

## Cover Note

### PART 1

To [SEA.gateway@scotland.gsi.gov.uk](mailto:SEA.gateway@scotland.gsi.gov.uk)

Or

SEA Gateway  
Scottish Executive  
Area 1H (Bridge)  
Victoria Quay  
Edinburgh

### PART 2

**A post-adoption SEA statement is attached for the PPS entitled:**

East Renfrewshire Council Local Development Plan

**The Responsible Authority is:**

East Renfrewshire Council

### PART 3

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**Post adoption SEA statement for:**

East Renfrewshire Council Local Development Plan

**Adopted on:**

25 June 2015

**Responsible Authority:**

East Renfrewshire Council

## Introduction

This document (referred to here as the post –adoption SEA statement) has been prepared in accordance with the Environmental Assessment (Scotland) 2005 Act.

## Availability of Documents

**Website:**

The Local Development Plan as adopted along with the Environmental Report and post-adoption SEA Statement are available on East Renfrewshire Councils website at:

East Renfrewshire Council Local Development Plan

[www.eastrenfrewshire.gov.uk/local-development-plan](http://www.eastrenfrewshire.gov.uk/local-development-plan)

Strategic Environmental Assessment Local Development Plan/Post Adoption Statement

[www.eastrenfrewshire.gov.uk/sea-ldp](http://www.eastrenfrewshire.gov.uk/sea-ldp)**Office Address:**

They may also be inspected free of charge at the principal office at the Responsible Authority

**Contact name, address and telephone number**

Richard Greenwood (Principal Planning Officer)

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**Times at which the document may be inspected or a copy obtained**

9am – 5pm, Monday to Friday (except public holidays)

## Key Facts

<b>Name of Responsible Authority</b>
East Renfrewshire Council
<b>Title of PPS</b>
East Renfrewshire Local Development Plan
<b>Purpose of the PPS</b>
The Local Development Plan sets out the Council's detailed policies and proposals for the use, development, protection and improvement of land. It provides a framework for the promotion of development opportunities and a basis for development Management.
<b>What prompted the PPS (e.g. a legislative, regulatory or administrative provision)</b>
Legislative and Regulatory provision
<b>Subject (e.g. transport)</b>
Land Use Planning
<b>Period covered</b>
2015 - 2025
<b>Frequency of updates</b>
5 Years
<b>Area of PPS (e.g. geographical area)</b>
East Renfrewshire Council Boundary
<b>Summary of nature/content of PPS</b>
The Local Development Plan sets out the Council's policies to guide development in the area and provides proposals for specific sites.
<b>Date adopted</b>
25 June 2015
<b>Contact name &amp; job title. Address, email &amp; telephone number</b>
Richard Greenwood, Principal Planner East Renfrewshire Council, 2 Spiersbridge Way, Spiersbridge Business Park, Thornliebank, G46 8NG <a href="mailto:ldp@eastrenfrewshire.gov.uk">ldp@eastrenfrewshire.gov.uk</a> 0141 577 3054
<b>Date</b>
28 October 2015

## Strategic Environmental Assessment Process

The Local Development Plan (2015) prepared by East Renfrewshire Council has been subject to a process of Strategic Environmental Assessment (SEA) under the Environmental Assessment (Scotland) Act 2005.

The SEA process has included the following activities:

- A Scoping Report was submitted to the Consultation Authorities in May 2011
- An Interim Environmental Report based on the Main Issues Report was submitted to the Consultation Authorities and for public consultation in October 2011 for 16 weeks.
- Taking into account the comments received from the consultation on the Main Issues Report an Environmental Report was prepared to consider the proposals set out in the Proposed Local Development Plan.
- In preparing the Environmental Report on the proposed Local Development Plan the following information was considered:
  - The baseline data relating to the current state of the environment
  - Links between the Plan and other relevant strategies, policies, plans, programmes and environmental protection objectives
  - Existing environmental issues affecting the Plan
  - The plan's likely significant effects on the environment (positive and negative)
  - Measures envisaged for the prevention, reduction and offsetting of any significant adverse effects
  - Monitoring measures to ensure that any unforeseen environmental effects will be identified allowing appropriate remedial action to be taken.
- Both the Proposed Local Development Plan, and Environmental Report were subject to consultation which commenced in February 2013 for 12 weeks.
- As a result of the consultation process the proposed Local Development Plan issued proposed Modifications. These were also assessed for potential environmental impacts; the assessment was published in an Addendum to the Environmental Report. Both were subject to consultation commencing October 2013 for 6 weeks.
- A revised Environmental Report was prepared in March 2015 following the examination of the local development plan and associated documents. The revision includes the relevant modifications and amendments to the local development plan.
- Committing to monitoring the significant environmental effects of the implementation of the Local Development Plan. This will also identify any unforeseen adverse significant environmental effects and enable appropriate remedial action to be taken.

## How environmental considerations have been integrated into the Local Development Plan and how the Environmental Report has been taken into account

The protection and enhancement of the environment is a fundamental principle upon which the Local Development Plan is founded and underpins the development strategy. Comments received to the consultation on the Main Issues Report and associated Interim Environmental Report have been taken into account in preparing a revised strategy and suite of policies for the plan.

To ensure the Local Development Plan provides an environmental focus the following key changes have been included in the Plan:

- Restructuring of the Plan to bring environmental objectives to the forefront of the Plan;
- Inclusion of an additional key strategic objective "To promote sustainable development and reduce carbon emissions";
- Greater recognition of Climate Change and Reducing Carbon emissions and how the Plan can address these issues;
- Inclusion in Strategic Policy 2 'Assessment of Development Proposals' of the Green Network, requirement for the proposals to provide defensible green belt boundaries and inclusion of protection of areas of peat;
- Inclusion of flood protection measures in Strategic Policy 2 to strengthen the policy;
- Continued emphasis on the regeneration of Brownfield sites and directing development to the urban areas;
- Continued protection of the Green Belt. There has been approximately a 1.2% reduction of the Green Belt to meet housing needs although these sites are subject to a master planned phased approach that is environmentally led;
- Inclusion in Policy D1 'Detailed Guidance for all Development' of the requirement for proposals to provide green infrastructure at the outset of the design process. In addition the policy requires impermeable surfaces of development to be kept to a minimum to assist with flood risk management. Accessibility requirements to sustainable transportation are also enhanced;
- Increased emphasis on design and creating sustainable places;
- Strengthening of Policies on Green Network and Protection of Open Space and new Policy on Green Infrastructure, supported by relevant Supplementary Planning Guidance. In addition the Green Network is shown on the Proposals Map;
- Strengthening of Policy on Sustainable Transport with increased emphasis on promoting sustainable modes of travel;
- Strengthening of Policies on Renewable Energy and Energy Efficiency supported by relevant Supplementary Planning Guidance;
- Review of Local Biodiversity Sites (formerly known as Sites Important to Nature Conservation, SINC) across the Authority;
- Inclusion of new Built and Natural Heritage designations, including Local Nature Reserve and new Conservation Areas; and
- Strengthening of Policies on the Water Environment, including Flooding, Drainage and Water Quality and Waste Management.

**Table 1**

*(Derived from Table 3 of the Environmental Report)*

Environmental Considerations and findings from the Environmental Report	Integrated into PPS (YES/NO)	How integrated/taken into account or reason for not being taken into account	Relevant Local Development Plan policies that address the environmental considerations and findings
Impact of land use change	Yes	Careful master planning to provide environmentally lead approach to development. Policies which bring green infrastructure to the forefront of the development process.	M1, M2, M2.1, M2.2, M3, M4, M5, M6, M7, M8 D1, D4 SPG – Green Network and Environmental Management
Negate future negative impact on Green Belt by ensuring development provides defensible boundaries preventing further urban sprawl	Yes	Reference to natural environment in strategic policy 1 and supporting text added through the examination to ensure policy is consistent with the aim of supporting sustainable development Careful master planning to ensure Strategic Development Options provide defensible greenbelt boundaries. Control and limitation of development in the green belt	Strategic Policy 1 M1 D1, D3, D4 SPG – Rural Development Guidance SPG – Green Network and Environmental Management
Mitigate against environmental impacts such as flooding and fragmented green space by ensuring green infrastructure and green networks are incorporated at the outset of the design process	Yes	Proposals requiring the need for a flood risk assessment.	D13.5, D13.6, D13.21 SG1.21 SG2.16 SG6.1, SG6.3, SG6.13, SG6.14, SG6.17, SG6.22, SG6.23 SG7.1, SG7.16 SG10.5

		<p>Policies addressing flooding and surface water drainage.</p> <p>Policies which bring green infrastructure/networks to the forefront of the development process.</p>	<p>E4, E5</p> <p>Strat Policy 2, M2.1, M2.2, D1, D3, D4</p> <p>SPG – Green Network and Environmental Management</p>
Mitigate against the impact of development and protect the integrity of SSSIs, Local nature reserve, Local Biodiversity sites	Yes	Natural features policy outlining a strong presumption against development that with negatively impact such sites	<p>D8</p> <p>SPG – Green Network and Environmental Management</p>
Ensure trees within tree preservation orders and areas of ancient woodland are not adversely impacted	Yes	<p>Natural features policy outlining a strong presumption against development that with negatively impact such sites.</p> <p>Cowden Hall woodland management plan</p>	<p>D8</p> <p>SPG – Green Network and Environmental Management</p> <p>D13.5</p>
Prevent the fragmentation/degradation of core paths and path networks	Yes	Policy concerning the protection of outdoor access.	<p>D9</p> <p>SPG – Green Network and Environmental Management</p>
Ensure negative impacts of potential contamination and radon gas issues are negated	No	Considered through development management and contaminated land (Scotland) Regs.	
Ensure that new development considers strategic landscaping to minimise the impact of increased noise	No	No specific policy within the LDP, however it was highlighted through the SEA process and the Master Plans that have been prepared have taken it into account with strategic landscaping.	<p>SPG – Master Plan Maidenhill</p> <p>SPG – Master Plan Barrhead South</p> <p>SPG – Master Plan Barrhead North</p>
Ensure sites of archaeological interest are not negatively impacted through development	Yes	Policy relating to the management and protection of the built heritage which seeks to safeguard sites of archaeological interest.	D11

Increase in Householder and commercial waste resulting from increase in residential and commercial properties to be delivered through the implementation of the plan	Yes	Provision for re-use/recycling of residential and commercial waste to minimise the impact of increased volume of waste. Safeguard waste management facilities.	D1  E7
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## How opinions expressed during consultation have been taken into account (including any consultation required with other EU member states)

*How the opinions expressed in response to the invitation mentioned in section 16 of the 2005 Act have been taken into account:*

Organisation	Issue	Concern/Comments	How addressed in SEA
<b>Environmental Report</b>			
SEPA	Additional Comments	Again while we would generally agree with the mitigation proposals identified for the various policies and proposals as set out in sections 6.4 to 6.8, it is our belief that the mitigation identified for Managing the Wider Environment (Chapter 7), could be improved by expanding this requirement to an Environmental Impact Assessment to include major proposals including renewable energy projects, where there is potential for negative impacts.	The requirement for Environmental Impact assessments for major proposals is dealt with through the planning application process. Policy E1: Renewable energy has been amended to bring it in line with Scottish Planning Policy (2014) which, where appropriate, requires applicants to submit satisfactory mitigation measures to alleviate any adverse environmental impacts.
SEPA	Environmental Objectives	Suggest that objective 5 could be strengthened with reference to the overall improvement of the water environment, rather than merely "minimising water pollution".	We note the comment and will consider rewording in future SEAs
SEPA	Environmental Objectives	Objective 7, aspiring to an overall decrease in flood risk would be more in line with the aims of the flood risk management act, than only seeking "no increase in flooding".	Wording within the Local Development Plan has been amended through the examination process to strengthen Policy E4: Flooding. In addition the Plan now includes the provision for a flood risk assessment for a number of sites identified for development. We therefore note the comment and will consider the rewording of objective 7 in future SEAs.
SNH	M2	Two areas within the M77 Strategic Development Opportunity (SDO) area that was assessed at the Main Issues Report stage are now being singled out as Master Plan sub-areas requiring further detailed Strategic Environmental Assessment in themselves. These areas M2.1 Malletsheugh/Maidenhill Newton	Wording within the LDP has been amended as follows: "That part of the M77 Area not contained within the urban expansion areas will remain as green belt other than for two sites at Hillfield and Barcapel, Newton Mearns which area allocated as part of the housing land supply."

		Mearns an M2.2 Barrhead South – Springhill, Springfield, Lyoncross. The remaining M77 SDO area – though still considered as part of the overall M2 M77 master plan areas – has not been made subject to any overall assessment beyond that associated with specific policies/allocations that might lie within it.	
SNH	M2.1 Maidenhill	Suggest that the overall biodiversity impact on the area would more likely be neutral	Comments noted and considered within the master plan process.
SNH	M2.2 Barrhead South	Achieving successful development of SG2.12 in particular – i.e. housing development which does not result in unacceptable impacts to the LBSs or the recreational experience of the Country Park, while at the same time allowing for delivery of the proposed access and other Country Park facility improvements that are linked to M77 Master Plan sub-area M2.2 – is likely to be one of the most significant challenges the planning authority will face in implementing the LDP.	Comments noted and considered within the master plan process.
SNH	M2.2 Barrhead South	SNH would draw the planning authority’s attention to the fact that the list of bullet points outlining the various elements of the proposed development in M77 Master Plan sub-area M2.2 given in section 3.4.3 of Appendix 3 continues to list “ <i>Upgrades to Aurs Road, Barrhead to Crookfur Road / M77 link road</i> ”. As this was the wording used to describe the now abandoned Barrhead/M77 link road through the middle of the Country Park which appears in the currently adopted Local Plan we would suggest that alternative wording may be better to describe the currently proposed Balgray Link.	As a result of the Local Development Plan examination the wording within policy M2.2 has been amended. The text in question has been removed and the following inserted: “investigate improvements to connectivity between Barrhead and Newton Mearns including, in the long term, the ‘Balgray Link’ route.”

SNH	E1 Renewable Energy	where ever commercial scale wind turbines are installed it will give rise to significant landscape change locally. As a result, it is SNH's advice that this should be recognised by the assessment and the landscape impacts deemed negative in the table, albeit that the policy greatly reduces the extent of negative impacts to East Renfrewshire's wider landscape character and supports other environmental objectives.	As a result of the Local Development Plan examination the wording within Policy E1: Renewable Energy has been amended to reflect Scottish Planning Policy (2014). Comments have been considered within the assessment of the new policy wording. The SPG is being revised to bring it in accordance with the 2014 Scottish Planning Policy.
SNH	Influence of the SEA on the LDP	it is not always clear how this identified need for mitigation has led to identifiable policies or hooks in the proposed LDP itself that will achieve such mitigation and allow the environmental impacts of the proposed development to become acceptable. It will thus fall largely to the master planning process to mitigate negative impacts in the areas where it is applied. SNH would therefore be pleased to work with East Renfrewshire Council in the development of these master plans when the time comes.	We note the comment and welcome SNH involvement in the master plan process.
SNH	Appendix 1	it may have been appropriate for the list of Regional / Structural PPS in this appendix to have included a reference to the <i>Glasgow and the Clyde Valley Landscape Assessment</i> (Land Use Consultants for SNH, 1999) – a document which also includes valuable guidance for ensuring that development is appropriate to the area of landscape character within which it is sited.	We note the comment and will consider rewording in future SEAs

SNH	Appendix 2	Objective 1 Under the list of SEA indicators given for this SEA Environmental Objective, it is again disappointing (though not surprising under current circumstances) that the priority habitats and species of the Local Biodiversity Action Plan are not listed. Particularly as these habitats and species were originally selected precisely because they were indicative of the condition of the region's biodiversity.	Comment noted
SNH	Appendix 2	Objective 15 Some reference to East Renfrewshire's successful contribution (or otherwise) to the Central Scotland Green Network would surely have been useful as an indicator of whether this SEA Objective has met.	Comment noted and will be considered in future SEAs
Save the Newton Mearns Greenbelt	M2.1 Maidenhill	No assessment of reasonable alternatives to Maidenhill.	Assessment of potential options given in the SEA for the Main Issues Report.
<b>Addendum to Environmental Report</b>			
SEPA	General	SEPA is pleased to note that that issues raised in our scoping response 24 June 2011 have been acknowledged and commented upon for the three additional/amended sites.	Comment welcomed and noted
SEPA	General	The importance of green infrastructure and green networks policies and their ability to provide positive environmental outcomes has previously been acknowledged. It is encouraging therefore to note that the impact on green networks and green spaces have been considered for the sites detailed in the addendum.	Comment welcomed and noted

<p>SEPA</p>	<p>D13.28  (amended to D13.22 in adopted LDP)</p>	<p>Waterfoot Road (D13.28) – It is noted that development of this site could result in the loss of a link to the green network and it has therefore been suggested that the site should be designed to avoid this scenario.</p>	<p>As a result of the Local Development Plan examination the green network boundary has been altered to follow the revised urban boundary. This will result in the loss of a link in the green network. Policy D5, however, refers to the loss of urban greenspace resulting in an important community use. The proposed School will provide significant community benefit and will be available for community use out with school hours, this to include outdoor facilities. The school site (Ref revised to D13.22) is subject to the requirement for a robust and defensible green belt boundary and this requirement has been stressed in the Planning Brief for the School development. Furthermore, the Brief refers to the need to take account of the Green Network and Environmental Management SPG. The comments from SEPA in relation to the design are noted and accepted and SEPA will be consulted on the planning application.</p>
<p>SEPA</p>	<p>D13.4  (amended to D13.2 in adopted LDP)</p>	<p>Barrhead (D13.4) - The site boundary encapsulates an area identified as potentially at risk of pluvial flooding and the need for appropriate mitigation has been recognised. Due to the loss of urban green space and green network, adherence to policy D4 is proposed. However it has not been established that adhering to policy will mitigate their loss and you may wish to clarify the effectiveness of this approach.</p>	<p>Following the Local Development Plan examination the description for D13.4 has been revised to read "Replacement High School and associated greenspace enhancement". (The policy ref revised to D13.2). The following parts of the site are also identified as urban greenspace and part of the green network on the map:</p> <ul style="list-style-type: none"> <li>- To the east, the synthetic playing field and running track</li> <li>- To the west, the public park</li> </ul>
<p>Historic Scotland</p>	<p>General</p>	<p>Historic Scotland welcome the detailed assessment that has been carried out on the additional sites and can confirm that we are content to agree with the findings reported in the addendum as they relate to the historic environment.</p>	<p>Comment welcomed and noted</p>

Historic Scotland	D13.28  (amended to D13.22 in adopted LDP)	Historic Scotland also welcome the suggested mitigation of early contact with your archaeological services in relation to the Waterfoot Road Sites for the consideration of potential archaeological issues.	Comment welcomed and noted
SNH	General	SNH is happy to concur with the conclusions of the assessment of these allocations against those Environmental Objectives which relate to the natural heritage.	Comment welcomed and noted
SNH	D13.28  (amended to D13.22 in adopted LDP)	We note that there will be a degree of loss to areas identified as part of East Renfrewshire's Green Network and agree that mitigation of this loss must be a key consideration in the design of any development to be taken forward	As a result of the Local Development Plan examination the green network boundary has been altered to follow the revised urban boundary. This will result in the loss of a link in the green network. The school site is subject to the requirement for a robust and defensible green belt boundary and this requirement has been stressed in the Planning Brief for the School development. Furthermore, the Brief refers to the need to take account of the Green Network and Environmental Management SPG. The comments from SNH in relation to the design are noted and accepted and SNH will be consulted on the planning application.

