

FALKIRK COUNCIL

Subject: CONSULTATIVE DRAFT DEVELOPMENT FRAMEWORK FOR THE MADDISTON EAST STRATEGIC GROWTH AREA
Meeting: EXECUTIVE
Date: 17 MAY 2016
Authors: DIRECTOR OF DEVELOPMENT SERVICES

1. INTRODUCTION

- 1.1. The spatial strategy and vision of the Falkirk Local Development Plan (LDP) 2015 is to promote moderate settlement growth across the Council area having due regard to environmental, physical and infrastructure capacity of individual settlements and the wider Council area.
- 1.2. The LDP identifies Maddiston East as one of 12 Strategic Growth Areas (SGA) which are to provide the focus for residential growth in the Falkirk Council area over the period of the LDP. The LDP requires a co-ordinated approach to bringing this SGA forward, particularly with regard to access provision. This will be facilitated by a Development Framework which will enable a suitable access strategy to emerge, as well as set out requirements for green and physical infrastructure. A draft Development Framework has now been prepared (attached as Appendix 1). This report summarises the content of the Consultative Draft Development Framework and seeks its approval for consultation purposes.
- 1.3. The Maddiston East SGA comprises 6 development sites. Of these 6 sites, the 5 additional sites (H44-H48) included in the Development Framework area will generate an additional 280 units. Parkhall Farm 1 (H43), which is currently nearing completion is also identified within the SGA and is expected to deliver around 60 units over the next 2-3 years, at which point the site will be complete. The Development Framework relates to sites H44-H48, which are as follows:

Ref.	Site Name	Site Size (ha)	Housing Capacity
H44	Parkhall Farm 2	4.3	40
H45	Parkhall Farm 3	7.7	80
H46	Parkhall Farm 4	1.1	20
H47	The Haining	3.6	20
H48	Toravon Farm	6.6	120

2. PURPOSE AND CONTENT OF THE CONSULTATIVE DRAFT DEVELOPMENT FRAMEWORK

2.1. The purpose of the Consultative Draft Development Framework is to set out how the remaining residential sites which form part of the Maddiston East SGA should be developed so as to provide a cohesive and sustainable extension to the village, which properly addresses the various environmental and infrastructure constraints affecting the area. The draft document is intended to provide guidance for landowners and developers on planning, design and infrastructure requirements, whether sites are brought forward on an individual basis, or collectively.

2.2. Section 1 provides an introduction and sets out the purpose and background of the framework. This section also sets out the relevant planning policy, and the objectives for design and placemaking, in line with Scottish Government and LDP policy and guidance.

2.3. Section 2 sets out the key assets and constraints of the Development Framework area and the wider Maddiston locality. This includes:

- Landscape;
- Ecology;
- Historic environment;
- Vehicular access;
- Core Path Network;
- Drainage, flooding and water Supply;
- Community infrastructure.

2.4. Section 3 addresses the strategic requirements which the sites collectively are expected to deliver. The content of each strategic requirement is broadly as follows:

Overall vision

2.5. Section 3.1 sets out six key principles which form the vision for the relevant sites. These are for sites to:

- be built to a high standard of design and integrate successfully with the existing settlement and the local landscape;
- be resource efficient and integrate sustainable design solutions;
- safeguard and enhance local environmental assets, including the green network and the built heritage elements within and adjacent to the Development Framework area;
- ensure that impacts on local community infrastructure are suitably mitigated, and developments contribute appropriately to the provision of such infrastructure;
- be well-connected to the existing settlement, the green network and public transport, with priority given to walking and cycling over vehicular movement; and
- Deliver a co-ordinated solution in terms of vehicular access for all sites within the Development Framework

Green Network and Open Space

- 2.6. Section 3.2 seeks to deliver requirements in terms of landscape, ecology, open space and outdoor access. This is particularly important in terms of addressing site-wide constraints including the design and layout response to the overhead powerline.
- 2.7. A key component is the landscape framework which has a number of elements shown on Map 5 of the document. These relate to the Manuel Burn corridor, existing ancient and semi-natural and long-established woodland in and around the sites, and new structure planting required.
- 2.8. Section 3.2 also sets out the requirements in terms of ecological protection, mitigation and enhancement. These include European Protected Species, as well as other Local Biodiversity Action Plan (LBAP) species of note.
- 2.9. Section 3.2 further identifies a requirement for improvements to the existing Core Path network in and around the site.

Strategic Access

- 2.10. The Development Framework requires the access for sites to be brought forward in a co-ordinated fashion so as not to prejudice the delivery of individual sites. Section 3.3 of the draft sets out four access options which will be subject to consultation. The four options are:
 - Option 1: Glendevon Drive to Vellore Road Link (including three possible route variants);
 - Option 2: Glendevon Road to Nicolton Road Link;
 - Option 3: Glendevon Road to A801 Link;
 - Option 4: No Connecting Link Road (ie individual access arrangements for all sites.
- 2.11. Factors which influence the four options are:
 - compliance with National Policy, including Designing Streets policy on design, placemaking, layout and permeability;
 - road network issues, including local network capacity and required improvements;
 - impact on natural and built heritage;
 - development viability and deliverability; and
 - fit with the Local Development Plan.
- 2.12. Sections 3.3.9-3.3.23 of the draft Framework assess of each of the options in terms of the above influencing factors.

2.13. The four options all have a range of associated challenges and attributes. Particular challenges include the suitability of a Manuel Burn crossing, capacity at the junction of Vellore Road with the B805, width and visibility restrictions along Vellore Road and Nicolson Road and impacts on sensitive receptors such as ancient and long-established woodland and the setting of The Haining B-Listed building. There is also a complex pattern of landownership across a number of the sites which may influence any emerging access strategy and the delivery of sites.

2.14. At this stage no preferred option is identified and it is considered that all of the options should be subject to public consultation so as to fully scope any remaining issues, and to identify the most suitable option to take forward into the Finalised Development Framework. The emerging access option may be a combination of some of the options tabled as a result of further assessment.

Flooding and Drainage

2.15. Map 4 of the Consultative Draft Development Framework identifies a number of areas which are subject to surface water flooding and flooding from watercourses. Section 3.4.2 also sets out information required in terms of surface and foul water drainage.

Contributions to Education and Community Facilities

2.16. The draft Development Framework addresses capacity issues at primary and secondary schools within the Development Framework area catchment. The critical capacity issue relating to the relevant sites is at Maddiston Primary School, which will require contributions in line with LDP Policy INF05 and associated Supplementary Guidance SG10 to provide a permanent extension.

2.17. The document highlights capacity issues in community facilities which have been identified by the community over a number of years. Maddiston Community Centre is reportedly particularly busy at peak times. The overall provision and capacity of community facilities within Maddiston is being monitored, and development may be required to contribute to upgrading/expansion where there is an identified need exacerbated by new development in line with LDP policy INF02.

Affordable Housing

2.18. The consultation document requires developers to provide affordable housing provision of 25% in line with LDP policy HSSG02 and Supplementary Guidance SG12.

Low and Zero Carbon Development

2.19. The document includes reference to LDP policy D04 and Supplementary Guidance SG15 which requires all proposals to incorporate low and zero carbon-generating technologies (LZCGT) as part of new development and explore opportunities for district heating.

3. CONSULTATION AND COMMUNITY ENGAGEMENT

3.1. Internal consultation within the Council and engagement with key external consultees has already been undertaken to inform the preparation of the consultative draft. This report seeks the approval of Members to undertake further public consultation on this. Subject to Member approval at this meeting the draft framework will be subject to a consultation for a six week period. Consultation will include:

- notification to key statutory agencies and other relevant organisations;
- notification to properties and any known landowners within and adjacent to the Development Framework area;
- advertisement in appropriate local newspapers;
- an exhibition and drop-in session at an appropriate venue within Maddiston;
- publication on the Falkirk Council web site.

3.2. Once consultation is complete, the results will be used to inform a finalised Development Framework which will be reported back to Members in due course.

4. STRATEGIC ENVIRONMENTAL ASSESSMENT

4.1. The Environmental Assessment (Scotland) Act 2005 requires that plans, programmes and strategies are screened for the requirement for Strategic Environmental Assessment (SEA) under the Act. All of the sites identified in the Development Framework have previously been subject to environmental assessment as part of the Local Development Plan SEA process, with significant environmental effects identified and mitigation and enhancement measures put in place within relevant proposals.

4.2. A screening request was submitted to the SEA gateway which concluded that there would not be significant environmental effects from the proposed housing developments. The relevant consultation authorities have confirmed that the proposed Development Framework is not required to be subject to SEA at this stage.

5. IMPLICATIONS

Financial: In taking forward the Development Framework, financial contributions will be expected from developers in line with LDP policies and Scottish Government Circular 3/2012.

Legal: None

Policy: The Maddiston East Strategic Growth Area is identified in the Falkirk Local Development Plan. The Development Framework will facilitate the planning process in the delivery of around 280 additional houses in line with the Local Development Plan.

Personnel: None.

6. RECOMMENDATIONS

- 6.1 It is recommended that the Executive approves the Draft Development Framework for consultation purposes.**

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Director of Development Services
Date: 17 May 2016

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LIST OF BACKGROUND PAPERS

1. Falkirk Local Development Plan 2015

Anyone wishing to inspect background papers should contact Alexandra Lewis on ext 4738.

MADDISTON EAST STRATEGIC GROWTH AREA DEVELOPMENT FRAMEWORK CONSULTATIVE DRAFT

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1 INTRODUCTION

1.1 PURPOSE OF THE DEVELOPMENT FRAMEWORK

1.1.1 The Falkirk Local Development Plan (LDP), adopted in July 2015, identifies Maddiston East as one of 12 Strategic Growth Areas (SGA) which are to provide the focus for residential growth in the Falkirk Council over the plan period. The LDP states that, within the SGAs, “the preparation of development frameworks, masterplans and briefs, as appropriate, and the co-ordination of social and physical infrastructure provision, will be a particular priority” (Policy HSG01).

1.1.2 The purpose of this Development Framework is to set out how the remaining residential sites which form part of the Maddiston East SGA should be developed so as to provide a cohesive and sustainable extension to the village, which properly addresses the various environmental and infrastructure constraints affecting the area. The Development Framework is intended to provide guidance for landowners and developers on planning, design and infrastructure requirements, whether sites are brought forward on an individual basis, or collectively. It is not intended to be overly prescriptive in terms of individual site layouts, but aims to identify the key factors developers are expected to consider when working up detailed proposals.

1.2 THE DEVELOPMENT FRAMEWORK AREA

1.2.1 Maddiston is a village within the south eastern part of the Falkirk Council area with a population of about 3,100. It originated as a small mining community, but expanded rapidly in the post-war period, resulting in coalescence with other Braes villages. Further private housing growth has taken place over the last 25 years, most recently at Parkhall Farm (site H43) in conjunction with the development of a new primary school.

