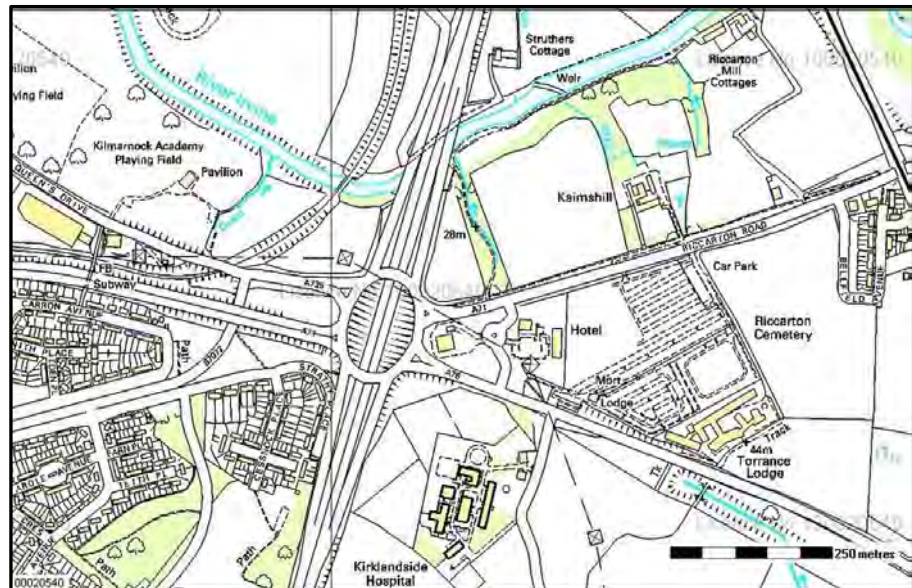


# Bellfield Interchange, Kilmarnock Development Options Stage 1 Assessment

On behalf of **East Ayrshire Council**

Date of Report: April 2020

Our Ref: KMcG/2019/06/0046





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## 1.00 Introduction

1.01 Graham + Sibbald (G+S) has been appointed by East Ayrshire Council to undertake a Stage 1 Assessment of potential development options for land adjacent to Bellfield Interchange, Kilmarnock.

1.02 The aim of the Stage 1 Assessment is to identify logically prioritised options that can take advantage of the development potential at Bellfield Interchange. The purpose of this Stage 1 Assessment is to identify site constraints and mitigation measures required to support development and to identify development options that would support economic growth and job creation within East Ayrshire within the context of the Ayrshire Growth Deal (AGD).

### **Scope of Stage 1 Assessment**

1.03 East Ayrshire Council's identified scope of the Stage 1 Assessment is as follows:

- Identify and analyse constraints and highlight key land within the study area that has the greatest development potential.
- Identify mitigation opportunities for constrained land within the study area in order to maximise the amount of available developable land.
- Assess proposed and other potential land uses, utilising all available information on current land use demand including local development plan 2 (LDP2) call for sites information, against current market conditions and identify suitable preferred end uses.
- Consider the potential of proposed public and private infrastructure improvements within the area.
- Contrast land availability with preferred end uses and potential infrastructure improvements ensuring compatibility.
- Establish any necessary infrastructure improvements and constraint mitigation measures.
- Identify appropriate delivery mechanisms with regards to public, private and joint venture opportunities.
- Identify potential external public and private funding sources to support delivery.
- Identify and consider the economic and social impacts of preferred end uses and infrastructure improvements on the wider area.
- Identify place based requirements to assist in attracting development opportunities.