*How the results of any consultation under regulation 14 of the Environmental Assessment of Plans and Programmes Regulations 2004 have been taken into account*

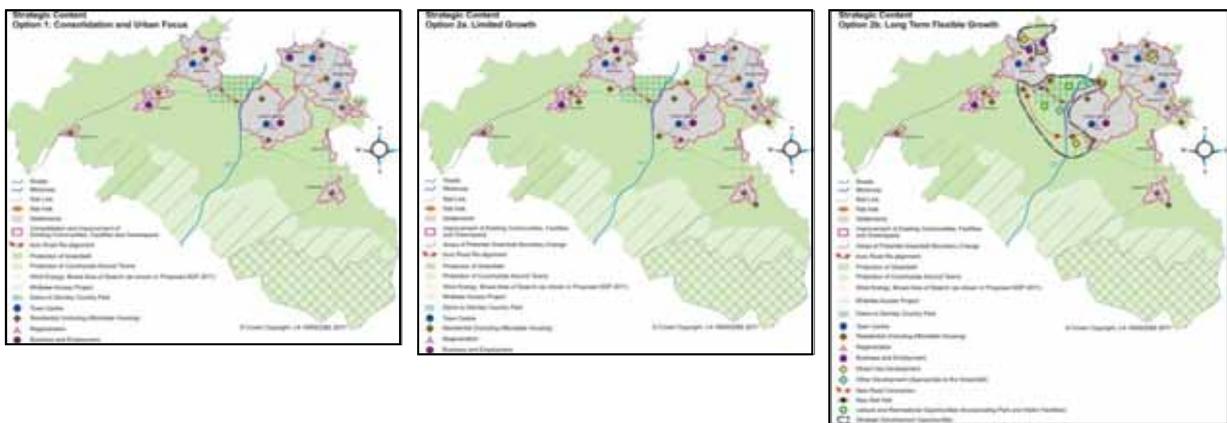
Due to the relatively local scale and nature of the Local Development Plan, no trans-boundary consultations were undertaken or comments received under section 14 of the 2004 Regulations.

## Reasons for choosing the Local Development Plan as adopted in the light of other reasonable alternatives

### Alternative proposals

Main Issues Report assessed the environmental impact of 3 different options.

- Option 1: Consolidation and Urban Focus – this is based upon the existing strategy of the 2011 Local Plan and does not include any additional release of land for development;
- Option 2a: Limited Growth – this includes Option 1 as above with limited Green Belt land released for housing; and
- Option 2b: Long Term Flexible Growth – again Option 1 is included, with the promotion of a greater number of Green Belt release of land predominantly for housing. This option also identifies three Strategic Development Opportunities areas (SDOs).



The overall analysis found that the three Spatial Development Strategy options vary considerably in terms of their impact on the environmental criteria and the characteristics of environmental effects. All three spatial options will require some form of mitigation measures.

### Reasons for choosing Option 2b

There is a statutory requirement for the Local Development Plan to comply with the requirements of the Glasgow and Clyde Valley Strategic Development Plan and The National Planning Framework 3.

Local Development Plans are required by national policy to provide a generous flexible supply of land to meet identified housing requirements across all tenures, which includes affordable housing. Broader objectives of creating sustainable mixed communities with well designed, energy efficient and good quality housing in sustainable location are also key considerations.

Spatial Option 1 returned the least negative impacts on the environment, followed by Option 2b and then 2a. Option 1 also scored the most positive impacts, with Option 2b the most neutral.

It was considered that Option 1 would not deliver the generous flexible supply of land required by national policy. Therefore Option 2b was taken forward to form the basis of the Local Development Plan with emphasis on a master planned approach to the SDOs.

## Measures that are to be taken to monitor significant environmental effects of the implementation of the PPS

Regular monitoring takes place for all of the main Local Development Plan topics, including the following:

**Action Programme** – is reviewed and updated at least every 2 years.

**Development and Change** – Including monitoring development management decisions and their conformity to Local Development plan policies and the impact of development proposals on environmental resources (e.g. Green Belt, green spaces, Sites of Special Scientific Interest, Local Biodiversity Sites, important species and habitats identified in the Local Biodiversity Action Plan, archaeological remains, etc)

**Vacant and derelict land (V&DL)** – An annual survey is carried out of the numbers and locations of derelict land sites and the level of take up over the previous year. Information is also gathered about the preferred end use for each site and its condition. This information is sent to the Scottish Government for their national monitoring purposes

**Housing land Supply Audit** – Monitors the level of housing completions and updates the supply and programming of established and effective sites

**Industrial Land Audit** – Measures the availability and take up of industrial land by type and location

**Economic trends** – monitoring changes in employment, economic activity and performance trends through the SOA

**Retail Monitoring** – monitoring the performance, vitality and viability of the town and neighbourhood centres

**Baseline Environmental Data** – the baseline environmental data and associated state of the environmental report is updated annually in order to assist in the identification of environmental trends

It is intended that a series of monitoring analysis on a range of subjects covered in the Local Development Plan will be carried out regularly (mostly on an annual basis) within the monitoring statement. This will offer an indication as to the effectiveness of the Plan and the extent to which it is being appropriately implemented on the ground. This is especially important due to the fact that the true impact of many of the policies will be determined by how they are implemented through Development Management decisions. The results of monitoring will also be used to inform the review of the policies and proposals to be included in Local Development Plan 2.

Any issues that are raised through monitoring not adequately addressed in the Local Development Plan will be dealt with if necessary by alteration to it, or through the issuing of Supplementary Planning Guidance. Any future Supplementary Planning Guidance produced will be subject to the SEA process.

## Conclusions

It is our view that the SEA has had a positive effect on the preparation of the Local Development Plan.

The SEA process has resulted in new policies and the rewording/strengthening of policies within the Local Development Plan. However the environmental report considered that its main influence would be on the mater planned areas. A number of issues were considered to require mitigation through careful master planning of the greenbelt releases. It is therefore considered prudent to outline here the steps taken in the development of the master plans to address the issues highlighted in the environmental report. These are presented in Appendix 1.

## Appendix 1

### Influence on Master Plans

### Maidenhill

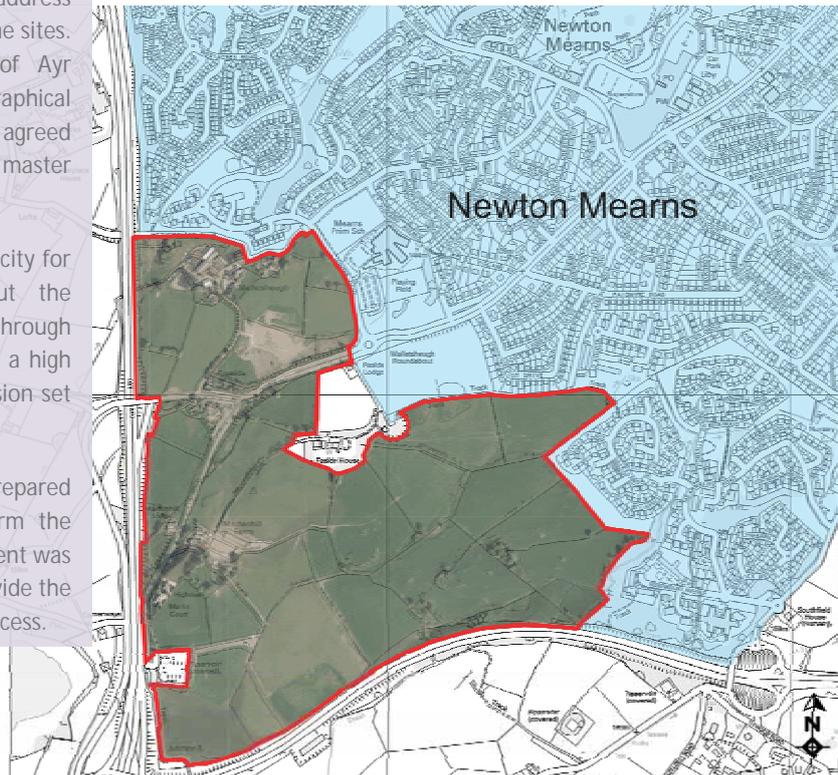
The site extends to 85ha and is defined by the M77 and the Glasgow Southern Orbital route. Ayr Road separates the site physically but this Framework will address strategic issues holistically across the sites. Although sites on either side of Ayr Road have different topographical characteristics, common and agreed solutions are required across the master plan area.

The development will provide capacity for over 1000 residential units but the development will be controlled through the master plan process to ensure a high quality place is created and the vision set out is realised.

A development framework was prepared alongside further studies to inform the master plan. Community engagement was carried out at an early stage to provide the community with an input to the process.

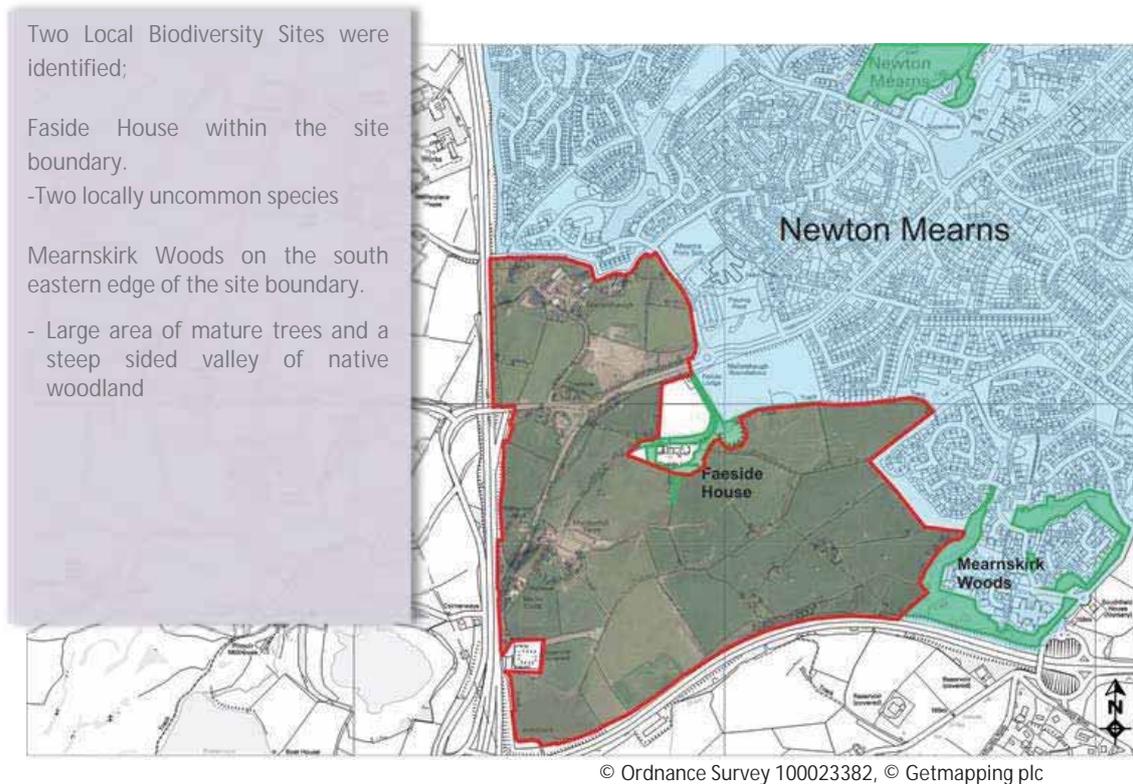
**KEY**

-  M2.1 Master Plan Area
-  Existing Urban Area



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## Local Biodiversity Sites



### LBS within site boundary

#### Faside House (1.7 Ha)

A very small and isolated area of mixed woodland including many planted trees around a private house and the adjoining small quarry south west of Newton Mearns and south of the A77; the site is generally species poor but includes two locally uncommon plants.

#### *Reason for Designation:*

A very small site, mainly planted but with two locally uncommon plants –

- Green Figwort (*Scophularia umbrosa*)  
A plant of fertile soils along streams and rivers. A few records along rivers, restricted in Scotland to the Central Belt
- Aspen (*Populus tremula*)  
LBAP species, a small tree of wet ground and woods. Few records for East Renfrewshire but widespread throughout UK, often planted

#### *Main Habitats:*

Deciduous woodland, mixed woodland, neutral grassland, tall herb vegetation

#### *Site Management:*

Area around the garden is managed as a garden, area around the quarry not managed.

#### *Associated site:*

Mearnskirk Woods LBS

#### *Site Connectivity:*

None.

No potential for connecting habitats noted in assessment.

**Mitigation Required:**

Ensure development does not have an adverse impact on the LBS.

Potential to expand habitat of LBAP species (Aspen) within development planting.

**Influence on the Master Plan Site:**

This site lies adjacent to the main development area and the Master Plan requires developers to ensure there is no detrimental impact on the LBS. The private house, Faside House is a Category B Listed Building. The woodland lies within the private estate and provides a strong landscape screen between the private house and the development site. Any impact on the woodland would also affect the setting of the Listed Building and this further emphasises the need to ensure its protection.

Figure 16 (Local Biodiversity Sites) of the Development Framework for Maidenhill identified all LBS sites and detailed the habitat identified. This is carried through to the Master Plan under the section Development Constraints/Abnormals/Opportunities presented on page 32. The Strategic Landscape Principles diagram/species list is also carried forward from Development Framework to Master Plan, being presented on page 41 of the Master Plan.

**Mitigation Methods Employed:**

The Council prepared a Development Framework that sets the planning context and provides clear guidelines for the development of Maidenhill. It sets out the key strategic requirements within which the detailed master plan was prepared. In respect of local biodiversity concerns, the Council worked closely with the developers and with key agencies such as Scottish Natural Heritage (SNH) and Glasgow and Clyde Valley Green Network Partnership (GCVGNP) to ensure full consideration was given to local biodiversity sites and to the improvement of habitat connectivity. It was made clear to developers that there is to be no adverse impact on this LBS and the Council is satisfied that the developers fully understand and will conform to this. This requirement has been emphasised throughout the development of the master plan which forms Supplementary Planning Guidance and will also be considered in subsequent planning applications. The opportunity for habitat connectivity and enhancement is recognised and emphasised within the master plan. It will remain an important aspect that relates to the loss of green space currently provided by the development site and provides a degree of mitigation.

Within the Development Framework, the Council has included reference to the LBAP species, Aspen and stated that it wishes to see expansion of this species within the development planting. The master plan also makes strong reference to the manner in which the Council wishes to see the landscape treatment and open space provision being created. This is emphasised as being critical to the character of the development. Existing landscape features, including mature trees are to be retained wherever possible. It is further stated that planting within the development should encourage ecological connectivity and that the potential exists to connect wetland habitat.

SNH has been instrumental in assisting the Council to develop the Strategic Landscape Principles and these are enshrined within the Development Framework and progress through to the Master Plan. The Green Network Partnership has also indicated that they have a GIS based tool called the Integrated Habitat Network Analysis that can provide guidance on the best locations for the creation of particular habitats for enhanced ecological connectivity. The Partnership has offered to work with developers on this aspect of the site design and the Council will encourage this interaction.

The woodland is identified in the Framework and Master Plan as one of the landscape features of the site that is to be protected and enhanced.

**It should also be noted that all developers will have to adhere to the requirements of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011**

## LBS bordering the site

### Mearnskirk Woods (11.6 Ha)

An old estate, once on the site of the Mearnskirk Hospital, now developed into a housing complex immediately to the south of Newton Mearns leaving a framework of planted shelter belts, of mature trees and natural woodland following the burn along with some open areas of grassland; a wide range of associated plants and two rarities.

#### *Reason for Designation:*

Large area of mature trees and a steep sided valley of native woodland.

- Shady Horsetail (*Equisetum pratense*);  
A plant of shaded stream banks on base-rich soil; no other records for East Renfrewshire; scattered records for central Scotland
- Bay Willow (*Salix pentandra*)  
A small willow of very wet soil; several records in East Renfrewshire but very local, generally widespread in lowland Scotland;

#### *Main Habitats:*

Broadleaved woodland plantation, mixed woodland plantation, neutral grassland, scrub, running water.

#### *Site Management:*

Most of the site is not managed although a management company do take care of dangerous trees etc as required. Included in the site are some fairly natural 'buffer' zones along the edge of the estate which do have some tree planting in them. Much of the site is fenced off making access restricted.

#### *Associated site:*

None? Faside House??

#### *Site Connectivity:*

Wetland habitat connected as Broom Burn flows through the woods and continues north. Limited scope for connecting habitats through expansion of woodland. Strategic planning/management and expansion could enable link to the south of the A726.

## Mitigation Required:

Ensure development does not have an adverse impact on the LBS.

Where planting on site is proposed consider potential expansion of habitat.

## Influence on the Masterplan Site:

This site lies immediately adjacent to the main development site. The attractive green edge, provided by the mature trees provides a landscape screen for existing residents of the Mearnskirk

development and sensitive integration will be required to ensure the new development does not have an adverse impact on the LBS. The Development Framework acknowledges this need. All LBS sites, including this site, are identified in figure 16 (Local Biodiversity Sites) of the Development Framework and the detail of the habitat identified. The strategic landscape principle creates planted links from this LBS through the site. This is carried forward into the master plan.

#### Mitigation Methods Employed:

As with the LBS at Faside House, it has been made clear to developers that there is to be no adverse impact on this LBS or the mature woodland (TPO) and the Council is satisfied that the developers fully understand and will conform to this.

The Framework makes it clear that sensitive integration between the existing residential development and the new development will be required, particularly in relation to the LBS. It also highlights the opportunity to consider expansion of the broadleaf woodland planting. This is illustrated within the Strategic Landscape Principles diagram within both the framework and master plan. Section C – C that indicates a requirement for a wide shelter belt of Oak and Beech woodland along the length of the GSO and adjoining the LBS. There is an emphasis on the need to incorporate native species within the planting regime proposed for the site.

The Strategic Landscape Principles have been prepared in close cooperation with SNH and these are enshrined within the Development Framework and illustrated in Figures 14 and 15 of the Framework. This is carried through to the Master Plan and is illustrated and detailed on page 41.

It is further stated that planting within the development should encourage ecological connectivity and that the potential exists to connect wetland habitat.

