

WOKINGHAM BOROUGH COUNCIL LFRMS

Habitats Regulations Assessment

19/09/2014

Quality Management

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks				
Date	19/09/2014			
Prepared by	Kim Bossingham & Michael Browne			
Signature				
Checked by	Richard Gill			
Signature				
Authorised by	Richard Gill			
Signature				
Project number	62003442			
Report number	1			
File reference	\\ser02col2uk.uk.ws pgroup.com\Enviro nmental\Environme ntal Planning London\03. Projects\07. SA Projects\39030 - Wokingham FRMS\HRA			

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19/09/2014

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Abbreviations

EA	Environment Agency
FCS	Favourable Conservation Status
GIS	Geographic Information System
HRA	Habitat Regulations Assessment
IROPI	Imperative Reason of Overriding Public Interest
LFRMS	Local Flood Risk Management Strategy
SAB	SuDS Approving Body
SAC	Special Area of Conservation
cSAC	Candidate Special Area of Conservation
SCI	Site of Community Importance
SEA	Strategic Environmental Assessment
SPA	Special Protection Area
pSPA	Potential Special Protection Area
SuDS	Sustainable Drainage Strategy
SWMP	Surface Water Management Plan
WBC	Wokingham Borough Council



1 Introduction and Purpose of this Report

1.1 Introduction

- 1.1.1 This Screening Report has been prepared by WSP UK Ltd on behalf of Wokingham Borough Council as part of the statutory Habitats Regulations Assessment (HRA) of the Wokingham Local Flood Risk Management Strategy (LFRMS).
- 1.1.2 It is intended that the strategy will reflect the principles, aims and objectives of the 'National Flood and Coastal Erosion Risk Management Strategy for England. The strategy will address flooding from surface water, ground water and ordinary watercourses within Wokingham as a whole and also provide guidance on other sources of flooding such as from main rivers.

1.2 Purpose of this Report

1.2.1 This report is the first stage in the HRA process, commonly referred to as Screening. It identifies whether or not the Wokingham LFRMS is likely to result in significant effects upon a European site either alone or in-combination with other plans or programmes and subsequently whether or not an Appropriate Assessment will be required. If Appropriate Assessment is required this document will outline its proposed scope. Further details on the HRA stages are provided in Section 3.

1.3 Background to Habitats Regulations Assessment

- 1.3.1 Under Article 6 of the Habitats Directive, an assessment is required where a plan or project may give rise to significant effects upon a Natura 2000 site (also known as 'European site').
- 1.3.2 Within 10km there are four European sites, however, there are also a further two sites which form part of the Natura 2000 network that could potentially be affected by the Wokingham LFRMS. Natura 2000 is a network of areas designated to conserve natural habitats and species that are rare, endangered, vulnerable or endemic within the European Community. This includes Special Areas of Conservation (SAC), designated under the Habitats Directive for their habitats and/or species of European importance, and Special Protection Areas (SPA), classified under Directive 2009/147/EC on the Conservation of Wild Birds (the codified version of Directive 79/409/EEC as amended) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands.
- 1.3.3 In addition, it is a matter of law that candidate SACs (cSAC) and Sites of Community Importance (SCI) are considered in this process; furthermore, it is Government policy that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (Ramsar sites) and potential SPA (pSPA) are also considered.
- 1.3.4 The requirements of the Habitats Directive are transposed into UK law by means of the Conservation of Habitats and Species Regulations 2010¹ as amended.
- 1.3.5 Paragraph 3, Article 6 of the Habitats Directive states that:

¹ SI 2010/490

'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to paragraph 4 (see below), the competent national authority shall agree to the plan or project only having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public'.

1.3.6 Paragraph 4, Article 6 of the Habitats Directive states that:

'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.'

1.3.7 The overarching aim of HRA is to determine, in view of a site's conservation objectives and qualifying interests, whether a plan, either in isolation and/or in combination with other plans, would have a significant adverse effect on the European site. If the Screening (the first stage of the process, see Section 3 for details) concludes that significant adverse effects are likely, then Appropriate Assessment must be undertaken to determine whether there will be adverse effects on a sites integrity.

1.4 Legislation and Guidance

- 1.4.1 This HRA screening report has drawn upon the following legislation and guidance:
 - The Conservation of Habitats and Species Regulations 2010. In 2012, these Regulations were amended to transpose more clearly certain aspects of the Habitats Directive. No fundamental changes to the Regulations were made;
 - European Commission, Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC;
 - European Commission, Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC;
 - Technical Advice Note 5, Nature Conservation and Planning (2009); and,
 - Draft Guidance For Plan Making Authorities In Wales The Appraisal Of Plans Under The Habitats Directive, David Tyldesley Associates (November 2009, revised April 2010 and September 2012).



2 Introduction to the Wokingham LFRMS

2.1 Background and Purpose

- 2.1.1 Wokingham Borough Council is a 'Lead Local Flood Authority', as detailed in the Flood and Water Management Act (2010), and therefore are responsible for managing local flood risk from surface water, groundwater and ordinary watercourses in Wokingham Borough. As part of this the Council has a duty to assist with the management of local flood risk as part of a Local Flood Risk Management Strategy (LFRMS).
- 2.1.2 Wokingham Borough, which sits with in the Thames River basin and whose district contain numerous tributaries, rivers and other water bodies (**Figure 2.1**), are often subject to flooding from surface water, groundwater and ordinary watercourses. More often than note the borough experience a combination of the three flooding types which has in recent times resulted in a disruptive and damaging flooding events. As such the LFRMS focusses on the effects of local flooding from these sources