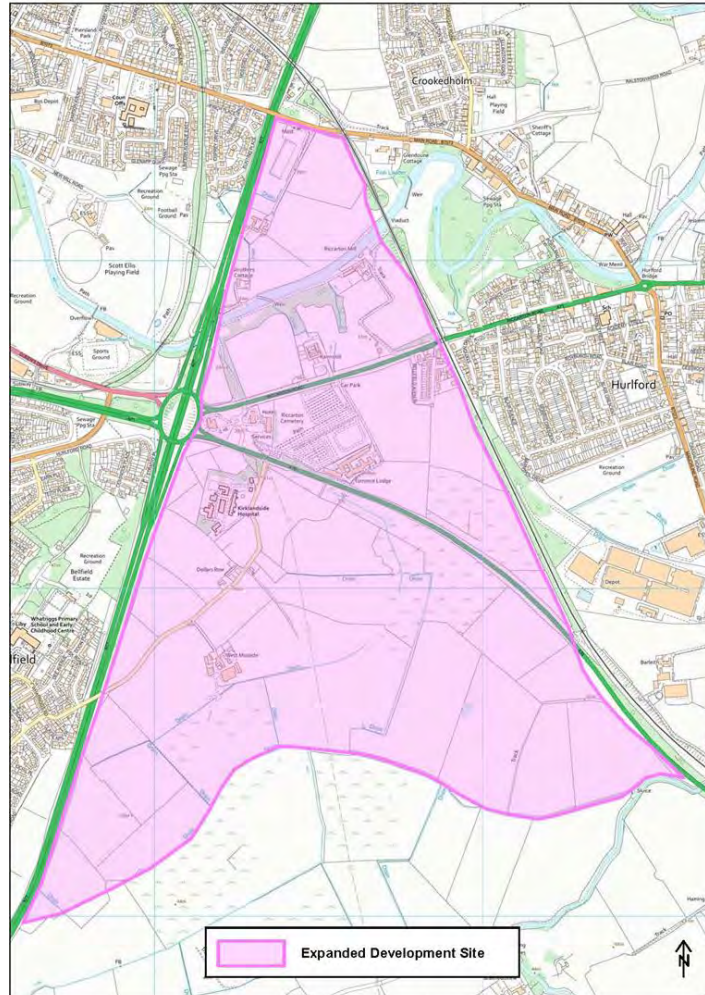
1.04 East Ayrshire Council required that, for the purposes of this Stage 1 Assessment, it should be assumed that traffic and transport constraints associated with the current capacity of Bellfield Interchange have been addressed.

1.05 East Ayrshire Council also required that the development options identified and assessed should focus solely on economic and community uses. The Bellfield Interchange area is out-with the Kilmarnock settlement boundary and has been identified by East Ayrshire Council as a future growth area. The scope of this Stage 1 Assessment has not considered or assessed the potential for residential development at this location.



1.06

The extent of the study area for this Stage 1 Assessment is shown on the map extract below.



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### Project Team

1.07

This Stage 1 Assessment has been delivered by a multi-disciplinary Project Team led by Graham + Sibbald. The table below lists the consultants involved in undertaking this Stage 1 Assessment and their roles and responsibilities.



Consultant	Roles and Responsibilities
Graham + Sibbald	Project Lead Provision of commercial development and planning consultancy advice. Undertaking market assessment and engagement with key stakeholders, identification of potential development options and associated delivery models
Waterman Infrastructure + Environment Ltd	Engineering and transport consultancy advice. Assessment of baseline site constraints and physical constraints/mitigation requirements associated with each identified option
Ekosgen	Economic consultancy advice. Provision of baseline economic review. Assessment of socio-economic impacts associated with each identified option

### Stage 1 Assessment Report Format

1.08

This Stage 1 Assessment Report comprises of the following sections:

- Section 2: Background Position
- Section 3: Baseline Economic Position
- Section 4: Baseline Site Conditions
- Section 5: Assessment of Development Options
- Section 6: Funding and Delivery Opportunities
- Section 7: Summary and Recommendations



## 2.00 Background Position

- 2.01 The Bellfield Interchange is recognised in the adopted East Ayrshire Local Development Plan 2017 (LDP) and by the Scottish Government as being a strategically important transport hub and one of the main gateways to Kilmarnock. It links several key routes on the transport network together, including:
- A71, which runs East and West across the interchange. The A71 connects Irvine to Edinburgh;
  - A77, which crosses under the interchange running north and south. 2 miles to the north of Bellfield Interchange the A77 merges with the M77 which links to the M8 and Glasgow;
  - A76, which originates at the interchange and runs south east. The A76 connects Kilmarnock to Dumfries; and the
  - A735 that acts as one of the main entrances to Kilmarnock and continues onto Kilmaurs, Stewarton and Dunlop.
- 2.02 East Ayrshire Council recognises the development potential around this area and wishes to realise the potential as part of the AGD and take advantage of the many transport connections leading to local and regional destinations. As demonstrated by the road connectivity detailed above, the Bellfield Interchange area is the most accessible area in East Ayrshire for motorised traffic.
- 2.03 East Ayrshire Council is aware that there are constraints on the current infrastructure. The interchange has peak hour queues causing tailbacks and delays across several local and regional routes. There is a risk of accidents on an almost daily basis as well as impacts on business and commuters caused by traffic queuing delays.
- 2.04 The Bellfield Interchange is an asset controlled by Transport Scotland, with East Ayrshire Council having no direct control over the development or maintenance of the Interchange. Transport Scotland has agreed to work with the Council to develop medium and long term solutions to the on-going problems. Separate studies will be conducted to investigate these issues. For the purposes of this Stage 1 Assessment it has been assumed that the known capacity issues associated with Bellfield Interchange have been addressed.
- 2.05 Crucial to any long-term solutions at the Bellfield Interchange will be an understanding of the possibilities for future development so that coherent, joined-up thinking is applied to realising the area's development opportunities and putting in place the infrastructure required to make this happen. The purpose of this Stage 1 Assessment is to start the process of identifying the development possibilities for the area around the Interchange in support of the AGD and the next LDP for East Ayrshire.