Figure 13 from the Development Framework. Identifies green linkages between Faside House LBS and Mearnskirk LBS across the site.

**Legibility and Permeability incorporating the principles of Integrated Green Infrastructure (from Development Framework)**

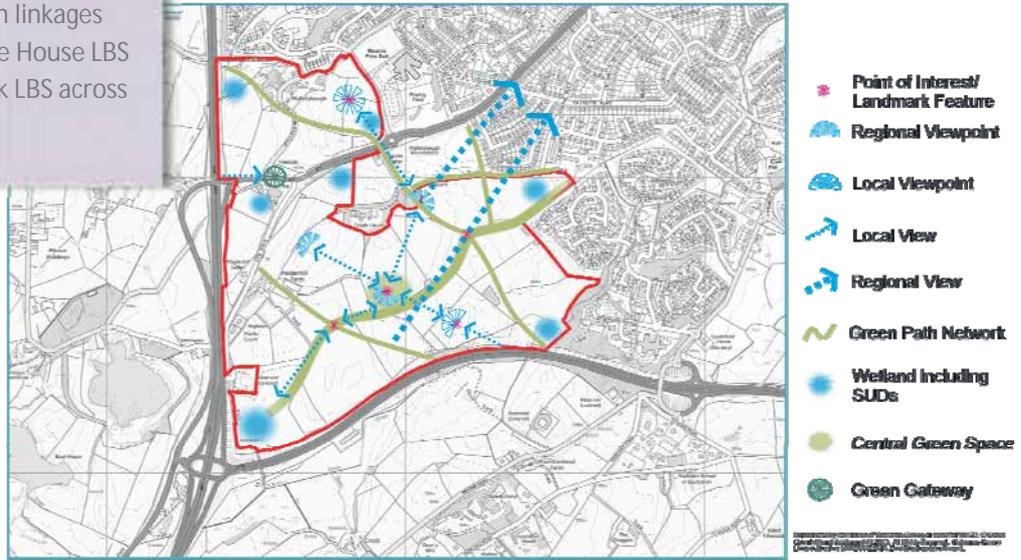


Figure 15 from the Development Framework. The principles set out in the figure have been carried through into the final masterplan.

**Landscape Considerations**

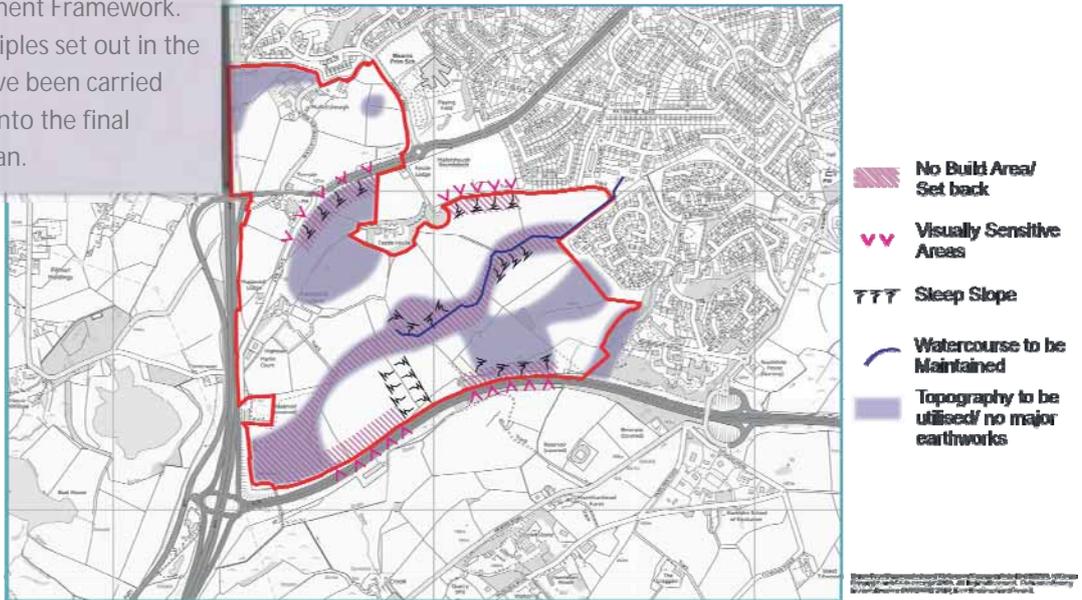


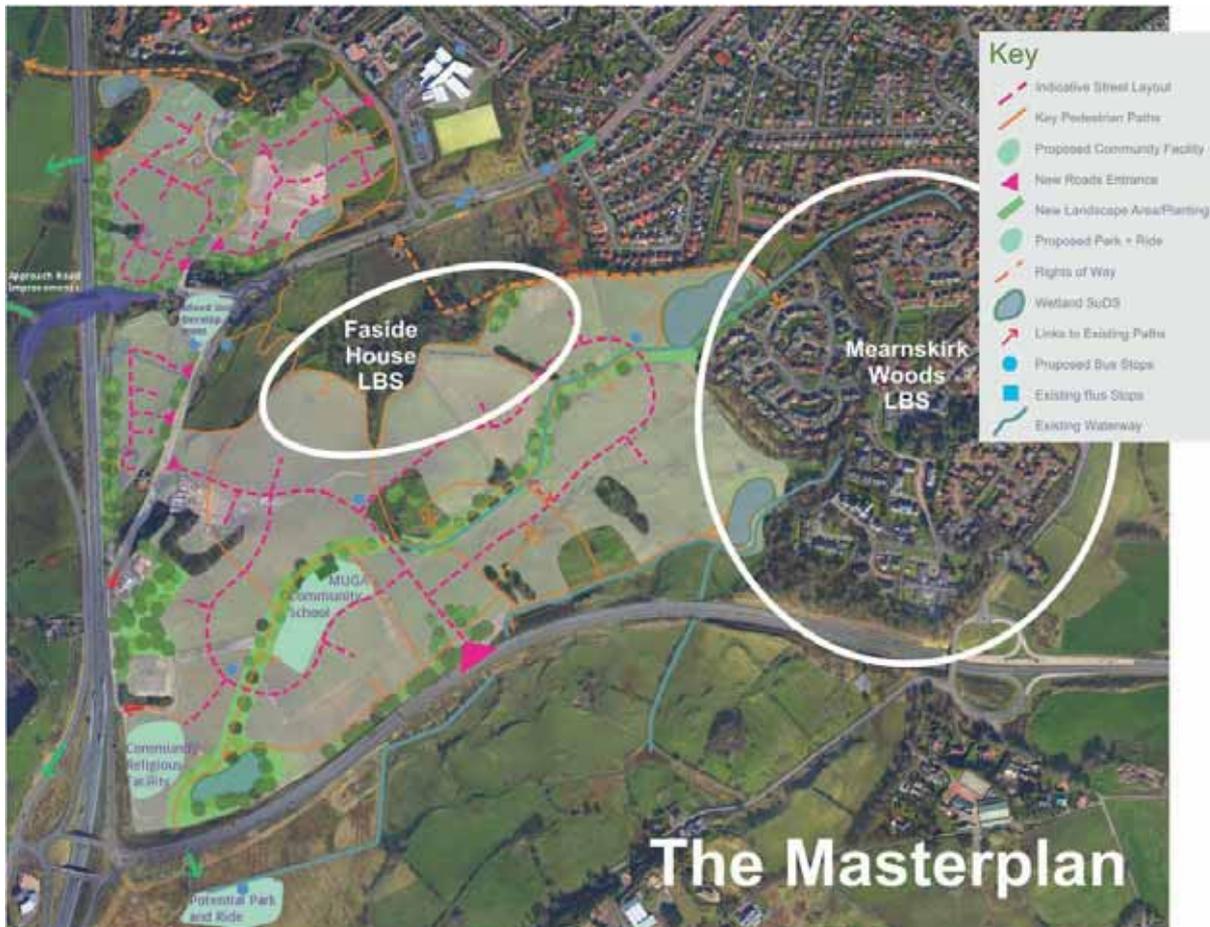
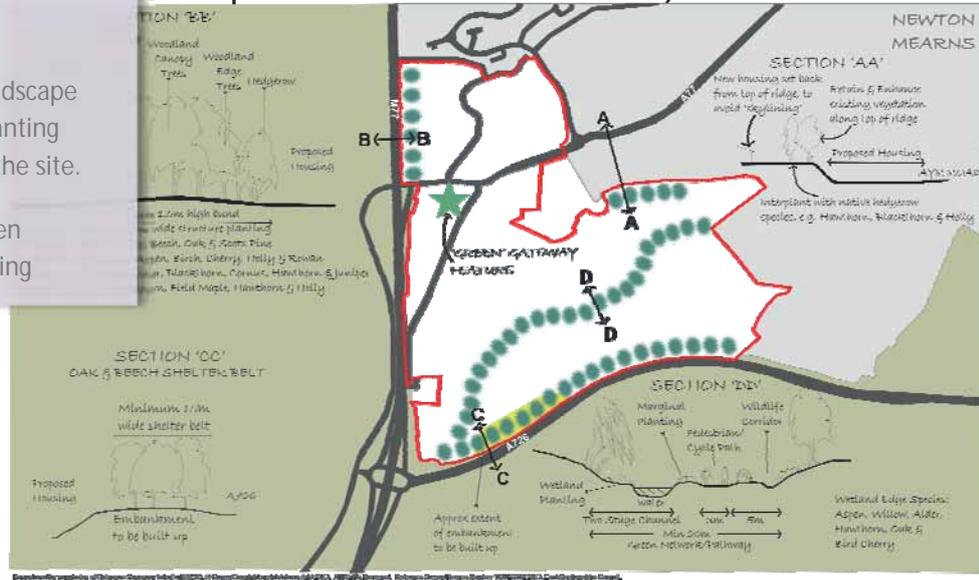
Figure 14 from the Development Framework/page 41 of the Master Plan.

Illustrates the landscape principles and planting structure across the site.

Note:-use of Aspen throughout planting

**Strategic Landscape Principles**

-Developed with the assistance of Scottish Natural Heritage (from Development Framework and Master Plan)



The Master Plan outlined in the Supplementary Planning Guidance. No development impacting on either Local Biodiversity Site. Green Networks linking the two LBS sites. Further onsite tree planting.

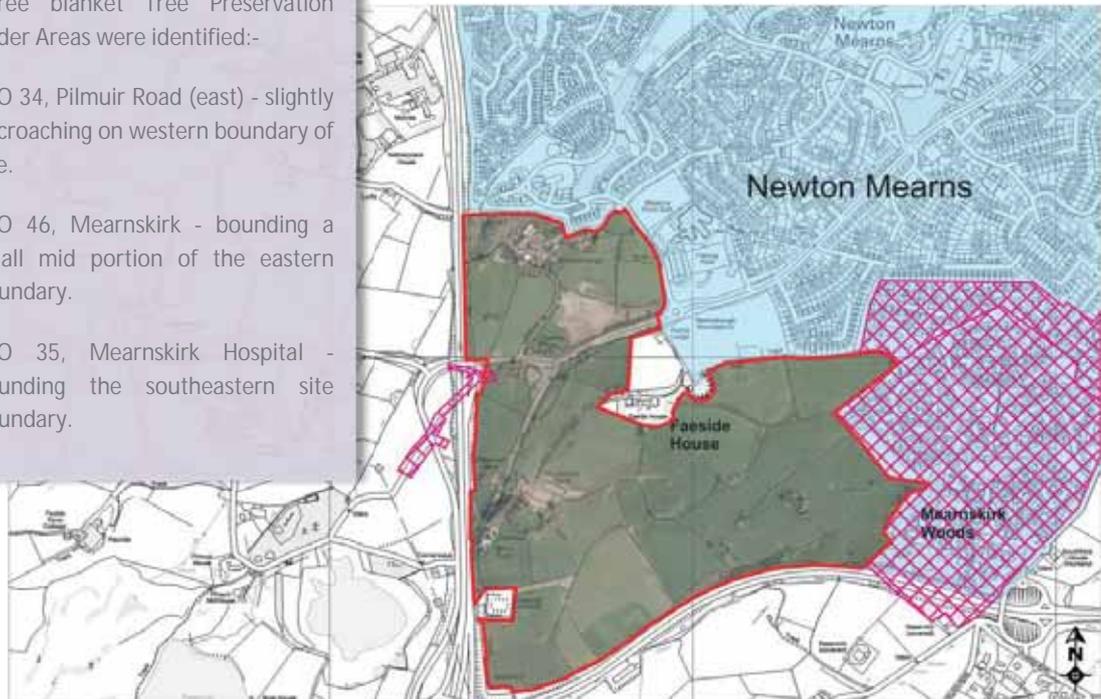
## Tree Preservation Order Areas (TPOs)

Three blanket Tree Preservation Order Areas were identified:-

TPO 34, Pilmuir Road (east) - slightly encroaching on western boundary of site.

TPO 46, Mearnskirk - bounding a small mid portion of the eastern boundary.

TPO 35, Mearnskirk Hospital - bounding the southeastern site boundary.



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### 2.1 TPO within site Boundary

#### TPO 34, Pilmuir Road (east)

##### Influence on the Masterplan Site:

This TPO is located mainly out with the master plan site boundary and only a small part encroaches onto the development site. The main part of the TPO lies on the opposite side of the M77 Trunk Road and has little influence on the master plan site.

No specific mitigation measures are proposed within this TPO but the Framework and Master Plan do set broad landscape principles, developed in association with SNH. This suggests woodland edge tree planting in the northern area, along the M77 with a 20m wide structure planting and this will augment and enhance the existing TPO. This is illustrated in section B – B on the Strategic Landscape plan.

## 2.2 TPO Bordering the Site

### TPO 46, Mearnskirk & TPO 35, Mearnskirk Hospital

#### Influence on the Masterplan Site:

The TPO's identified above lie adjacent to the main development site in the former Mearnskirk hospital development. The mature woodland forms an important and attractive green edge and shelter belt to the existing residential development and defines the south eastern boundary of the development site. The woodland is an important and attractive landscape feature.

#### Mitigation Methods Employed:

The Development Framework makes it clear that sensitive integration between the existing residential development and the new development will be required, particularly in relation to both the LBS and the TPO. This is continued into the Master Plan which also highlights the opportunity to consider expansion of the broadleaf woodland planting. This is illustrated in section C – C of the strategic landscape principles figure that indicates a requirement for a wide shelter belt of Oak and Beech woodland along the length of the GSO and adjoining the LBS.

The Framework sets out the need to retain existing mature trees wherever possible and stressing that these should be properly managed in future. The vision for the 'Place' within the masterplan stresses the need for an integrated and strong green network, incorporating SuDS and therefore scope exists for a significant improvement in the current ecological and landscape value of the area. The Council will work closely with the developers to ensure this Vision is maintained throughout the process.

Figure 15 from the Development Framework. The principles set out in the figure have been carried through into the final masterplan.

**Landscape Considerations**

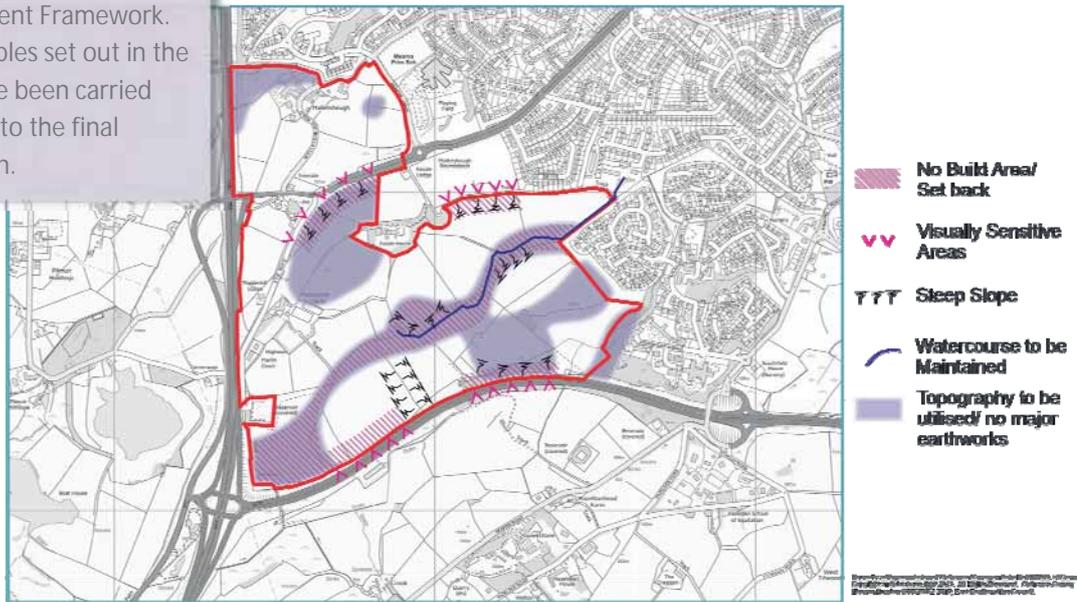


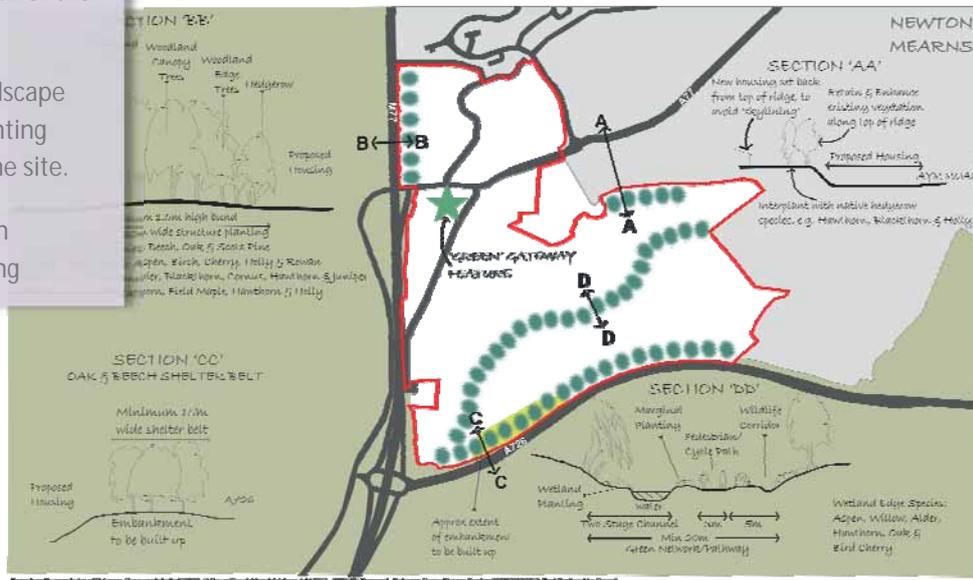
Figure 14 from the Development Framework/page 41 of the Master Plan.

