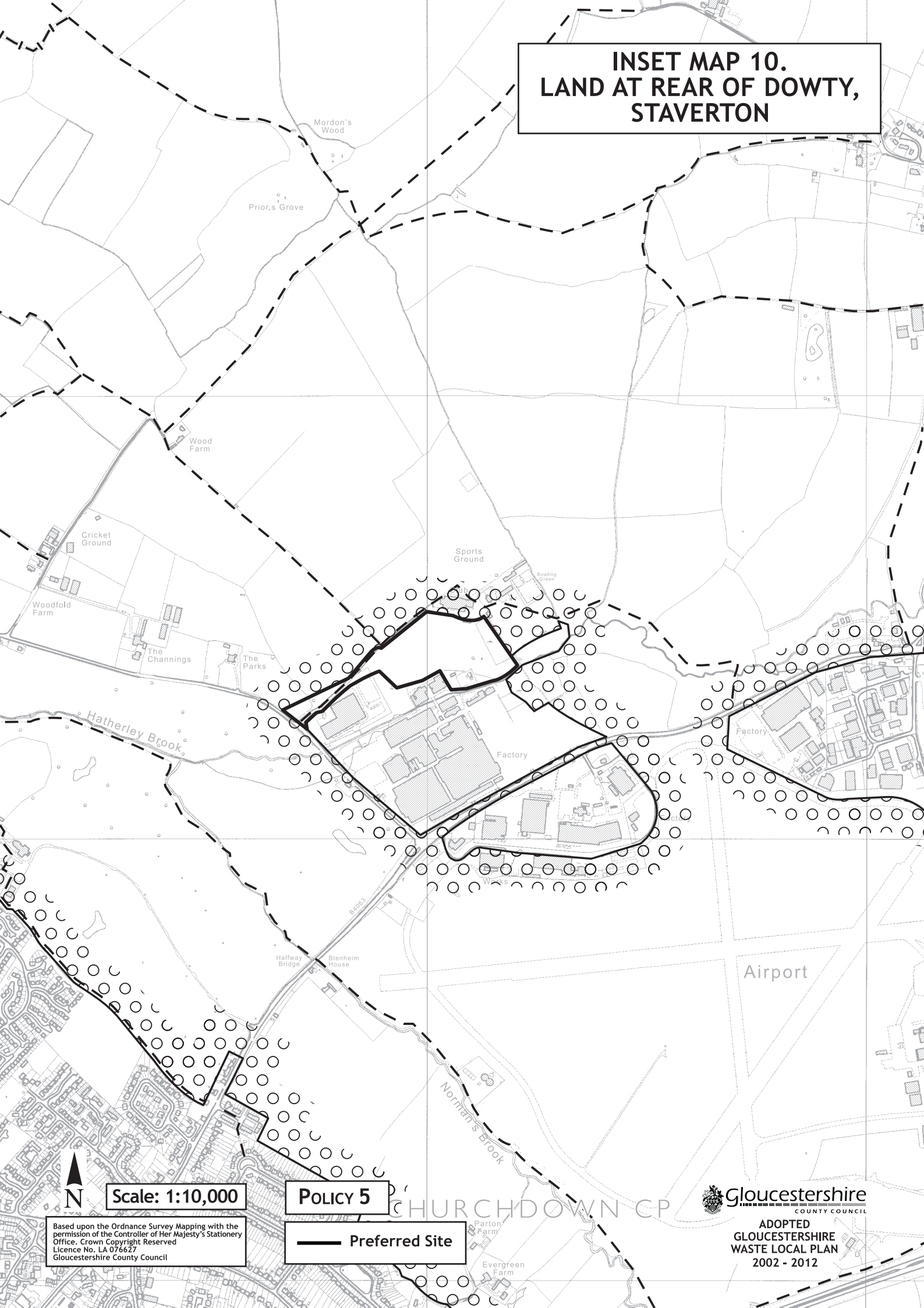
Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- A Traffic Assessment will be required to address the traffic generation of the proposed development and its impact on the local road network. Conditions may be imposed to limit traffic movements to no greater than they are at present.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 10.
LAND AT REAR OF DOWTY, STAVERTON



Gloucestershire COUNTY COUNCIL

ADOPTED
GLOUCESTERSHIRE
WASTE LOCAL PLAN
2002 - 2012

SITE PROFILE

Site Name:	Land Rear of Dowty, Staverton
Site No:	10
Site Area:	5 Hectares **District:** Tewkesbury Borough
Location:	Between Cheltenham and Gloucester. Approximately 2.4 miles by road from Junction 11 of the M5 Motorway, to the north of the B4063 and to the south west of Dowty Sports Ground.
Existing Operations:	A number of metal recycling facilities and a Materials Recovery Facility are nearby.
Further Information and History:	A site with established employment use. Midway between Gloucester and Cheltenham with a location that reduces travelling time or distances for bulk supply. Consultation with airport authorities would be required in relation to the proximity of the site to Staverton Airport. The site is allocated for housing in the Revised Deposit Tewkesbury Local Plan (2001).

Constraints

Access:	Existing site access is 375m to the north of the B4063 on the road to Down Hatherley. There is good access to junction 11 of the M5 via the B4063 and A40(T). Road improvements to the junction of the B4063 could be considered with restrictions against works traffic passing through Down Hatherley. Contributions may be required towards improvements/maintenance of the local network and M5 Junction depending on the intensity of the proposed use.
Environmental:	Adjacent land within Green Belt.
Proximity to Dwellings:	Single Dwelling approx 250m to Northwest.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- Whilst there is no known archaeological site, the site is in a locality where prehistoric and Roman activity may be expected. An archaeological evaluation would be required in order to assess the impact any development proposal may have.
- If the housing allocation is upheld within the Tewkesbury Borough Local Plan, the only waste management option set out in Schedule 2 which is considered to have potential at this site is a Household Waste Recycling Centre.
- The route of public footpath EDH 10/A.
- The site has a good environmental standard that will require enclosed facilities and a high standard of control of noise, dust and other potential pollutants.
- The site access requires substantial improvement. A Transport Assessment will be required.
- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 11.
RAILWAY TRIANGLE SITE, GLOUCESTER

N

Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name: Railway Triangle Site, Gloucester

Site No: 11

Site Area: 7.7 Hectares **District:** Gloucester City

Location: At Barnwood Junction to the north of Metz Way, Gloucester. Formerly in uses associated with a major railway centre, the site is now mainly derelict land with various redundant railway buildings. The site is in close proximity to Gloucester with good links to Cheltenham, Tewkesbury, Stroud and Cirencester.

Existing Operations: There are several transfer stations in close proximity dealing with special, and household wastes. Also a number of metal recycling facilities.

Further Information and History: The land is designated for employment uses in the District Local Plan. It is capable of having good road access subject to new junction at Metz Way. Consideration of individual proposals for waste management development on the Railway Triangle will need to be carefully considered against the longer-term pattern of waste management for the Central Severn Vale and the particular aspirations of Gloucester City Council's Local Plan for this set of Key Sites.

Constraints

Access: Existing access by road is currently from Blinkhorns Bridge Lane. A new access would be required from Metz Way. From there is good access to the M5 motorway junctions via Eastern Avenue and the A417 and the A40 to Junction 11a and A38 to Junction 12. The opportunity exists to integrate waste management facilities with the rail network.

Environmental Within close proximity to a Landscape Conservation Area.

Proximity to Dwellings: There are areas of housing to the north and northeast of the site and the Gloucester Royal Hospital is situated to the northwest.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