## Adopted East Ayrshire Local Development Plan 2017

- 2.06 The East Ayrshire Local Development Plan (LDP) was adopted in April 2017. The LDP sets out how the Council wants to see East Ayrshire develop over the next 10-20 years. The LDP takes a proactive look at how the Council can create more successful places.
- 2.07 Paragraph 2.2 of the LDP identifies the following vision for East Ayrshire:
- “East Ayrshire will be a desirable place in which to love, work, invest and visit. It will have a buoyant, sustainable economy with varied and plentiful employment opportunities and pleasant, well designed and affordable places to live. It will contribute to providing a low carbon economy through the use of renewable energy technologies. Its town centres will provide an attractive, welcoming focus for living, shopping, working and leisure.*
- East Ayrshire will have capitalised on its rich heritage, its quality historic built and natural environment and its close proximity and excellent road and rail links to Glasgow. This transformation will have taken place in a sustainable manner, ensuring that a careful balance is struck between economic growth and protecting the environment.*
- Above all, it will be a competitive place offering a good quality of life for its residents and for those who will be attracted to live here in the future.”*
- 2.08 The LDP identifies that Kilmarnock will remain East Ayrshire’s location for major development and by 2035 the town will have found a new economic role. Kilmarnock is identified as having the greatest capacity for growth with most major developments and major regeneration projects being directed to the town, as existing services and infrastructure have the capacity to accommodate development growth.
- 2.09 The LDP identifies that future business and industrial growth should be accommodated to the east of the town and that this will be considered in a future review of the LDP. Volume 2: Settlement Maps sets out the development opportunities for the Kilmarnock Area. Kilmarnock 5 (page 65 of Volume 2 of the LDP) details that:
- “A future industrial growth area has been identified to the east of Kilmarnock. FGA4 is situated in the vicinity of the Bellfield Interchange and is programmed to start post 2025. This does not currently constitute a formal site designation; rather it indicates where Kilmarnock’s future business and industrial expansion will take place.*
- Note: In preparing future proposals for this site, developers will require to work closely with Transport Scotland to assess the impact of the development on the Bellfield Interchange and that satisfactory access can be taken from the A76 if this is required. This matter, along with all other issues relating to the sites’ future formal identification, will form part of a future review of this LDP.”*
- 2.10 The Kilmarnock Settlement Map shows the location of the proposed future growth. This is shown by the purple arrows and reference Future Growth Area 4 (FGA4).



2.11 Appendix 1 contains a map showing the extent of the study area subject to this Stage 1 Assessment and the extent of the Future Growth Area. The boundaries of the study area and Future Growth Area were provided by East Ayrshire Council in the tender documentation for this Stage 1 Assessment.

2.12 Section 5 of the LDP Volume 1: Strategy and Policy relates to revitalising the economy. Paragraph 5.1.8 details that:

*“Kilmarnock provides a high quality and attractive environment for investment from Business and Industrial development due to its excellent road and public transport links and attractive setting. The M77 business and investment corridor is a new concept being promoted through this LDP that will further promote Economic Development. It extends from East Renfrewshire in the north to Ayr and the Enterprise Zone at Prestwick Airport in South Ayrshire. Its purpose is to help link Ayrshire with the Glasgow conurbation highlighting viable economic development opportunities along its length and to complement and capitalise on the implementation of the Glasgow and Clyde Valley City Deal. The key elements of this concept are development at North Kilmarnock and a future growth area at Kirklandside, close to the Bellfield Interchange, the main entry points to Kilmarnock from the M77/A77.”*