**Strategic Landscape Principles**

-Developed with the assistance of Scottish Natural Heritage (from Development Framework and Master Plan)

Illustrates the landscape principles and planting structure across the site.

Note:-use of Aspen throughout planting



## Local Biodiversity Action Program (LBAP)

### Habitats

#### Broadleaved & Mixed Woodland

The objectives aim to maintain the current extent of ancient semi natural woodland and to increase the total extent of UK priority woodland habitat types within the Partnership area. The other aim is to ensure that the ecological value of existing broadleaved and mixed woodland is improved and associated socio-economic benefits are enhanced and promoted for public benefit. This would involve:

- Restoring some of the former areas of ancient sites for priority woodland habitat types that have been planted with non-native conifers since World War II, or are currently dominated by other non-native species.
- Encouraging the expansion of broadleaved and mixed woodland as a result of promoting natural colonisation and by planting species mixtures of site native and local genetic provenance. Sites will be selected where existing woodland habitats will become linked to each other, thus developing a Forest Habitat network.

#### Influence on the Masterplan Site:

The master plan offers the opportunity to ensure the development is contained within a strong landscape setting that offers the opportunity for planting of native species and linking existing woodland habitats.

#### Mitigation methods employed

The broad landscape principles, developed in association with SNH, are set out in the Development Framework and carried through to the Master Plan. This suggests woodland edge tree planting in the northern area, along the M77, and this will include a 20m wide structure planting belt. This will augment and enhance an existing TPO. This is illustrated in section B – B of the Strategic Landscape Principles figure. It also highlights the opportunity to consider expansion of the broadleaf woodland planting. Section C – C indicates a wide shelter belt of Oak and Beech woodland along the length of the GSO and adjoining the LBS and existing TPO.

The Framework also sets out the need to retain existing mature trees wherever possible and stressing that these should be properly managed in future. The vision for the 'Place' to be created through the masterplan process stresses the need for an integrated and strong green network, incorporating SuDS and therefore scope exists for an improvement in the current ecological and landscape value of the area. The Council will work closely with the developers to ensure this vision is maintained throughout the process.

The Master Plan lists the proposed species recommended for delivery of the landscape structure planting. The planting should predominantly be undertaken with native species and be properly maintained in the future.

**Mires (unconfirmed, included as a result of identified peat)**

Mires (including Fens) are becoming an increasingly rare habitat nationally and many have suffered due to neglect in recent years. If fens are to remain as important habitats within the LBAP Partnership area, and have their wildlife interest enhanced, they will need to be protected from further loss and receive sympathetic management. Management plans for the main wetland sites will help to recognise the value and needs of fens within the larger habitat mosaics. Further wetland projects could be an important source of new sites.

**Dwarf Shrub Heath (unconfirmed, included as a result of identified peat)**

The UK Upland Heathland habitat action plan has a general aim to maintain the current distribution and extent of the resource, but also sets a target of an increase of 5% by habitat enhancement and restoration. Generally, it is hoped to stop fragmentation of the habitat through maintaining upland blocks greater than 10km<sup>2</sup>. The UK costed Habitat Action Plan for Lowland Heathland has two main objectives: "to maintain and improve, by management, all existing lowland heathland"; and "to encourage the re-establishment of heathland areas".

**Influence on the Masterplan Site:**

There is an area likely to have peat in the south west part of the site, in the area bounded by the M77 Trunk road and the GSO.

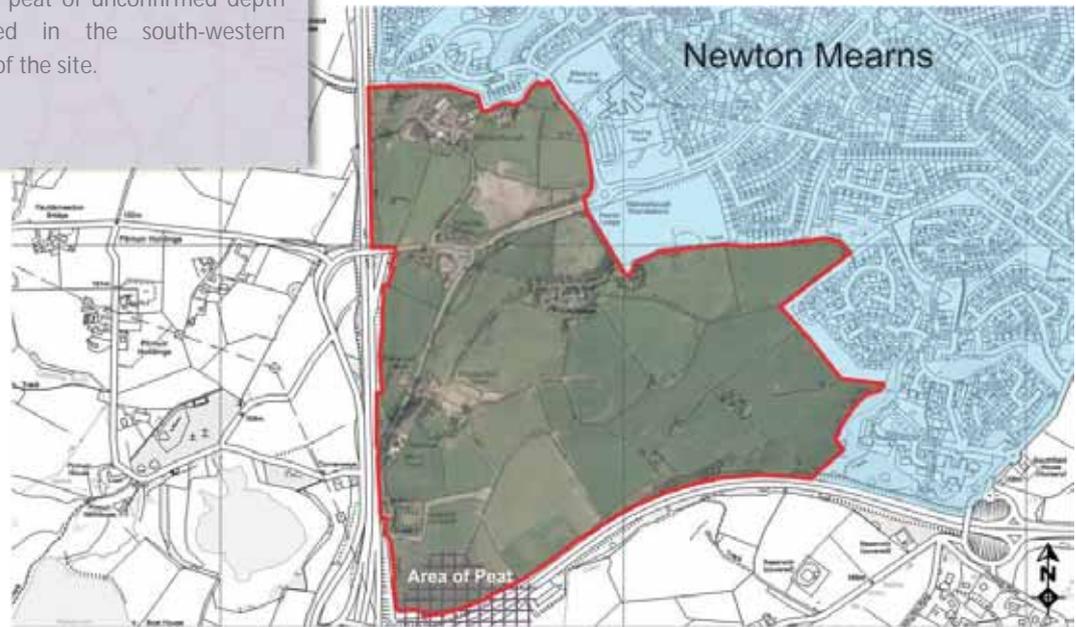
**Mitigation methods employed**

The Council undertook a hydrological scoping study to provide the necessary hydrological understanding of the site to assist in the development of the sustainable water management component of the Development Framework. One of the key requirements is for a strongly integrated green infrastructure informed by the hydrological, ecological and other environmental characteristics of the site. This site is identified as a marshy area at the southwest corner of the site. Runoff collects in this area and drains towards the culvert under the A726 road. Peat of moderate to shallow depth is likely to be present in the area. This is identified in the hydrological study and further emphasised in the development framework. The framework requires that development of areas consisting of peat and Groundwater Dependent Terrestrial Ecosystems should be avoided where possible.

The sustainable drainage options outlined in the hydrological report identifies this area as suitable for development drainage attenuation. Although the schematic options outlined in the hydrology study suggests that an 'end of pipe' attenuation solution could be implemented for example, by a SuDS pond structure, attenuation may take place in a distributed manner throughout the SuDS within each drainage area.

The Master Plan has considered this and an area of wetland SUDS is illustrated in the plan.

Area of peat of unconfirmed depth identified in the south-western corner of the site.



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The Master Plan from the Supplementary Planning Guidance shows the area of peat developed into a wetland SUDs.

**Rivers and Streams**

Rivers and streams within the LBAP Partnership area should be managed to maximise their potential as wildlife habitat and wildlife corridors, within the constraints imposed by the need for the protection of life and property. Their amenity and recreation value to the people of the area should also be a consideration.

**Influence on the Masterplan Site:**

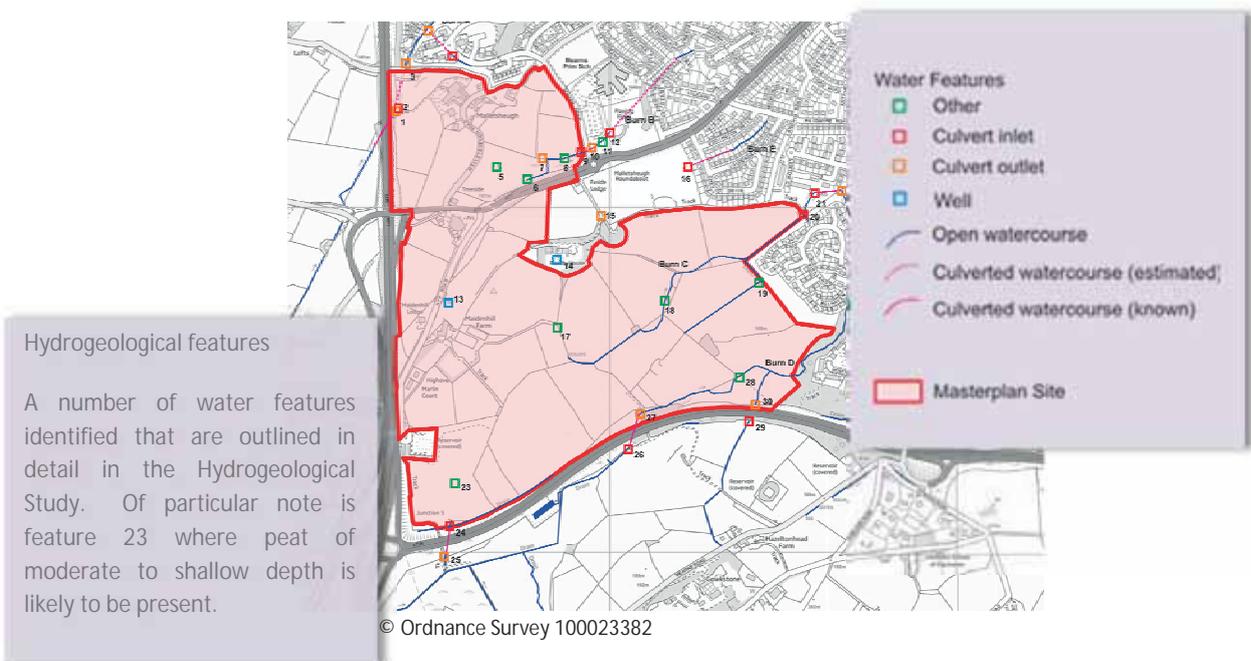
The site is located within the River Clyde and Loch Lomond catchment area. The site is drained through four small and unnamed burns.

**Mitigation methods employed**

The hydrological study and development framework stresses the importance of taking a strategic and coherent approach in relation to water management due to the hydrologically inter-linked nature of individual development areas within the site. Additionally, the council requires a strong green network to be incorporated throughout the area following the principles of Integrated Green Infrastructure (IGI). It is considered that the design of IGI should be aligned with the hydrological and other environmental characteristics of the site.

The key aim of the hydrological report and the Development Framework prepared by ERC is therefore to identify the overall water management requirements and principles that should be adhered to. This information will be beneficial to developers as it provides the constraints and opportunities to be considered during the design of individual development plots. The water management approach presented in the report aims to provide the high level principles that should be considered.

This approach ties in well with the requirements of the LBAP Partnership area.





The Master Plan Supplementary Planning Guidance shows the main burn through the site becoming a feature of the green network.

## Species

### Aspen

Key priorities are to ensure the survival and viability of the remaining stands of Aspen and to increase the population and distribution of the species across the LBAP partnership area. Natural regeneration as well as planting will be used.

#### Influence on the Masterplan Site:

The opportunity exists to enhance the LBAP species in the development site.

#### Mitigation methods employed

The requirement to use Aspen as part of the development planting scheme is made clear in the development framework and outlined in the master plan. It will be monitored through the development management process.

## Archaeological Features of Interest

### 1.1. Sites within site boundary

<ul style="list-style-type: none"> <li>• SAS Reference 8492 Platform (Possible)</li> <li>• SAS Reference 8472 Buildings</li> </ul>	<ul style="list-style-type: none"> <li>• SAS Reference 8473 Dyke</li> <li>• SAS Reference 8501 Tower (Possible)</li> </ul>
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#### Influence on the Masterplan Site:

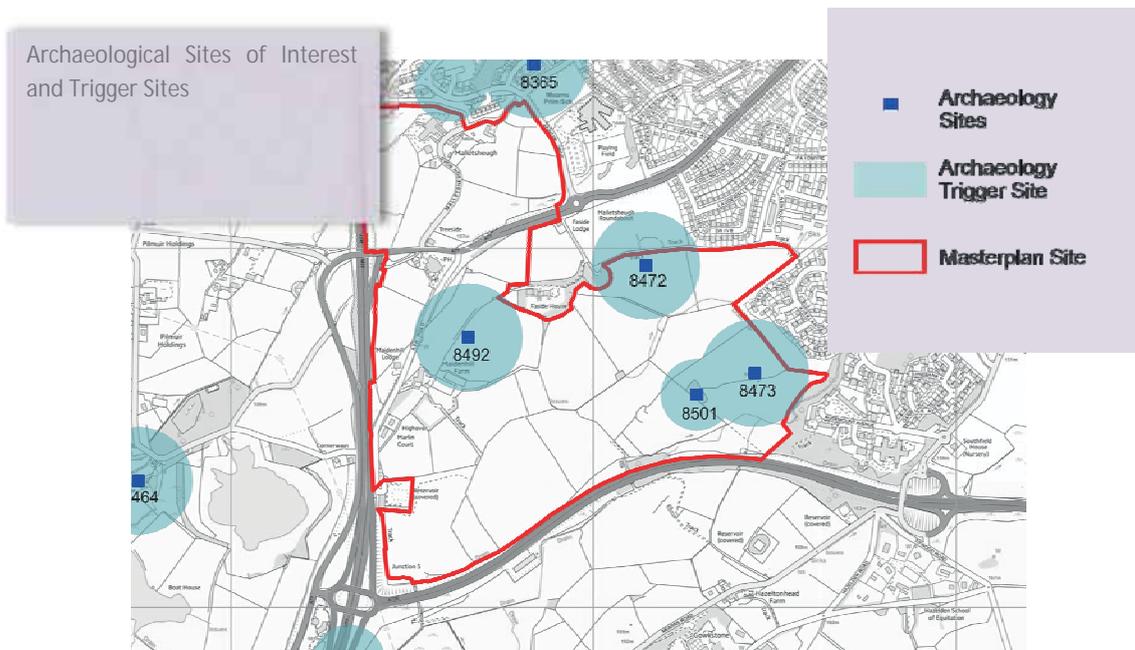
There are 4 trigger points within the development area together with the potential of the survival of buried archaeological remains below ground level.

#### Mitigation methods employed

In line with the SEA, the Council contacted WoSAS who provided a report on the trigger points identified above. Furthermore, they are seeking additional information relating to a programme of archaeological evaluation trenching. Figure 17 of the Development Framework identifies the four trigger points within the site and outlines the requirements of the archaeological service. The developers have also been advised of the requirements.

This involves a programme of archaeological evaluation trenching. The aim of the trenching would be to determine whether significant archaeological features survive below ground level. The framework therefore requires a programme of fieldwork that is in line with that set out in both national and local planning policies relating to the treatment of the historic environment.

WoSAS has confirmed that they are happy with the content of the Development Framework as it affects their interests. Their requirements are noted within section 1.4 of the Master Plan.



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## Green Network

The site is situated in an area formerly designated as greenbelt. It is therefore required to have a strong defensible boundary to prevent further urban sprawl. The site will be subject the green network and natural environment polices as set out in the local development plan. In line with these policies green infrastructure will be at the forefront of the planning process. It will seek to mitigate against potential surface flooding.

### Influence on the Masterplan Site:

The opportunity exists for a strong green network throughout the development area, incorporating SuDS and ensuring flooding and drainage issues are suitably addressed. The master plan ensures a strong, greenbelt boundary in line with the requirements of the Local Development Plan.

### Mitigation methods employed

There is a significant emphasis on the importance of the green network throughout the Development Framework and the site itself very much lends itself to the development of a strong green network as a primary layer around which the development will take shape. The development framework also references the SPG on the Green Network and Environmental Management which form part of the LDP and is referenced as a key document.

The hydrological study undertaken by the Council and a cooperative approach to the project with GCVGNP has contributed to defining the requirements set out in the Framework in respect of the Green network and integrated green infrastructure. The hydrological regime has been studied and potential drainage solutions proposed. This particularly describes how SuDS can contribute to the achievement of the overall vision for the site. The figure depicting the potential layout (figure 6) in the Framework illustrates the scope of the green network, utilising it for access links north-south and east-west and ensuring the maximum benefit is derived through the creation of blue/green corridors. This remains a fundamental component of the master plan.

This has also been bolstered by work undertaken in conjunction with SNH to consider the visual impact of the development and to provide strategic landscape principles. These are set out in the Strategic Landscape Principle diagram. The hydrology of the site is also considered within both the framework and master plan. The Framework was undertaken in consultation with SEPA and Scottish Water to ensure that it met their requirements and this engagement with them continued formally throughout the development of the master plan.

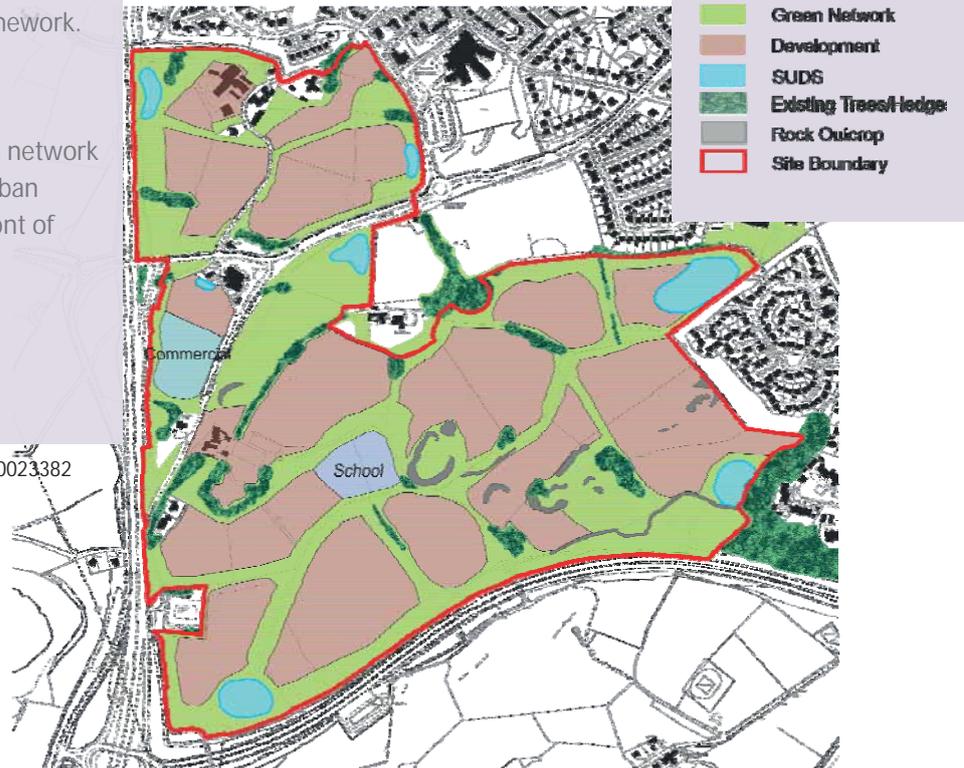
The defensible green belt boundary is robust on this site as it is bounded by 2 major roads – the M77 Trunk road and the GSO. The Council remains aware of the importance of reinforcing this boundary and therefore strong structural planting is proposed along both roads to clearly define the new urban edge. Care will be taken in the design to ensure an appropriate visual solution to the transition area between town and country.