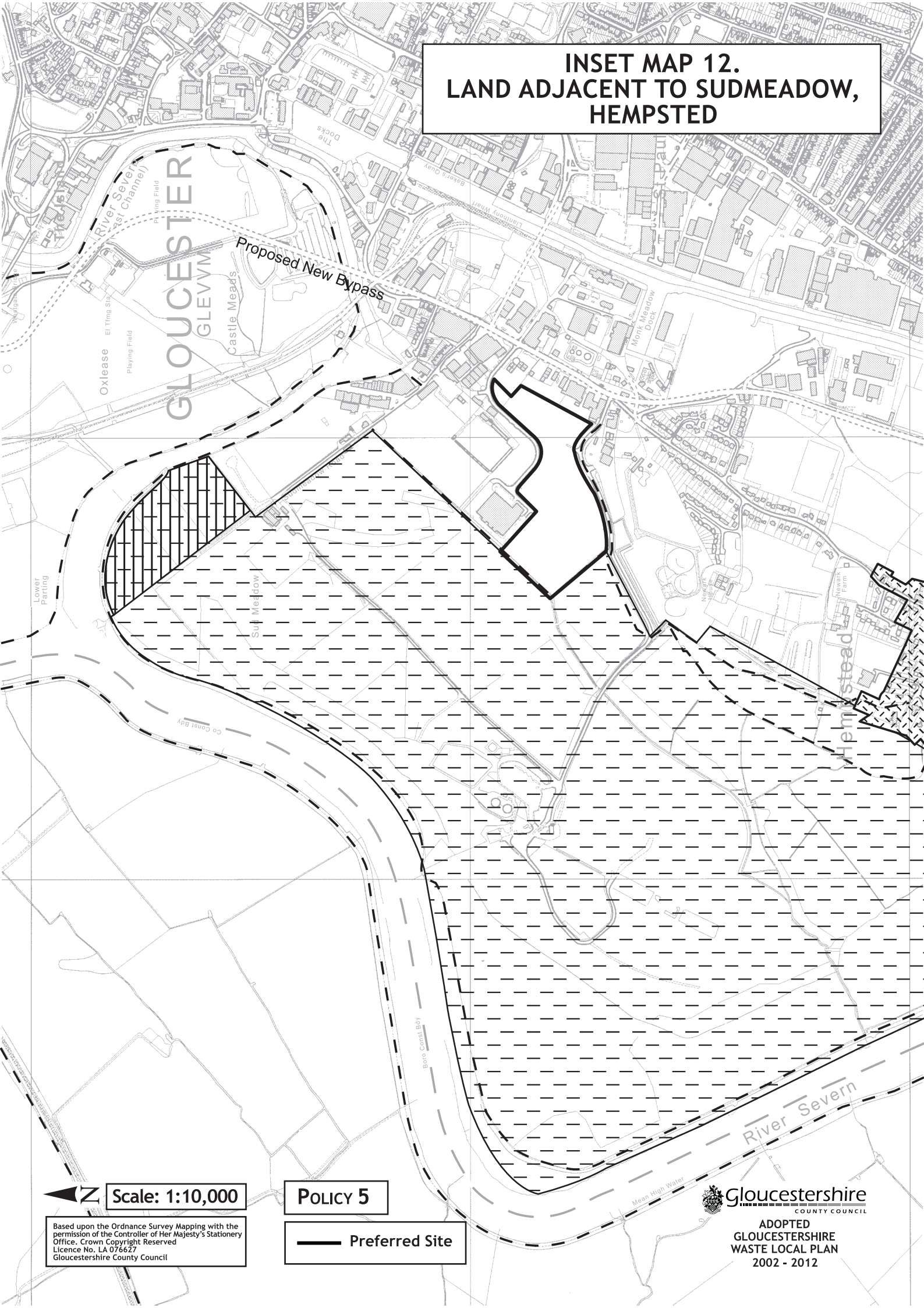
- A Transport Assessment will be required to address the traffic generation of the proposed development and its impact on the local road network. Access to the site would only be acceptable with the formation of a satisfactory access from Metz Way to an appropriate standard to facilitate development on both sides of Metz Way. The preferred access arrangement is a left in/out arrangement on both sides of Metz Way.

- The site is located within an area of interest for its industrial history. In addition it is located within the landscape surrounding Gloucester's Roman Town where associated activity may be present. Archaeological evaluation would be required to determine the impact any development would have.

- The site is located in a 'gateway' to the City and is prominent to public view. Waste development will need to ensure that key views of the Cathedral are not prejudiced and to be of a standard that will not discourage other employment uses on the site.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 12.
LAND ADJACENT TO SUDMEADOW, HEMPSTED



Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED
GLOUCESTERSHIRE
WASTE LOCAL PLAN
2002 - 2012

SITE PROFILE

Site Name: Land Adjacent to Sudmeadow, Hempsted.

Site No: 12

Site Area: 6.5 Hectares **District:** Gloucester City

Location: The site is situated on the western edge of Gloucester, off Hempsted Lane. Industrial and commercial development and Sudmeadow (Site 7) bound the site.

Existing Operations: Landfill with energy recovery, composting, recovery and recycling of inert material and a Household waste recycling centre all exist adjacent to the site. Transfer stations, Materials Recovery Facilities, and metal recycling facilities are in close proximity.

Further Information and History: The site is adjacent to a well-established waste management facility. It lies in very close proximity to Gloucester and within reach of Cheltenham, Tewkesbury, Stroud and the Forest of Dean.

By placing waste processing facilities closer to current waste management facilities there is a reduction in 'double handling' the waste and demonstrates better performance under the Proximity Principle. In addition these operations are labour intensive and could lead to greater employment opportunities. The area would be particularly well served if a facility were developed to transfer waste to and from Barges on the Gloucester to Sharpness Canal. The site meets the requirements of Structure Plan Policy and the Proximity Principle.

Constraints

Access: Road access to the site is poor as the main access to the area is from Hempsted Lane, which in itself is only accessible at present by passing over a canal bridge. There may be a possibility of gaining access from the new Gloucester South West by-pass when it is built, and contributions may be sought.

Environmental: The site is adjacent to a Landscape Conservation Area.
Within 1947 Flood Plain.

Proximity to Dwellings: The residential area of Hempsted lies to the Southeast.

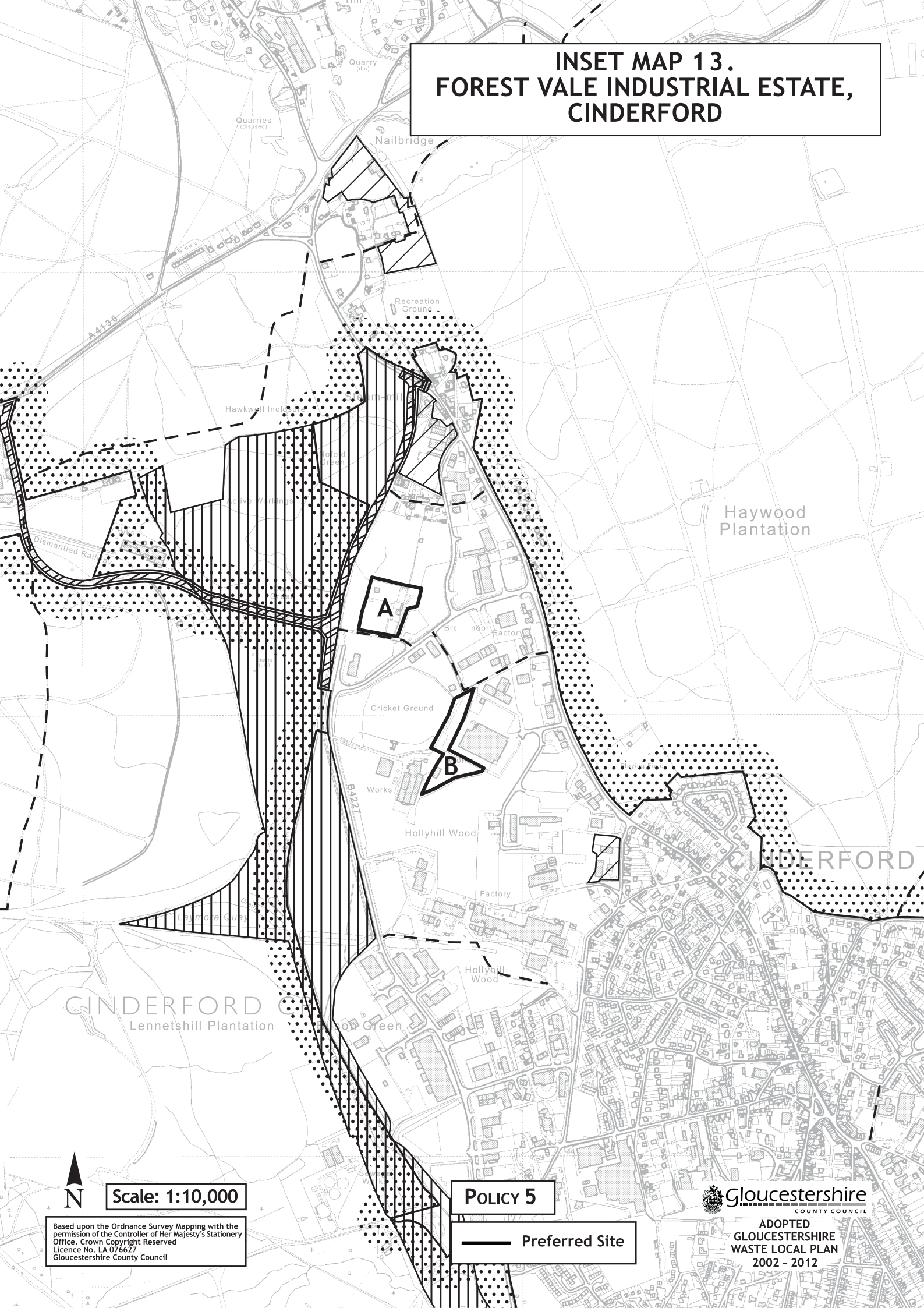
Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site adjoins the River Severn. The potential impact on watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 13.
FOREST VALE INDUSTRIAL ESTATE, CINDERFORD



Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name: Forest Vale Industrial Estate, Cinderford

Site No: 13

Site Area: Area A 1.2 hectares
Area B 1.2 hectares

District: Forest of Dean

Location: The Forest Vale Industrial Estate is to the north west of Cinderford within the urban fringe. This large industrial estate has two potentially suitable sites for the development of a waste management facility. The current mix of industries on the estate includes a brickworks and heavy engineering. To the west of the site is low-lying agricultural land, some residential properties to the north, and further industrial development to the south and east.

Existing Operations: There are a number of metal recycling facilities in the vicinity and also a liquid waste treatment plant.