2.13 Paragraph 5.1.12 continues that:

*“A future business and industrial future growth area is identified with development being programmed to start post 2025. This is a highly visible strategic location adjacent to the Bellfield Interchange, a significant entry point into Kilmarnock where the M77/A77 meets the A71 and A76. It is envisaged that new business and industrial development at this location will assist to consolidate the M77 Investment Corridor and will greatly assist in helping to strengthen and diversify the economy of Kilmarnock and will further develop links with Prestwick Airport. The Council will carry*





*out a feasibility study for this area and will identify exact site boundaries in a future review of the LDP.”*

- 2.14 This Stage 1 Assessment has been commissioned in accordance with the requirement set out in the LDP for a feasibility study to be undertaken to determine the extent of future business and industrial development that could be accommodated adjacent to the Bellfield Interchange.
- 2.15 Section 6 of the LDP relates to energy and infrastructure and identifies that East Ayrshire’s vision of a buoyant and sustainable economy relies on efficient transportation links. It has been identified that there are specific locations which would benefit from improvements to ensure that East Ayrshire’s transportation system runs as efficiently as possible. Bellfield Interchange has been highlighted as a priority for improvement.
- 2.16 Transportation issues associated with Bellfield Interchange were assessed in detail as part of the Examination process associated with the preparation of the adopted LDP 2017. Transport Scotland had raised concerns at the time in relation to capacity issues at Bellfield Interchange and the ability to accommodate housing allocations identified in the LDP and future economic and commercial growth. A hearing session on transportation issues was undertaken as part of the Examination. As a result, specific modifications were made to the LDP prior to adoption in relation to the requirements to assess capacity and constraints at Bellfield Interchange.
- 2.17 Paragraph 6.2.4 under subsection 4 entitled, the upgrade and improvement of the Bellfield Interchange states that:
- “Bellfield Interchange is the most important traffic junction in East Ayrshire being the main entry point to Kilmarnock and its town centre. It also provides access from the strategic road network to other very important business and employment locations (e.g. Moorfield and the newly created Moorfield Park) and infrastructure (e.g. Crosshouse University Hospital). The Council accepts that there are peak hour queues and delays at the Bellfield Interchange which could significantly impact on new development in plan periods after 2025. The Council has concerns that the economic development and regeneration of Kilmarnock as well as economic development within Ayrshire generally could potentially be constrained by a lack of available capacity at this junction. In particular there is significant conflict between strategic and local traffic that has implications for road safety (especially during the evening peak), journey times and reliability.*
- Despite these conflicts, there is some available capacity within the interchange to enable the identified housing, commercial and retail development allocations within the Local Development Plan to be developed within the lifetime of the Plan i.e. to 2020/21 and beyond to 2025/26 without causing any unacceptable road safety or capacity issues.*
- Ideally, post-2025/26, improved capacity would be desirable to ensure that economic, commercial and residential development will not be compromised whilst also addressing the future economic needs for the wider Ayrshire conurbation.*
- There may be a requirement for ‘queue management’ mitigation options to be introduced post 2025/26 to ensure that queuing at the interchange, especially on the southbound off ramp, is safe for users of the trunk road network.*



*The Council will introduce in the short to medium term (2016 / 2021) an active queue loop detection and signage which will warn of any queues on the southbound off slip which could potentially compromise road safety for southbound traffic on the trunk road.*

*Within the current LDP, the Council will commission a study to look at what mitigation options are available in the period after 2025/26 to address queue capacity and queue management and associated safety concerns within the current footprint of the interchange without the requirement for STPR commitment and funding from Transport Scotland. The study will examine queue management options, including a parallel diverge slip road extension to the A77 southbound off ramp. The study will seek to ensure that proposed LDP future growth areas to 2035 and beyond can be safely developed without compromising road safety. The Council would look to implement the findings of the study in the period 2021/2026. This will allow all relevant consultations to be carried out and for proportionate developer contributions to be sought in the next Local Development Plan.*

*The Council will also monitor queuing at the Bellfield Interchange to determine whether consideration will need to be given to advancing implementation of any of the proposals in the study.*

*The commitment to provide active queue loop detection and signage and undertake the queue management study is included in the Action Programme for this Local Development Plan.*

*In addition, the Council would wish to commission a second study which will be undertaken in two stages. The first stage will examine the potential for economic, commercial and other development including residential development if capacity at the Bellfield Interchange was enhanced. The first stage will be undertaken in conjunction with the study to address mitigation options for queue capacity and management. The second stage will identify, test and cost options to improve traffic capacity issues at the Bellfield Interchange. This second study will be taken forward by the three Ayrshire Councils subject to the Ayrshire Growth Deal, as submitted, being approved by the Scottish Government.*