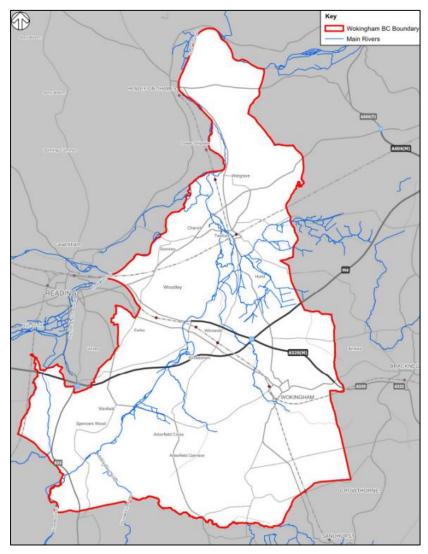


Figure 2.1: Map showing Main Rivers in Wokingham Borough

2.2 What will the Wokingham LFRMS contain?

2.2.1 Structure of the LFRMS

- 2.2.2 At the stage of writing this report a draft of the LFRMS has been produced, although this is subject to development. It includes the following elements:
 - Introduction Provides and introduction and background to Wokingham's LFRMS including a brief introduction to the Council's strategy and definition of flooding;
 - Legislative and Policy Context Provides a quick overview of the important national policy relevant to the construction of the LFRMS;
 - Roles and Responsibilities This section outlines the overall structure of who is involved and in what capacity. Risk Management Authorities within Wokingham are also detailed;
 - Understanding Flood Risk in Wokingham Outlines the historical flooding of Wokingham, already adopted measures and schemes;
 - Managing the Likelihood and impact of Flooding This section looks at all the objectives and sub-objectives of the LFRMS;
 - Funding and Delivery Looks at the local budget for funding of schemes as a number of budgets available both national and local;
 - Action Plan Outlines the actions to be taken as part of the LFRMS; and
 - Review and Development of the Strategy Provides an overall review of the LFRMS in terms of a number of legislative measures and nationally significant measures.

2.2.3 Objectives of the Strategy and Key Actions

2.2.4 The overarching objective of the LFRMS is to set out how flood risks will be reduced and managed in the Wokingham Borough. This is achieved through six objectives, which are detailed in **Table 2.1**.

Table 2.1: Key Objectives of the LRMFS

Reference	Objective
01	Continue to improve knowledge and understanding of current and future local sources of flood risk within Wokingham Borough
02	Continue to work collaboratively and develop effective partnerships with other Flood Risk Management Authorities and local communities to deliver a sustainable, cost effective approach to flood risk management, that reduces flood risk and provides wider environmental and socio-economic benefits where possible
03	Ensure that land use planning and application decisions take full account of flood risk, avoiding development in inappropriate locations, minimising and preventing an increase in flood risk wherever possible
04	Maintain and, where necessary, improve local flood risk management infrastructure and privately owned flood defence assets and Ordinary watercourses, to reduce risk.
05	Ensure that emergency plans and responses to flood incidents are effective and that communities are prepared and resilient to local flood risk
06	Identify national, regional and local funding mechanisms to deliver flood risk management solutions and schemes

2.2.5 To deliver the LFRMS objectives, Wokingham Borough council have identified measures and actions needed to achieve these objectives, as well as categorising the timescale for each action, as detailed



below in **Table 2.2**. Each of the actions aims to be sustainable and centre on a risk-based proportionate approach that reflects the size and complexity of the flood risk.

Table 2.2: Summary of Actions and Measures for each C	Objective outlined in LRMFS
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Objective	Sub-Objective	Action/Measure	Description and Benefits of Action/Measures	Timescale
01	A	Develop the investigations policy and implement this policy when investigating flood events	Building knowledge of flooding sources in the borough to ensure schemes and funding are targeted appropriately	Short Term
	В	Develop and maintain a live database of flood incidents in the Borough	Improve knowledge available to Wokingham Direct, Ready access to data to support funding applications for schemes	Short term
	C	Work to transfer the key information form the flood incident database to GIS. This GIS map can then be made accessible to all risk management authorities within Wokingham Borough	Ensuring maintenance and responsibilities can be correctly identified. Improved understanding of the area and risk	Short term
	D	Undertake a SWMP for the Borough	Will allow WBC to investigate the accuracy of the recently released surface water flood map and provide affected residents with information and support. Allow maintenance programme to be developed and identify critical assets	Medium Term
	E	Utilise social media to enable the general public to report flood issues to improve knowledge of flood risk in the Borough	Improve understanding of flooding in the borough. Engages with younger communities providing new data	Short term
02	A	Continue to work with local communities to develop Flood Forums/ Partnerships in at risk areas in the Borough.	Help to reduce risk to communities and ensure responsibilities are correctly identify	Short term
	В	The findings and actions emerging from the SWMP will be promoted to local communities to involve them in the process of identifying solutions and implementing the actions	Improves understanding and steps that can be taken by the community to reduce risk	Long term
	С	The findings from the SWMP will be discussed with maintenance teams and the required actions identified in partnership.	Reduces risk and ensures critical assets are identified	Long term
	D	Work with partners to identify flood alleviation schemes, and assess these schemes against the prioritisation tool.	Ensure responsibilities are defined and funding appropriately spent	Medium term
	E	Investigate the further use of social media techniques such as Datasquirt and WBC Facebook page to disseminate information and raise awareness within local communities.	Reduces risk and potential disruption and damages	Short term
	F	Develop a prioritisation tool against which flood alleviation schemes can be assessed.	Robust approach to ensure potentially limited funds are spent in the areas where it will be most effective	Short term
03	A	Develop an internal procedure in order to efficiently and effectively undertake new duties as the SAB.	Required under the FWMA	Short term
	В	Undertake a skills assessment of all officers who are to be involved in the SAB. Any skills gaps will be met with staff training.	Required to ensure SUDS schemes are appropriately designed.	Short term