Further Information and History: The sites within the industrial estate could accommodate a number of different types and scale of operations. The sites are allocated in the Forest of Dean District Local Plan for industrial development. Some parts of the industrial estate is low lying and there may be hydrological implications. The central location of Cinderford within the Forest of Dean means that a facility here could serve the rest of the District. The site therefore meets the requirements of Structure Plan Policy and the Proximity Principle.

Constraints

Access: The main access to the site is by road, the A4151, which links to the wider transportation network. Existing road infrastructure on the industrial estate because of its nature is currently utilised by HGVs and associated traffic. Adjacent land to the west side of the site is safeguarded for highway construction.

Environmental: Flooding may affect some areas.
In close proximity to a Special Landscape Area and Key Wildlife Site.

Proximity to Dwellings: A small group of houses lie immediately adjacent to one of the sites.
Land nearby is allocated for residential development.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site adjoins Laymore Quay. The potential impact on watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- A Transport Assessment will be required to address the traffic generation of any proposed development and its impact on the local road network. Financial contributions may be sought towards the extension of the Forest Vale Industrial Estate spine road and improvements to Cinderford Bridge as part of any expansion in this area. There would be a need for traffic to avoid Newtown Lane.

- The sites lie within an area of former coal mining. Depending on the precise location of any proposed development, an archaeological evaluation may be necessary in order to identify the impact of the development.

- To preserve a good environmental standard on the industrial estate, operations should take place within a building and screening should be considered in appropriate locations.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

- Incineration is not considered to be appropriate at this site.

INSET MAP 14. CANAL WORKS, LYDNEY

Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name: Canal Works, Lydney

Site No: 14

Site Area: 1.0 hectare **District:** Forest of Dean District

Location: The site is in the south of the Forest of Dean close to the River Severn near Lydney. It is adjacent to the Harbour Road Industrial Estate.

Existing Operations: The site is used by Bendalls of Lydney as a combined metals recycling facility and waste transfer station. An inert landraise operation exists on land adjacent to the site.

Further Information and History: The Canals Works site was formerly an inert landfill. Harbour Road Industrial Estate is allocated for employment uses in the Forest of Dean District Local Plan. The site's proximity to the River Severn may lend itself to consideration of water borne transportation (subject to regeneration / redevelopment proposals for the docks).

Constraints

Access: The main access to the area is via Harbour Road from the A48. The preferred route for long distance lorry traffic in the area runs along Harbour Road, connecting with the site entrance. There is also access to the main rail network close by. An area of land to the north-west of the site is safeguarded for highway construction.

Environmental The site lies adjacent to the Severn Estuary SSSI which is also designated as a Ramsar Site (Wetland of International Importance) and Special Protection Area (SPA). The same area is also under consideration for designation as a Special Area of Conservation (SAC).

There is a need to ensure that the special features of these designations are safeguarded from any potential impacts of the development of a waste facility in this location. Of particular concern would be the potential effects of emissions, effluent, noise disturbance and visual disturbance a waste facility at this location (and any associated transport activity) would have on habitats and species for which the site has been designated.

The existing SPA designation means that the Severn Estuary is a European Site as defined by the Conservation (of Natural Habitats & c) Regulations 1994 and reference must therefore be made to the requirements of these Regulations in considering development proposals and any related development of the water borne transport infrastructure.

Proximity to Dwellings: A small group of dwellings lies approx 575m from the site boundary. Land north of the site allocated for Residential Development.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- The site adjoins Lydney Harbour and is in close proximity to the River Severn. The potential impact on the watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to

contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- The site lies within an area of Roman Land Reclamation and medieval field systems. An archaeological evaluation may be required.

INSET MAP 15.
LYDNEY INDUSTRIAL ESTATE, LYDNEY

Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name: Lydney Industrial Estate, Sites A, B and C, Lydney

Site No: 15

Site Area: Area A 16.75 hectares
Area B 2.15 hectares
Area C 22 hectares

District: Forest of Dean District

Location: These sites are within an industrial area on the urban fringe of Lydney, in the south of the Forest of Dean. They are largely sites that have been allocated as employment land in the Forest of Dean District Local Plan and represent a considerable expansion of Lydney's Industrial Estates (Harbour Road Industrial Estate and Mead Lane Industrial Estate).

Existing Operations: An inert landraising operation exists on Area A. Area B is undeveloped agricultural land on the periphery of the Mead Lane Industrial Estate. Area C is at Harbour Road Industrial Estate.

Further Information and History: Areas A, B and C are located in the vicinity of existing metals recycling facilities. The sites are in close proximity to Lydney and have good road access links. The sites meet the requirements of the Adopted Structure Plan.

Constraints

Access: Via newly constructed roads from the A48. The preferred route for long distance lorry traffic runs along the road adjacent to the industrial estate. There is potential access to the main railway line as a station currently operates within the industrial area. An area of land to the north of the sites is safeguarded for highway construction.

Environmental: Flood Plain (may be Environment Agency requirement to maintain for flood capacity)

High visual impact on the setting of Lydney Park Estate.

The sites lie adjacent to the Severn Estuary SSSI, which is also designated as a Ramsar Site (Wetland of International Importance) and Special Protection Area (SPA). The same area is also under consideration for designation as a Special Area of Conservation (SAC).

There is a need to ensure that the special features of these designations are safeguarded from any potential impacts of the development of a waste facility in this location. Of particular concern would be the potential effects of emissions, effluent, noise disturbance and visual disturbance a waste facility at this location (and any associated transport activity) would have on habitats and species for which the site has been designated.

The existing SPA designation means that the Severn Estuary is a European Site as defined by the Conservation (of Natural Habitats &c) Regulations 1994 and reference must therefore be made to the requirements of these Regulations in considering development proposals and any related development of the water borne transport infrastructure.

Proximity to Dwellings: Several small groups of houses lie within the industrial estate.
Land north-east of the sites is allocated for residential development.

Site Specific Criteria for Development

Any application for waste management development in addition to the General Criteria should also address the following:

- The site adjoins Lydney Harbour and is in close proximity to the River Severn. The potential impact on the watercourses should be assessed and, where appropriate, measures taken to prevent any pollution. A hydrogeological survey may be required. Measures should be taken to contain any pollution arising within the site, in accordance with the requirements of the Environment Agency.

- Direct access to site B from either the by-pass or A48) would be precluded. The site should be served by an extension to the existing adopted highway.

- Evidence of Roman land reclamation and medieval field systems are found in this area. Depending on the precise location and extent of development proposals, archaeological evaluation may be needed in order to identify the impact of any development.

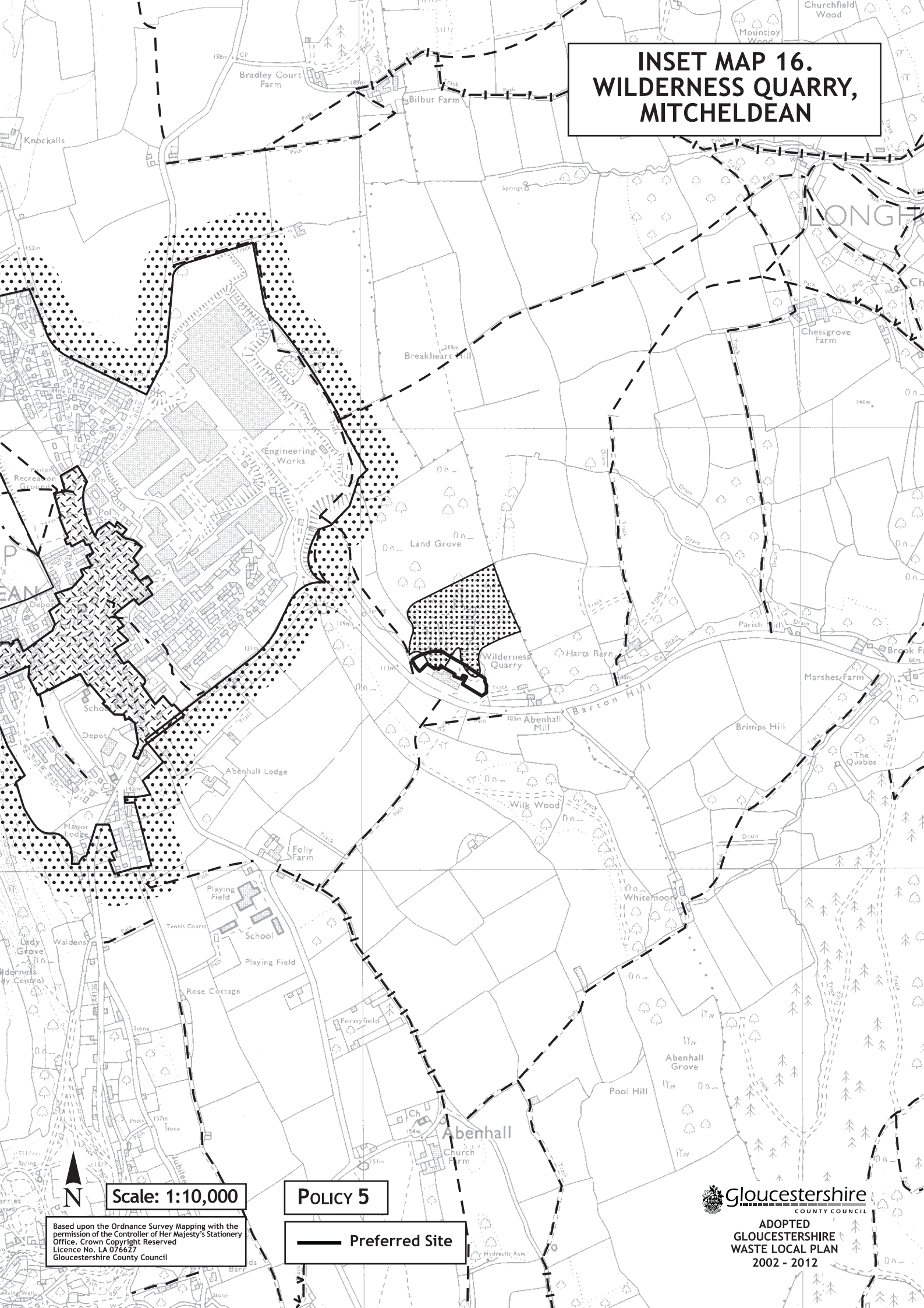
- Unless flood prevention and compensation measures can be undertaken as part of the waste or other development of Area A, some parts of the area will not be able to be used. Attention is drawn to the Forest of Dean District Local Plan Policies.