1.2.2 The Maddiston East SGA provides for further eastern growth of the village, towards the A801, encompassing further land at Parkhall Farm (sites H44-H46) and the Haining, to the north of Vellore Road, and at Toravon Farm, to the south of Vellore Road. The Development Framework encompasses these additional sites, providing for approximately 280 additional homes, together with additional land up to the A801 which provides opportunities for green network enhancement (See Map 1).

1.2.3 Notwithstanding the construction of the new primary school, access to local services and the improvement of service provision is a theme which emerged strongly from the community during the LDP process, and which will need to be addressed in the new development.

1.3 POLICY CONTEXT

1.3.1 The LDP identifies six sites which make up the East Maddiston SGA. These are listed below, and shown on Map 1.

Ref.	Site Name	Site Size (ha)	Housing Capacity
H43	Parkhall Farm 1	13	239
H44	Parkhall Farm 2	4.3	40
H45	Parkhall Farm 3	7.7	80
H46	Parkhall Farm 4	1.1	20
H47	The Haining	3.6	20
H48	Toravon Farm	6.6	120

1.3.2 Parkhall Farm 1 (H43), which was originally allocated in the previous Local Plan, is substantially complete and, although not included in the Development Framework, is relevant to the Development Framework in terms of how it connects to the new sites. Toravon Farm (H48) has been carried forward from the previous Local Plan. Parkhall Farm 4 (H46) has already been granted detailed planning permission.

- 1.3.3 Broad guidance for each of the SGAs is included in Appendix 2 of the LDP, including information on land use, design, placemaking, green network, constraints and developer contributions. This guidance, which underpins the Development Framework, is included in Appendix 1 of this document for reference.
- 1.3.4 Two green network opportunities identified in the LDP have relevance to the SGA (Map 1). Development will be expected to assist in the delivery of these opportunities, as specified in the Development Framework.

Ref.	Opportunity
GN16	Lower Braes Southern Fringes
GN18	Polmont Open Space Corridors

- 1.3.5 A number of general LDP policies are relevant to the proposals at East Maddiston and also inform the Development Framework. These are listed in Appendix 2.
- 1.3.6 Falkirk Council has produced a suite of Supplementary Guidance which forms a part of the Development Plan. The most relevant SGs are:
- SG02: Neighbourhood Design
 - SG05: Biodiversity and Development
 - SG06: Trees and Development
 - SG08: Local Nature Conservation and Geodiversity Sites
 - SG09: Landscape Character and Landscape Designations
 - SG10: Education and New Housing Development
 - SG12: Affordable Housing
 - SG13: Open Space and New Development
 - SG15: Low and Zero Carbon Development

1.4 PLACEMAKING AND DESIGNING STREETS

- 1.4.1 *'Creating Places: A Policy Statement on Architecture and Place for Scotland'* was published in 2013 and sets out the Scottish Government position on architecture and place, and its links with the planning system.
- 1.4.2 *'Designing Streets'* supports *'Creating Places'* and is the first policy statement in Scotland for street design. Designing Streets marks a change in emphasis towards placemaking and connectivity, seeking to reduce the dominance of motor vehicles within development sites, and redress the balance in favour of pedestrians and cyclists. The Scottish Government's policy on placemaking, as set out within Scottish Planning Policy, identifies six key qualities of successful places as identified below.
- 1.4.3 The Council's Supplementary Guidance SG02 on 'Neighbourhood Design' provides guidance on implementing 'Designing Streets' within the Falkirk Council area, including good practice examples from within the area.
- 1.4.4 Development within the Maddiston East SGA will be expected to address the requirements of Designing Streets and SG02. Applications for individual sites within the Development Framework area will be expected to include a Design Statement including an audit of the design against the six qualities of successful places.

Six Qualities of Successful Places	Examples from Designing Streets
Distinctive	<ul style="list-style-type: none"> • Block structure with legible urban form and distinctive landmarks and features within the urban realm • Reflect local context in terms of historic reference points and use of local materials and layouts
Safe and pleasant	<ul style="list-style-type: none"> • The street hierarchy should prioritise pedestrians and cyclists, resulting in decreased dominance of motor vehicles. The design and layout should reduce vehicle speeds. • Consider use of street markings, lighting and street furniture and reduce clutter
Easy to move around	<ul style="list-style-type: none"> • Design should provide good connectivity for all modes of transport within the site. • Consider public transport connections early in design process • Junctions should be designed to prioritise the needs of pedestrians first
Welcoming	<ul style="list-style-type: none"> • Development should be walkable and with good connections to local amenities. • The development should consider how public realm will create nodes where social interaction will take place.
Adaptable	<ul style="list-style-type: none"> • Connections to wider area should be considered in the early stages of the design process. • Parking and emergency access should not be a dominant feature and should be incorporated imaginatively .
Resource efficient	<ul style="list-style-type: none"> • Consider orientation of buildings to maximise solar gain • Incorporate SUDS and drainage into the overall design in order to integrate well into the streetscape and provide additional environmental and landscape benefits. • Materials should be sustainable and be of a high standard. • Consider how utilities will be incorporated without compromising satisfactory layout

2 SITE CHARACTER, ASSETS AND CONSTRAINTS

2.1 GENERAL

2.1.1 The area covered by the Development Framework consists of three broad parts:

2.1.2 **Parkhall Farm (H44-H46)** – an area of mainly residual agricultural land, bounded to the west by the recent residential development, to the east by woodland, and to the south by Vellore Road. It is divided into four quadrants by the east-west Manuel Burn, and the north-south farm access track leading to the farm steading. The north east part contains the now derelict Parkhall steading, together with a row of dwellinghouses and a disused plant nursery along the north side of the burn. The north west part contains the SUDS pond serving the existing Parkhall development. An overhead powerline cuts diagonally across the site.

2.1.3 **The Haining (H47)** – an area of policy woodland, with clearings, lying to the north of Parkhall Farm, and associated with the former Parkhall House (now the Haining care home).

2.1.4 **Toravon Farm (H48)** – an area of agricultural land bounded to the north by Vellore Road, to the south and east by existing residential development.

2.2 LANDSCAPE

2.2.1 **Map 2** shows the main landscape features of the Development Framework area.

2.2.2 In terms of topography, the double east-west ridgeline to the north provides a backdrop and containment to the Development Framework Area. The Parkhall Farm area is relatively flat, whilst the Haining site rises up relatively steeply to the ridgeline. The Toravon Farm land is relatively flat adjacent to Vellore Road, but then rises steeply to a further relatively level area to the south. Gradients on both the Toravon and Haining sites are likely to present challenges to development.

2.2.3 The corridor of the Manuel Burn is a key landscape feature and habitat corridor, the southern bank of which is well vegetated. Riparian trees to the west of the Parkhall Farm access track are identified in the SNH's Inventory of Ancient and Semi-Natural Woodland. The northern bank is the route of an old railway line, the western part of which is a core path

2.2.4 Extensive woodland along the eastern edge of the Parkhall site, at the Haining, and along the Manuel Burn is perhaps the key landscape asset of the Development Framework area, providing landscape structure, further containment and a potentially attractive setting for development. Map 3 dates from 1843 and shows the historic Parkhall Estate and its designed landscape, including the original policy woodland associated with the Haining which is now identified in the Inventory of Ancient and Semi-Natural Woodland. There are also individual trees located within the Development Framework area, including mature trees forming part of hedgerows which run north-south through the Toravon site, and are also included in the Inventory.

2.2.5 In terms of man-made elements of the landscape, the key elements are the derelict Parkhall Farm steading, the row of houses between the farm steading and the burn, and individual dwellinghouses on the Vellore Road adjacent to the Parkhall Farm track ('Parklea') and in the vicinity of the Haining ('Shamistle', and the Manor House which sits within the old walled garden). An overhead power line traverses the site from north-west to south-east

2.2.6 The area falls within Landscape Character Unit 5(i) Manuel Farmlands as identified in 'SG09 *Landscape Character Assessment and Landscape Designations*'. SG09 identifies expansion of Maddiston/Polmont as a likely future force for change in the landscape. The guidelines for this LCU are to ensure that the loss of woodland is minimised, that new infrastructure and large-scale housing is sensitively designed and that proposals are subject to Landscape and Visual Impact Assessment. The SG identifies key sensitivities as being visibility of development on higher ground and loss of defining landscape elements such as tree belts, field boundaries, woodland and stone walls.

2.3 ECOLOGY

2.3.1 The two key habitats within the area are the corridor of the Manuel Burn, which is designated as a Site of Importance for Nature Conservation (SINC), and the woodland, much of which, as noted above, is classified as ancient and semi natural woodland. The designations are shown on Map 2. These features are an important part of the wider green network. Development has potential for both direct and indirect impacts on ecology. Direct impacts relate to loss of habitat. Indirect impacts can include:

- increased disturbance from new population, traffic etc;
- impact of localised air quality issues;
- fragmentation or isolation of habitats and green corridors;

- 2.3.2 The Development Framework will seek the retention, protection and enhancement of the key habitats, where possible, including the maintenance of appropriate buffers to features, and bringing woodland under management.
- 2.3.3 The site provides potential habitat for certain European Protected Species such as badgers, bats and great crested newts. An extended Phase 1 habitat survey would be required to confirm the presence of any such species. Development involving felling of trees or established hedgerows, along with removal of vacant and derelict buildings or structures would require a through bat survey. There may be the potential for Great Crested Newts around standing bodies of water such as the SUDS pond. There is also the potential for badger activity in and around woodland and field edges. Other Local Biodiversity Action Plan (LBAP) species may also be present in and around the site.

2.4 HISTORIC ENVIRONMENT

- 2.4.1 The Haining is a Category B-Listed building and lies adjacent to the Development Framework area. Development within site H47 in particular has the potential to have an impact on its setting.
- 2.4.2 The Haining is identified as a non-inventory designed landscape in SG09 'Landscape Character Assessment and Landscape Designations.' Although there is no boundary specified for the designed landscape, it comprises elements such as the policy woodland, access drives and the walled garden, which lie in or adjacent to the Development Framework Area, and will be potentially affected by development. The form and extent of the designed landscape is evident in the historic plan in Map 4. In addition to LDP Policy D09 relating to listed buildings, proposals with potential impacts on non-inventory designed landscapes will be assessed against Policy D12 of the Falkirk LDP which states that they will be given due weight in the planning process, having regard to their historical significance, integrity and condition. In terms of impacts on the Haining and its landscape setting, SG09 sets out detailed guidelines on how to assess this.
- 2.4.3 Factors which will require consideration include:
- protection and enhancement of original remaining features of the designed landscape;
 - assessment of setting including key views/vistas to and from the Haining;
 - demonstrating that the overall design solution integrates successfully with the designed landscape; and
 - evidence of a long-term management plan.
- 2.4.4 A Heritage Impact Assessment (reflecting the findings of, but separate from, any landscape and visual impact assessment) may be appropriate in particular for development within the Haining (H47.)