	С	Develop a guidance document for SuDS, setting out the local standards that will be required for SuDS in Wokingham Borough in addition to the National Standards	Provides sound and robust advice to developers and improves the quality and accuracy of the SAB Applications	Short time
	D	Identify the relevant stakeholders responsible for reviewing planning and drainage applications in Wokingham Borough, such as the sewage undertaker, the EA and WBC as the Highways Authority.	Input in development planning required from all Risk Management Authorities under the Act	Short term
	E	Review local flood policy and guidance to check that it is current, clear (independent review), and can easily be taken into account during the planning process	Ensures that the new Strategic Development Sites consider flood risk on and off site and provide betterment wherever possible	Short term
	F	Prepare a briefing note on Flood Rate and what affect it has on new developments.	Ensures that the siting of commercial and domestic properties in terms of flood risk is appropriate.	Short term
04	A	Produce a guidance/advice note for riparian owners to ensure they are aware of their responsibilities to maintain their watercourses and associated assets.	Informs landowners of their duties and reduces risk due to poor management	Short term
	В	Identify all the ordinary watercourses in Wokingham Borough and designate those they feel are 'high-risk'.	Ensure maintenance work is effectively targeted	Medium term
	C	Develop a prioritised list of structure categories (e.g. bridges, culverts, etc.) which potentially may have a significant effect on a flood risk in the Borough. The individual features within these categories will then be reviewed in order of priority and the significant features added to the Asset Register.	Ensure maintenance work is effectively targeted	Short term
05	A	Encourage communities to produce Emergency Plans that consider flooding emergencies. These plans will help support the community and allow them to understand what actions they need to take during an emergency. WBC will encourage communities to log completed plans with the Wokingham Borough Community Resilience Team.	Reduces risk to persons and may reduce disruption and damage	Short term
	В	Continue to review all existing Emergency Plans to ensure they reflect existing/future flood risk	Consideration to be given to strategic development sites and whether they will impact on existing plans	Short term
	С	Publicise the Flood line Warnings Direct service and encourage residents in areas at risk from flooding to sign up to the service. Identify areas where local telemetry systems could be installed	Reduces risk	Short/medium term
	D	Work with local communities at risk from flooding to develop Flood Forums and work with these Forums to develop Flood Plans and encourage Flood wardens	Reduce risk and encourages responsibilities and awareness	Medium term
06	A	Develop a timeline for funding opportunities and publicise this timeline to at risk communities/communities where potential schemes would be of benefit, to ensure sufficient time is provided to raise funds via partnership funding	Maximise chances of successful funding applications	Medium term
	В	Develop a programme of bids for funding	Maximises chances of successful funding applications	Long term



С	The prioritisation tool will produce a list of flood alleviation schemes in order to priority. The potential funding mechanisms which can be used to deliver each scheme will be identified, as well as the need and potential for partnership funding.	Robust approach to ensure targeted spending of funds	Medium term
D	WBC will work with local communities to raise awareness of planned flood alleviation works, the prioritisation system and the need for and benefits of partnership funding.	Maximises chances of successful funding applications	Long term

3 The Habitats Regulations Assessment Process

This section provides an outline of the stages involved in HRA and the specific methods that have been used in preparing this report.

3.1 Stages in HRA

- 3.1.1 The requirements of the Habitats Directive comprise four distinct stages:
 - 1. **Screening** is the process which initially identifies the likely impacts upon a European site of a project or plan, either alone or in-combination with other projects or plans, and considers whether these impacts may have a significant effect on the integrity of the site's qualifying habitats and/or species. It is important to note that the burden of evidence is to show, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment. There is European Court of Justice case law to the effect that unless the likelihood of a significant effect can be ruled out on the basis of objective information, and adopting the precautionary principle, then an Appropriate Assessment must be made.
 - 2. **Appropriate Assessment** is the detailed consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine whether or not there will be adverse effects on the integrity of the site. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.
 - 3. Assessment of alternative solutions is the process which examines alternative ways of achieving the objectives of the project or plan that would avoid adverse impacts on the integrity of the European site, should avoidance or mitigation measures be unable to cancel out adverse effects.
 - 4. Assessment where no alternative solutions exist and where adverse impacts remain. At Stage 4, an assessment is made with regard to whether or not the development is necessary for imperative reasons of overriding public interest (IROPI). If it is, this stage also involves detailed assessment of the compensatory measures needed to protect and maintain the overall coherence of the Natura 2000 network.
- 3.1.2 The Draft guidance produced by David Tyldesley Associates prescribes a series outlined above. This is reproduced in **Figure 3.1** below. This Screening Report corresponds with the first four stages in the flow-chart, pertaining to 'Assess Likely Significant Effects'.

PROCEDURAL STAGE

METHODOLOGICAL STEPS

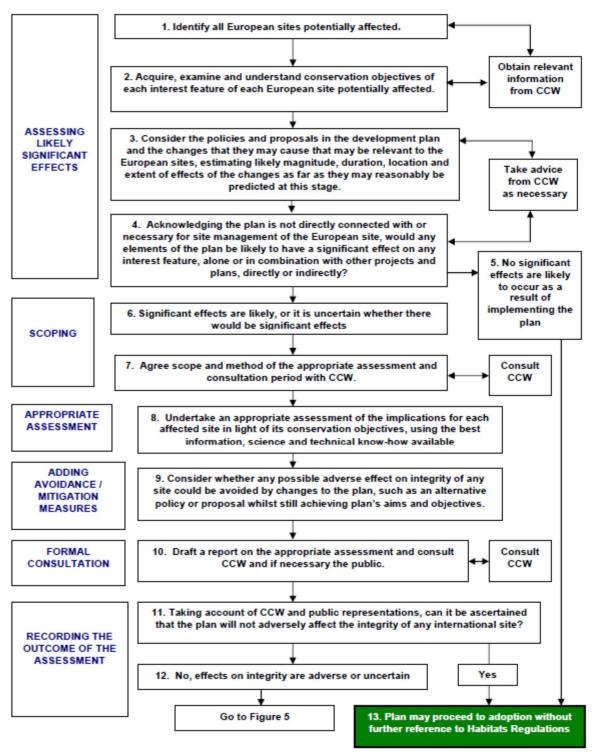


Figure 3.1 Application of Regulation 102 of the Habitats Regulations to Plans – David Tyldesley Associates 2009

- 3.1.3 Those stages relating to Assessing Likely Significant Effects are outlined in the following sections of this report:
 - Section 4 Identifying the European sites: This section of the report corresponds with Stages 1 and 2 of Figure 3-1.