- Area B is part of an important approach to the town of Lydney. Industrial development is expected to enhance the image of the town through a high standard of design, construction and landscaping. Waste management facilities, including operational areas, should be enclosed within buildings and will be expected to be sympathetic to surrounding development. Attention is drawn to the Forest of Dean District Local Plan Policies.

- Some waste management options will not be appropriate to some areas.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 16. WILDERNESS QUARRY, MITCHELDEAN



SITE PROFILE

Site Name: Wilderness Quarry, Mitcheldean

Site No: 16

Site Area: 0.5 hectare **District:** Forest of Dean

Location: The site is at the foot of a steep south facing slope, on a flattened area created by Wilderness Quarry, which is situated on the eastern periphery of Mitcheldean. Mitcheldean is approximately 5km to the north of Cinderford. Several residential properties lie in close proximity to the south east. To the west of the site is Vantage Point Business Village.

Existing Operations: A licensed waste transfer station, which includes inert recovery and recycling, metals recycling and materials recovery, operates from the site. Existing business units and the quarry, worked principally for building stone (Devonian Old Red Sandstone), adjoin the site. Due to the existing operations, scope for a new facility on the site is limited, without some reorganisation.

Further Information and History: The site has planning permission for the use of land for recycling, reclamation storage, distribution and transfer of waste material and products to include putresible waste. The planning consent applies to an area of 0.3 hectares.The quarry, which is worked northwards into Breakheart Hill, has been worked for over a century. Under the Environment Act 1995, Review of Mineral Planning Permissions the quarry is subject to a 2042 time limit unless otherwise agreed in writing by the Mineral Planning Authority (mineral review Application DF1270/1/G).

Constraints

Access: The site has a shared access with a complex of small factory units, known as Ladygrove Business Park, onto the A4136 between Mitcheldean and Longhope.

Environmental: Wilderness Quarry includes a Geological Site of Special Scientific Interest (Landgrove Quarry SSSI), which is also a Regionally Important Geological and Geomorphological Site (RIGs). To the north lies designated ancient woodland that is identified as Land Grove Key Wildlife Site. The site and the surroundings are in a Special Landscape Area designated within the Adopted Forest of Dean Local Plan.

Proximity to Dwellings: A small group of houses lie to the south east. The site is approximately 350m from the built up area.

Site Specific Criteria for Development

Any application for waste management development should in addition to the General Criteria also address the following:

- Landgrove Quarry SSSI, within the quarry, should be safeguarded from any potential adverse impacts from a waste management facility. Any waste development will need to ensure that rock faces are left open so that visual or actual access to the SSSI is not impeded.

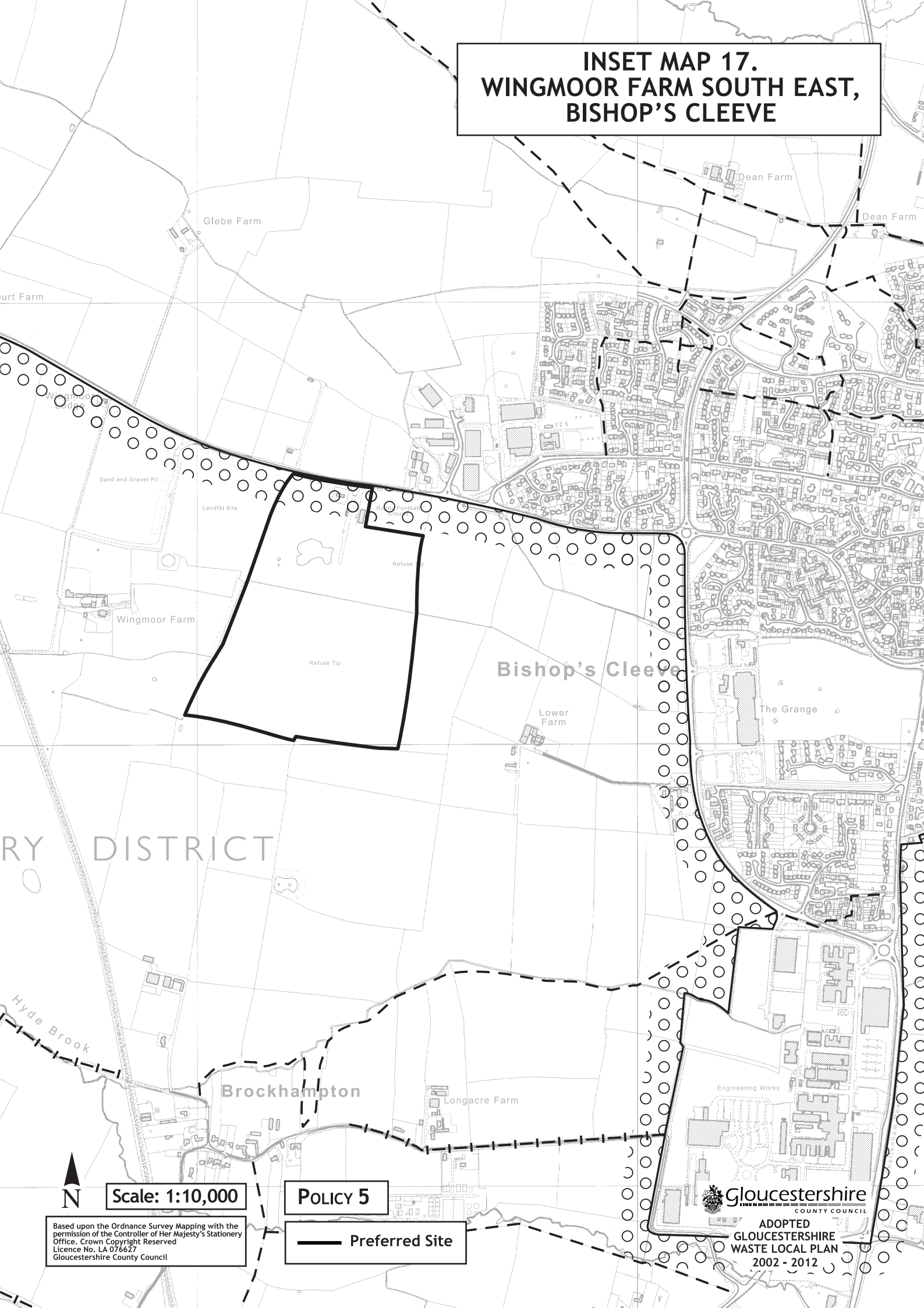
- A Transport Assessment will be required to address the traffic generation of any proposed development and its impact on the local road network.

- Proposals should be carefully designed in order to safeguard protected areas of landscape, nature, geological and geomorphological value.

- Incineration is not considered to be appropriate at this site.

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 17.
WINGMOOR FARM SOUTH EAST, BISHOP'S CLEEVE



Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name: Wingmoor Farm South East, Bishop's Cleeve

Site No: 17

Site Area: 22.3 hectares **District:** Tewkesbury Borough

Location: The site is situated to the west of the residential area of Bishop's Cleeve and south east of the residential area of Stoke Orchard. The site's west boundary borders with the Wingmoor Farm East Site (Site 2). The surrounding land uses consist mainly of agricultural land and other waste management facilities. The site also lies within the Green Belt defined in the District Local Plan.

Existing Operations: The site is used for the landfill/landraise of inert builders and commercial waste. Further landfill sites and a Waste Transfer Station are in close proximity.

Further Information and History: The site is a well-established waste management facility. It lies almost in the centre of the County, in close proximity to Cheltenham and Bishop's Cleeve and with access to both Tewkesbury and Gloucester.

Constraints

Access: Main access to the site by road is from Stoke Road from the A435 to the east. Stoke Road to the west is restricted to vehicles passing through of less than 17 tonnes.

Environmental: Within Green Belt.
Visible from AONB.

Proximity to Dwellings: A farm lies off the south west of the site. Settlements of Bishop's Cleeve and Gotherington nearby to the north-east, Brockhampton, Stoke Orchard and other small settlements around the south and west of the site.