2.5 VEHICULAR ACCESS

- 2.5.1 Currently, the Parkhall Farm steading, the nursery and adjacent properties, are served via a farm access track from Vellore Road. The Haining, North Lodge and South Lodge are served via South Avenue, a separate private road from Vellore Road.
- 2.5.2 Glendevon Drive, which is the main access road through the Parkhall Farm 1 development, terminates at a roundabout on the western edge of site H44. However, the road is currently a cul-de-sac, and the Council's Transport Planning Unit consider it to be at its limit in terms of the number of existing and approved dwellings which can be served off it, until it is connected through to the wider road network at its eastern end.
- 2.5.3 Toravon Farm currently has a field access from Vellore Road. The access road to the Toravon Manor development to the south passes along the western edge of the H48 and could potentially provide access to H48.

- 2.5.4 There are localised pressures within the existing road network, in particular affecting the B805 junction with Vellore Road, and the road network around Maddiston Primary School at peak times.

2.6 CORE PATH NETWORK

- 2.6.1 The Development Framework area contains three paths which are an important part of the local access network, and require to be safeguarded and enhanced where necessary as part of new development. These are shown on Map 2.

- (a) Core Path 020/765 Manuel Burn, which connects from the Parkhall Farm track westwards toward Valley Park and the Main Road
- (b) Core Path 020/809 Parkhall Farm, which follows the Parkhall Farm track from Vellore Road northwards, through the Haining site and on towards the Union Canal
- (c) Right of way east of Toravon Farm, which connects Vellore Road to Maddiston High Road

2.7 FLOODING, DRAINAGE AND WATER SUPPLY

- 2.7.1 The area drains towards the Manuel Burn. The Parkhall Farm 2 site (H44) contains the SUDS serving Parkhall Farm 1 (H43). Further assessment will be required as to whether this SUDS can service further development.

- 2.7.2 Map 4 shows the current areas which are at risk of flooding from rivers and surface water flooding. Sites within the Development Framework area are likely to require a Flood Risk Assessment.

- 2.7.3 Scottish Water have confirmed that there is sufficient capacity in the Kinneil Kerse Waste Water Treatment Works to serve this development. However, they have confirmed that there is an issue with hydraulic incapacity of the drainage network in specific locations in the Maddiston, Brightons and Polmont areas which has resulted in some localised flooding incidents. Recent investigations into the performance of the drainage network in this area, through principally site surveys and computer network modelling (or drainage area plan (DAP) analysis) confirm a lack of capacity in the drainage system. This manifests itself in the historical flooding incidents experienced in this area as the combined foul and surface water sewers are hydraulically surcharged under certain rainfall storm conditions. As well as Scottish Water infrastructure, the capacity of the road drainage and surface water culverts in the area are also contributory factors.

- 2.7.4 Scottish Water and Falkirk Council have undertaken an Integrated Catchment Study (ICS) encompassing the Forth Estuary catchments of Grangemouth and surrounding areas. A key objective of this study has been the assessment and identification of all flood risks to the catchment whether these be drainage infrastructure, watercourse or coastal related by the creation of integrated models and to develop appropriate solutions for reducing the identified risks. This information provides context to the issues of surcharging mentioned above.

- 2.7.5 In terms of water supply, Scottish Water have confirmed that there is sufficient capacity in the Balmore Water Treatment Works to serve this development. However to determine network capacity, developers will be required to carry out a Flow and Pressure test (F&P) which will have an understanding of the impact the development has on the network. The results of the test will also highlight if any network mitigation works are required.

2.8 COMMUNITY INFRASTRUCTURE

Primary Education

- 2.8.1 Maddiston Primary school is located within the village centre close to the Development Framework area. The 2015 school roll projections suggest that the school will be operating at above capacity and a commitment has been made to provide a school extension within the

curtilage of the existing school. This extension will allow the East Maddiston SGA sites to progress. Developer contributions from the sites will be required.

- 2.8.2 St Andrews Primary School is the local RC school serving the Maddiston area. The school is operating at close to capacity, but is considered to be able to accommodate pupils generated from the East Maddiston SGA sites.

Secondary Education

- 2.8.3 Braes High School is located in Brightons. 2015 roll projections indicate it will approach full occupancy by the mid 2020's. At present, it is likely that investment in additional capacity will be required to meet the additional demand from new housing between now and then, including the growth in Maddiston.
- 2.8.4 St Mungos is the RC secondary school serving the Maddiston area. There is likely to be additional pressure from years 2019/2020 in terms of capacity and developer contributions will be required.

Community Facilities

- 2.8.5 The main community facility within the village is Maddiston Community Centre. This accommodates a variety of groups including a café, early years groups, job clubs, and health promotion. There are also other facilities including the Braes Childrens Centre, Maddiston Old Folks Hall, Sports facilities at Meadowbank in Polmont and The Grange Centre in Brightons plus a number of church halls and the facilities which form part of Maddiston Primary School. There have been concerns arising from previous Development Plan consultations that there is a shortage of community space for the village, and that this is particularly acute at Maddiston Community Centre.
- 2.8.6 Capacity issues at Maddiston Community Centre are currently being monitored and contributions may be required where there is a clear need for improvements, exacerbated by the new development

Healthcare

- 2.8.7 Maddiston falls within the Polmont GP practice area. Supplementary Guidance SG11 Healthcare and New Housing Development confirms that there is currently capacity identified at Polmont Park Surgery to accommodate proposed development identified as part of the East Maddiston SGA.

Open Space

- 2.8.8 The Council's Open Space Strategy sets out a long-term strategic approach to managing open space. The aims are to assess current and future needs and to secure the long-term improvement to the quality of Falkirk's open spaces. The Strategy is currently under review, and a Consultative Draft was published in December 2015.
- 2.8.9 In terms of the wider Polmont area, the Draft Strategy highlights the fact that the quality of open space in the Polmont area is generally very good and above the Council average in terms of quality indicators. The area has a lower rate of open space provision than the Council average, but over double the 5ha/1000-people standard identified in the Draft Strategy. The distribution of open space is also satisfactory. The key focus is on improving the quality of local parks, improving the Green Network, developing new play and sports facilities where required, and rationalising open space provision to improve overall quality.
- 2.8.10 The priorities for the Maddiston area set out in the Draft Open Space Strategy are:

Open Space	Role and function of open space	Opportunities for enhancement
Main Road, Maddiston	Site forms an area or amenity greenspace, with some paths linking Main Road to Cairneymount Avenue.	<ul style="list-style-type: none"> • Improved maintenance in terms of cleaning and managing the woodland and scrub areas. • Upgrading and resurfacing of paths and creation of sitting areas to allow the site to be visited and used. • Introduction of a new play area,
Valley Park	The site forms a play space and a semi-natural greenspace with burn corridor and woodland.	<ul style="list-style-type: none"> • Valley park identified as a priority action for improvement. • The Consultative Draft Strategy highlights that substantial improvements have already been made through development contributions, and resources may become available for other open spaces.
Creation of new woodland edge along eastern edge of Maddiston	Will deliver green network opportunities in term of habitat enhancement, landscape improvement and potentially outdoor access.	<ul style="list-style-type: none"> • To be delivered in conjunction with housing in the Development Framework area.
Manuel Burn Corridor	Green corridor providing opportunities for habitat enhancement and recreation.	<ul style="list-style-type: none"> • Manuel Burn corridor should be retained and enhanced in conjunction housing in the Development Framework area.

2.8.11 There are other open spaces in Maddiston which do not have any actions against them in the Draft Open Space Strategy, but which were assessed in the Open Space Audit. Improvement of these sites may be appropriate should there be an opportunity to explore wider opportunities beyond those set out in the 2015 Draft Open Space Strategy. These are:

Open Space	Role and function	Opportunities for enhancement
California Park	Playspace and sports pitch well-utilised for informal recreation.	<ul style="list-style-type: none"> • Additional play equipment • Enhancement of biodiversity including additional tree planting
Forgie Crescent	Semi-natural, partially-wooded greenspace with important path linkages to the wider settlement and surrounding countryside	<ul style="list-style-type: none"> • Improve signage and maintenance • Manage woodland for biodiversity benefits

3 DEVELOPMENT FRAMEWORK: STRATEGIC REQUIREMENTS

3.1 OVERALL VISION

3.1.1 The vision of the Maddiston East Development Framework is that all the LDP sites which are identified within the Development Framework are brought forward in such a way as to provide a cohesive, sustainable and attractive overall settlement extension. It is acknowledged that sites may come forward at different times, so it is important that the requirements which are expected of each site are clear. The vision for the Development Framework is for the site to:

- be built to a high standard of design and integrate successfully with the existing settlement and the local landscape;
- be resource efficient and integrate sustainable design solutions;
- safeguard and enhance local environmental assets, including the green network and the built heritage elements within and adjacent to the Development Framework area;
- ensure that impacts on local community infrastructure are suitably mitigated, and developments contribute appropriately to the provision of such infrastructure;
- be well-connected to the existing settlement, the green network and public transport, with priority given to walking and cycling over vehicular movement; and
- deliver a co-ordinated solution in terms of vehicular access for all sites within the Development Framework.

3.1.2 This section of the Development Framework focuses on the strategic infrastructure which the developments will collectively have to deliver, and requirements which are common to all the sites. Site specific considerations are set out in Section 4.

3.2 GREEN NETWORK AND OPEN SPACE

Landscape

3.2.1 The provision of a robust and well-designed landscape framework, which helps integrate development into the landscape and contributes to the development of the green network, is essential. This should build on the existing landscape assets and habitats in the area.

3.2.2 The landscape framework should comprise the following components, as illustrated on the Development Framework Plan (Map 5):

- (1) *The ancient and semi-natural woodland which forms part of the Haining designed landscape which should be retained, brought under management and reinforced where appropriate. This woodland should be subject to a management plan which will be prepared as part of proposals for site H47.*
- (2) *The woodland along the eastern edge of Parkhall Farm which should be retained and, where possible, brought under management in conjunction with site H45.*
- (3) *The Manuel Burn SINC corridor, which should be enhanced and managed, in conjunction with sites H44-H46. This will include clearing the burn corridor of invasive species, and incorporating a managed landscape buffer between the development sites and the burn. Breaches of the corridor resulting from access should be minimised. Crossing points should be designed so as to ensure minimise impacts on the ecology of the burn corridor.*
- (4) *New structure planting at Parkhall Farm along the northern edge of site H44, of minimum width of 15 m, subject to wayleave requirements associated with the overhead powerline*
- (5) *New structure planting at Toravon Farm along the eastern edge of H48, of minimum width 15m, subject to wayleave requirements associated with the overhead powerline. This should incorporate the hedgerow trees along this boundary*
- (6) *The hedgerow bisecting the Toravon Farm site, which should be retained and reinforced.*
- (7) *The existing SUDS pond at Parkhall and the powerline wayleave, which should be designed to provide an attractive green corridor connecting (3) and (5).*
- (8) *Toravon Farm (H48) has an area of particularly steep gradient, rising southwards from the flatter, northern area of the site. There should be additional east-west landscaping to screen development within the southern part of the site, which would otherwise be highly visually prominent to the north. This should connect with landscape areas (5 and 6).*

3.2.3 For all applications where development could affect trees and woodland, the requirements of SG06 Trees and Development will apply. Tree surveys should be undertaken at an early stage to inform design and layout. Tree protection plans should be prepared, as appropriate, and replacement planting undertaken where tree removal is necessary and justified.