- Section 5 Screening the LFRMS: This section of the report corresponds with Stages 3 and 4 of Figure 3-1.
- Section 6 Conclusions: This section of the report provides a conclusion on the Assessment of Likely Significant effects and makes recommendations for further HRA if required.

3.2 In-Combination Effects

3.2.1 As outlined in Section 3.1, it is necessary for HRA to consider in-combination effects with other plans and projects. Plans under consideration may range from neighbouring authorities' planning documents down to sector specific strategic plans on such topics as flood risk. A review has been undertaken of plans and projects with the potential for an in-combination effect with the Wokingham LFRMS and these are listed in **Table 3.1**.

Table 3.1 Plans and Pro	iects Considered for I	n-Combination Effects
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Relevant Plan/Project	Overview
 Wokingham Borough Council Adopted Core Strategy, 2010 Adopted Local Plan, 2004, saved policies 	Planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise. The National Planning Policy Framework (NPPF), published in March 2012, sets out the Government's planning policies for England and must be taken into account in the preparation of the development plan. It is also a material consideration in planning decisions.
	The Core Strategy sets out the long term 'spatial vision' for the Wokingham Borough up until March 2026. This includes policies and strategies to provide new housing, schools, roads, places to work and other services. Some policies within the 2004 Local Plan are saved and therefore have material planning weight. These saved policies will eventually be replaced by the emerging Managing Development Delivery DPD.
	The Local Plan is being produced in consultation with all those who have a stake in the future development of Wokingham.
 The Development Plan for West Berkshire Core Strategy, July 2012 West Berkshire Local Plan, June 2002 and polices saved in September 2007 	The Development Plan for West Berkshire comprises the West Berkshire Local Plan, made up of the West Berkshire Core Strategy (2006 - 2026), the Saved Policies of the West Berkshire District Local Plan (WBDLP) 1991 - 2006, the Replacement Minerals Local Plan for Berkshire and the Waste Local Plan for Berkshire. The West Berkshire Core Strategy was adopted on 16 July 2012 and carries full weight in decision- making as a development plan document (DPD) adopted since publication of the NPPF.
 Replacement Minerals Local Plan for Berkshire, 1995 with alterations adopted in May 2001 Waste Local Plan, 1998 	The West Berkshire District Local Plan Saved Policies: A number of policies in the WBDLP have been superseded by policies in the Core Strategy. The saved policies carry "due weight" according to their degree of conformity with the NPPF. These policies will ultimately be replaced by policies in the forthcoming Site Allocations and Delivery Development Plan Document.
 Basingstoke and Deane Borough Council Adopted Local Plan, 1996 saved policies, 2009 	The adopted local plan is currently the Council's key planning document. A new Local Plan is currently in development but carries no material weight at this time.
 Reading Borough Council Adopted Core Strategy, 2008 Saved policies from the Replacement Minerals Local 	The Core Strategy forms the most important planning document in Reading's Local Development Framework (LDF). It sets out the overall planning strategy and broad principles for development in Reading. All other planning documents that are part of the LDF need to conform with the Core Strategy. The document has 'development plan' status, which means that it is one of the main con-

Relevant Plan/P	roject	Overview
Plan, 2001		siderations in deciding planning applications in the Borough.
-	ies from the Waste or Berkshire, 1998	
 Local Plan: Policies - the new local pl 	re Strategy, 2012 Sites and General e second part of the	The Development Plan for South Oxfordshire consists of the adopted Core Strategy and the new Local Plan, together with the saved policies of the 2006 adopted Local Plan.
 Buckingham Waste Loca Buckingham Waste Core 	t Council re Strategy, 2008 Ishire Minerals and I Plan 2004-2016 Ishire Minerals and Strategy, 2012 ies in the Local	The Development Plan for Wycombe consists of the adopted Core Strategy and the emerging Local Plan, together with the saved policies of the 2004 adopted Local Plan and Minerals and Waste documents.
 Maidenhead Emerging B Saved polici Plan, 2003 The Replace Local Plan 2 	Local Plan for	The Development Plan for Windsor and Maidenhead consists of the saved policies of the 2003 Local Plan, together with the Minerals and Waste documents.
 Saved polici Plan, 2002 Replacement Plan for Bent alterations at 2001 	Borough Council re Strategy, 2008 ies from the Local nt Minerals Local kshire, 1995 with idopted in May	The Development Plan for Bracknell comprises the Local Plan, made up of the Core Strategy, the Saved Policies of the Local Plan, the Replacement Minerals Local Plan for Berkshire and the Waste Local Plan for Berkshire.
Plan, 2002 a	ocal Plan ies of the Local	The Development Plan for Hart comprises the Saved Policies of the Local Plan and the Minerals and Waste Local Plan.