Site Specific Criteria for Development

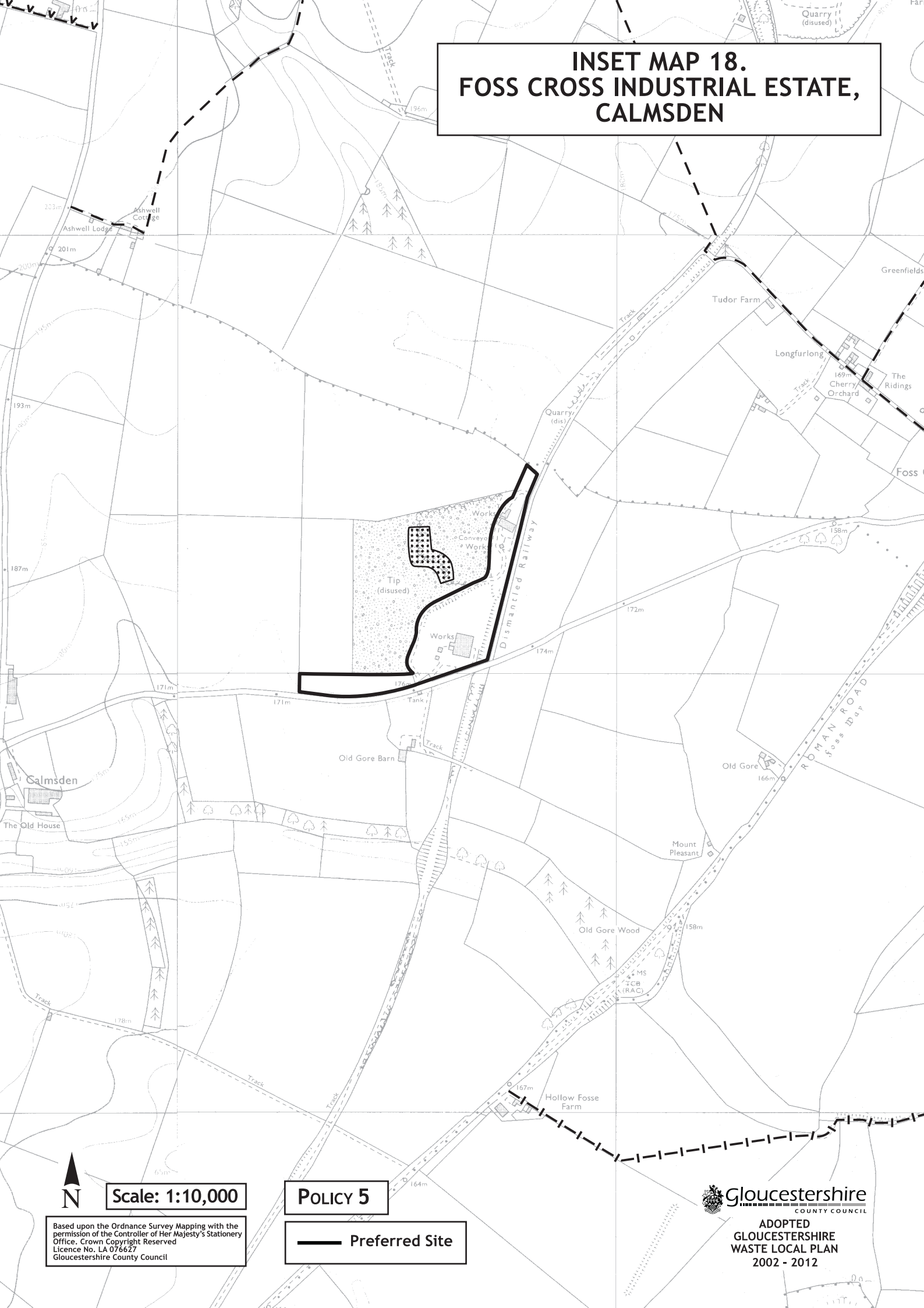
Any application for waste management development in addition to the General Criteria should also address the following:

- New waste management facilities should be designed, and if necessary contained, to ensure that dust, odour, fumes, noise, litter and other effects do not have a materially adverse impact on nearby residents and businesses.

- Stoke Road requires improvement from the site to its junction with the A435 to make it more suitable for use by heavy lorries. Improvements are needed to Stoke Road to make it safer for pedestrians and cyclists from the A435 up to, and including, Stoke Orchard village. A Transport Assessment for any application for planning permission will be sought in accordance with Policy 39 assessing routes to connect with the M5, Cheltenham, Gloucester and Tewkesbury.

- The Green Belt status of the site may require demountable buildings to be provided and their use limited to the duration of the landfill/landraise operations.

INSET MAP 18.
FOSS CROSS INDUSTRIAL ESTATE, CALMSDEN



N

Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name:	Foss Cross Industrial Estate, Calmsden
Site No:	18
Site Area:	6.4 Hectares **District:** Cotswold District
Location:	This site is in the South East of the County, situated to the west of the A429 'Fosse Way' and east of the village of Calmsden.
Existing Operations:	A former landfill site, an agricultural depot and several other employment uses are located in and around the site, encircling an existing recycling depot.
Further Information and History:	The various employment and storage uses that are grouped within the site are relatively unobtrusive. This is a useful site for firms that are difficult to locate in towns or villages. Any facility would need to be located and designed to minimise impact on the surrounding area. Some natural screening exists in and around the site, but additional screening may be required, particularly along the road frontage and especially if new buildings are proposed.

Constraints

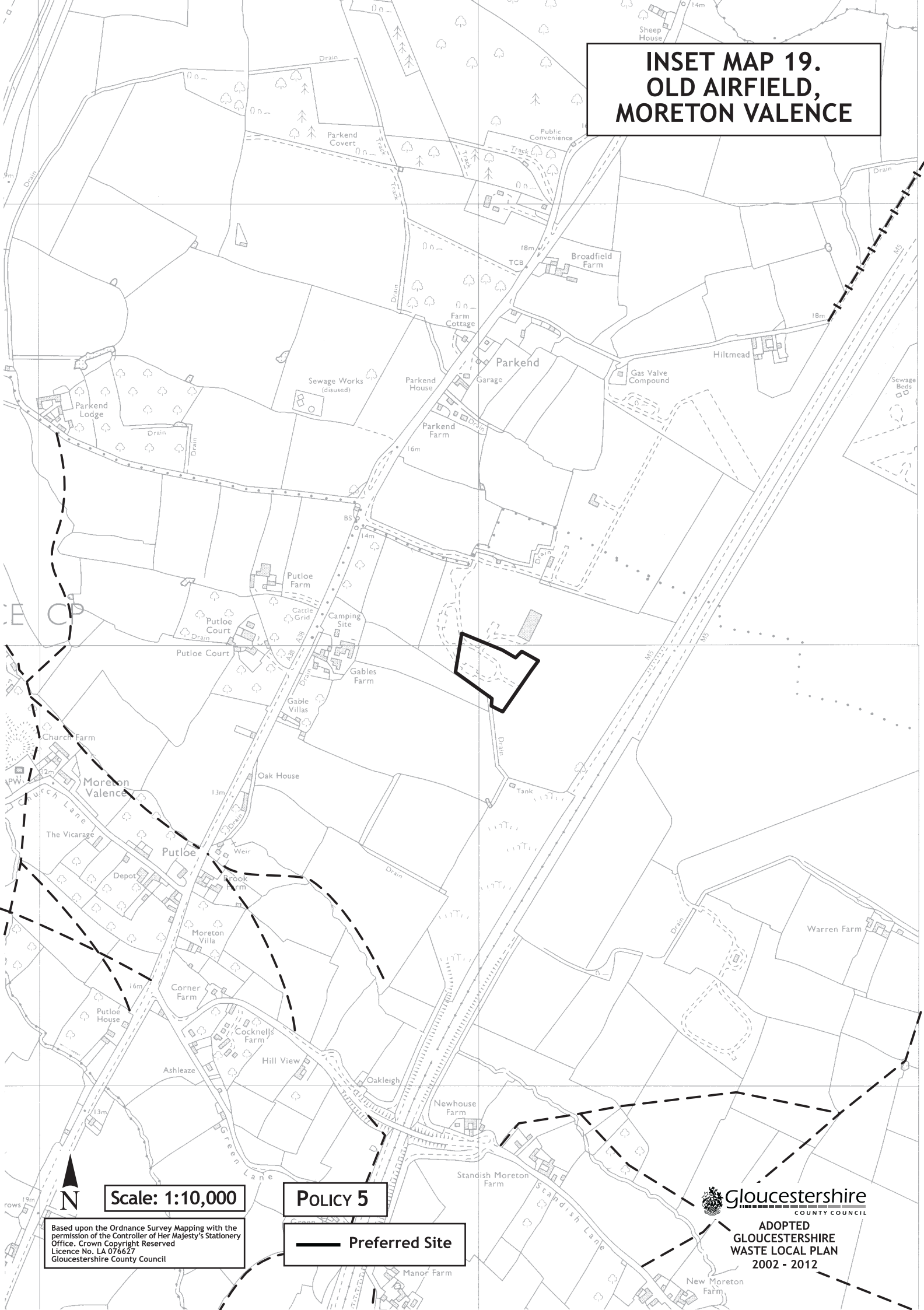
Access:	The main access to the site is via the road between the A429 and Calmsden.
Environmental:	Visible from AONB. The site is close to Foss Cross Quarry SSSI. There is a need to ensure that the special features of this designation are safeguarded from any potential impacts of the development of a waste facility at this location, in accordance with Policy 23 'Internationally and Nationally Designated Sites for Nature Conservation'.
Proximity to Dwellings:	A farm lies to the south of the site.