Open Space

3.2.4 The provision of open space within the new development should accord with Policy INF04 of the LDP, Supplementary Guidance SG13 'Open Space and New Development' and the Council's Open Space Strategy.

3.2.5 It is anticipated that sites will satisfy the open space requirement partly through on-site provision, and partly through contributions to off-site upgrading. The methodology for calculating off-site contributions is set out in SG13.

3.2.6 Further information about on-site requirements is provided in Section 4. However, as part of on-site provision, two equipped play spaces should be provided, one to the north of Vellore Road and one to the south. The northern facility should be located within the northern part of H45. The southern facility will be within H48.

3.2.7 Off-site contributions will be invested in upgrading of open space and enhancement of the green network in Maddiston, as directed by the priorities identified in the Open Space Strategy.

Ecology

- 3.2.8 As identified in Section 2.3, the Development Framework area contains habitats of local importance, notably the burn corridor, trees, woodland and hedgerows, which may host protected species.
- 3.2.9 Development proposals will be required to follow guidance within SG05 Biodiversity and Development. This will ensure that species, habitats and sites that are particularly vulnerable or of high ecological importance nationally or locally are protected and that the wider biodiversity is maintained and enhanced.
- 3.2.10 A Phase 1 habitat survey will be the starting point for further investigations relating to European Protected Species, birds and Local Biodiversity Action Plan (LBAP) species. It is anticipated that the following protected species surveys will be required:
- Badger
 - Bats
 - Water vole
 - Otter
 - Great crested newts
- 3.2.11 The need for additional protected species surveys may be highlighted by the Phase 1 survey.
- 3.2.12 A breeding bird survey will be required to identify species likely to be impacted by the development. This would include any legally protected bird species such as barn owl and kingfisher.
- 3.2.13 The badger survey should aim to identify movement of badgers within the development area as well as the presence of setts. If badgers are foraging or migrating across the development area, consideration will need to be given to the potential loss or isolation of habitat and the provision of corridors to allow the continued safe movement of badgers within the area. This is particularly important due to the barrier presented by the A801 to the east and the potential isolation of badger clans from their foraging areas as a result of development.
- 3.2.14 A survey for invasive non-native plant species including Japanese knotweed, Himalayan balsam and Giant hogweed will be required. Should these species be identified an appropriate programme of treatment and eradication will be required.

Outdoor Access and Path Network

- 3.2.15 The Development Framework Plan (Map 5) shows the strategic path linkages within and through the Development Framework area which should be safeguarded and enhanced as follows:
- (1) *Core path 020/809 from Vellore Road to the northern edge of the Haining should be safeguarded and upgraded as part of the development of sites H44-47. Where there is an interface between the Core Path and access road, the Core Path will be served by a footway, preferably separated from the road by a verge where this is a primary access road. The National Roads Development Guide and Designing Streets offer further advice on appropriate widths.*
 - (2) *Core path 020/809 from the Haining to Nicolton Road should be upgraded. This is an off-site improvement which will be funded by proportionate contributions from all the sites within the Development Framework area on the basis shown below.*

Ref	Site	% of total cost attribution
H44	Parkhall Farm 2	14.2%
H45	Parkhall Farm 3	28.5%
H46	Parkhall Farm 4	7.1%
H48	Toravon Farm	42.9%
H47	The Haining	7.1%

(3) *The right of way from Vellore Road to Maddiston High Road, along the eastern boundary of Toravon Farm should be safeguarded and upgraded by the developer of site H48.*

3.2.16 There should be good connections within, and between, sites, with direct path links suitable for cycle and pedestrian use. These paths should be safe, well-lit and preferably overlooked by new development. These paths should also link into the strategic core paths specified above, to provide wider access to Maddiston and the surrounding countryside. Applications should include details of path specification and signage.

3.3 STRATEGIC ACCESS

Key Considerations

3.3.1 Access to all the sites within the Development Framework Area will be required to be brought forward in a co-ordinated fashion so as not to prejudice delivery of individual sites.

3.3.2 Key factors influencing consideration of access options include:

(1) *Designing Streets and the National Roads Development Guide*: These have been adopted by the Council as guidance for the development of new streets within the area. They emphasise the prioritisation of pedestrian and cycle movement and the use of permeable and connected street layouts.

(2) *Road network issues*. Account must be taken of any capacity and safety issues in the local road network to which the sites will be connected. Two specific issues have a strong bearing on the Development Framework Area:

- Sites south of the Manuel Burn (H45(S), H46 and H48) lie adjacent to Vellore Road, and would most obviously be accessed from Vellore Road. However, Vellore Road is subject to constraints in terms of the width of the carriageway and pedestrian and cycle provision at certain sections, and its junction with Main Street, the improvement of which is hampered by current parking at the junction associated with the adjacent shop. Suitable upgrades will need to be agreed with the Council; the extent of which will be dependent upon the amount of additional traffic which will be using Vellore Road and its junction with the B805.
- Sites north of the Manuel Burn (H44, H45(N) and H47) would most naturally be served off Glendevon Drive. However, the Council's Transport Planning Unit consider that it is undesirable for any further houses to be accessed off Glendevon Drive other than those already approved while it remains a cul-de-sac.

(3) *Impact on natural and built heritage*. Priorities include:

- Minimising severance of the Manuel Burn SINC
- Minimising loss of trees, particularly where these form part of the ancient and semi-natural woodland.
- Respecting the setting of The Haining and its designed landscape
- Achieving a good landscape fit and minimising the visual impact of road infrastructure

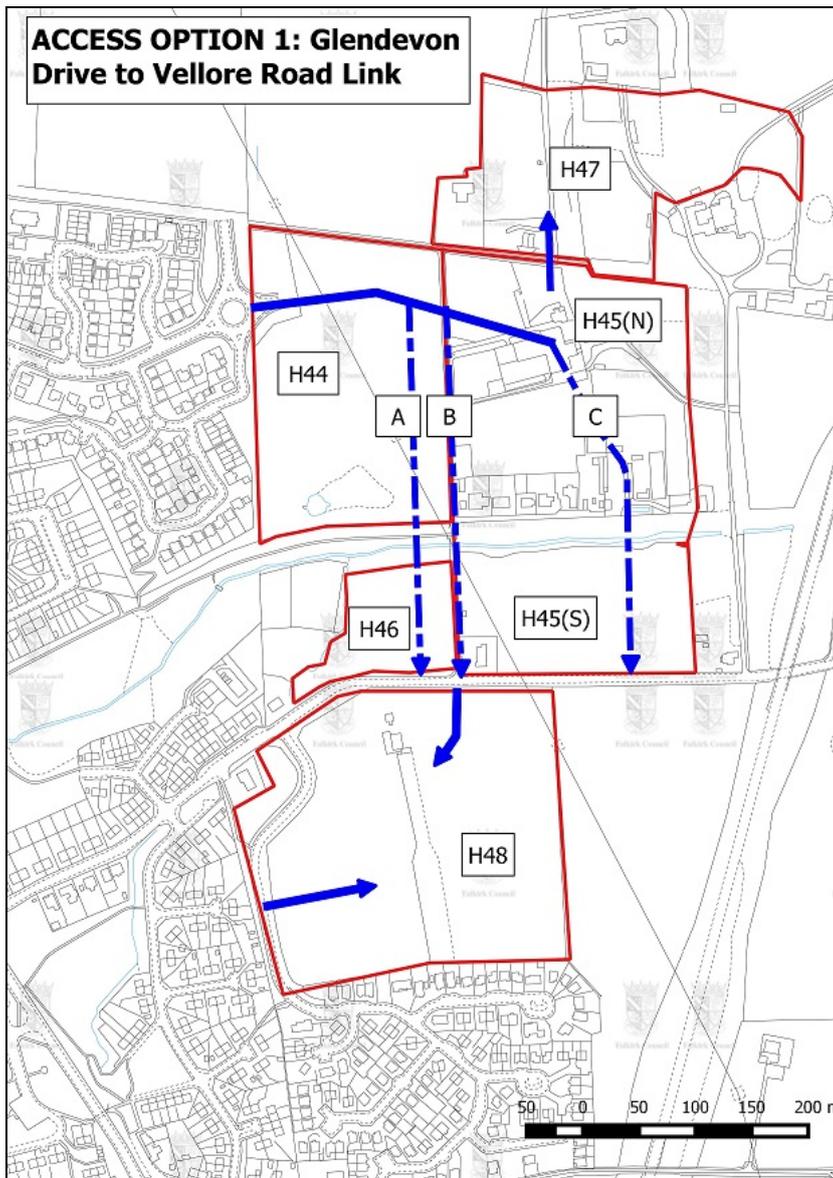
(4) *Development viability and deliverability.* The access solution must be cost-effective, affordable and deliverable, taking account of the scale of housing proposed, and the pattern of land ownership.

(5) *Fit with the Local Development Plan.* The solution should be focused on delivering the allocated sites, without prejudicing decisions on any future growth which may take place in the area

Options

3.3.3 This draft Development Framework presents four main access options as shown on the four maps (options 1-4) for consideration and consultation. These are as follows:

Option 1: Glendevon Drive to Vellore Road Link



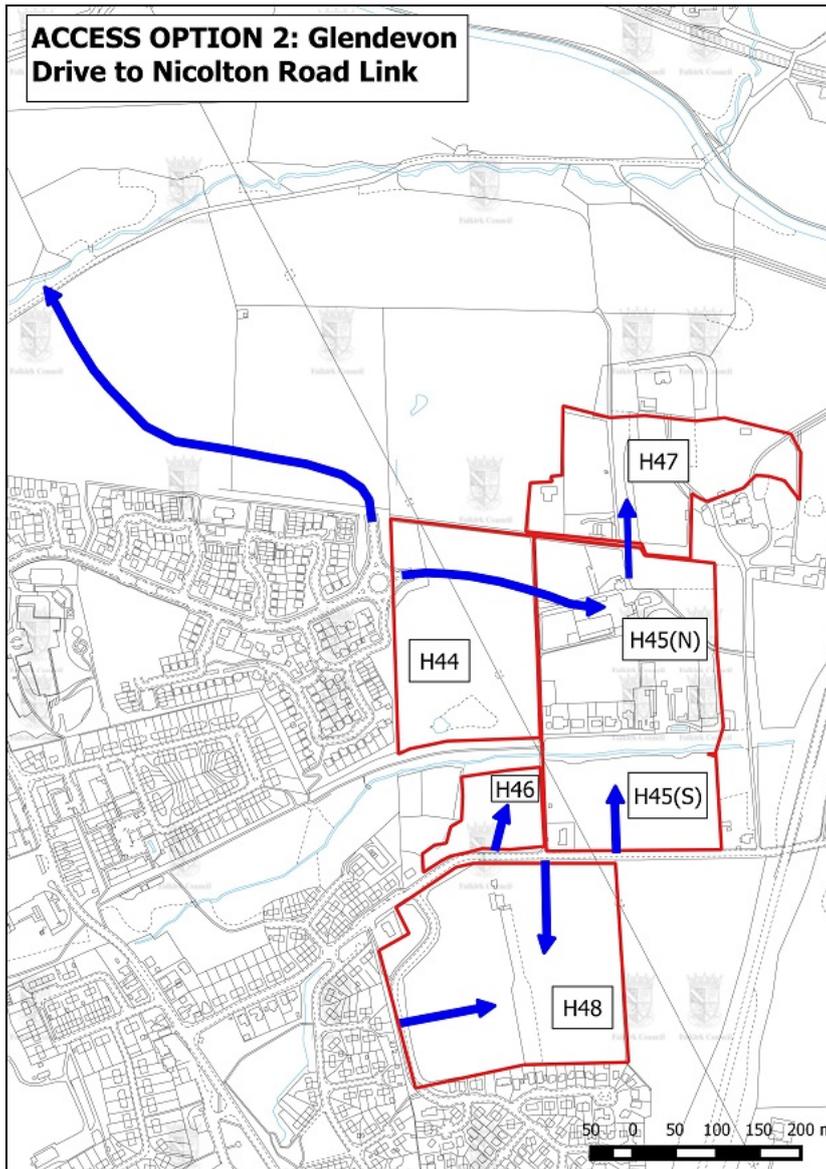
A new primary route would be built from Vellore Road northwards across the Manuel Burn to connect to Glendevon Drive. There are three route variants:

- (A) through H46;
- (B) along the route of the Parkhall Farm track;

(C) through H45.

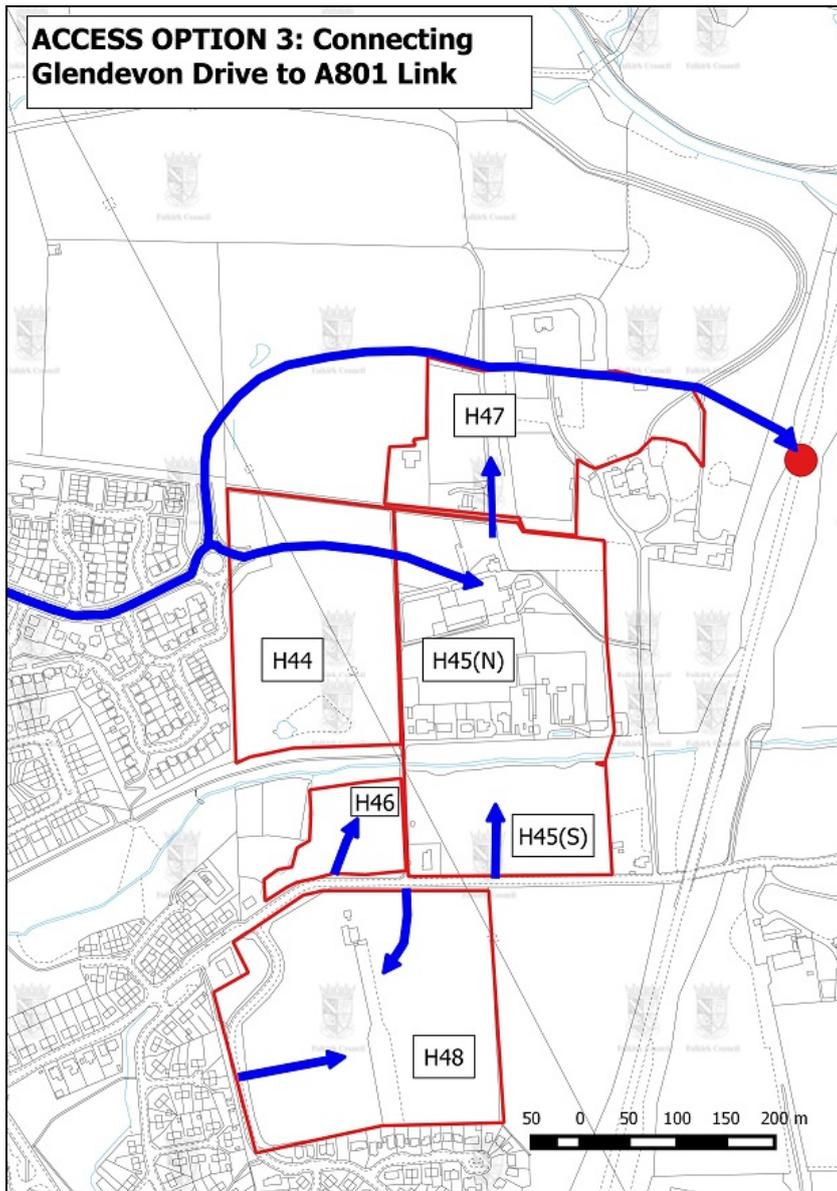
3.3.5 If this option is adopted, the preferred solution for this option would be that sites H45 and H46 are accessed off this possible road, rather than Vellore Road itself, but it is recognised that site H46 already has planning permission based on an independent access off Vellore Road, and that independent accesses may be acceptable subject to appropriate junction spacing. The junction of the new road with Vellore Road would ideally be a roundabout, off which access to the lower section of H48 would also be taken. The upper section of H48 would be taken from the existing Toravon Manor access road.

3.3.6 **Option 2: Glendevon Road to Nicolton Road Link**



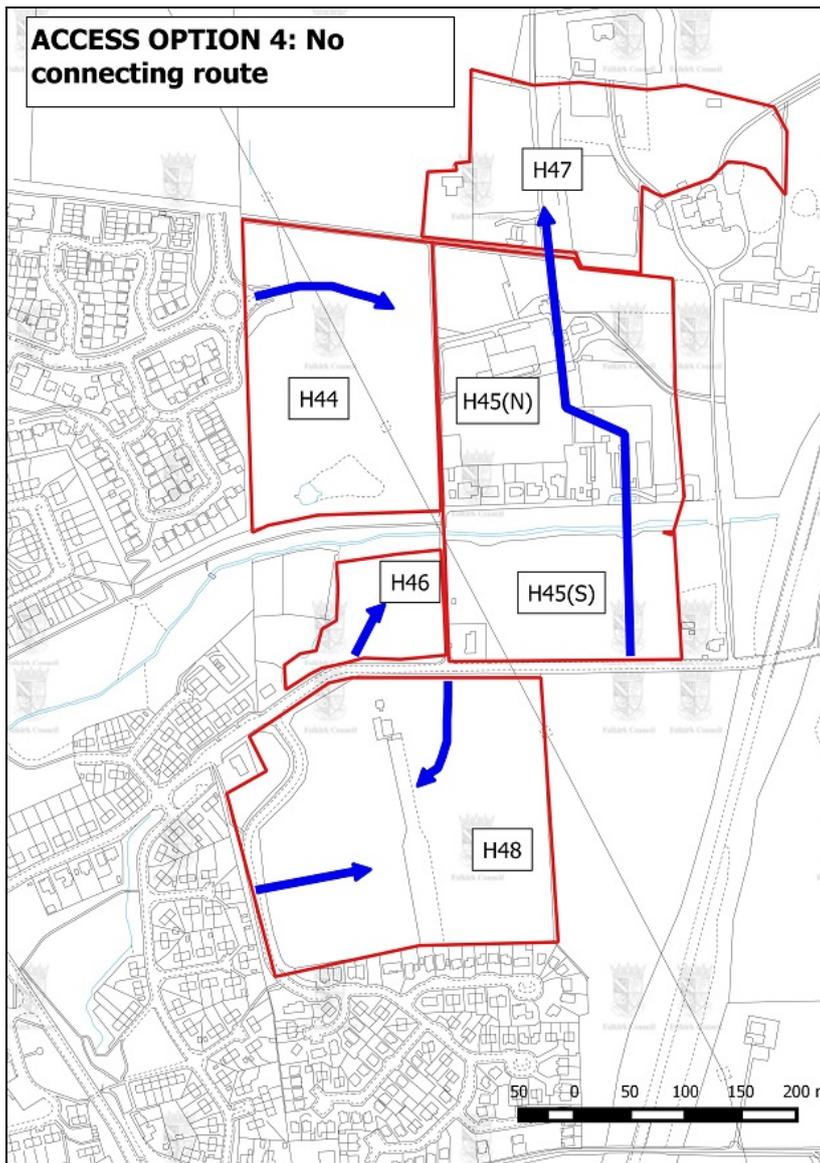
A new primary link road would be built from Glendevon Drive to Nicolton Road to provide a second connection to the wider road network, allowing sites north of the Manuel Burn to be accessed off Glendevon Drive. Sites south of the Manuel Burn would be accessed off Vellore Road.

3.3.7 **Option 3: Glendevon Road to A801 Link**



A new primary link road would be built from Glendevon Drive to a new roundabout on the A801 to provide a second connection to the wider road network, allowing sites north of the Manuel Burn to be accessed off Glendevon Drive. Different routes may be possible, although the route shown is that which is subject to the current planning application (P/14/0486/FUL). Sites south of the Manuel Burn (H45(S), H46 and H48) would be accessed off Vellore Road.

3.3.8 **Option 4: No Connecting Link Road**



Sites would generally be accessed via their own independent access road (with the exception of H47, which would be accessed by means of a continuation of the H45 access route). The continuation of Glendevon Drive as a cul-de-sac serving additional houses in H44 would be contrary to the advice of the Council's Transport Planning Unit. This issue might be mitigated by the provision of an emergency second access (e.g. along an upgraded Parkhall Farm Road) and by reducing the number of houses in H44. However, there are potential difficulties with emergency accesses and therefore they have not been recommended in recent years.

Option Assessment

Designing Streets

3.3.9 Option 1 potentially provides the best fit with Designing Streets, offering a continuation of Glendevon Drive as a connecting 'main street' through the Development Framework Area, although other options would be able to secure pedestrian/cycle connectivity. The link roads in Option 2 and 3 are outwith the urban area and so are considered as roads rather than streets.

3.3.10 *Road network issues*

All of the options introduce additional traffic on to Vellore Road and would require the constraints associated with Vellore Road to be addressed. Option 1 is likely to have the greatest impact on Vellore Road because it proposes a through road.

- 3.3.11 Option 3 has the advantage that it distributes traffic more effectively to the wider network by connecting with the A801. Options 1 and 2 are less effective because they connect back into the more congested B805.
- 3.3.12 Option 3 provides a potential short cut to the A801 from the B805. This may encourage additional through traffic, although this could be controlled through appropriate traffic calming.
- 3.3.13 Option 4 is problematic in that it loads additional traffic on to the Glendevon Drive cul de sac with no alternative access out into the wider network, although as noted above, this might be mitigated by provision of an emergency access. The problems associated with this approach are highlighted in Section 3.3.8.
- 3.3.14 Option 2 is problematic due to the substandard nature of Nicolton Road. There is doubt as to whether land exists to upgrade it westwards towards the B805, including any necessary improvement to the of B805/Carron Terrace junction.