Relevant Plan/Project	Overview
 Hampshire Minerals and Waste Plan 2013 	
The Loddon Catchment Abstraction Licensing Strategy (2012)	The Loddon catchment covers an area of 680 km ² and falls within the counties of Surrey, Hampshire and Berkshire. This is a licensing strategy for the sustainable management of water resources at a local level. This will make more information on water resources and licensing practice publicly available and allow the balance between the needs of abstractors, other water users and the aquatic environment to be considered in consultation with the local community and interested parties.
Wokingham Borough Council Strategic Flood Risk Assessment (SFRA) (2012)	The primary purpose of the SFRA is to determine the variation in flood risk across the Borough. Robust information on flood risk is essential to inform and support the Council's revised flooding policies in its emerging Local Development Framework (LDF). The SFRA provides an overview of all sources of flood risk throughout the Borough, and will inform the preparation of the Local Development Framework and gives essential information for the allocation of land for development. The SFRA also helps to inform future planning decisions, including those made on planning applications. A number of rivers run through Wokingham Borough including the River Thames and its tributary the Foudry Brook, and the River Loddon and its tributaries the Twyford Brook, Emm Brook, Barkham Brook and the River Blackwater. Flooding represents a risk to both property and life. It is essential therefore that planning decisions are informed, and take due consideration of the risk posed to, and by, future development by flooding.
Thames Basin Heaths Supplementary Planning Document (2010)	The Thames Basin Heaths Special Protection Area is an international designation covering parts of Berkshire, Hampshire and Surrey. This SPD provides guidance on how the impact of new residential developments on the Thames Basin Heaths Special Protection Area may be mitigated against.
River Basin Management Plan Thames River Basin District (2009)	This plan focuses on the protection, improvement and sustainable use of the water environment. Many organisations and individuals help to protect and improve the water environment for the benefit of people and wildlife. River basin management is the approach the Environment Agency is using to ensure combined efforts achieve the improvement needed in the Thames River Basin District. River basin management is a continuous process of planning and delivery. This plan has been prepared under the Water Framework Directive, which requires all countries throughout the European Union to manage the water environment to consistent standards. The plan describes the river basin district, and the pressures that the water environment faces. It shows what this means for the current state of the water environment, and what actions will be taken to address the pressures. It sets out what improvements are possible by 2015 and how the actions will make a difference to the local environment – the catchments, the estuaries and coasts, and the groundwater.

3.2.2 It should be noted that in-combination effects only require consideration where the plan or project being assessed has an impact, whether significant or not. A conclusion of 'Zero Effects' negates the possibility of in-combination effects.

3.3 Mitigation Measures

3.3.1 In preparing this report, consideration has been given to potential avoidance and mitigation measures which would serve to avoid adverse effects on the integrity of European sites, for example the provision of specific clauses within the strategy that may prevent effects occurring.



4 Identifying the European Sites

4.1 Approach to Identifying Sites

- 4.1.1 Wokingham Borough Council is located centrally within the county of Berkshire. The borough is bordered by eight other council areas, most notably Reading to the west, South Oxfordshire to the northwest and Windsor and Maidenhead to the northeast. The environment of the borough is dominated by the River Thames, which runs along the western and northern boundaries of the borough. The Thames valley character area stretches centrally across the borough, the Chilterns to the north and Thames Basin to the south.
- 4.1.2 There are no European sites within the Borough, however, sites outside of the county may be relevant if they are connected via hydrological links or if mobile species from neighbouring sites have a significant functional link with areas within Wokingham, such as for foraging. The HRA of the Wokingham LFMRS identified 4 sites (within 10km) deemed significant to the assessment (Figure 4.1).

4.2 European Sites within Wokingham

4.2.1 There are no European sites within Wokingham.

4.3 European Sites Outside Wokingham

4.3.1 Impacts and Influences of the LFRMS

4.3.2 As described above (in Section 4.1), it was first important to identify the likely impacts and influences of the LFRMS. The Draft LFRMS was reviewed and, in conjunction with the parallel Strategic Environmental Assessment (SEA), the following potential impact types were identified that may have some effect on European sites and their qualifying species.

Impacts and Influences of the LFRMS	Likely habitats and locations affected	Outcome for screening European Sites Outside Wokingham
Effects on ordinary watercourses, for example, naturalising and ensuring they flow freely.	Aquatic habitats associated with ordinary watercourses within and downstream of Ceredigion.	Identify sites associated with those ordinary watercourses (directly or indirectly) which lie downstream of Wokingham.
Effects of structures within ordinary watercourses, for example maintenance and discouraging blocking.	Riparian habitats dependent upon ordinary watercourses including those linked by groundwater. These could be located in both upland and lowland areas.	Key issues may relate to sites where habitats are linked or where mobile species from other sites use those aquatic areas such as migratory fish, birds and otters. Identify sites which may be hydrologically linked, for example through groundwater, to ordinary watercourses in Wokingham. Key issues may relate to peat land or wetland sites which are hydrologically linked or to mobile bird species from other sites which may be dependent on such habitats.
Effects on the floodplain, for example	Wetland or seasonally wet habitats within	Identify wetland sites downstream of

ensuring it is maintained, for example by maintaining or altering flood defences.	Wokingham or downstream of ordinary watercourses in Wokingham.	Wokingham's watercourses.
Effects on low-lying areas which are often most vulnerable to flooding. Effects on groundwater flooding.	Groundwater flooding is not a notable issue in Wokingham based on existing evidence. This tends to occur in low-lying areas underlain by aquifers.	Identify wetland sites downstream of Wokingham watercourses. Also identify areas outside of Wokingham hydrogeologically linked by aquifers.
Effects on populated areas and economic areas being some of the most vulnerable to surface water flooding, for example through sewer or drainage flooding.	Effects are primarily likely to be in urban areas and not generally associated with European Sites or protected species. Furthermore the intention would be to reduce flood risk in these areas and hence further minimise harm to the environment in addition to people.	No significant influence on choice of sites outside of Wokingham.
Effects on sea defences which are vulnerable to coastal erosion.	Saline habitats.	No significant influence on sites outside of Wokingham.

4.3.3 In summary, the European sites outside Wokingham which will be identified will be those that:

- Are associated with ordinary watercourses that flow downstream of Wokingham. This might include riverine sites or those dependent on the watercourses. Mobile species may therefore include migratory fish and otters.
- Are hydrologically linked, for example through groundwater or to ordinary watercourses in Wokingham. This might include peat land or wetland sites which are hydrologically linked or to mobile bird species from other sites which may be dependent on such habitats within Wokingham.
- Wetland sites downstream of Wokingham watercourses.
- Areas outside of Wokingham hydrogeologically linked by aquifers.
- 4.3.4 Sites Outside Wokingham Identified due to Aquatic, Hydrological or Hydrogeological Links
- 4.3.5 No European sites or wetlands outside of Wokingham have been identified as downstream of the county or linked to watercourses within the county.
- 4.3.6 A review of aquifers indicates that the majority of Wokingham is underlain by a Secondary A aquifer, with the minor inclusion of a Secondary B aquifer below Lower Earley on the outskirts of Reading. These are permeable layers capable of supporting water supplies at a local rather than strategic scale, in some cases forming an important source of base flow to rivers or otherwise yielding limited groundwater. The aquifers do not underlay a European Site or appear to extend into such sites, thus discounting the likely effect on any European Sites.