Site Specific Criteria for Development

Any application for waste management development in addition to the General Criteria should also address the following:

- The Environment Agency would require detailed site investigations to be carried out before any development commences in the interests of protecting the groundwater.

INSET MAP 19. OLD AIRFIELD, MORETON VALENCE



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Scale: 1:10,000

POLICY 5

Preferred Site

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name:	Old Airfield, Moreton Valence
Site No:	19
Site Area:	2 Hectares **District:** Stroud District
Location:	Moreton Valence is located approximately 8 km south of Gloucester city centre between the A38 and the M5 motorway (to the east) at Moreton Valence. The site is within the Old Airfield, comprising part of Gables Farm. The site is located to the rear of an existing industrial area, which accommodates a variety of small businesses, and light industry.
Existing Operations:	Transfer station/material recycling facility for bulk soil, concrete, bricks, construction and demolition waste, and timber. It also handles limited quantities of cement bonded asbestos.
Further Information and History	Planning permission was granted on the 17 May 2000 for a recycling transfer station on the site and shall commence 5 years from this date. The station primarily deals with bulk soil, concrete and brick and other industrial and commercial non-special materials. In 2003 the WPA approved applications at the site for limited asbestos handling and storage of primary aggregates.

Constraints

Access:	Access to the site will be from the A38, along the existing track serving the industrial uses and a concrete road laid in the airfield days.
Environmental:	Visible from AONB.
Proximity to Dwellings:	There are three residential properties and a caravan campsite associated with Gables Farm, located to the west of the site. Gables Farm lies some 350 metres from the site. A second residential property, Old Airfield Farm, lies some 320 metres to the north west of the site. The third property is located opposite the site access onto the A38 on the opposite side of the A38, some 400 metres from the site.

INSET MAP 20.
LAND ADJACENT TO GASWORKS, BRISTOL ROAD, GLOUCESTER

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name:	Site Adjacent to Gasworks, Bristol Road, Gloucester
Site No:	20
Site Area:	3.4 Hectares **District:** Gloucester City
Location:	Situated towards the Quedgeley end of the Bristol road, the site lies adjacent to a gas works. The residential area of Podsmead lies to the east of the site. Surrounding land-use's consisting of both light and heavy industries, with a playing field backing onto the site.
Existing Operations:	Brownfield site.
Further Information and History	The area is well established for industrial use, with there being many heavy and light industries along this stretch of road. The site is within good proximity to a current waste management facility in the form of Sudmeadow, Hempsted. The site has planning permission for industrial use. The site meets the requirements of Structure Plan Policy and the Proximity Principle.

Constraints

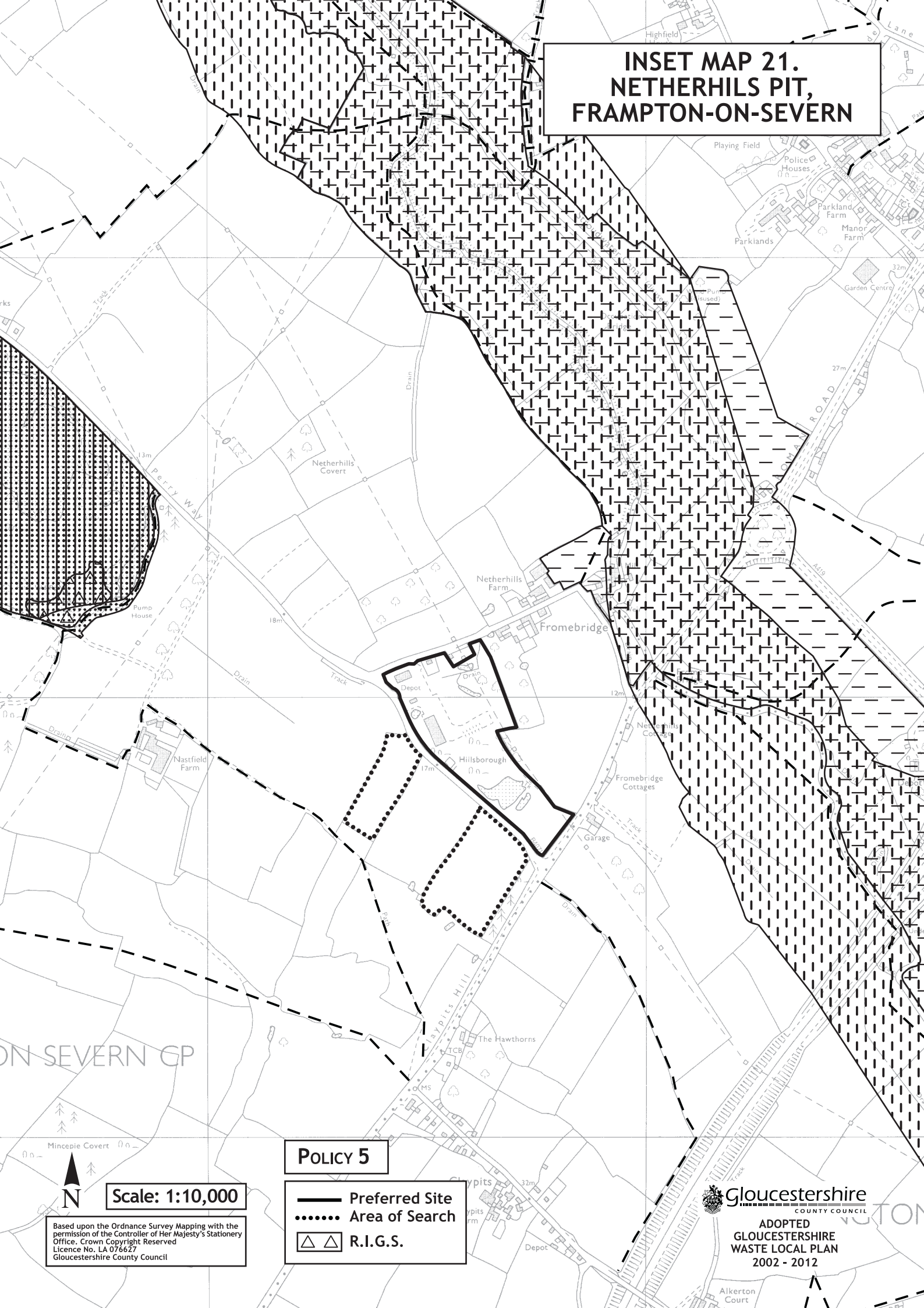
Access:	Main access to the area by road is directly off the Bristol Road, which has direct access to the primary road network in the form of the A38. This gives access to the primary road network and to all areas of the county. The Bristol Road currently has large volumes of traffic using it, which may make access to the site difficult at times. The original planning permission required the creation of a 'traffic signalled' junction at the point of access with Bristol Road. The site may only be suitable for use after the construction of the South West By-pass, depending on the type and intensity of the use.
Environmental:	There may be contamination issues for which remediation could be required prior to development.
Proximity to Dwellings:	Adjacent to housing and a school.

Site Specific Criteria for Development

Any application for waste management development in addition to the General Criteria should also address the following:

- Where a Waste to Energy facility is proposed, applicants will need to outline the details of the energy recovery / and heating system proposed and should identify the envisaged energy clients.

INSET MAP 21. NETHERHILS PIT, FRAMPTON-ON-SEVERN



POLICY 5

Preferred Site
Area of Search
R.I.G.S.

Scale: 1:10,000

N

Gloucestershire COUNTY COUNCIL

ADOPTED GLOUCESTERSHIRE WASTE LOCAL PLAN 2002 - 2012

SITE PROFILE

Site Name: Netherhills Pit, Frampton-on Severn

Site No: 21

Site Area: Northern land parcel 7.25 ha. Two southern land parcels approx. 6 ha.

District: Stroud District

Location: The site is situated adjacent to the B4071 near its junction with the A38 and consists of one parcel of land to the north and two parcels of land to the south of the B4071

Existing Operations: The site benefits from planning permission to extract sand and gravel. The land to the north has been excavated and 5.2 ha has been exhausted of minerals. It has been backfilled with inert material and developed into an industrial estate. The remaining 2.8 ha is unused.

Further Information and History

Permission was granted by Gloucestershire County Council on 22nd June 1953 to extract sand and gravel from the three blocks of land. This permission included the tipping of waste material only where it was necessary to assist in the raising of the level of the ground, when only suitable inorganic material of an inoffensive character shall be used.

An application for the determination of new conditions was received under the Environment Act 95 - Review of Mineral Planning Conditions. At present these conditions have still not been determined. During consultation of the new conditions it has been emphasised by Gloucestershire County Council's Landscape Officer that they would be opposed to landfilling of inert material at the site. The Environment Agency did not oppose the conditions as restoration to a low level with lakes was proposed and not backfilled with controlled waste.

Frampton-on-Severn Parish Council also raises concern to landfilling.