Figure 6 from the Development Framework.

Showing the green network and sustainable urban drainage at forefront of layout design.

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**Potential Layout**



The Master Plan illustrated in the Supplementary Planning Guidance shows the incorporation of integrated green network in the development and clear greenbelt boundaries as defined by the GSO and M77 roads.

## Path Network & Sustainable Travel

There are two rights of way bordering the site

- RoW 66 – Lane from Lanrig Road to Falside Lodge, Ayr Road.
- RoW 17 – Lane from Malletsheugh Road to Netherplace Farm, Newton Mearns

The SEA conducted for the Local Development Plan identified a third right of way (RoW 15) which transacted the site; however this was extinguished as a Right of Way in February 2014.

There are a number of sections of the Thornliebank to Floak core path (ref ERC-C) bordering the site.

- Section C13 – Ayr Road: Eastwood Toll to Floak
- Section C17 – Netherplace Road to Fingalton Bridge
- Section C18 – Ayr Road to Netherplace Road

### Influence on the Masterplan Site:

The opportunity exists for a strong path network throughout the development area largely based on the green network. The Framework emphasises the need to ensure attractive access routes for pedestrians, cyclists and vehicles, in that order, in line with 'Designing Streets'. The recognition for a sustainable transport solution is identified and addressed within section 3.4 of the masterplan.

### Mitigation methods employed

The development framework includes an entire section that discusses Roads and Transportation. A movement strategy for the area was undertaken and this sets out high level access requirements, both internally and externally. This has been augmented by a strategic transport assessment for the area.

There is a strong emphasis within the movement strategy on increasing connectivity by all methods including public transport. Walking and cycling provision is also strongly referenced. 'Designing Places' and 'Designing Streets' feature strongly and are cited as key reference items reflected within the master plan.

The Council places great emphasis on encouraging a reduction in the number of car trips and ensuring that the site layout provides sufficient and attractive pedestrian and cycle paths. This was fully assessed within the consideration of development options that identified a 2-hub approach as the preferred solution. This considered walking distances to local amenities and further emphasises the need to ensure a public transport system comes into the site at an early date to encourage early adoption by new residents.

The section on development contributions within the master plan mentions that a bus service will require subsidy in the early years of operation. The master plan proposes a subsidy of 3 years from development contributions commencing at a trigger point to be agreed by SPT.

## Air & Soil Quality

The SEA identified potential impact to Air Quality through development and introduction of households and car users. Likewise development was identified as having a potential impact on the soil quality through its change from greenfield to urban use.

### Mitigation methods employed

Scottish Planning Policy states that the Planning system has an important role in supporting the achievement of sustainable development through its influence on location, layout and design of new development and that an important part of the decision making in the planning system is taking into account the implication of development on water, air and soil quality.

The Council's Environmental Services monitors air quality and this has demonstrated no requirement to designate Air Quality Management Areas within East Renfrewshire. The requirements under Environmental Assessment (Scotland) Act 2005 will ensure that air quality amongst other environmental factors is thoroughly considered when assessing applications for planning permission. This is a factor which is integral to the Strategic Environmental Assessment process and which has been carried out in tandem with the Local Development Plan. Strategic Policy 2 of the local development plan contains reference to the impact on air, soil, including peat and water quality.

The master plan layout has avoided development on the area of peat identified in the southwestern corner. This will instead be transformed into the wetland SUD area.

A sustainable transport solution will be incorporated into the design and a location to the south of the site has been identified as a potential park and ride.

Given all these factors the Council considers that it has adequately covered the consideration of air quality.

As a green field site, construction noise will be minimised throughout operations and will be considered as part of the development management process

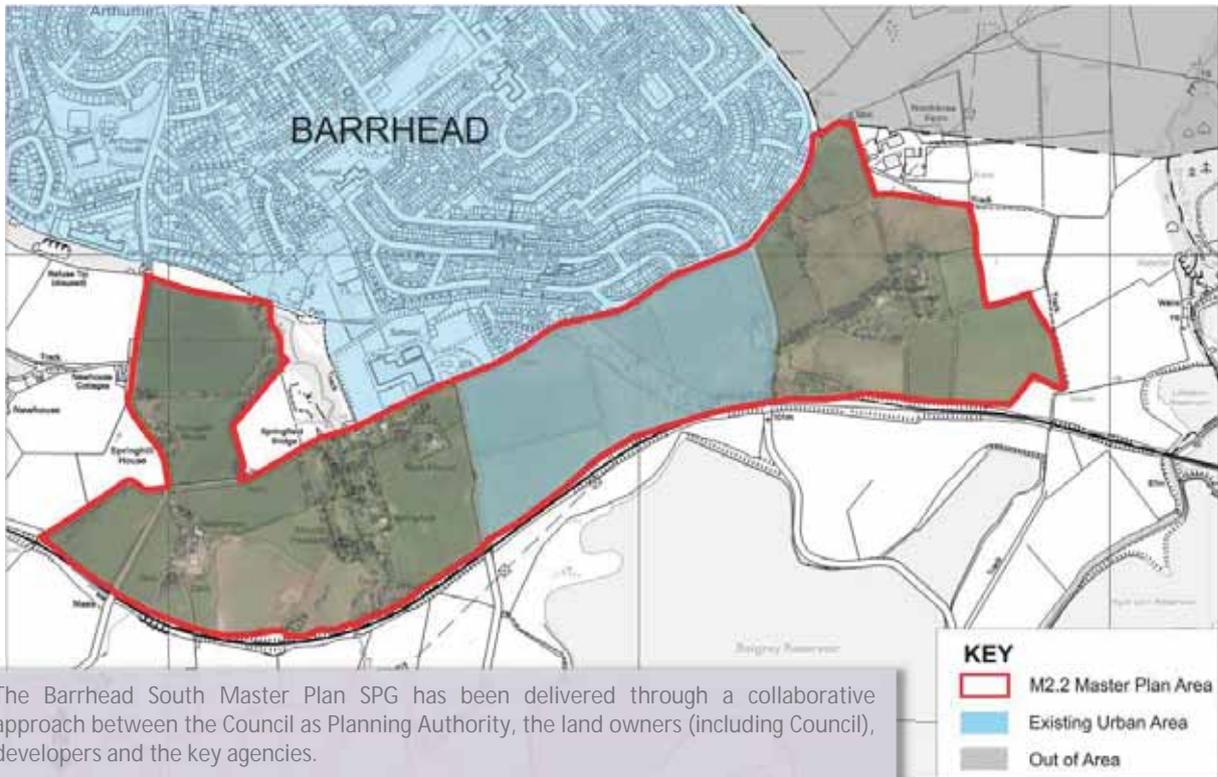
## Waste

Introduction of households will increase the volume of waste generated in the area.

### Mitigation methods employed

The management of domestic waste will be considered through the detailed planning applications.

## Barrhead South



The Barrhead South Master Plan SPG has been delivered through a collaborative approach between the Council as Planning Authority, the land owners (including Council), developers and the key agencies.

A Development Framework (DF) was prepared by a consultancy team that was jointly instructed by the Council and 3 developers with the 4 parties between them having control over all of the land included within the Barrhead South Strategic Development Opportunity as detailed in Policy M2.2 of the Local Development Plan (LDP). The DF was informed by phase 1 studies, including ecological and landscape visual impact, to consider all matters raised by the strategic environmental assessment (SEA) of the LDP in relation to the site. The DF was approved by Council in January 2014.

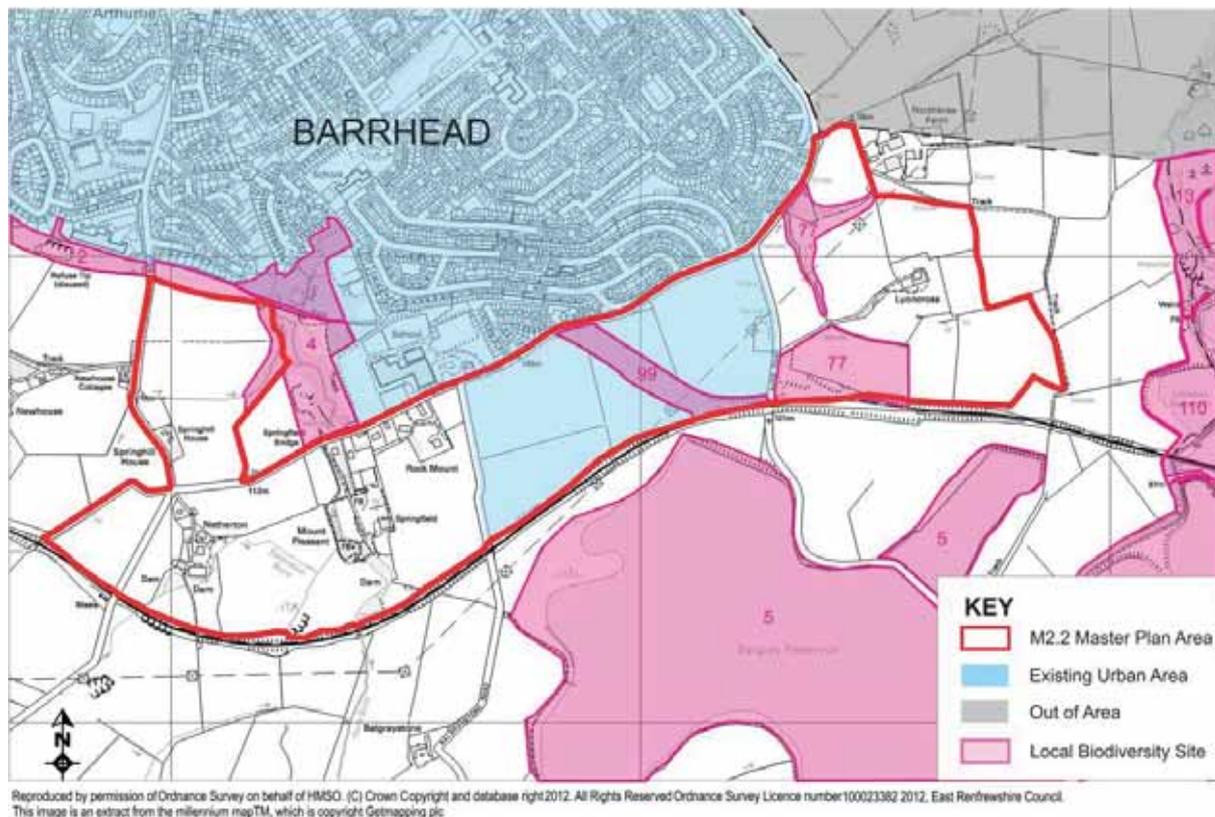
Further detailed studies were undertaken to inform the master plan, which was approved for consultation by the Council in September 2014, including a full landscape visual impact assessment and ecological surveys (habitat and flora) that were carried out through appropriate seasons within 2014. Full surveys of the following fauna were included within the ecological report:-

Fauna - Otter / Bat / Amphibian / Water Vole / Breeding Bird with incidental records taken throughout to note anything further of ecological note.

It should also be noted that all developers will have to adhere to the requirements of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011.

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## LOCAL BIODIVERSITY SITES (LBS)



### LBS Within Site Boundary

#### Lyon Cross (5.2 Ha) LBS 77

Two fields to the south-west of Barrhead; the northern one being un-grazed and of neutral grassland with fringing woodland along a burn and the southern one grazed with scrub developing on the steeper slopes; a number of associated plants and one rarity.

#### *Reason for Designation:*

Plant rich grassland

Plant rarity –

- Slender Sedge (*Carex lasiocarpa*), a sedge of reed swamps and edges of burns etc. One other record for East Renfrewshire; scattering of records in uplands and to the west of Scotland; 2012.

#### *Main Habitats:*

Neutral grassland, marshy grassland, scrub, woodland, tall weedy vegetation, running water

#### *Site Management:*

North field un-grazed and unmanaged (adjacent field cut for silage); maybe under threat from development; south field occasionally grazed with cattle.

#### *Associated site:*

Springfield Disused Railway

#### *Site Connectivity:*

Site is not part of an important network; however is part of a small area of remnant woodland south of Barrhead including the Disused Railway at Springfield LBS.

**Mitigation Required:**

Where LBS is of ecological or landscape value ensure there is no detrimental impact as a result of development. In all cases ensure development impact on LBS does not result in a net detriment to the ecology of the wider development area. Potential to mitigate for any loss of habitat through provision / enhancement of green network in the wider development area.

**Influence on the Masterplan Site:**

This LBS is split in two with the northern section being woodland along a watercourse and the southern section being grassland fields. Between the two areas there is a mature tree lined access road, Lyoncross Avenue, serving the Lyoncross property. All LBS sites, including this one, are identified in the Development Framework (DF) and were subject to a phase 1 habitat study (JDC Ecology) to inform the framework strategy and where necessary a detailed ecological assessment to inform the master plan.

**Mitigation Methods Employed:**

The northern section of the LBS includes mature oak woodland linked to a corridor along a watercourse that runs between the fields. This section, at parts, bounds the developable area of the site and is to be retained and enhanced through appropriate planting to the development boundary and the introduction of a SUDS pond. Where tree loss is required this is to be kept to an absolute minimum to retain the integrity of woodland and landscape settings with any work to be carried out by a suitably qualified contractor. The master plan details that woodland or shelter belt planting should have a 3m native woodland shrub species planted along its edge to enhance the biodiversity and amenity value of these features. Similarly it states that SUDS features should be planted to maximise biodiversity value with an appropriate planting schedule provided within the ecological survey for the site.

The mature tree lined avenue between the LBS sites is to be maintained to retain the integrity of this important wildlife corridor.

The field area of the southern section will be lost to development with the scrub area retained. The loss of the field area will be mitigated through the retention and enhancement of grasslands to the east of the LBS which are currently classified as wet and dry grasslands. The biodiversity and amenity value of these areas will be enhanced through planting and maintenance regimes that are detailed in the master plan (Pgs 164-165) and the ecology survey and the creation of a further SUDS feature that will be planted to encourage biodiversity. This approach was subject to consultation with SNH and SEPA.

Whilst mitigating the loss of a localised area of the Lyoncross LBS the approach taken contributes to the wider master plan strategy to link greenspaces and provide an enhanced and multi-functional green network that improves habitat connectivity (Master Plan p.150 – 151).

### Springfield Disused Railway (2.1 Ha) LBS 99

A short stretch of disused railway on the south-west outskirts of Barrhead abutting the live railway from Neilston to Glasgow; the site is mostly tussocky grassland with a scattering of scrub and patches of woodland; there are a number of associated plants and one local rarity.

#### Reason for Designation:

An interesting development of grassland and scrub on a recent site.

Plant rarity –

- Greater Butterfly Orchid (*Platanthera clorantha*), LBAP species, restricted to unimproved grassland. Very local records from several sites in East Renfrewshire; widespread in western, lowland Scotland.

#### Main Habitats:

Neutral Grassland, scrub, woodland, tall herb vegetation.

#### Site Management:

The site is un-managed although the Council maintained footpath runs the length of it.

#### Associated site:

Lyoncross

#### Site Connectivity:

Site is part of a small area of remnant woodland south of Barrhead including Lyoncross LBS.

#### Mitigation Required:

Where LBS is of ecological or landscape value ensure there is no detrimental impact as a result of development. In all cases ensure development impact on LBS does not result in a net detriment to the ecology of the wider development area. Potential to mitigate for any loss of habitat through provision of new or enhancement of the existing green network in the wider development area.

#### Influence on the Masterplan Site:

This LBS is the site of a disused railway and associated land centrally located within the largest development area of the wider site and currently has a footpath connection running through it from Springfield Rd south to Dams to Darnley Country park. The LBS designation includes the presence of the Greater Butterfly Orchid. All LBS sites, including this one, are identified in the DF and were subject to a phase 1 habitat study to inform the framework strategy and where necessary a detailed ecological assessment to inform the master plan.

#### Mitigation Methods Employed:

The phase 1 survey identified 3 large areas of Japanese Knotweed and raised concerns about its impact on the Greater Butterfly Orchid (GBO) and LBS if left to spread or indeed if treated. It was recommended that a detailed survey should be carried out to establish GBO numbers and location.

The detailed surveys found that there were only a few Greater Butterfly Orchid spikes within the LBS but numerous throughout fields to the South West (which are not being developed) and the northern fields of Lyoncross which are to be retained and enhanced as grasslands. The Council owns this site and has procured specialist consultants to treat the Japanese knotweed to ensure that it's eradicated in medium term and its impact on the LBS is contained in the short term. The majority of

the area designated as the LBS is being retained along with the footpath connection traversing the site from north to south. The LBS is being enhanced through the removal of Japanese knotweed and its designation as an ecological link with amenity functions (Page 161 of master plan).

#### **Aurs Glen (6.8 Ha) LBS 004**

A woodland valley along the Aurs Burn immediately to the South of Barrhead with a range of grassland, marsh and scrub habitats with a range of plants including three local rarities.

##### Reason for Designation:

Range of habitats with diverse plants and several rare species

Plant rarity –

- Green Figwort (*Scrophularia umbrosa*) A plant of fertile soils along streams and rivers. A few records along rivers, restricted in Scotland to the Central Belt
- Greater Butterfly Orchid (*Platanthera clorantha*), LBAP species, restricted to unimproved grassland. Very local records from several sites in East Renfrewshire; widespread in western, lowland Scotland.
- Slender Rush (*Juncus tenuis*), A rush of damp, open ground. Many records for East Renfrewshire but very local, widespread in western Scotland

##### Main Habitats:

Woodland with scrub, neutral grassland with tall herb areas, running water with fringing wetland vegetation.

##### Site Management:

Majority of the site is unmanaged and un-grazed but with a few areas of grassland next to the main path cut on occasions. Large dense stands of willowherb adjacent to the main path and elsewhere appear to be due to the grass burning and could be a threat to the grasslands on the site

##### Associated site:

Arthurlie Disused Railway LBS

##### Site Connectivity:

Running water and woodland habitats connected with medium links to other LBS. Not part of a recognised network.

##### Mitigation Required:

Where LBS is of ecological or landscape value ensure there is no detrimental impact as a result of development. In all cases ensure development impact on LBS does not result in a net detriment to the ecology of the wider development area.

##### Influence on the Masterplan Site:

The majority of this site lies out with the master plan area with only a small section of grassland at the woodland edge being within the master plan boundary. The gorge and woodland provides an attractive green edge to the master plan area with amenity opportunities within. The master plan provides for a suitable set back from the woodland and additional planting within the LBS boundary to enhance its setting.

**Mitigation Methods Employed:**

The topography of this section of the site is challenging and appropriate care to ensure the suitable transition from development to the LBS and woodland is required. The master plan recognises the ecological importance of Springhill burn which flows into the LBS connecting the mature trees and fields to the west with the mature woodland and riparian corridor of the LBS. The master plan requires a suitable setting to be created to the burn with habitat enhancements achieved through appropriate planting and maintenance regimes (master plan pgs 152/153).