Impact on natural and built heritage

- 3.3.15 Options 1 and 4 involve additional or widened crossing of the Manuel Burn with associated landscape and ecological impacts, including some loss of the riparian ancient and semi natural woodland.
- 3.3.16 Option 2 will have significant landscape and ecological impacts. Its route takes it up on to the ridge, with associated visual impacts. Depending on the route, it may involve removal of a significant area of ancient and semi-natural woodland, and have adverse impacts on the Haining and its designed landscape.

Development viability and deliverability

- 3.3.17 Multiple ownership within the Development Framework Area means that all of the options have deliverability issues, requiring suitable agreements to be reached between the different parties. Nonetheless, it appears that some sites largely have control over their own accesses, and may be easier to deliver.
- 3.3.18 All of the options are likely to require off-site upgrading of Vellore Road, which may require land acquisition and additional cost.
- 3.3.19 Options 2 and 3 involve lengthy link roads (and in the case of Option 3 a substantial roundabout on the A801) which involve a level of cost that appears unsustainable in relation to the scale of the allocated sites.
- 3.3.20 Options 1 and 4 involve crossings of the Manuel Burn which will also entail additional cost.

Fit with the development plan

- 3.3.21 Options 1 and 4 are contained within the envelope of the allocate sites.
- 3.3.22 Options 2 and 3 involve the construction of roads extending outwith the Urban Limit, thereby putting development pressure on unallocated sites and potentially prejudicing the outcome of future planning for the area.

Option Selection

- 3.3.23 Clearly, there are advantages and disadvantages associated with the various options. The Council is inviting views on the options through this draft document, prior to determining a preferred solution when the Development Framework is finalised. However, whichever option

is selected, Transport Assessments will need to be undertaken to establish the extent of off-site improvements required to the network, in association with each phase of development.

3.3 FLOODING AND DRAINAGE

Flood Risk

- 3.4.1 As identified in Section 2.7, parts of the Development Framework area are located within areas which are at risk of flooding (from watercourses and surface water). Developers must therefore produce a Flood Risk Assessment (FRA) for each of the development sites. A key requirement for a FRA is that it must consider all sources of flooding and demonstrate how flood mitigation methods will be managed. The FRA will be required to ensure that any flood risk associated with the development can be managed now and in the future, taking into account climate change projections and illustrate how the development will not increase the risk of flood risk downstream. SEPA advise that there should be no development within the 0.5% annual probability fluvial flood extent determined by a flood risk assessment. Furthermore, mitigation measures for the surface water flood risk should not increase the risk of flooding to neighbouring areas and runoff rates should be agreed with Falkirk Council.

Drainage

- 3.4.2 A Drainage Impact Assessment will be required for all sites within the Development Framework area. This will assess potential impacts in terms of surface water drainage and foul drainage. SUDS (Sustainable Urban Drainage Systems) will be required as part of the drainage strategy. SUDS help to protect water quality, contribute to green networks, reduce potential for flood risk and release capacity in the public sewerage network where the alternative is use of combined systems. The preference will be for a co-ordinated SUDS solution with facilities serving more than one site. The detailed work up of identifying SUDS locations should be the subject of early discussions between SEPA, the Council and the developers so as to maximise the green network potential of the SUDS scheme.

3.5 CONTRIBUTIONS TO EDUCATION AND COMMUNITY FACILITIES

Education

- 3.5.1 As noted in Section 2.8, there are capacity issues in certain schools in whose catchments the East Maddiston SGA lies. Developer contributions to education infrastructure will therefore be required for all sites within the Development Framework area, in line with the guidance in Supplementary Guidance SG10 Education and New Housing Development. Contribution rates are set out in Appendix 1 of SG10. These rates may be updated in line with future projected growth. At present, contributions will be sought in relation to:

- Maddiston Primary School (Non-Denominational Primary)
- Nursery provision
- St Mungo's High School (RC Secondary)
- Braes High School (Non-Denominational Secondary)

- 3.5.2 There may be a requirement for future contributions relating to St Andrew's RC Primary School. This will be reviewed in line with future growth projections.

Community Facilities

- 3.5.3 The main community spaces serving the village are Maddiston Community Centre and Maddiston Primary School. The community has highlighted that there have been capacity issues highlighted within Maddiston Community Centre in terms of availability of community space.
- 3.5.4 Policy INF02 of the LDP requires developers to contribute towards the provision, upgrading and maintenance of community infrastructure where development will create or exacerbate

deficiencies in, or impose significantly increased burdens on, existing infrastructure. The Development Framework sites will be generating around 280 additional units and may therefore exacerbate existing capacity problems in the future, particularly with respect to the Community Centre. Developers should therefore engage with the community and the Council on whether contributions relating to the upgrading or extension of community facilities at pre-application stage. As set out in Section 2.8, the capacity issues relating to Maddiston Community Centre are being monitored. Developers may be required to contribute to upgrading/expansion where there is an identified need exacerbated by new development.

- 3.5.5 In applying the policy, consideration of the overall viability of the development will be taken into account and this should be addressed by the developer.

3.6 AFFORDABLE HOUSING

- 3.6.1 Affordable housing will be required on each of the sites within the Development Framework area in accordance with LDP Policy HSG02 and Supplementary Guidance SG12 Affordable Housing. This stipulates a requirement of 25% for the Polmont area in developments of 20 or more houses. SG12 provides flexibility as to how the requirement is delivered, and early discussions with Falkirk Council Housing Services are recommended.

3.7 LOW AND ZERO CARBON DEVELOPMENT

- 3.7.1 Policy D04 of the LDP requires all new buildings to incorporate on-site low and zero carbon generating technologies (LZCGT) to meet a proportion of the overall energy requirements. Applicants must demonstrate that 10% of the overall reduction in CO2 emissions as required by Building Standards has been achieved via on-site LZCGT. This proportion will be increased as part of subsequent reviews of the LDP. All proposals must be accompanied by an Energy Statement which demonstrates compliance with this policy. Should proposals not include LZCGT, the Energy Statement must set out the technical or practical constraints which limit the application of LZCGT. Further guidance will be contained in Supplementary Guidance SG15 'Low and Zero Carbon Development'.
- 3.7.2 A settlement expansion also represents an opportunity to investigate the potential for district heating. Feasibility work for each site should be undertaken to assess potential opportunities in line with Policy D04. There should also be consideration of future-proofing the site and taking the following considerations into account:
- ensuring that service connections are compatible with district heating solutions in the future in the event that District Heating cannot be implemented as part of the current development.
 - building or setting aside land for a future energy centre – preferably compatible with other fuels or LZCGT in advance of more integrated long-term DH scheme utilising renewable energy sources.
 - developers should explore the various sources of finance for renewable heat such as the District Heating Loan Fund and the Renewable Heat Incentive.

4 DEVELOPMENT FRAMEWORK: SITE REQUIREMENTS

4.1 Section 4 sets out the specific site requirements for each site within the Development Framework. It is not an exhaustive list of matters to be addressed within a planning application, but does identify specific challenges or attributes associated with each site and how issues identified in Section 3 Strategic Requirements should be addressed. These are as follows:

H44	PARKHALL FARM 2
Green Network	<ul style="list-style-type: none"> • Central open space corridor formed by the powerline wayleave and the existing SUDS pond to be designed as positive landscape feature (landscape component 7). • Structure planting to be formed along the northern site boundary (min 15 m) (landscape component 4 on Map 5). • Burn corridor to be enhanced and managed in conjunction with sites H44-H46, including removal of invasive species and a 10 m landscape buffer between development and the burn (landscape component 3 on Map 5). • Tree survey required if development affects any trees on the site. • Landscape plan required to accompany detailed proposals • Appropriate ecological surveys to be carried out including protected species surveys,
Design	<ul style="list-style-type: none"> • Development to comprise pockets of housing on either side of the central open space corridor, with housing fronting the open space. • Design and palette of materials reflecting that of Parkhall Farm 1 to the west. • Level difference between Parkhall Farm 1 to be handled carefully with ground graded appropriately. • Design statement will be required.
Open Space	<ul style="list-style-type: none"> • Central open space corridor is likely to meet passive open space requirements. • Active open space requirement likely to be met by off-site contributions to facilities on other sites.
Access & Drainage	<ul style="list-style-type: none"> • All strategic access options envisage extension of Glendevon Drive into site which should have housing frontages. In all but one of the options this will require to connect across to H45(N). • Access will have to be maintained to 'Shamistle'. • In conjunction with Site H45(N), core path along eastern boundary to upgraded to adoptable standard and integrated into layout. • Flood Risk and Drainage Impact Assessment required. • Existing SUDS pond to utilised if possible, with modifications if necessary.
Developer Contributions	<ul style="list-style-type: none"> • Developer contributions required for education and core path upgrade, and potentially also community facilities and off-site road network improvements depending on further investigations. Need for off-site open space contributions dependent on extent of on-site provision. • 25% affordable housing to be provided.

H45(N)	PARKHALL FARM 3 (NORTH)
Green Network	<ul style="list-style-type: none"> • Existing woodland to east to be retained and brought under management (landscape component 2 on Map 5). • Burn corridor to be enhanced and managed in conjunction with sites H44-H46, including removal of invasive species and a 10 m landscape buffer between development and the SINC (landscape component 3 on Map 5). • Tree survey required to inform layout and design. • Landscape plan required to accompany detailed proposals. • Appropriate ecological surveys to be carried out including protected species surveys.
Design	<ul style="list-style-type: none"> • Parkhall Farm steading and former nursery to be removed and redeveloped. • Existing dwellinghouses on the southern part of the site are likely to remain. These should be sensitively integrated into the layout in a way that respects their amenity and privacy. • House designs and palette of materials should take inspiration from traditional rural forms. • Design Statement will be required.
Open Space	<ul style="list-style-type: none"> • Recreational open space to be located within site with play provision. • Depending on scale on on-site provision, contributions to off-site upgrading of open space may also be required, in line with SG13.
Access & Drainage	<ul style="list-style-type: none"> • Depending on the access option chosen, access will either be from the south over the burn; from the west from H44; or both as part of the through road from Glendevon Drive to Vellore Road. • Site layout will have to make provision for access to H47 and continuing access to 'Shamistle'. • In conjunction with Site H44, core path along western boundary to be upgraded to adoptable standard and integrated into layout. • Flood Risk and Drainage Impact Assessment required. • SUDS provision to be integrated as a positive landscape feature within development.
Developer Contributions	<ul style="list-style-type: none"> • Developer contributions required for education and core path upgrade, and potentially, community facilities and off-site road network improvements depending on further investigations. Need for off-site open space contributions dependent on extent of on-site provision. • 25% affordable housing to be provided.