*While the commitment to carry out this second study will be included in the Action Programme, it will be subject to approval of the Ayrshire Growth Deal bid. It will be prepared in conjunction with Transport Scotland, Strathclyde Partnership for Transport, and relevant stakeholders, landowners and developers. Any conclusions arising from the study will be incorporated into the next LDP for East Ayrshire (LDP2), subject to the availability of committed financial resources.*

*Within the context of the findings of both studies, LDP 2 will examine whether proportionate developer contributions are appropriate for identified housing, commercial and retail development allocations and, if they are, what level of contributions will be required. It should be noted that the Council is committed, as detailed in the most recent Development Plan Scheme, to producing and consulting upon the Main Issues Report for LDP 2 by the end of 2017, with a Proposed Plan being produced and consulted upon by the end of 2018."*



2.18

Paragraphs 6.3.19 – 6.3.22 contains further details in relation to East Ayrshire Council's commitment to undertake studies in relation to Bellfield Interchange to guide the preparation of the second LDP. These paragraphs outline that:

*"6.3.19 As detailed in Section 4, the Council will commission a study to look at what mitigation options are available to address capacity and queue management and associated safety concerns within the current footprint of the Interchange without the requirement for STPR commitment and funding from Transport Scotland. This study will examine queue management options to ensure that proposed LDP future growth areas to 2035 and beyond can be safely developed without compromising road safety. The Council would look to implement the findings of this study in the period 2021/2026. This will allow all relevant consultations to be carried out and for proportionate Developer Contributions to be sought in the next Local Development Plan.*

*6.3.20 In addition, a second study to identify, test and cost options to improve traffic capacity issues at the Bellfield Interchange will be taken forward by the three Ayrshire Councils subject to the Ayrshire Growth Deal, as submitted, being approved by the Scottish Government. This second study, will be in two stages: the first stage will examine the potential for economic, commercial and other development including residential development if capacity at the Bellfield Interchange was enhanced; and the second stage will consider what improved capacity options are available, and test and cost these options. The first stage will be undertaken in conjunction with the study to address mitigation options for queue capacity and management. The second stage will identify, test and cost options to improve traffic capacity issues. The commitment to carry out this second study will also be included in the Action Programme but will be subject to approval of the Ayrshire Growth Deal bid. It will be prepared in conjunction with Transport Scotland, Strathclyde Partnership for Transport, and relevant stakeholders, landowners and developers. Any conclusions arising from the report are intended to be incorporated into the next LDP for East Ayrshire (LDP2), subject to the availability of committed financial resources.*

*6.3.21 It is intended that LDP 2 will examine whether proportionate developer contributions are appropriate for identified housing, commercial and retail development allocations and, if they are, what level of contributions will be required. In doing so, the required level of developer contributions would require to be subject to full consultation throughout the preparation of LDP 2 and the detail on how the contributions would be collected and held is intended to be detailed within Developer Contributions Supplementary Guidance for that Plan.*

*6.3.22 It should be noted that the Council is committed, as detailed in the most recent Development Plan Scheme, to producing and consulting upon the Main Issues Report for LDP 2 by the end of 2017, with a Proposed Plan being produced and consulted upon by the end of 2018."*

2.19

In accordance with the above LDP requirement, East Ayrshire Council commissioned Amey Consulting to re-assess potential improvement options for Bellfield Interchange, within the confines of the existing footprint. Amey Consulting prepared an Options Appraisal in December 2018 and a summary of this report is included in paragraphs 2.28 – 2.37 below. The scope of this Options Appraisal undertaken by Amey Consulting was to consider options to improve capacity to support all development proposals and allocations within Kilmarnock (including residential and commercial developments).