Constraints

Access: The main access will be from the A38 on to the B4071 (Perry Way)**.** As stated new conditions are being determined and improvements to the access to the blocks of land will have to be made.

Environmental: Adjoining land contains an archaeological prehistoric barrow cemetery.
To the North West of the area there is the Frampton Pools SSSI, Key Wildlife Site and Regionally Important Geological & Geomorphological Site which need to be safeguarded in accordance with the relevant policies of this Plan. To the North East of the site runs a conservation area and Area of High Quality Landscape (Watercourse).

Proximity to Dwellings: It is approximately 200 metres to the nearest dwellings.

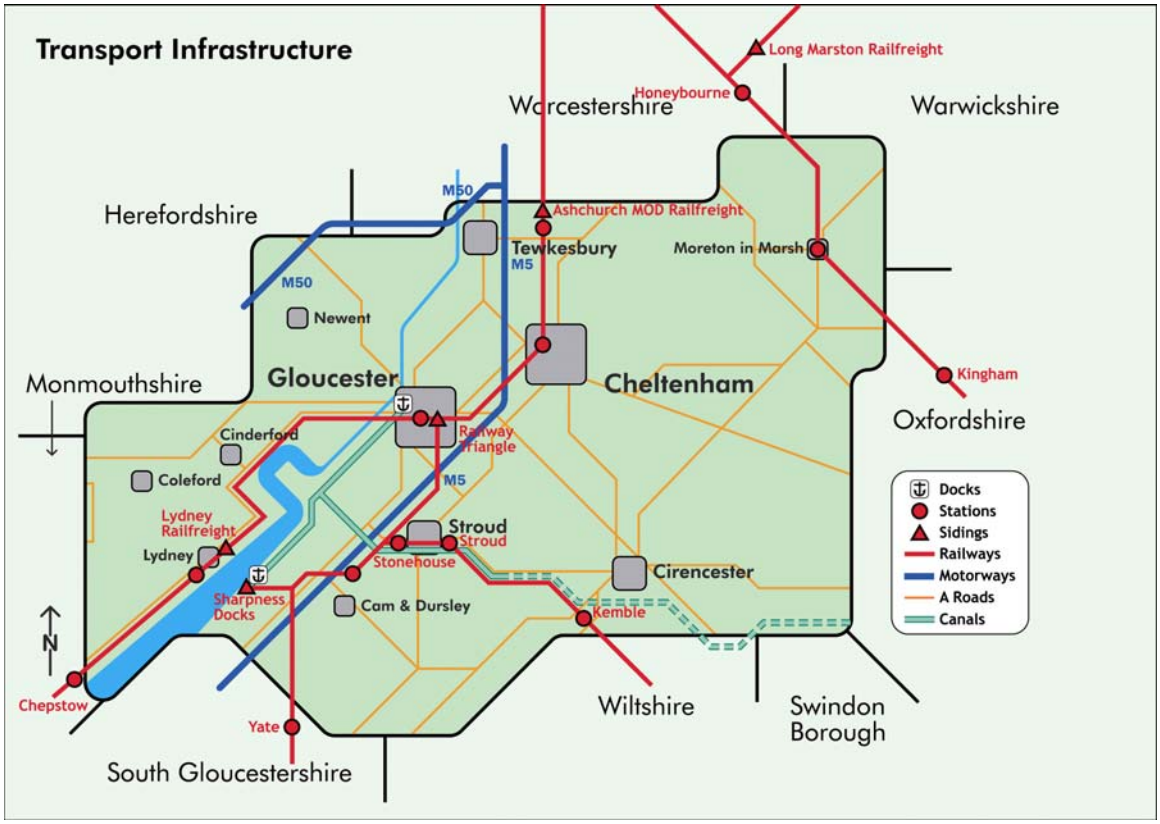
Criteria for Development

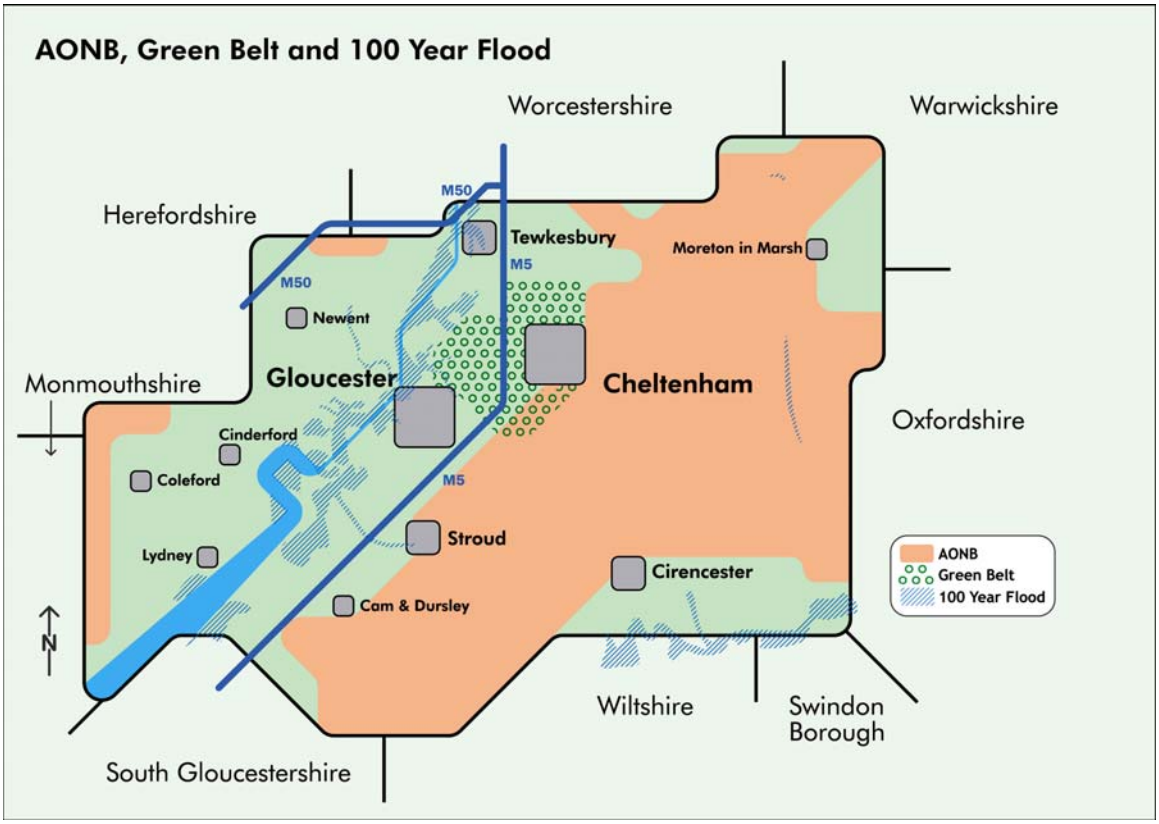
Any application for waste management development in addition to the General Criteria should also address the following:

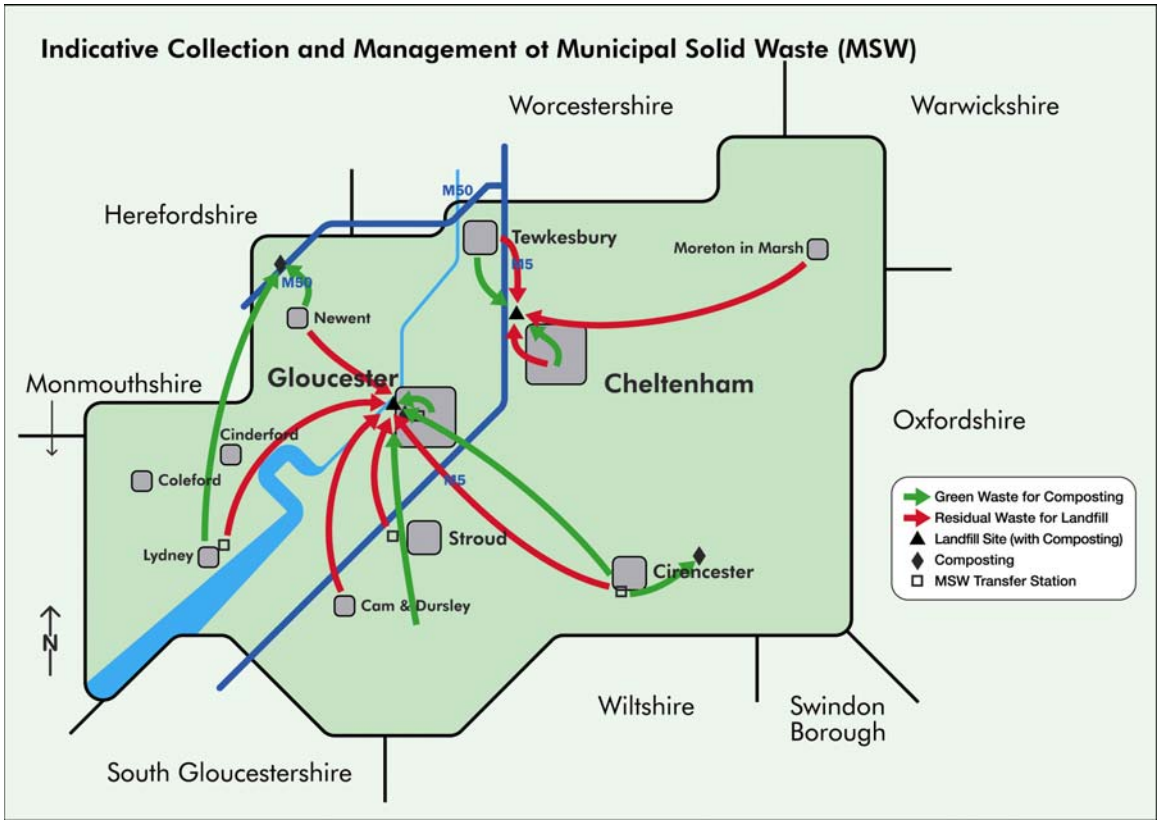
- A Transport Assessment will be required for a new facility in order to assess the potential impact of traffic congestion at Junction 13 of the M5.