**LBS Bordering the Site****Arthurlie Disused Railway (2.5 Ha) LBS 002**

A short, narrow section of disused railway line on the south west edge of Barrhead between Aurs Glen and the Kirkton Burn, now deciduous woodland with some small areas of grassland and wetland and one locally rare plant.

**Reason for Designation:**

Are of naturally regenerated woodland connecting two other LBS

Plant rarity –

- Green Figwort (*Scrophularia umbrosa*) A plant of fertile soils along streams and rivers. A few records along rivers, restricted in Scotland to the Central Belt

**Main Habitats:**

Woodland, neutral grassland, running water, marginal vegetation

**Site Management:**

Unmanaged and un-grazed

**Associated site:**

Kirkton Burn LBS, Aurs Glen LBS

**Site Connectivity:**

Running water and woodland habitats connected with medium links to other LBS.

Not part of a recognised network.

**Mitigation Required:**

Where LBS is of ecological or landscape value ensure there is no detrimental impact as a result of development. In all cases ensure development impact on LBS does not result in a net detriment to the ecology of the wider development area.

**Influence on the Masterplan Site:**

This site lies immediately adjacent to one of the main development parcels. The LBS is a disused railway that has a core path running through it which provides an important link at the edge of the existing urban area to the footpaths linking to the gorge, D2D and St Lukes High School. The setting of this LBS will provide the transition between the existing urban area and the master plan development.

**Mitigation Methods Employed:**

The phase 1 survey identified a large area of Japanese Knotweed within the LBS. The detailed Japanese knotweed survey confirmed this and identified further areas. Again this area is owned by the Council who have procured specialist contractors to treat the Japanese Knotweed to ensure it is contained in the short term and eradicated in the long term. This action will enhance the biodiversity value of this LBS.

The master plan has recognised the importance of the setting of this LBS in terms of not only its biodiversity value but also its amenity function. Sections demonstrating how development should address this area are included within the master plan including appropriate native woodland planting to the development edge. This will enhance the biodiversity of this corridor and provide a sensitive setting for the path and integration with the existing urban area.

**Balgray Reservoir (66.7 Ha) LBS 005**

A large, man-made (1865), active reservoir with fringing wetland, grassland and woodland habitats, part of a complex of reservoirs in the Dams to Darnley Country Park with a range of wetland birds, both breeding and wintering.

**Reason for Designation:**

Large area of open water with marginal wetlands, neutral grassland.

Plant Rarity –

- Greater Butterfly Orchid (*Platanthera clorantha*), LBAP species, restricted to unimproved grassland. Very local records from several sites in East Renfrewshire; widespread in western, lowland Scotland.
- Trifid Bur-marigold (*Bidens tripartite*), An annual specialising in exposed, nutrient-rich mud. A few, very local records for East Renfrewshire; scattering of records in Central Belt.

**Main Habitats:**

Open water, neutral grassland, roosting and wintering area for birds.

**Site Management:**

Reservoir is in use and managed as a public water supply with a fringing public footpath.

**Associated site:**

Ryat Lynn Reservoir LBS, Waulkmill Glen Reservoir LBS

**Site Connectivity:**

Running Water habitats connected with medium sized connections to other reservoirs. Part of the complex network of the Country Park.

**Mitigation Required:**

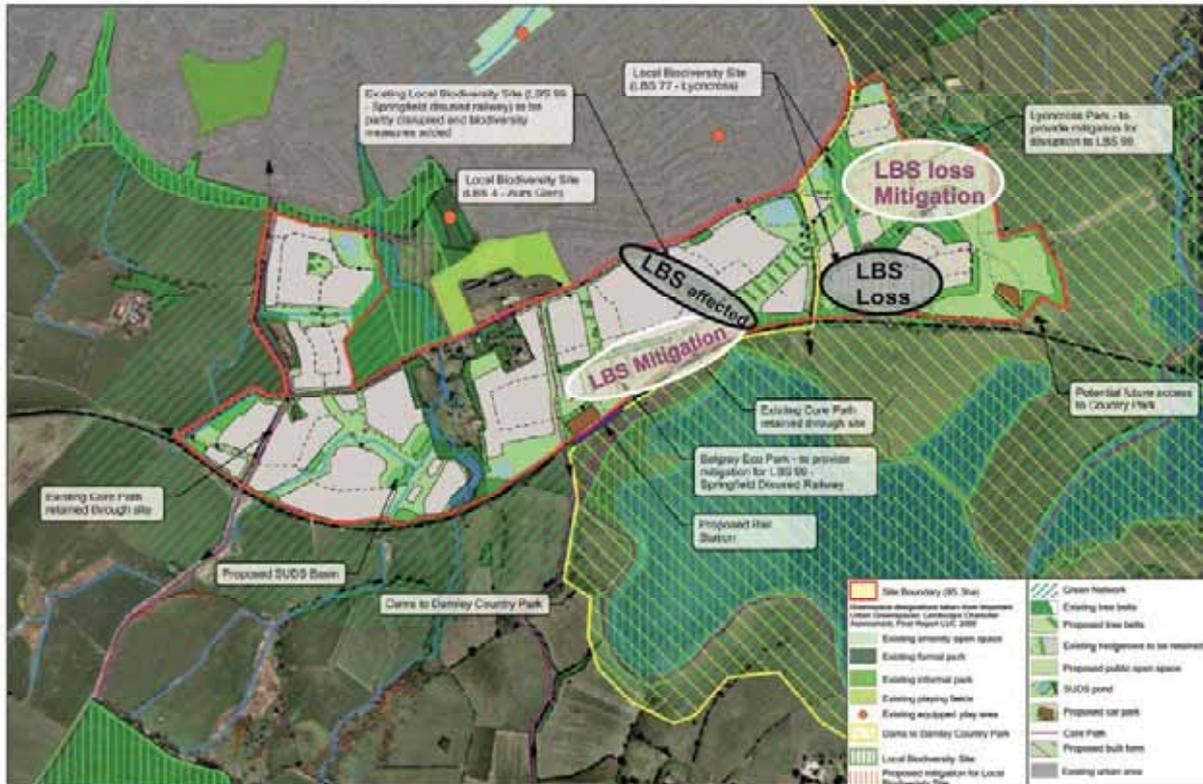
Where LBS is of ecological or landscape value ensure there is no detrimental impact as a result of development. In all cases ensure development impact on LBS does not result in a net detriment to the ecology of the wider development area.

**Influence on the Masterplan Site:**

The Balgray Reservoir LBS is separated from the site by the Neilston to Glasgow railway line. The reservoirs are within the D2D country park which bounds the eastern half of the master plan area to the south and within which the Lyoncross area of the master plan is located.

**Mitigation Methods Employed:**

The master plan will not have a direct impact on the Balgray Reservoir LBS however the master plan strategy attempts to enhance the wider green network through the provision of linked green corridors, sensitive integration with neighbours and appropriate landscape fit with the surrounding countryside.



## TREE PRESEVATION ORDER (TPO)

### TPO Within Site Boundary

No TPOs within the site boundary.

### TPO Bordering the Site

TPO R23, Springhill Road, Barrhead

#### Influence on the Masterplan Site:

The TPO identified above lies adjacent to the main development parcels and runs north away from the site into the existing urban area.

#### Mitigation Methods Employed:

The master plan will not have a direct impact on this TPO.

## LOCAL BIODIVERSITY ACTION PLAN (LBAP)

### Habitats

#### Unimproved Grasslands (Neutral Grassland)

The priorities are fundamentally aimed at curbing the loss of unimproved grasslands, in particular to ensure that no further loss occurs at known areas of high species diversity and of representative samples of the various types. It is therefore important that such grasslands are identified and investigated for optimum management.

#### Rivers and Streams

Rivers and streams within the LBAP Partnership area should be managed to maximise their potential as wildlife habitat and wildlife corridors, within the constraints imposed by the need for the protection of life and property. Their amenity and recreation value to the people of the area should also be a consideration.

### Species

#### Greater Butterfly Orchid (*Platanthera clorantha*)

The Butterfly-orchids receive no specific action at present, apart from the general protection of wild plants by the Wildlife and Countryside Act 1981. A priority is to increase the awareness among landowners and land uses of the species' presence and their vulnerability to agricultural treatments. The maintenance of appropriate habitat management regimes and their introduction elsewhere should help to stabilise populations and prevent further decline.

#### Influence on the Masterplan Site:

The LBAP habitat and species were identified through the LDP SEA and considered through the DF surveys and master plan development strategy.

#### Mitigation Methods Employed:

The master plan has embedded these priorities in its strategy through identification, assessment and management of them as considered appropriate. Whilst there will be a loss of an area of grassland this is mitigated through the enhancement of existing grasslands through planting and management schemes and the introduction of new areas of ecological interest including SUDS features.

The master plan strategy retains and enhances open water courses with a site wide SUDS strategy, suitable landscape setting and development set offs, enhanced planting / biodiversity areas within riparian zones increasing biodiversity value and amenity uses introduced. (Master plan pgs 154/155, 152/153, 157)

The assessment and surveys have identified the presence of the greater butterfly orchid across several areas of the site rather than solely within LBS 99 as previously thought. The biodiversity design principles of the master plan states that specifically identified meadow areas will be managed as greater butterfly orchid as a priority. (master plan p. 40)

## ARCHAEOLOGICAL FEATURES OF INTEREST

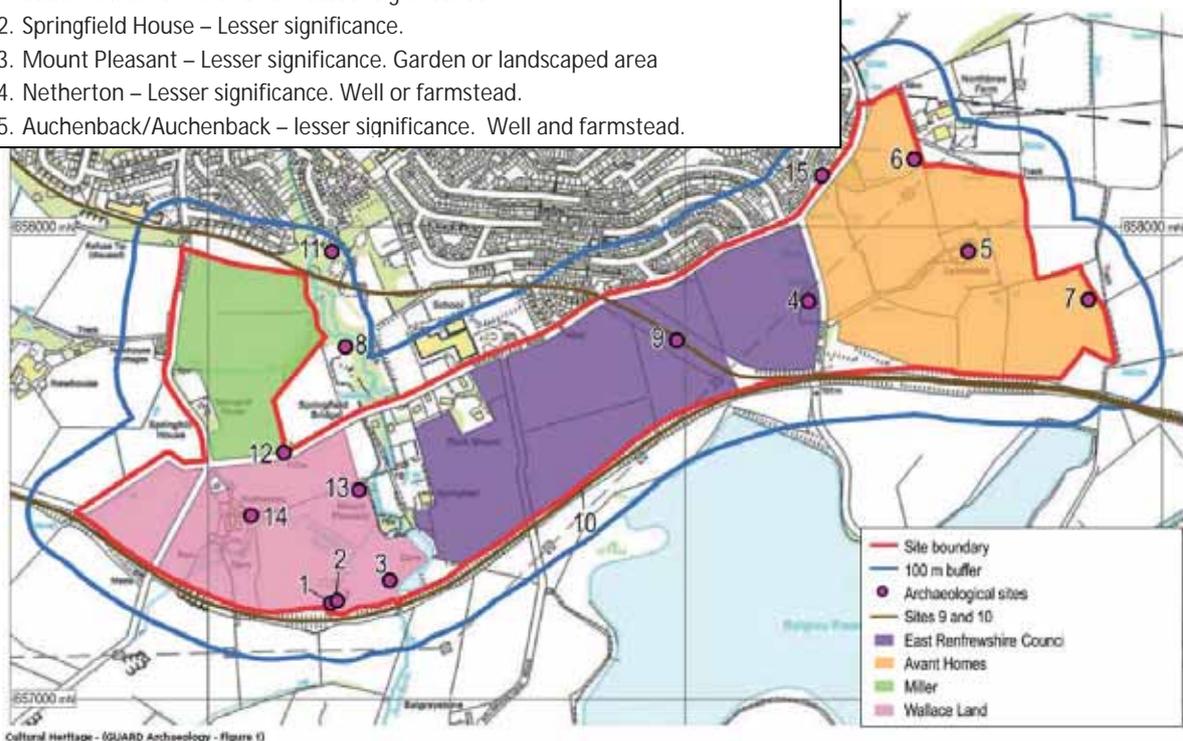
A cultural heritage assessment (GUARD: Nov 13) was carried out to inform the development framework with 12 cultural heritage sites recorded within the development area and a further 3 within the immediate surrounding area. (p.33/34 development framework)

### Mitigation Methods Employed:

All sites identified were of lesser or no significance and will be considered through the planning application process during which WOSAS will be consulted.

#### Key to Cultural Heritage Sites

1. Netherton – no significance. Possible earthworks and enclosure
2. Field Survey: Netherton – no significance. Possible earthworks and enclosure
3. Netherton, Barrhead 0 No significance. Fragments of earthworks/enclosure
4. Gorbals water works. Balgray Filter and Tank – Lesser Significance. Site of former filter and tank.
5. Lyoncross by Auchenback Barrhead – Local significance – Category C Listed Building. 2 storey farmhouse, probably circa 1780 with extensive additions circa 1900.
6. North Brae – Lesser significance Windpump.
7. Lyoncross – Lesser significance. Farmstead annotated as Littleton, a ruin comprising one unroofed building shown on the 1<sup>st</sup> edition OS 6 inch map.
8. Springfield. Lesser significance. Bleach works.
9. Paisley and Barrhead Line – Lesser significance railway line.
10. Lanarkshire and Ayrshire railway line – lesser significance. Railway line also known as London Midland and Scottish Railway.
11. South Arthurlie Printworks – Lesser significance
12. Springfield House – Lesser significance.
13. Mount Pleasant – Lesser significance. Garden or landscaped area
14. Netherton – Lesser significance. Well or farmstead.
15. Auchenback/Auchenback – lesser significance. Well and farmstead.



## RADON

Areas of the site are identified as Class 4 Radon Areas. This means any new properties in these areas will fall within an Intermediate probability radon area (5 to 10% of homes are estimated to be at or above the Action Level). The property will therefore be considered to be in a radon affected area.

Stage 1 protective measures for new dwellings, as set out in BR 376 'Radon: Guidance on protective measures for new dwellings in Scotland (1999)' comprise of:

"A continuous radon-proof membrane between the dwelling and the soil. A radon-proof membrane must be a minimum of 1200 gauge polyethylene. Appropriate attention must be given to design and installation of the membrane including sealing joints, linking the membrane to the cavity tray replacing the normal damp-proof course, and sealing around entry and exit points for mains services."

### Influence on the Masterplan Site:

An engineering desk top study and review of existing documents has been undertaken to inform the development framework and master plan. Further work to assess cut / fill strategy have also been undertaken. Few engineering constraints were identified and further site investigations will be required to substantiate mitigation requirements if required.

### Mitigation Methods Employed:

Further detailed site investigations will be required to assess presence of Radon and recommend appropriate mitigation methods.

## SUSTAINABLE TRAVEL/PATH NETWORK

### Core Paths

1. **ERC-B (B2), Crossmill to Uplawmoor & Dodhill; including Dams to Darnley CP**  
Aurs Road: Cowan Park to Dams to Darnley
2. **ERC-B (B3), Crossmill to Uplawmoor & Dodhill; including Dams to Darnley CP**  
Dams to Darnley: Springfield Road to Balgrayston Road
3. **ERC-B (B6), Crossmill to Uplawmoor & Dodhill; including Dams to Darnley CP**  
St Lukes HS to Fingalton Bridge
4. **ERC-B (B8), Crossmill to Uplawmoor & Dodhill; including Dams to Darnley CP**  
Springhill Road to Kirkton Road



### Rights of Way

No Rights of Way within or bordering the site.

### Path Network

1. **BH142 (potential route)**  
Core countryside path
2. **BH132 (potential route), Linking Auchenback and the Dams**  
Core countryside path

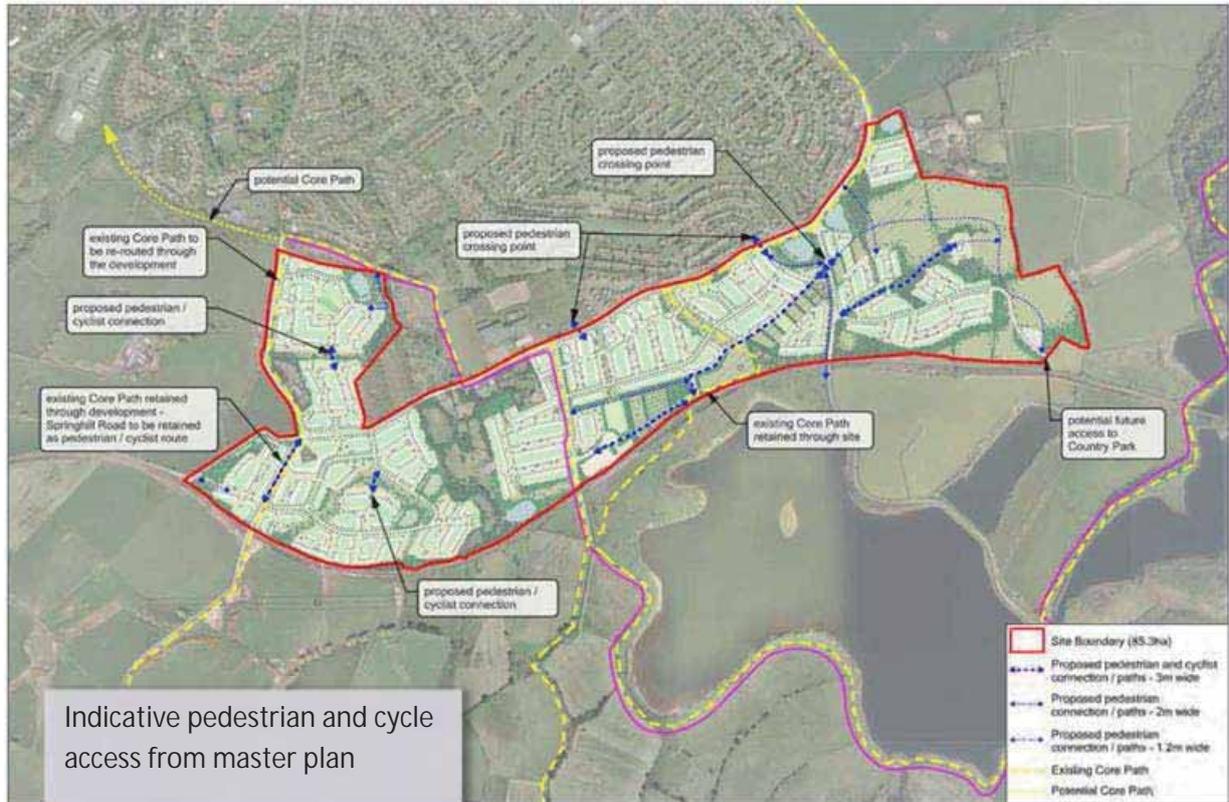
### Influence on the Masterplan Site:

A number of existing routes for pedestrians and cyclists cross through the master plan area incorporating both on and off site provision and including the core paths. The existing path network has been incorporated in the master plan.