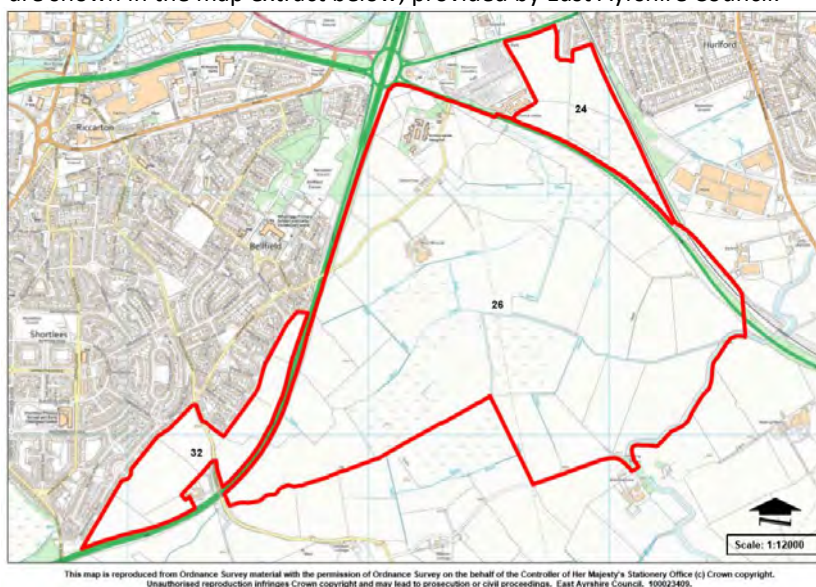


2.20 This Stage 1 Assessment has been commissioned in accordance with the above LDP requirements to examine the development potential within the identified FGA4, if capacity at Bellfield Interchange is enhanced. The growth area has been specifically identified for future business and industrial expansion to support economic growth. The scope of this Stage 1 Assessment therefore focuses on capacity for development at this location which would support economic growth within East Ayrshire.

### Local Development Plan 2

2.21 East Ayrshire Council has commenced preparation of their Second Local Development Plan and the Call for Sites consultation was undertaken in 2017/18

2.22 Three submissions were made to the Call for Sites consultation to promote land around the Bellfield Interchange. The location of these potential development sites are shown in the map extract below, provided by East Ayrshire Council.



2.23 All three submissions were made by Hope Homes. Site Reference 24 extends to 15.2 hectares and has been promoted for a mixed use development comprising of 180 residential units, business, commercial, rail halt, new woodland and open space.

2.24 Site Reference 26 extends to 213.09 hectares and has been promoted for a residential led masterplan with community park and nature conservation wetland and enhancement of flood defences. The proposal would also include areas of open space/landscaping, leisure and community facilities, a new rail halt and a park and ride facility.

2.25 Site 32 extends to 23 hectares and has been promoted for residential use. In April 2016 Hope Homes (Scotland) Ltd submitted an application for planning permission in principle for the erection of a residential development with associated access roads, open space, landscaping and other required infrastructure (application reference: 16/0279/PPP). This application was considered at Committee in April 2017 and was recommended for approval subject to a Section 75 Agreement. At the time of this Assessment (March 2020) a decision notice had not been issued and it is understood that developer contribution negotiations are ongoing.



2.26 Hope Homes submitted a representation to promote all three areas of land jointly for residential development. They are seeking an allocation for residential development in the emerging Local Development Plan 2 and consider that this site supports the long term growth of Kilmarnock. This land was promoted for a similar residential led development during the preparation of the adopted 2017 Local Development Plan. The allocation of the land for residential development was not supported by East Ayrshire Council and the Reporter agreed with the Council's position at Examination stage.

2.27 East Ayrshire Council is currently aiming to publish the Main Issues Report for consultation in Spring 2020 and thereafter, the Proposed Plan immediately before in Quarter 4 of 2021.

### **Amey Consulting Bellfield Interchange Options Appraisal**

2.28 In December 2018, Amey Consulting prepared a Stage 1 Options Appraisal for Bellfield Interchange. The purpose of this Options Appraisal was to review the existing operation of the Bellfield Interchange and re-assess improvement options generated in a previous study that was carried out by Amey on behalf of Transport Scotland (A77/A76 Bellfield Interchange, Traffic Simulation Report 2010). The aim of the Options Appraisal was to identify the impact of various traffic management options, within the current footprint of the roundabout, that attempt to improve the operation of Bellfield Interchange.

2.29 There is significant conflict between strategic and local traffic and the Interchange currently experiences peak period queueing and delays on a number of its entry arms. This has implications for road safety, journey times and journey time reliability. This limits the potential for future housing, commercial and retail development in East Ayrshire.

2.30 During the morning peak period the main queueing issues are on the A77 (Southbound, Kilmarnock exit off ramp), A71 (East) and A76 approach arms. In the evening peak period, the main queueing issues are on the A77 (North), A71 (East), A71 (West) and A735 approach arms. One of the main concerns is that, during the PM peak period, queues on the A77 (North) arm are often so long that they extend beyond the length of the slip road and onto the main carriageway. This results in vehicles queueing on lane 1 of the southbound A77 while traffic passes by at high speed in lane 2. As a result, the slow-moving or stationary vehicles queueing on the A77 carriageway are at risk of high speed rear end shunts which could lead to a severe or fatal collision.