4.4 Conservation Objectives of the European Sites

4.4.1 Relevant European Sites Outside of Wokingham

4.4.2 European protected sites where considered up to 10km of Wokingham District, where they may have potential connectivity. The results indicated three Special Areas of Conservation (SAC), as well as a single Special Protection Area (SPA), as listed within **Table 4.3**.



Designation Site	Designation Number	Principle Designation Features	Description	Distance	Potential Connectivity
SPA					
Thames Basin Heaths	UK9012141	 During Breeding Season: Dartford Warbler Sylvia undata Nightjar Caprimulgus europaeus Woodlark Lullula arborea 	Thames Basin Heaths SPA is a composite site that is located across the counties of Surrey, Hampshire and Berkshire. Habitats of scrub, acidic woodland and conifer plantations dominate, within which area scattered areas of open heath and mire	61m	Blackwater River, a tributary of the River Loddon, does run along the boundary of the designation; the SPA is upstream of the River Loddon.
SAC					
Chilterns Beachwood	UK0012724	 Asperulo-Fagetum Beech Forests Semi-natural dry grassland and scrubland 	Chilterns Beachwood SAC is split across two sections of woodland north and south of the River Thames near to Marlow	2.8km	Although the SAC is located close the River Thames, neither section of the SAC encounters any tributaries of the River Thames. Nor do any of the sections of woodlands fall within the River Thames flood zone.
Thursley, Ash, Pirbright and Chobham	UK0012793	 Northern Atlantic wet heaths with <i>Erica tetralix</i> European dry heaths Depressions on peat substrates of the <i>Rhynchosporion</i> 	This SAC is contained to a section of the Thames Basin Heaths SPA, to the southeast of the Wokingham District	6.8km	There is no hydrological connectivity between the SAC and Wokingham District. At such distance from Wokingham there is unlikely to be any connectivity with the designation.
Windsor Forest & great Park	UK0012586	 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains Atlantic acidophilous beech forests with <i>Ilex</i> and somethimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i> 	This SAC is located to the east of the Wokingham District and comprises predominantly woodland and parkland	8.6km	The SAC has a tributary, Cranbourne Chase, of the River Thames running through the site, however at such distance there is unlikely to be any significant connectivity.

Table 4.3: Designated Sites within 10km of Wokingham District Boundary

4.5 Conservation Objectives of the European Sites

- 4.5.1 Under Regulation 35(3) of the Conservation of Habitats and Species Regulations 2010 the appropriate statutory nature conservation body (in this case NRW (formally CCW)) has a duty to communicate the conservation objectives for a European site to the relevant/competent authority responsible for that site. The information provided under Regulation 35 must also include advice on any operations which may cause deterioration of the features for which the site is designated.
- 4.5.2 The conservation objectives for a European site are intended to represent the aims of the Habitats and Birds Directives in relation to that site. To this end, habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS), as defined in Article 1 of the Habitats Directive below:
- 4.5.3 The conservation status of a natural habitat will be taken as 'favourable' when:

- Its natural range and the area it covers within that range are stable or increasing;
- The specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future; and
- Conservation status of typical species is favourable as defined in Article 1(i).
- 4.5.4 The conservation status of a species will be taken as favourable when:
 - Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
 - The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
 - There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.
- 4.5.5 Guidance from the European Commission3 indicates that the Habitats Directive intends FCS to be applied at the level of an individual site, as well as to habitats and species across their European range. Therefore, in order to properly express the aims of the Habitats Directive for an individual site, the conservation objectives for a site are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.

5 Screening

5.1 Context

5.1.1 The LFRMS outlines a number of measures that will be adopted to help reduce and managed flood risk in the Wokingham Borough. In most instances these aims area achieved through increased awareness, improved information (both for the public and the governing body) and ability to adapt to flooding events. There is little by the way of physical actions to be undertaken on the district's watercourse. The LFRMS looks at flooding from surface, groundwater and combination events. The Wokingham LFRMS is applicable to the whole of Wokingham County.

5.2 Screening of the Wokingham LFRMS

- 5.2.1 The elements of the Wokingham LFRMS used in the screening assessment are listed in **Table 2.2**.
- 5.2.2 The screening process has been split into two distinct stages, initial screening and detailed screening. The initial screening stage provides a high level screening 'matrix style' assessment to determine if the LFRMS could possibly lead to significant adverse effects on European sites identified in **Table 4.3** and Section 4.3.4. The purpose of this is to eliminate those sites from the assessment which very clearly would not be affected by the strategy in order to focus on those sites where there was potential or uncertainty. The European sites that were identified to be potentially at risk due to potential development associated with the LFRMS were carried forward into a more detailed screening assessment.
- 5.2.3 The sections below outline the initial and detailed screening of the LFRMS for Wokingham.
- 5.2.4 Initial Screening of the Sub-Objectives Local Objectives and Measures for Delivery
- 5.2.5 The initial screening of the LFRMS is presented in **Table 5-1** below.



- 5.2.6 The twenty-nine Sub-Objectives were initially examined to determine their need for further detailed assessment. The notations below were used to indicate if further detailed assessment is required:
 - ✓ Further detailed assessment is required to determine the nature of effects on the European site.

× No further assessment is required as no effects are predicted on the European site.