Appendix F

Diagrams supporting the spatial portrait of Gloucestershire (Transport Infrastructure; AONB, Green Belt and 100 year Flood; and Indicative Collection and Management of Municipal Solid Waste (MSW))


Transport Infrastructure
Long Marston Railfreight
Honeybourne
Worcestershire
Warwickshire
Herefordshire
M50
Ashchurch MOD Railfreight
Tewkesbury
M5
Moreton in Marsh
M50
Newent
Gloucester
Cheltenham
Kingham
Monmouthshire
Oxfordshire
Cinderford
Railway Triangle
Coleford
M5
Lydney Railfreight
Stroud
Stroud
Lydney
Stonehouse
Cirencester
Sharpness Docks
Cam & Dursley
Kemble
N
Chepstow
Yate
Wiltshire
Swindon Borough
South Gloucestershire
Docks
Stations
Sidings
Railways
Motorways
A Roads
Canals

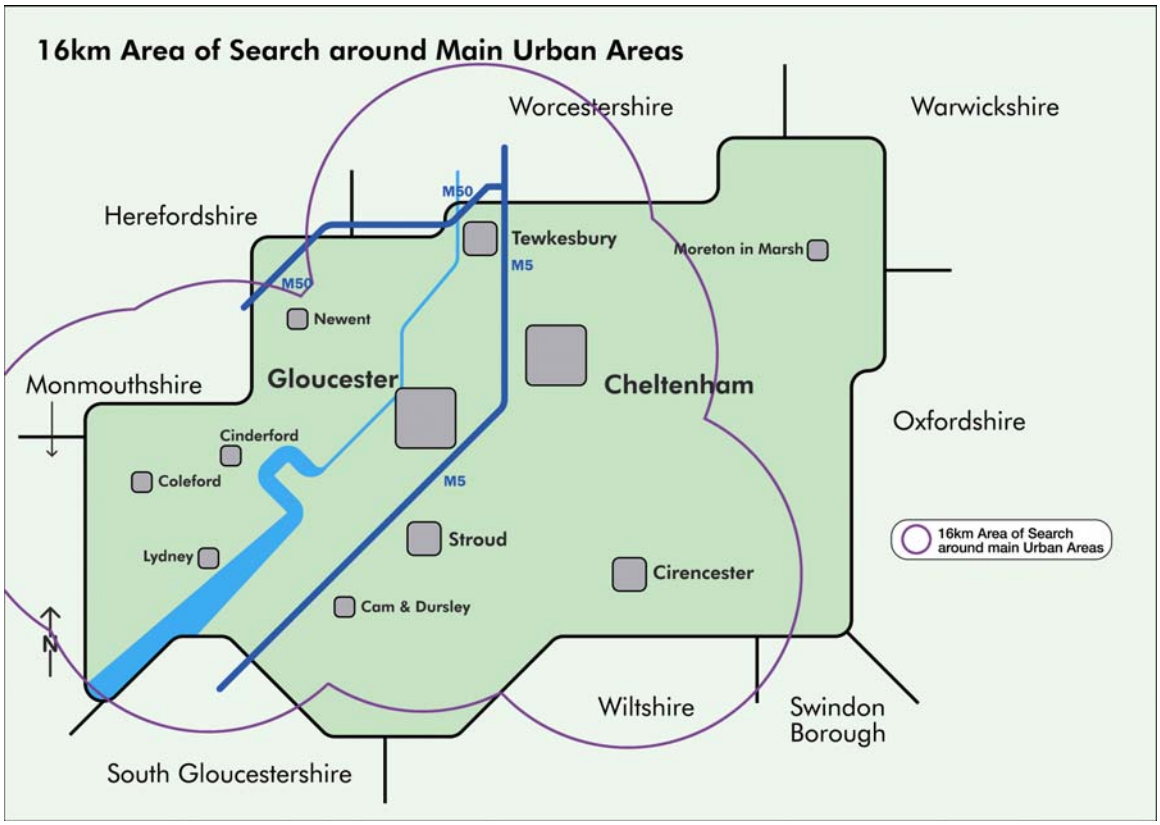

AONB, Green Belt and 100 Year Flood
Worcestershire
Warwickshire
Herefordshire
M50
Tewkesbury
M5
Moreton in Marsh
M50
Newent
Gloucester
Cheltenham
Monmouthshire
Oxfordshire
Cinderford
Coleford
M5
Stroud
Lydney
Cirencester
Cam & Dursley
N
Wiltshire
Swindon Borough
South Gloucestershire
AONB
Green Belt
100 Year Flood


Indicative Collection and Management ot Municipal Solid Waste (MSW)
Worcestershire
Warwickshire
Herefordshire
M50
Tewkesbury
Moreton in Marsh
M5
M50
Newent
Monmouthshire
Gloucester
Cheltenham
Oxfordshire
Cinderford
Coleford
M5
Lydney
Stroud
Cirencester
Cam & Dursley
N
Wiltshire
Swindon Borough
South Gloucestershire
Green Waste for Composting
Residual Waste for Landfill
Landfill Site (with Composting)
Composting
MSW Transfer Station

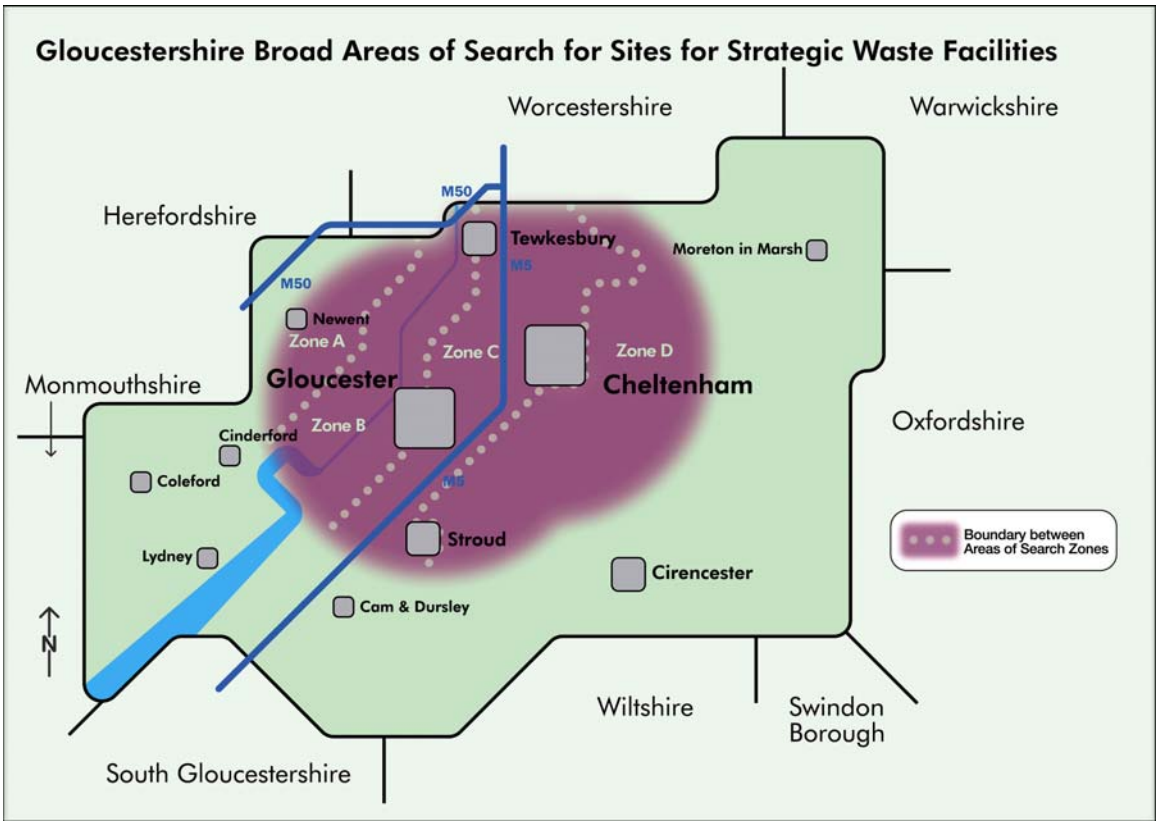
Appendix G

Diagrams relating to locational strategy and Preferred Options WPO7a, WPO7b, WPO7c and WPO7d

(Option WPO7a)



(Option WPO7b)



(Options WPO7c & 7d)