2.31 Amey was tasked with investigating options that were created as part of the 2010 study that did not require additional land and thus fitted within the existing junction footprint. These options, using the numbering taken from the 2010 study, were:

- Option 1: Partial Signalling. Traffic signals introduced on the A77 North and South entry arms with corresponding signals on the roundabout to control the circulating flow at these entry points.
- Option 3: Full Signalling. Traffic signals introduced on all six arms of the roundabout with corresponding signals on the roundabout to control the circulating flow at these entry points.



- Option 5: Majority Signalling. Traffic signals introduced on five arms of the roundabout, excluding the A77 (South) arm, with corresponding signals on the roundabout to control the circulating flow at these entry points.

- 2.32 The Options Appraisal tested each of the above three options using the S-Paramics traffic microsimulation model developed for the 2010 study with 2025 forecast traffic. The S-Paramics modelling of each option, using the predicted 2025 traffic volumes, showed that none of the options tested were able to solve the traffic delay and queue length issues at the Bellfield Interchange. They all result in lengthy queues and extensive journey time delays.
- 2.33 The 2018 Options Appraisal considered the additional option of extending the length of the A77 southbound off-slip that approaches the north arm of Bellfield roundabout. This provides additional queueing space by extending the available length of two-lane queueing from about 370m to about 670m. This allows approximately 100 additional vehicles to queue safely, although it does not improve the operation of the roundabout. The outline design of a parallel diverge slip road at the southbound approach leading to Bellfield Interchange is included in this report.
- 2.34 The S-Paramics modelling of this additional option shows that, with the predicted 2025 traffic, the queue on the A77 (North) arm still extends beyond the length of the slip road and onto the A77 carriageway. However, more vehicles are able to queue safely. This modelling relies on a 2009 S-Paramics Base model that is now more than nine years old. In addition, the limited growth data has meant that a single growth factor has been applied uniformly to all of the turning movements on the roundabout. This does not take into account the likely variation in growth amongst the turning movements. Nor does it include any suppression of demand as a result of congestion.
- 2.35 Notwithstanding the limits of the current S-Paramics model and the limits of the current traffic forecasting, the extent to which the options fail to cope with the predicted 2025 traffic shows that none of the traffic signal options considered in the 2018 Options Appraisal are able to address the issues that are experienced at Bellfield Interchange. Options that are not constrained to be within the existing footprint of the roundabout will need to be considered. In the meantime the suggested auxiliary diverge that would extend the queueing capacity of the A77 southbound off-slip would provide a short-term safety improvement that would mean that traffic could queue more safely on the approach to Bellfield Interchange.
- 2.36 In the absence of any capacity improvements, the results of the study undertaken by Amey Consulting suggest that Bellfield Interchange will restrict the likely traffic growth in the surrounding area and will thus restrict development in East Ayrshire.
- 2.37 This Stage 1 Assessment of potential development options within the identified Future Growth Area however is based on the assumption that the current safety and capacity constraints at Bellfield Interchange have been addressed. This is a stand-alone assessment and is not linked to the findings of the Options Appraisal undertaken by Amey Consulting in 2018.

### **Ayrshire Growth Deal**

- 2.38 The economy of Ayrshire has under-performed over a substantial period of time, leading to Ayrshire having one of the highest unemployment rates in Scotland and



the UK, particularly among younger people. The purpose of the Ayrshire Growth Deal therefore is to put in place a set of funded interventions to help provide and accelerate the development of the right conditions required for inclusive and sustained economic growth throughout Ayrshire.