The opportunity exists for a strong path network throughout the development area largely based on the green network. The master plan details how this will be achieved with attractive access routes for pedestrians, cyclists and vehicles, in that order, in line with 'Designing Streets'.

**Mitigation Methods Employed:**

The path network will be enhanced through additional connection, appropriate design to ensure safe and desirable routes and pedestrian crossings being introduced to the main road network. The master plan sets design principles for sustainable transport, access and the movement hierarchy (master plan pgs 16 – 25) and develops these further into guidance with regards to the delivery of these principles(master plan pgs 52-111).



## SUSTAINABLE TRAVEL - BUS STOPS & NEW RAIL STATION

A new rail station is proposed within the master plan site on the Glasgow – Neilston rail line that runs along the southern edge of the master plan area.

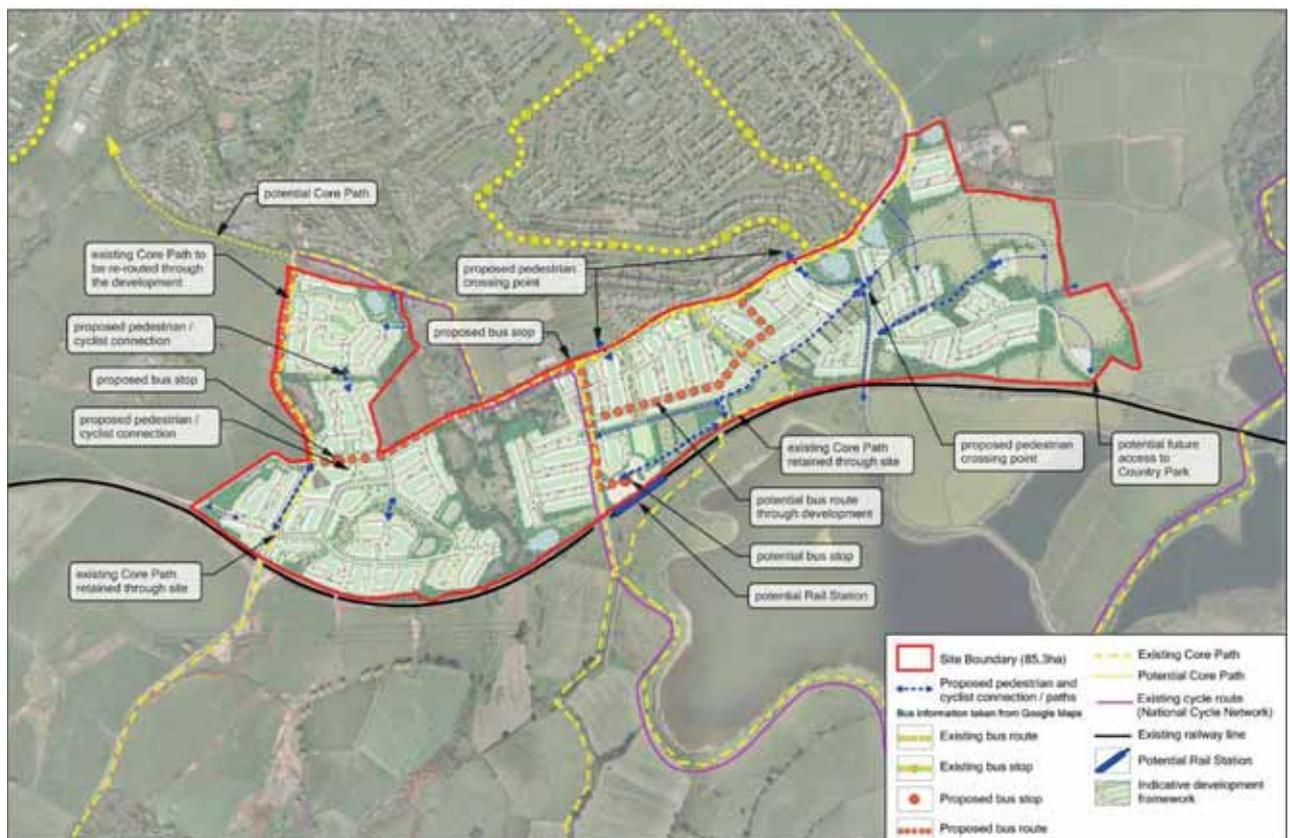
### Influence on the Masterplan Site:

One of the central aims of the development framework and master plan is to deliver a sustainable access strategy. The design of the master plan has taken account of existing bus routes and the need to allow the opportunity for the expansion of these to serve the new community.

### Mitigation Methods Employed:

The movement hierarchy ensures that primary streets are of a design capable of accommodating bus routes in order to ensure that the vast majority of the site is within 400m of a possible bus stop / route. Proposed new bus routes, including locations of stops and a transport hub at the new rail station have been detailed within the master plan (pgs 104 – 109). SPT were consulted during both the development framework and master plan and have advised that the proposed new routes should be commercially viable.

The new rail station is located in an area that is accessible from a primary road and through the path network. The new station is central to the delivery of the sustainable access strategy and will be supported through development contributions from the master plan area. It has been subject to extensive consultation with SPT, Network Rail and Transport Scotland have been undertaken to deliver the station.



## LANDSCAPE CHARACTER ASSESSMENT

<p><b>NSF1 North Brae/Lyoncross</b>                  LANDSCAPE SENSITIVITY: Low-Medium                  VISUAL SENSITIVITY: Medium                  GREEN BELT LANDSCAPE CHARACTER: Moderate - Strong                  LANDSCAPE CHARACTER ASSESSMENT OBJECTIVE: Protection                  URBAN EDGE OBJECTIVES: Constraint                  CHARACTER TYPE: Northern Scarp Farmland</p>	<p><b>ULF5 Balgray</b>                  LANDSCAPE SENSITIVITY: Medium-High                  VISUAL SENSITIVITY: Low-Medium                  GREEN BELT LANDSCAPE CHARACTER: Moderate - Strong                  LANDSCAPE CHARACTER ASSESSMENT OBJECTIVE: Protection                  URBAN EDGE OBJECTIVES: Constraint                  CHARACTER TYPE: Undulating Lowland Farmland</p>	<p><b>ULF7 Newhouse/Springhill</b>                  LANDSCAPE SENSITIVITY: Medium-High                  VISUAL SENSITIVITY: Medium                  GREEN BELT LANDSCAPE CHARACTER: Moderate - Strong                  LANDSCAPE CHARACTER ASSESSMENT OBJECTIVE: Protection                  URBAN EDGE OBJECTIVES: Constraint                  CHARACTER TYPE: Undulating Lowland Farmland</p>
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### Influence on the Masterplan Site:

The sensitivity of the landscape setting of the master plan was recognised from the outset, particularly in relation to the D2D country park, with a landscape visual impact assessment informing the development framework from the outset. A full landscape visual impact assessment including mitigation measures was undertaken at the master plan stage.

### Mitigation Methods Employed:

The development areas have been sited to minimise the impact on the wider landscape setting with certain areas being designated as unsuitable for development. Locations of visible sensitivity along development boundaries have been designed to minimise visual intrusion through woodland planting or by presenting a suitable development frontage to the area. A section of the master plan, 2.7 Ensuring landscape fit with the surrounding area (Pgs 132 – 150), addresses the design requirements for these sensitive areas.

The Glasgow- Neilston railway line presents a strong defensible boundary to the south of the site.



## GREEN NETWORK/URBAN GREENSPACE

### Green Network Connectivity

The site is bounded by an identified green network. Links between existing green networks should be created as part of the development.

### Defensible greenbelt boundary

The site is bounded to the north by an existing urban area comprising residential development. To the south the boundary is formed by the Glasgow – Neilston train line. Springhill/Springfield Road offer a boundary to further development in the greenbelt to the west of the site.

There are no landmarks defining the eastern boundary of the site. As this area is also the part of the site that is within the Dams to Darnley Country Park, the development should provide a defensible greenbelt boundary to prevent any future development encroaching further on the greenbelt and the park.

### Urban Greenspace

Two areas identified as Urban Greenspace fall within the boundary of the site:

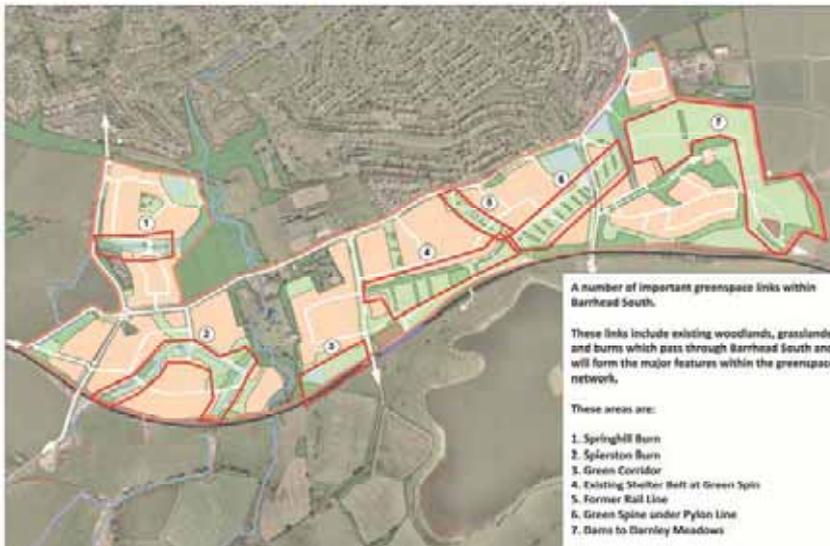
- Balgraystone Road, Barrhead
- Springfield, Barrhead

### Influence on the Master Plan Site:

The opportunity exists for a strong multi-functional green network throughout the development area, incorporating SUDS and ensuring amenity value is achieved. The master plan must also ensure appropriate greenbelt boundaries and relationships with neighbours in line with the requirements of the Local Development Plan.

### Mitigation methods employed

There is a significant emphasis on the importance of the green network throughout the Development Framework and the master plan as it has been recognised that the green network will have a strong contribution in the creation of a high quality place.



## FLOODING

River (fluvial) flooding - this occurs when the water draining from the surrounding land exceeds the capacity of the watercourse.

Surface water (pluvial) flooding – this is caused when rainfall water ponds or flows over the ground before it enters a natural or man-made drainage system or watercourse, or when it cannot enter the drainage system because the system is already full to capacity.

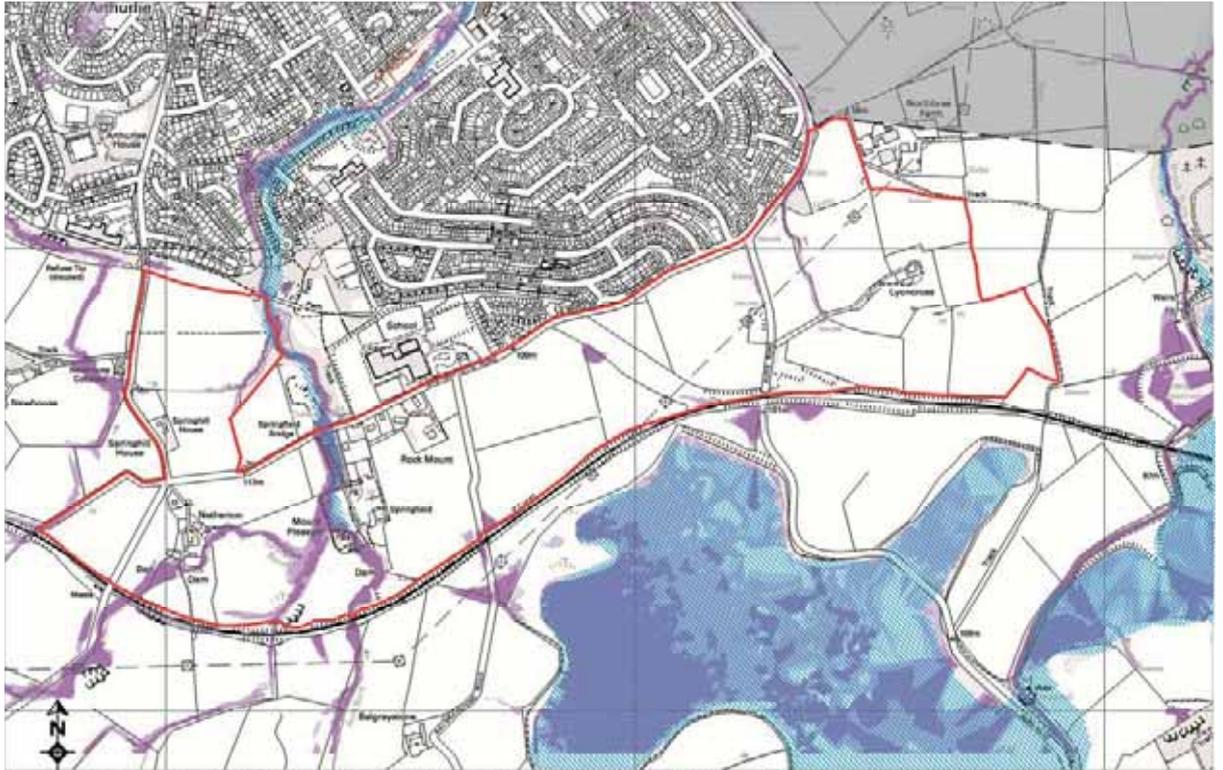
### Influence on the Master Plan Site

An area of Fluvial flooding in a 1 in 200 year probability event is identified in the Springhill area of the site, associated with Aurs Burn.

SEPA has identified the potential for pluvial (surface water) flooding in their 1 in 10, 1 in 100 and 1 in 200 year event models. The main area with potential for flooding is identified towards the Springfield part of the site and a small section on Lyoncross, within the Local Biodiversity site.

### Mitigation methods employed

A Flood risk assessment has been carried out for the site and has identified minimum flood risk in certain areas. The master plan includes a site wide SUDS strategy and has been subject to consultation with SEPA. The planning applications will be subject to formal consultation with SEPA and the Council as flood authority.



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## AIR QUALITY

### Site Noise

#### Short-Term Noise

Development will introduce construction noise to existing surrounding residential properties.

#### Long-Term Noise

Change of land use from farmland to urban use will result in increased noise from daily activity.

### Air Quality

*( from Road Transport/Monitoring)*

#### PM10

PM10 (Tonnes)	West Site	Mid Site	East Site
2007	0.0698	0.109	0.057
2008	0.778	0.123	0.0632
2009	0.092	0.143	0.0755

#### NOx

NOx(Tonnes)	West Site	Mid Site	East Site
2007	1.15	1.85	0.966
2008	1.16	1.79	0.972

#### CO2

CO2 (Tonnes)	West Site	Mid Site	East Site
2006	382	563	321
2007	425	625	358
2008	440	646	370

### Influence on the Master Plan Site:

Scottish Planning Policy states that the Planning system has an important role in supporting the achievement of sustainable development through its influence on location, layout and design of new development and that an important part of the decision making in the planning system is taking into account the implication of development on water, air and soil quality.

### Mitigation methods employed

The Council's Environmental Services monitors air quality and this has demonstrated no requirement to designate Air Quality Management Areas within East Renfrewshire. The requirements under Environmental Assessment (Scotland) Act 2005 will ensure that air quality amongst other environmental factors is thoroughly considered when assessing applications for planning permission. This is a factor which is integral to the Strategic Environmental Assessment process and which has

been carried out in tandem with the Local Development Plan. Strategic Policy 2 of the Plan contains reference to the impact on air, soil, including peat and water quality.

The master plan layout has avoided development on the area of peat identified in the southwestern corner. This will instead be transformed into the wetland SUD area.

As detailed in the master plan the delivery of the sustainable transport strategy, including a new rail station, enhanced and extended path network and expanded bus routes is central to the development strategy.

Given all these factors the Council considers that it has adequately covered the consideration of air quality.

As a green field site, construction noise will be minimised throughout operations and will be considered as part of the development management process

## WASTE

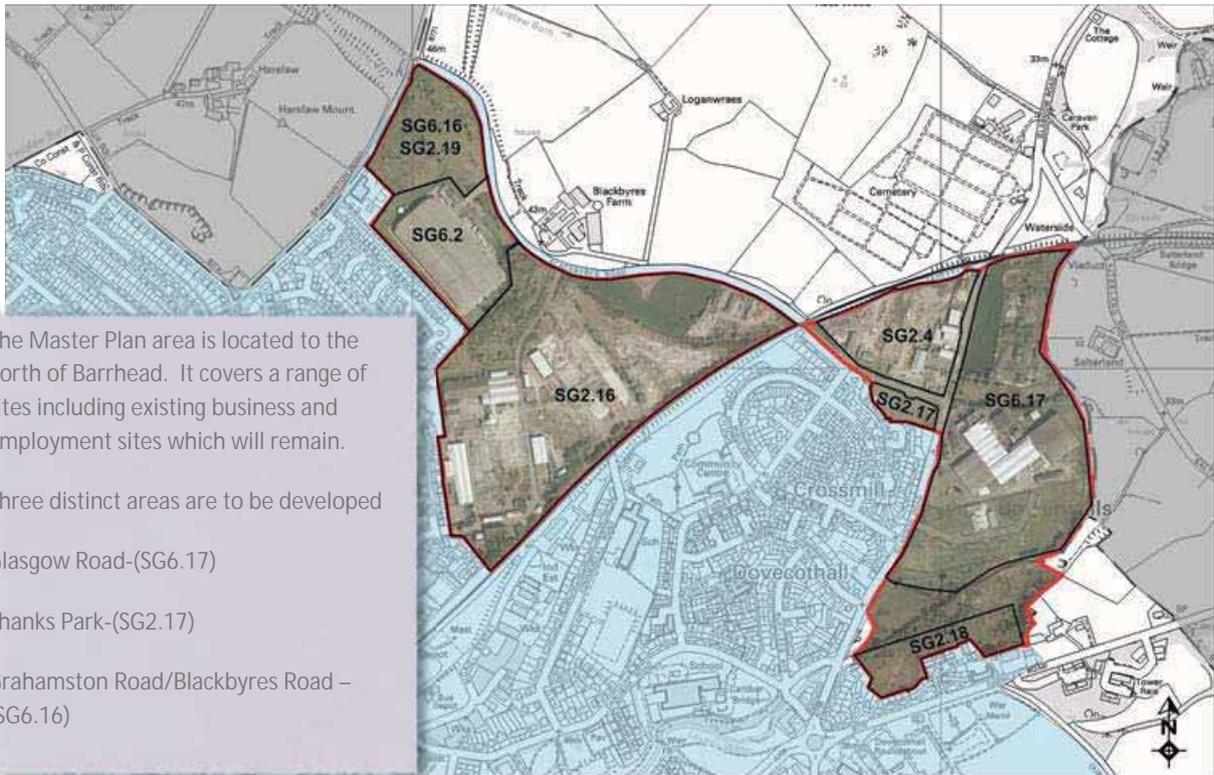
New housing will result in increased household waste.