H45(S)	PARKHALL FARM 3 (SOUTH)
Green Network	<ul style="list-style-type: none"> • Burn corridor to be enhanced and managed in conjunction with sites H44-H46, including removal of invasive species and a 10 m open space buffer between development and the SINC (landscape component 3 on Map 5). • Power line wayleave to form landscaped open space at western end of site (landscape component 7 on Map 5). • Tree survey required if development affects any trees on the site. • Landscape plan required to accompany detailed proposals • Appropriate ecological surveys to be carried out including protected species surveys.

Design	<ul style="list-style-type: none"> • Frontage with Vellore Road should maintain existing rural character through retention and upgrading of stone wall with roadside planting buffer to housing behind. This will provide a high-quality frontage with filtered views into the site, particularly when approached from the east. This will assist in the transition in character between rural area and the urban edge. • A gateway feature (identified on Map 5) as part of the vehicular access to the site would assist in the above objective. Layout should provide a positive built frontage to the burn corridor open space, rather than rear fences, resulting in the burn corridor forming an integral part of the site, and contributing to overall placemaking. • House designs and palette of materials should take inspiration from traditional rural forms. • Design Statement will be required.
Open Space	<ul style="list-style-type: none"> • Burn corridor and power line wayleave are likely to meet passive open space requirements. • Active open space requirement likely to be met by off-site contributions to facilities on other sites.
Access & Drainage	<ul style="list-style-type: none"> • Access will be from Vellore Road. Depending on the access option chosen, this will either serve only H45(S); be required to provide onward access to H45(N) and H47; or be part of a primary route connecting Vellore Road to Glendevon Drive. • In conjunction with Site H46, core path along western boundary to be upgraded to adoptable standard and integrated into layout. • Flood Risk and Drainage Impact Assessment required. • If not shared with H45(N), SUDs provision to be integrated as a positive landscape feature within development.
Developer Contributions	<ul style="list-style-type: none"> • Developer contributions required for education and core path upgrade, and potentially also community facilities and off-site road network improvements depending on further investigations. Need for off-site open space contributions dependent on extent of on-site provision. • 25% affordable housing to be provided.

H46	PARKHALL FARM 4
Green Network	<ul style="list-style-type: none"> • Burn corridor and SINC to be enhanced and managed in conjunction with sites H44 and H45, including removal of invasive species and a 10 m landscaped buffer between development and the SINC (landscape component 3 on Map 5) • Power line wayleave to form landscaped open space at north east corner of site (landscape component 7 on Map 5) • Tree survey required if development affects any trees on the site. • Landscape plan required to accompany detailed proposals • Appropriate ecological surveys to be carried out including protected species surveys.
Design	<ul style="list-style-type: none"> • Housing frontage to Vellore Road is required, with existing stone wall retained and incorporated as far as possible. • House designs and palette of materials should take inspiration from traditional rural forms. • Design Statement will be required.

Open Space	<ul style="list-style-type: none"> • Burn corridor buffer and power line wayleave may meet some passive open space requirements, but requirement for off-site contributions likely, • Active open space requirement likely to be met by off-site contributions to facilities on other sites.
Access & Drainage	<ul style="list-style-type: none"> • Access will be from Vellore Road. Depending on the access option chosen, this will either serve only H46; or be part of a primary route connecting Vellore Road to Glendevon Drive. • In conjunction with Site H45(S), core path along eastern boundary to be upgraded to adoptable standard and integrated into layout. • Flood Risk and Drainage Impact Assessment required.
Developer Contributions	<ul style="list-style-type: none"> • Developer contributions required for education and core path upgrade, and potentially also community facilities and off-site road network improvements depending on further investigations. Need for off-site open space contributions dependent on extent of on-site provision. • 25% affordable housing to be provided if site capacity is 20 units or more.

H47	THE HAINING
Green Network	<ul style="list-style-type: none"> • Safeguarding and management of the policy woodland associated with the Haining is paramount (landscape component 1 on Map 5) • Three clearings have been identified (see Map 5) which are areas of less mature scrub and trees which could potentially be developed. • Tree survey required which will confirm the number and location of trees which could be felled and which should be retained, as well as root protection zones required. • Replacement planting will be required to reinforce the policy woodland and replace any trees lost. • Landscape plan required to accompany detailed proposals • Appropriate ecological surveys to be carried out including protected species surveys
Design	<ul style="list-style-type: none"> • Site constraints will only allow development of small pockets of low density housing, designed in a bespoke manner to fit sympathetically within the policy woodland and rural setting, to deal satisfactorily with topography, and to respect the various components of designed landscape. • Number of units to be derived from assessment of sites constraints, rather than indicative capacity stated in LDP. • Development should respect the setting of the B-listed Haining, particularly if it is in close proximity to, or visible from, the Haining. • A Design Statement incorporating a Landscape and Visual Impact Assessment and Heritage Impact Assessment will be required to demonstrate that the design solution meets the above objectives.
Open Space	<ul style="list-style-type: none"> • The restored policy woodland may satisfy functional passive open space requirements • Active open space requirement likely to be met by off-site contributions to facilities on other sites.
Access & Drainage	<ul style="list-style-type: none"> • Access is expected from site H45(N) under all strategic access options. It is unlikely that the existing South Avenue to the Haining

	<p>could serve additional development without substantial upgrading, but this could be explored.</p> <ul style="list-style-type: none"> • The core path within the boundary of the site will require to be upgraded. • Drainage Impact Assessment required.
Developer Contributions	<ul style="list-style-type: none"> • Developer contributions required for education and core path upgrade, and potentially also community facilities and off-site road network improvements depending on further investigations. Need for off-site open space contributions dependent on extent of on-site provision. • Development unlikely to be reach affordable housing threshold of 20 units

H48	TORAVON FARM
Green Network	<ul style="list-style-type: none"> • Landscape framework needed to break up and reduce visual impact of development. This should comprise structure planting along line existing north-south hedgerows/tree belts (landscape components 5 and 6 on Map 5), and east-west planting along the most steeply sloping section of the site (landscape component 8 on Map 5) • Tree survey required if development affects any trees on the site. Any existing mature trees and woodland suitable for retention will require root protection zones which will influence overall layout. • Landscape plan required to accompany detailed proposals • Appropriate ecological surveys to be carried out including protected species surveys
Design	<ul style="list-style-type: none"> • Visual impact of development needs careful consideration given topography and elevated nature of southern part of site. • Housing frontage to Vellore Road is required, with appropriate boundary treatment. • Landscape framework elements 7 and 5 along the eastern boundary of the site will provide a robust urban edge. • House designs and palette of materials should take inspiration from traditional rural forms. • Design statement will be required.
Open Space	<ul style="list-style-type: none"> • Recreational open space to be located within site with the provision of a play area. Depending on scale on on-site provision, contributions to off-site upgrading of open space may also be required, in line with SG13.
Access & Drainage	<ul style="list-style-type: none"> • Access to be off Vellore Road, with elevated southern section likely to be accessed from Manor Wynd • Core path along eastern boundary to upgraded. • Flood Risk and Drainage Impact Assessment required. • SUDS provision likely to be in north-east corner of site where it should be integrated as a positive landscape feature within development, integrating with landscape framework element 7, shown on Map 5.
Developer Contributions	<ul style="list-style-type: none"> • Developer contributions required for education and core path upgrade, and potentially also community facilities and off-site road network improvements depending on further investigations. Need for off-site open space contributions dependent on extent of on-site provision. • 25% affordable housing to be provided.

APPENDIX: RELEVANT PLANNING POLICY

NATIONAL POLICY

Scottish Planning Policy (2014): <http://www.gov.scot/Publications/2014/06/5823>

Designing Streets (2010): <http://www.gov.scot/Publications/2010/03/22120652/0>

LOCAL DEVELOPMENT PLAN POLICY

HSG02 Affordable Housing	GN01 Falkirk Green Network
HSG04 Housing Design	GN02 Landscape
INF02 Developer Contributions to Community Infrastructure	GN03 Biodiversity and Geodiversity
INF03 Protection of Open Space	GN04 Trees, Woodland and Hedgerows
INF04 Open Space and New Residential Development	GN05 Outdoor Access
INF05 Education and New Housing Development	D01 Placemaking
INF06 Healthcare and New housing Development	D02 Sustainable Design Principles
INF07 Walking and Cycling	D03 Urban Design
INF08 Bus Travel and New Development	D04 Low and Zero Carbon Development
INF02 Developer Contributions to Community Infrastructure	D09 Listed Buildings
INF10 Transport Assessments	D12 Historic Gardens and Designed Landscapes
INF11 Parking	RW05 The Water Environment
INF12 Water and Drainage Infrastructure	RW06 Flooding
	RW09 Waste Reduction in New Development
	RW10 Vacant, Derelict, Unstable and Contaminated Land

RELEVANT SUPPLEMENTARY GUIDANCE

SG02	Neighbourhood Design
SG05	Biodiversity and Development
SG06	Trees and Development
SG09	Landscape Character Assessment and Landscape Designations
SG10	Education and New Housing Development
SG11	Healthcare and New Housing Development
SG12	Affordable Housing
SG13	Open Space and New Development
SG15	Low and Zero Carbon Development

Design Statements SPG (Non-statutory)

Contaminated Land SPG (Non-statutory)