	Table 5.1 Initial	Screen	of the	Sub-Ob	iectives
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		European Sites			
Objective	Sub- Objectives	Thames Basin Heaths SPA	Chilterns Beachwood SAC	Thursley, Ash, Pirbright and Chobham SAC	Windsor Forest & great Park SAC
1	A	✓	×	×	×
	В	×	×	×	×
	С	×	×	×	×
	D	✓	×	×	×
	E	×	×	×	×
2	А	×	×	×	×
	В	×	×	×	×
	С	✓	×	×	×
	D	✓	×	×	×
	E	×	×	×	×
	F	×	×	×	×
3	А	✓	×	×	×
	В	×	×	×	×
	С	✓	×	×	×
	D	×	×	×	×
	E	×	×	×	×
	F	×	×	×	×
4	А	✓	×	×	×
	В	×	×	×	×
	С	×	×	×	×
5	А	×	×	×	×
	В	×	×	×	×
	С	×	×	×	×
	D	×	×	×	×
6	А	×	×	×	×
	В	×	×	×	×
	С	✓	×	×	×

D	×	×	×	×
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- 5.2.7 Following the initial screening of the LFRMS, three of the European sites have been screened out of the remainder of this assessment. **Table 5.1** shows that most of the sub-objectives of the LFRMS will have no impact on these European sites, hence significant effects from the implementation of the strategy were unlikely.
- 5.2.8 5.3.2 Detailed Screening of the Sub-Objectives and Measures for Delivery
- 5.2.9 The detailed screening of the Sub-Objectives and Measures for Delivery is presented in **Table 5.2** below and is based on the findings of the initial screening exercise.
- 5.2.10 The notations below were used to indicate if the policy should be taken forward to the Appropriate Assessment stage:
 - ✓ Appropriate Assessment required
 - × No further assessment required

Table 5.2 Screening the Sub-Objectives and the Measures for Delivery: Thames Basin Heaths SAC

Sub-Objective (inc. Measures for Delivery)	Development and Land Use Change Potential Effects	Avoidance and Mitigation Potential	In-combination Effects Potential	Appropriate Assessment Required? (x/√)
Objective 01 – Continue to imp Borough	prove knowledge and under	standing of current and futu	re local sources of flood ris	k within Wokingham
 Develop the investigations policy and implement this policy when investigating flood events Undertake a Surface Water Management Plan (SWMP) for the Borough 	The continuation of knowledge on flooding events may require a degree of monitoring – which can involve automatic monitoring via instruments incorporated into rivers, streams, aquifers etc. As such the introduction of such devices could influence flow rates downstream of monitoring locations. This said the SAC is located upstream of Wokingham and the resulting monitoring is unlikely to impact upon the SAC. Whilst the LFRMS may include measures which could affect European sites, it is via unspecified methods and the adoption of a SWMP would be contained to a separate document. Therefore any potential impacts could not be seen as being as a result of the LFRMS implementation.	As no potential impacts are envisaged there is no need to introduce mitigation measures.	No effects on the SAC identified from the LRFMS therefore in- combination effects are not possible.	×

communities to deliver a sustainable, cost effective approach to flood risk management, that reduces flood risk and provides wider



Sub-Objective (inc. Measures for Delivery)	Development and Land Use Change Potential Effects	Avoidance and Mitigation Potential	In-combination Effects Potential	Appropriate Assessment Required? (x/√)		
environmental and socio-ecor	nomic benefits where possib	le				
 Work with partners to identify flood alleviation schemes, and assess these schemes against the prioritisation tool 	Identification of flood alleviation schemes and the use of a prioritisation tool is just a simple mechanism to help understand the flood risk of the borough. This action is unlikely to impact upon the SAC as the SAC is upstream of Wokingham.	As there is no impact to the SAC no mitigation measures are necessary.	No effects on the SAC identified from the LRFMS therefore in- combination effects are not possible.	×		
Objective 3 – Ensure that land inappropriate locations, minim				velopment in		
 Develop an internal procedure in order to efficiently and effectively undertake new duties as the SuDS Approving Body (SAB) 	The SAB would encourage sustainable development by the incorporation of SuDS that will effect water management across any proposed development – thus having a knock on effect on the water management within the Borough. As the assessment of any SuDS will consider the wider implications and the connectivity of the development to the borough there is unlikely to be an impact upon the SAC, as this would be a material consideration if a development was to occur within close proximity to the SAC. Furthermore the assessment would be dealt with in a separate assessment and therefore any potential impacts could not be seen as being as a result of the LFRMS implementation	As there is no impact to the SAC no mitigation measures are necessary.	No effects on the SAC identified from the LRFMS therefore in- combination effects are not possible.	×		
Objective 4 – Maintain and, where necessary, improve flood risk management infrastructure and privately owned flood defence assets and Ordinary watercourses, to reduce risk						
 Produce a guidance/advice note for riparian owners to ensure they are aware of their responsibilities to maintain their watercourse and associated assets. 	The introduction of a guidance/advice note may alter the use or operation of a number of exiting or proposed privately owned watercourse and as such, depending on their location, could influence surrounding	As there is no impact to the SAC no mitigation measures are necessary.	No effects on the SAC identified from the LRFMS therefore in- combination effects are not possible.	×		

Sub-Objective (inc. Measures for Delivery)	Development and Land Use Change Potential Effects	Avoidance and Mitigation Potential	In-combination Effects Potential	Appropriate Assessment Required? (x/∕`)
	waterbodies. However considering the fact the SAC is upstream of Wokingham Borough there is little implication at the SAC as the results of any actions in align with this objective.			
Objective 6 – identify national,	regional and local funding r	mechanisms to deliver flood	I risk management solutions	s and schemes
 The prioritisation tool will produce a list of flood alleviation schemes in order of priority. The potential funding mechanisms which can be used to deliver each scheme will be identified, as well as the need and potential for partnership funding 	The introduction of the prioritisation tool will merely alter the speed at which some alleviation schemes are brought into operation. Although the implementation of such schemes would alter waterbodies, flood risk and overall surface water management within the Borough, in terms of the SAC there is no impact as the Sac sits upstream of the Wokingham Borough.	As there is no impact to the SAC no mitigation measures are necessary.	No effects on the SAC identified from the LRFMS therefore in- combination effects are not possible.	×

5.2.11 Screening Summary / Recommendations

- 5.2.12 From undertaking the detailed screening of the Sub-Objectives and Measures for Delivery (presented in **Table 5.2**). None of the objectives and sub-objectives identified within the LFRMS will result in an effect upon any of the European designated sites.
- 5.2.13 There are a limited number of European designations surrounding Wokingham Borough and only a single SAC was identified as potentially having connectivity. Nevertheless the Sac is located upstream of Wokingham and thus any influence exerted within Wokingham will unlikely impact upon the SAC. Furthermore the objectives and sub-objectives detailed within the LFRMS are associated more with management and setting up of structure within the Borough rather than tangible activities on the ground within the Borough. As such many of the objectives will not impact upon watercourse unless they occur within subsequent documents resulting from the LFRMS as such the LFRMS will have no effect on European designated sites.