### Influence on the Masterplan Site & Mitigation:

The management of domestic waste will be considered through the detailed planning applications.

The master plan strategy has attempted to minimise the removal of material from site with a balanced cut/fill across each development.

## Barrhead North



The Master Plan area is located to the north of Barrhead. It covers a range of sites including existing business and employment sites which will remain.

Three distinct areas are to be developed

Glasgow Road-(SG6.17)

Shanks Park-(SG2.17)

Grahamston Road/Blackbyres Road –  
(SG6.16)

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## ARCHAEOLOGICAL FEATURES OF INTEREST

One site of Archaeological interest within North Darnley Road site (SG2.19) and one to the north of this site.

1. **SAS Reference 8353** (within site)  
Site of Stewart Rais Tower
2. **SAS Reference 8366**  
Village

### Mitigation Required:

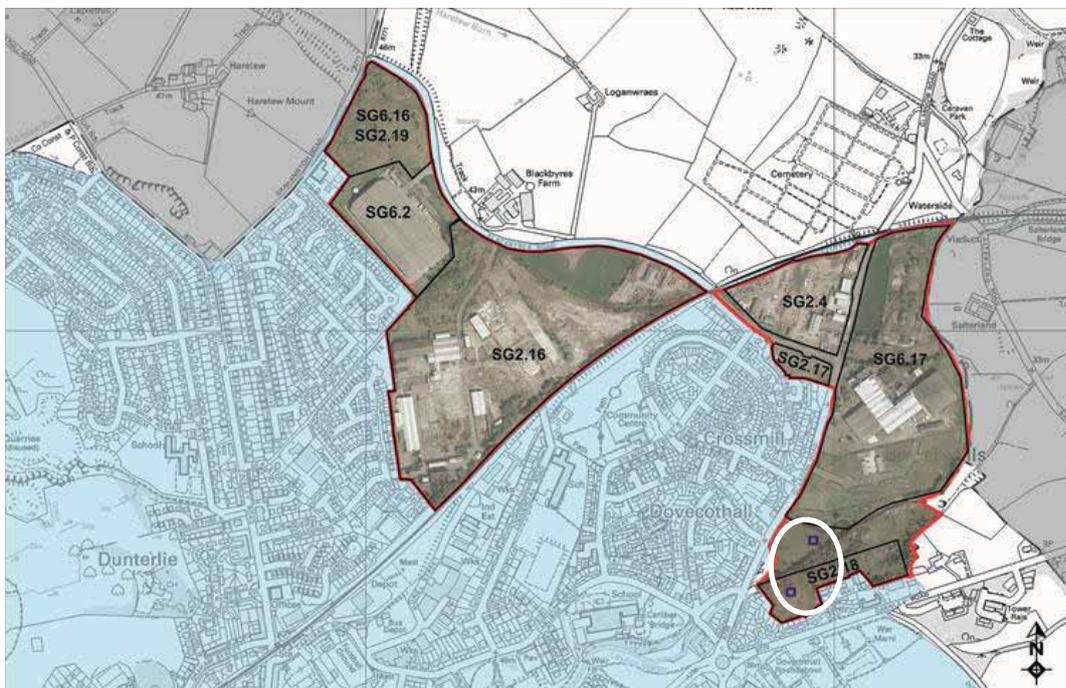
Need to consult with the West of Scotland Archaeology Service at relevant stage. Stewart Rais Tower (SAS 8353) is located within a site that is out with the masterplan area and is allocated for housing post 2020 therefore a relevant study will be required when development layouts are being considered. SAS 8366 is located out with the development sites and will be considered during planning application process.

### Influence on the Master Plan Site:

No influence on master plan site due to locations out with proposed development areas.

### Mitigation Methods Employed:

Need for consideration at relevant stage of development process noted.



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## SUSTAINABLE TRAVEL/PATH NETWORK

### Core Paths

Core path through North Darnley Road (SG2.19).

1. **ERC –A (A3), Uplawmoor to Barrhead** - Levern Way: Glasgow Road to Bowerwalls
2. **ERC-B(B1), Crossmill to Uplawmoor & Dodhill; including Dams to Darnley** - Cowan Park: Rower Rais to Aurs Road

### Rights of Way

Right of Way through North Darnley Road (SG2.19).

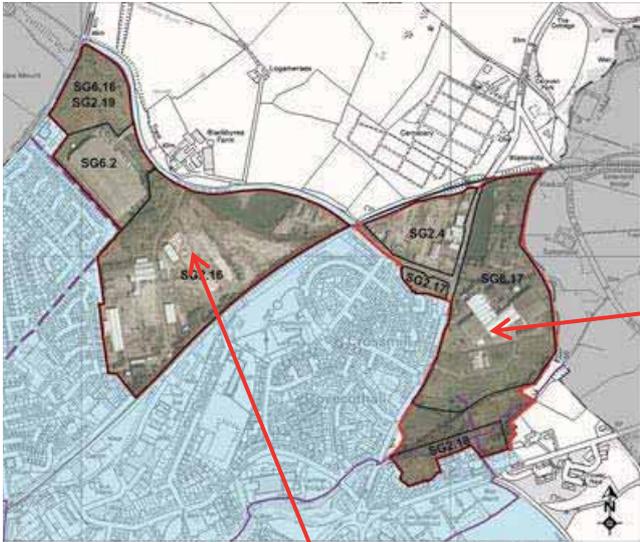
1. **RoW (65)**- Troy Walk
2. **RoW (58) – Adjacent to SG6.02** - Grahamston Road to Dealston Road.

### Influence on the Master Plan Site:

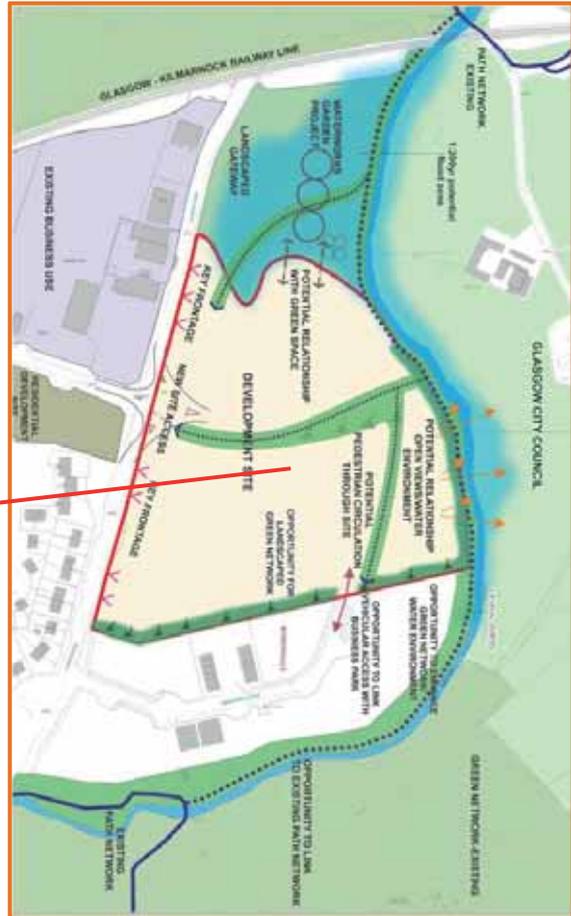
The existing path network has been incorporated within the master plan and has presented the opportunity for the master plan to enhance and extend this provision. The opportunity exists to develop the path network within a strong landscape setting and in particular connecting to existing core routes and to connect the path network of East Renfrewshire Council to that of Glasgow City Council.

### Mitigation Methods Employed:

The path network of the wider area will be enhanced through new path networks that will connect existing routes and develop links between the communities of Barrhead and Darnley. The master plan considers movements and connection between existing sites and neighbouring areas as well as through sites to ensure that strong connections to and between the existing and the new community are established (master plan p.28 and 42).



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Master plan shows path linkages across sites SG6.17 and SG2.16

## SUSTAINABLE TRAVEL/BUS STOPS

There are 27 bus stops within a 400m buffer of the site boundary and Barrhead Railway station is sited within 800m of the site boundary.

### Influence on the Master Plan Site:

One of the main aims of the master plan is to deliver the productive use of brownfield sites that are located adjacent to and within established communities. The land allocations have taken advantage of this situation with employment generating land allocated on a main bus route with strong pedestrian links to the communities of Barrhead and enhance links to communities within Glasgow City Council.

### Mitigation Methods Employed:

The movement and access strategy will ensure safe and desirable routes from the sites within the master plan to adjacent bus stops and the train station (master plan p.42). The new and enhanced path networks will also connect the development sites to the services of the town centre and the leisure opportunities within Carlibar Park.

## ROAD NETWORK

How has the master plan improved connections to the surrounding road network and has this eased congestion? Evidence or monitoring plan to show this?

### Mitigation Required:

The master plan impact is limited to the local road network.

### Influence on the Master Plan Site:

The master plan was developed in consultation with the Councils Road Service and regional transport partner SPT. Junctions requiring to be considered for enhancements have been identified and will be modelled at the appropriate stage of development.

### Mitigation Methods Employed:

The Council has enhanced the main road junction that will be affected by the master plan development through the construction of a roundabout that will also provide direct access to the mixed use development site on Glasgow Road (master plan p.28)

## LANDSCAPE CHARACTER ASSESSMENT

Mostly classified as urban with an area covering SG2.19 classified as below

**1. LF2, Dovecot Hall**

LANDSCAPE SENSITIVITY: Low

VISUAL SENSITIVITY: Low-Medium

GREEN BELT LANDSCAPE CHARACTER: Moderate-Strong

LANDSCAPE CHARACTER ASSESSMENT OBJECTIVE: Protection

URBAN EDGE OBJECTIVES: Constraint

CHARACTER TYPE: Lowland Farmland

### Influence on the Master Plan Site:

The master plan sites are all brownfield sites at the urban edge with limited landscape sensitivity.

### Mitigation Methods Employed:

Where the sites bound the urban edge the master plans identify key views and emphasises the importance of appropriate design and building orientation to enhance the transition between rural and green belt. The master plan also identifies a gateway strategy in recognition of the location of the development sites at the main vehicular and rail accesses into Barrhead (Master plan Pgs 28, 46 & 59).

## GREEN NETWORK

Site SG2.19 falls in an area identified as Green Network/Green belt

### **Green Network Connectivity**

There is the potential to connect the areas of green network through careful design and layout.

### Influence on the Masterplan Site:

Consideration of the relationship of development with the green network and green belt was of significant importance to the development strategy. Site SG2.19 is not considered with the master plan as the development is proposed post 2020 and the development principles will be better addressed at a more appropriate time.

### Mitigation Methods Employed:

Key access route connecting the master plan area to the green network have been identified. Pedestrian and cycle access routes through the master plan area will connect existing and new communities through these sites to the green network and green belt. The green network along the Lavern Water in particular will be enhanced with a new path delivered along the water edge that links the master plan area to Carlibar Park, the town centre and linking the Councils path networks and Glasgow City Councils.



### Defensible greenbelt boundary

North Darnley Road (SG2.19) is noted as being in the greenbelt. A defensible barrier is required to prevent future development in the greenbelt around this area.

#### Influence on the Masterplan Site:

The master plan addresses the 3 main development sites within the Barrhead North area within which development will commence in the short term.

The Glasgow Road East site is bounded by the Levern Water in the north and west, Glasgow Road in the south and a railway line to the east. It is considered that these features will provide a defensible boundary preventing the spread of development beyond this site into the green network.

The Shanks Park site is bounded by existing development, a railway line and Blackbyres road. It is considered these features will provide a defensible boundary preventing the spread of development beyond this site into the green network.

Similarly the Bynzl site also considered within the masterplan is bounded on all sides by road or existing development.

The North Darnley Road site is programmed for development post 2020 and the relevant approach to delivering a defensible boundary will be considered at that time.

#### Mitigation Methods Employed:

To be determined post development.

### HIGH AMENITY OPEN SPACE

In accordance with SPG Green Infrastructure there is a requirement for the provision of high amenity open space and priority given to walking and cycleways. How have these improved the aesthetic nature of the area, and is there any evidence for promotion of outdoor recreation/health benefits?

#### Influence on the Masterplan Site:

The provision of an enhanced path network to and within the master plan area was central to the development strategy. The strategy was developed in consultation with the Councils Green Access Officer.

#### Mitigation Methods Employed:

New path networks have been identified that will provide the missing connection between Glasgow City Council and East Renfrewshire Core Paths. This provision of this new path within the master plan has assisted in achieving funding from the Regeneration Capital Grant Fund 2015/16 for it to be constructed prior to development of the site.

This path is located along the banks of the Levern Water and will open up this water environment to the community and encourage access to the wider path networks.

**FLOODING**

**Surface flooding**

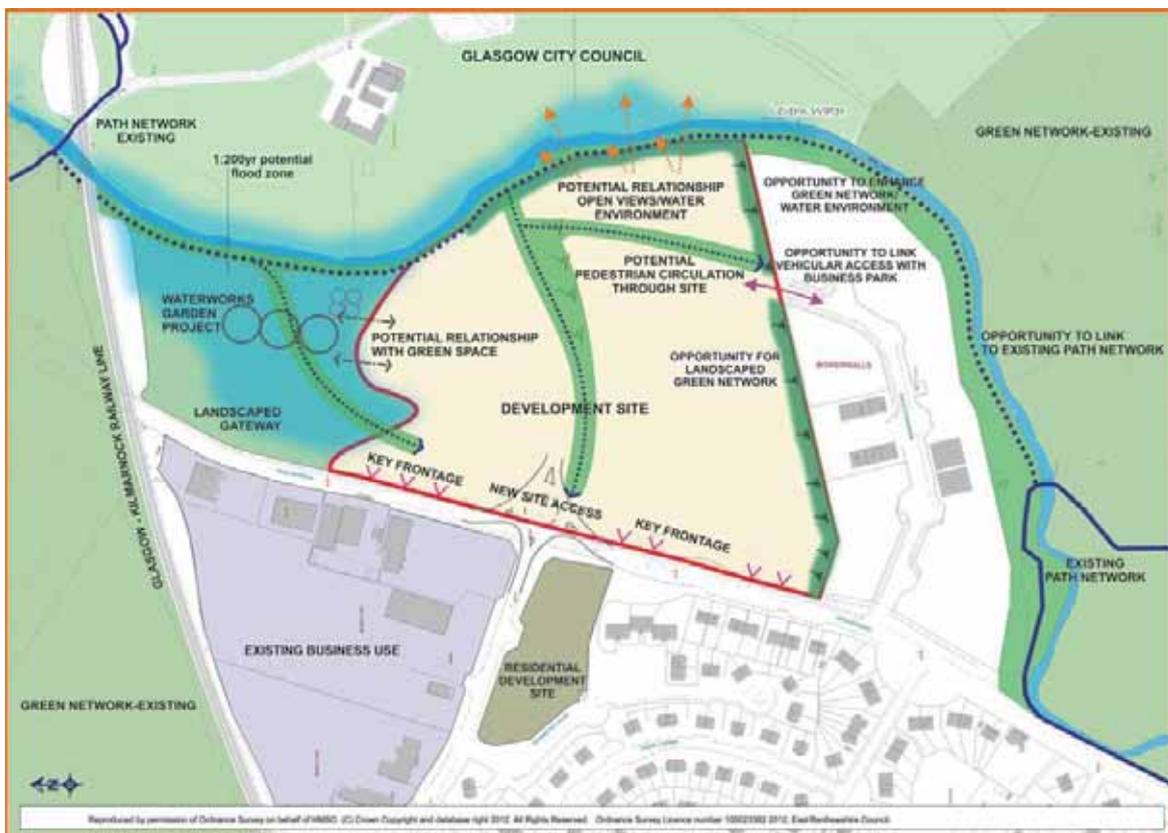
The potential for flooding identified in SEPA's 1 in 200 year flood risk map on Glasgow Road East site (SG6.17).

Influence on the Masterplan Site:

The area identified within the flood risk map has been demonstrated within the master plan and excluded from the development area.

Mitigation Methods Employed:

Development area is out with flood risk area with development proposals to be subject to consultation with SEPA.



Master Plan identifying potential flood areas and new path opportunities, providing a link between existing paths.

## AIR QUALITY

### Influence on the Masterplan Site:

Scottish Planning Policy states that the Planning system has an important role in supporting the achievement of sustainable development through its influence on location, layout and design of new development and that an important part of the decision making in the planning system is taking account the implication on water, air and soil quality.

### Mitigation Methods Employed:

The Council's Environmental Services monitors air quality and this has demonstrated no requirement to designate Air Quality Management Areas within East Renfrewshire. The requirements under Environmental Assessment (Scotland) Act 2005 will ensure that air quality amongst other environmental factors is thoroughly considered when assessing applications for planning permission. This is a factor which is integral to the Strategic Environmental Assessment process and which has been carried out in tandem with the Local Development Plan. Strategic Policy 2 of the LDP contains reference to the impact on air, soil, including peat and water quality.

As detailed in the master plan the delivery of enhanced, extended and attractive path networks alongside the location of the sites in close proximity to sustainable transport options is central to the development strategy. Given these factors it is considered that the master plan adequately covers the consideration of air quality.

## RADON

Areas of Shanks Park (SG2.17), North Darnley Road (SG2.19), Glasgow Road East (SG6.17) and Glasgow Road West (SG6.04) were shown as class 4 on the British Geological Surveys radon map. Class 4 is considered to present a potential intermediate risk of radon gas generation. Has this been noted in the Master plan for consideration through the Development Management and Building Standards processes?

### Influence on the Masterplan Site:

Developers and the Council as a land owner are aware that all sites within the master plan area will require detailed site investigations due to the brownfield nature of the sites.

### Mitigation Methods Employed:

Further detailed site investigations will be required to assess the presence of Radon or not and recommended appropriate mitigation measures for the proposed end use.

## SOIL QUALITY

Potential Contamination on Brownfield sites. How has this been investigated and what, if any, remedial measures were put in place?

North Darnley Road historical maps indicate historical mining activities. Potential for residual mines and shafts. Potential for contamination due to infill activities.

### Influence on the Masterplan Site & Mitigation:

Due to the nature of the brownfield sites there is a wide awareness of the need for detailed site investigations to inform the final remediation strategy, development layouts and site viabilities. The master plans will assist in the instruction of these investigations as certainty is established of development potential.

A full site investigation has been carried out on the Glasgow Road development site which has found limited remediation requirements for the proposed mixed use development but does note that this will have to be reviewed once specific uses on sites are known.

## WASTE

New commercial, retail, leisure and residential development will result in increased waste.

### Influence on the Masterplan Site & Mitigation:

The management of waste will be considered through detailed planning applications.