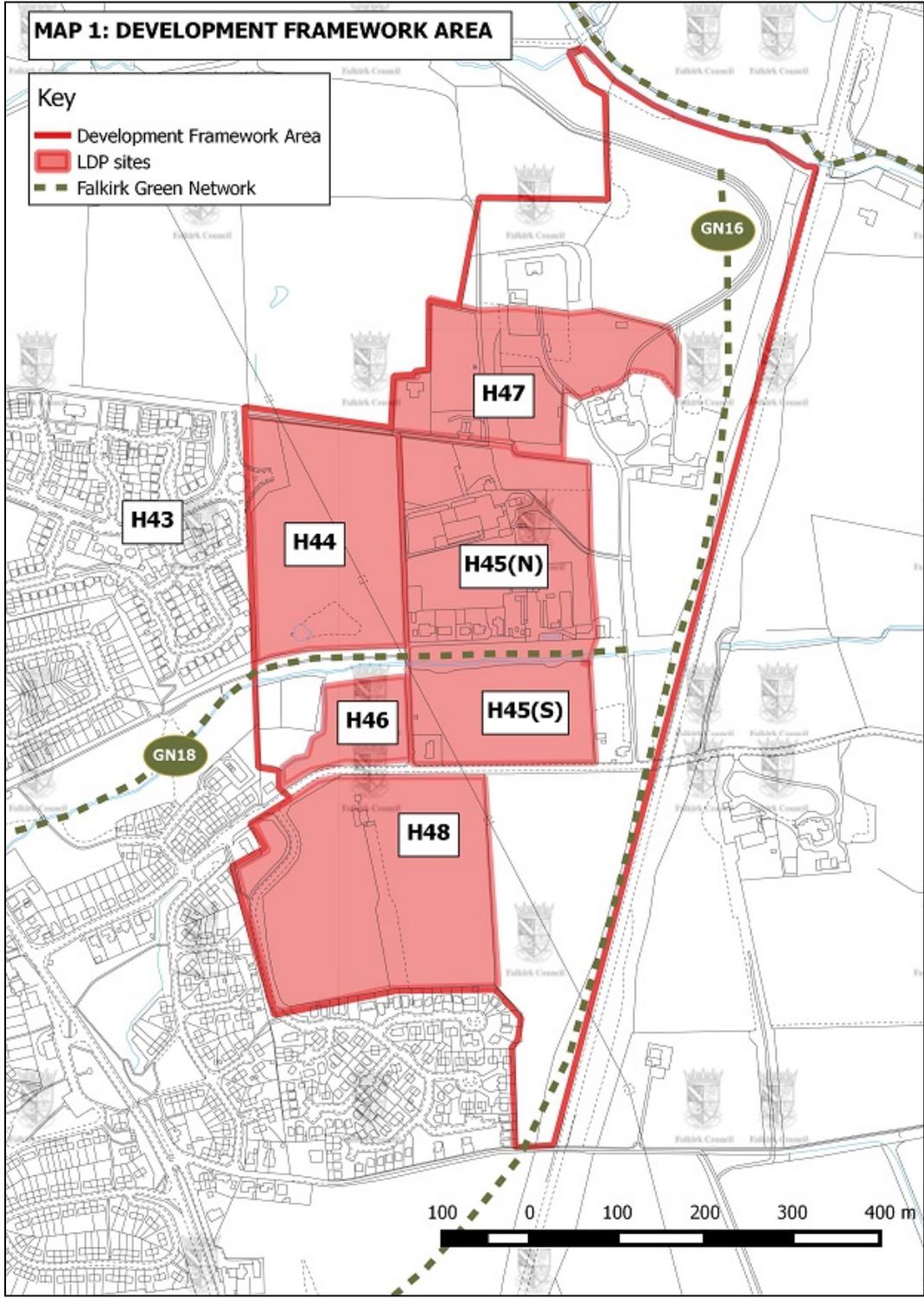
Flooding and Sustainable Urban Drainage Systems SPG (Non-statutory)

Travel Plan SPG (Non-statutory)

MAP 1: DEVELOPMENT FRAMEWORK AREA

Key

- Development Framework Area
- LDP sites
- Falkirk Green Network



MAP 2: Site Character, Assets and Constraints

Key

Development Framework Area

Overhead power line

Site of Importance for Nature Conservation (SINC)

Existing SUDS

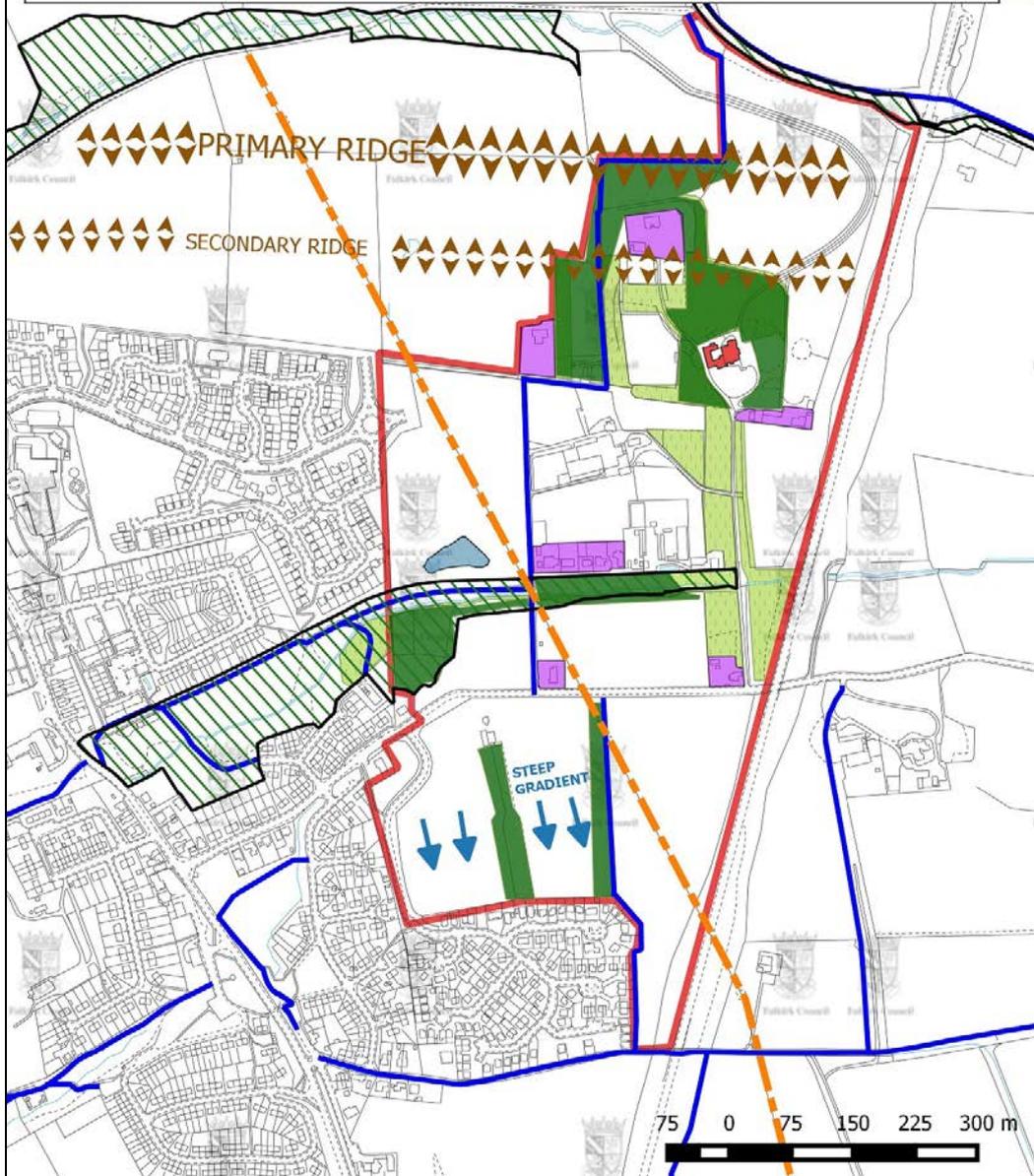
B-Listed Building

Ancient and Semi-natural woodland

Other woodland and trees

Existing dwellings

Core Paths



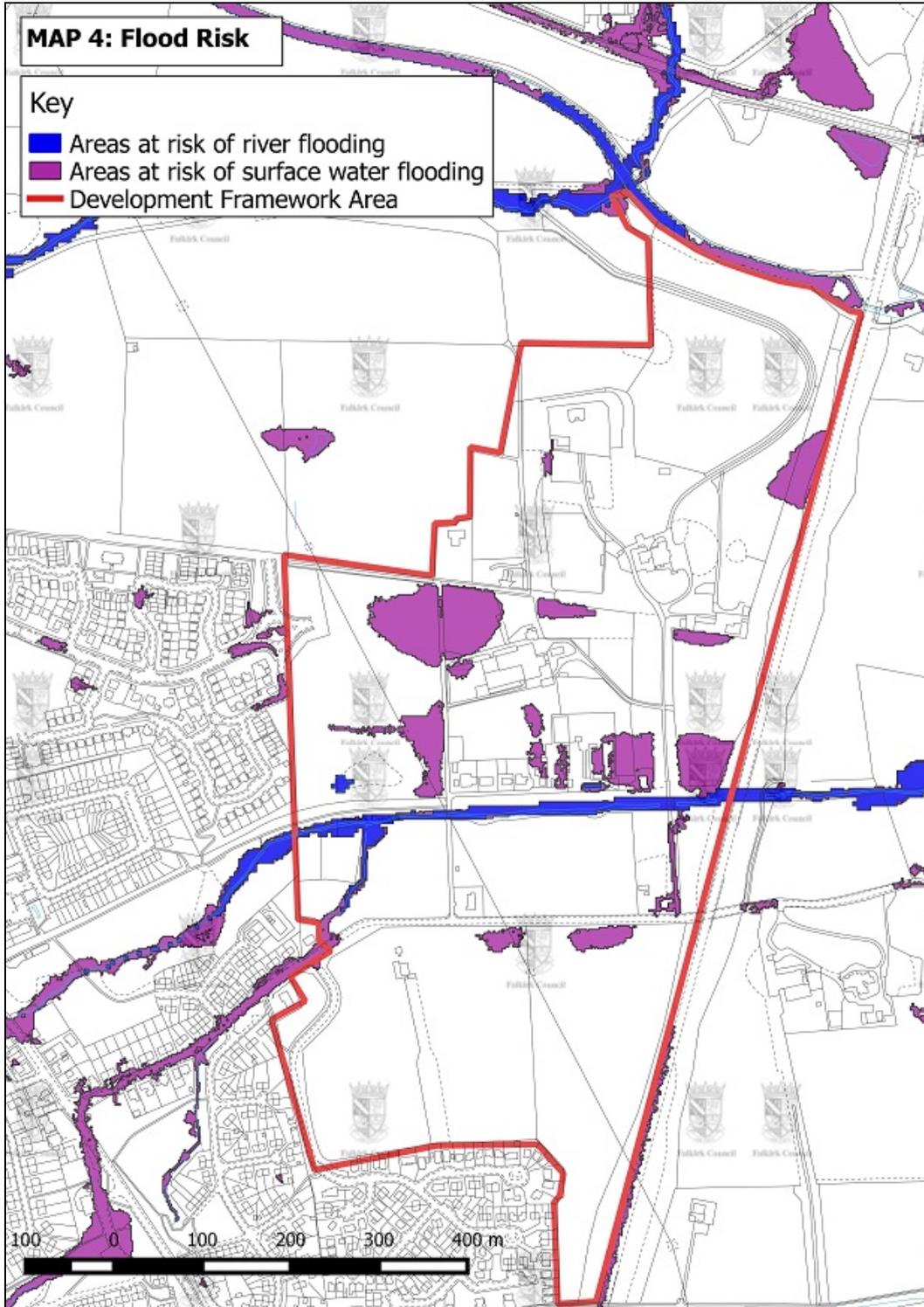
MAP 3: Historic Map of Parkhall Estate



MAP 4: Flood Risk

Key

- Areas at risk of river flooding
- Areas at risk of surface water flooding
- Development Framework Area



MAP 5: Development Framework Plan

Key

- Core Paths to be upgraded
- Landscape Framework components (See section 3.2.2)
- Potential H47 development areas
- Development Framework Area
- Play provision
- Potential gateway to urban edge (See H45(S) site requirements)
- Existing SUDS
- High-quality Vellore Road frontage