5.3 In-Combination Effects

5.3.1 The HRA needs to consider not only the sub-objectives and Measures for Delivery within the LFRMS that may lead to significant impacts upon European sites on their own but also those that may have a significant impact in-combination with other plans and projects. These may be spatial planning documents produced by the neighbouring authorities or major developments anticipated within the county. **Table 2.1** outlines relevant plans and projects that were considered in-combination with the LFRMS.



5.3.2 **Table 5.2** identify that the LFRMS for Wokingham is not likely to result in any significant adverse effects upon the European sites identified. Furthermore, it has been determined that the LFRMS will have zero effects upon these sites (not merely no significant effects) and as such it would therefore not be possible to result in an in-combination effect with any other plans or projects.

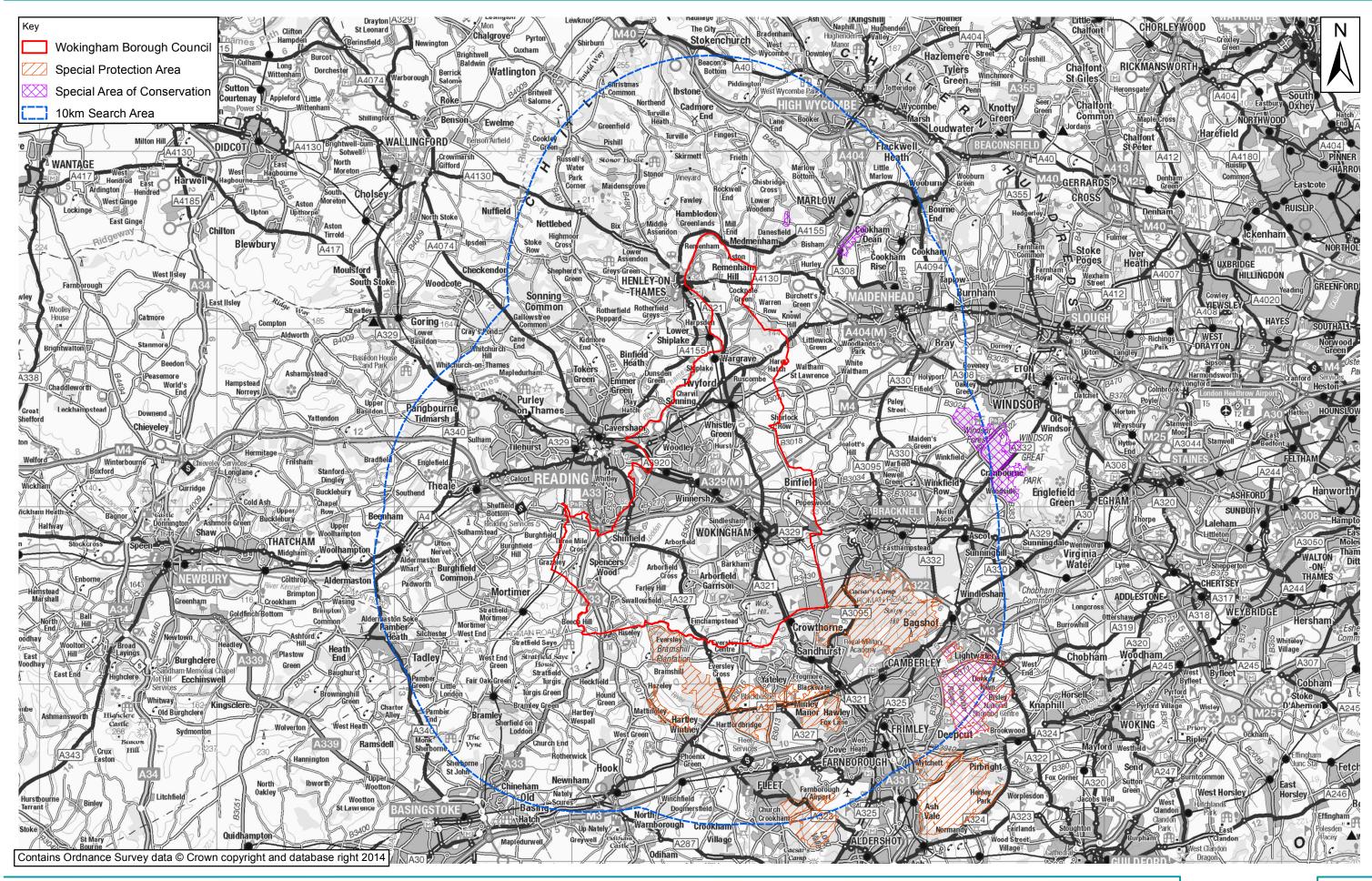
6 Conclusions

- 6.1.1 It has been concluded that the LFRMS is unlikely to have any significant effects on the European sites identified, either alone or in-combination with other plans or projects. This is primarily due to the lack of such sites within Wokingham Borough and a lack of connectivity to any neighbouring European designated sites.
- 6.1.2 In view of the findings of this HRA Screening Report it is not proposed to undertake Appropriate Assessment. We seek NRW's opinion and agreement or otherwise with this conclusion.

Appendices



Appendix A – Figure



PROJECT: Wokingham HRA PROJECT No: 62003442

Client: Wokingham Borough Council



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