- 2.39 A Heads of Terms document has been signed between the three Ayrshire Councils and the Scottish and UK Governments. It commits the Scottish Government and the UK Government to work collaboratively with the 3 Ayrshire local authorities and other Ayrshire regional partners to deliver, over a period of time, a targeted programme of infrastructure development and agreed economic interventions. The Scottish Government will invest up to £103 million over 10 years, and the UK Government will invest up to £103 million over 15 years, subject to approval of final business cases for each project outlined in this document.
- 2.40 Regional partners will match this investment with up to £45.5 million. This will result in a Deal worth £251.5 million.
- 2.41 The Ayrshire partners believe that these interventions will unlock private investment of around £300 million and deliver around 7,000 new jobs across a wide range of sectors.
- 2.42 The context for many of the transport and traffic interventions in the AGD will be provided by the National Transport Strategy and the second Strategic Transport Projects Review 2 which, at the time of writing, is underway. Transport Scotland and the STPR consultant team have been working with the Ayrshire Authorities and regional partners to develop the evidence base around current traffic problems and opportunities, define transport planning objectives and undertake regional transport appraisal work. Outputs from this work will inform NTS policies and the work on STPR2 and will ensure that appropriate consideration is given to Ayrshire's transport infrastructure and the Growth Deal projects when setting the regional and national policy and intervention priorities.
- 2.43 Of particular note is the commitment in the AGD Heads of Terms to the development of an Advanced Manufacturing facility and site at Kilmarnock. The Advanced Manufacturing Investment Corridor aims to "... address market failure with investment in commercial space and will deliver on the need for high quality premises to support business growth and internationalisation opportunities.
- 2.44 The innovation centre will be the hub facility within the AMIC area and will establish Ayrshire as the go-to region for smart manufacturing and digital skills. The innovation centre will be delivered in partnership with Strathclyde University and will focus on Food & Drink innovation as this is a key sector for the local and regional economy. With Ayrshire supporting a substantial amount of the Scottish milk market the centre will have an initial focus on dairy innovation as a niche sub-sector, with substantial opportunity for development in both product development innovation and production process innovation."
- 2.45 The future Growth area at Bellfield has the potential to become the location for the AMIC project and hub facility.



## 3.00 Baseline Economic Position

### Introduction

3.01 This section of the report sets out the baseline economic conditions in East Ayrshire. It presents the current 'state of play' and trends over time in terms of the East Ayrshire's demographics, labour profile and economy. Section 3 also sets out a short policy context, outlining the key policies or interventions that are, or will, be affecting change in East Ayrshire, including the Ayrshire Growth Deal and the Economic Development Strategy. The baseline economic conditions and policy context are important to understand to assist with the identification of development options for the land around Bellfield Interchange.

3.02 The data presented in this section precedes the COVID-19 pandemic. Although the full economic impact of the pandemic is still unknown, it will undoubtedly have serious implications for economic growth and employment in East Ayrshire for the duration of the pandemic, and afterwards. East Ayrshire Council will undertake a full assessment of the impact of COVID-19 when the timing is right. The impact of the pandemic will make realising the full potential of the Bellfield Interchange even more important, as it could play a key role in the area's economic recovery through inward investment and large scale commercial and industrial development

### Demographics

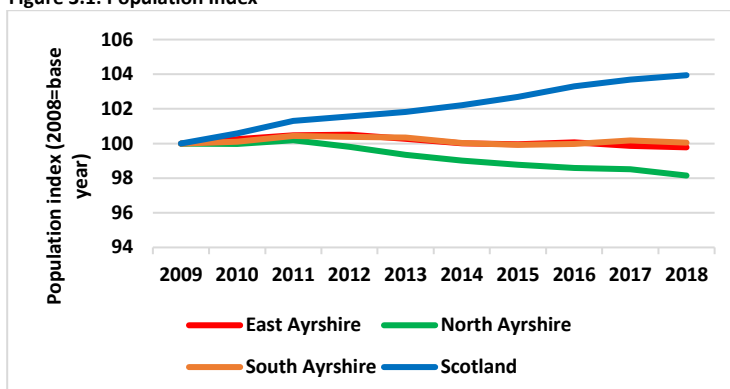
3.03 East Ayrshire had a population of 122,000 in 2018. As seen in Figure 3.1, this has remained relatively stable over the past decade in contrast to Scotland as a whole where the population has grown by 4%. East Ayrshire has the second largest population of the three Ayrshire councils, after North Ayrshire. Of the three, North Ayrshire's population is in decline, while the populations of East and South Ayrshire are both broadly stable.

3.04 East Ayrshire has five main towns: Kilmarnock, Cumnock, Galston, Stewarton and Dalmellington. Kilmarnock is the principle settlement with a population of circa 51,000, which is just over 40% of East Ayrshire's total population. There are also a number of small towns and villages within 5 miles of Kilmarnock including Hurlford, Kilmaurs and Crosshouse. Taking into account the population of the surrounding small towns and villages, this would increase the population of Kilmarnock and the hinterlands to circa 59,000.





Figure 3.1: Population Index



Source: Mid-Year Population Estimates, NOMIS

3.05 As with Scotland as a whole, the population of East Ayrshire is ageing. Compounding this, the area already has a slightly older population profile than nationally. East Ayrshire has seen a decline in the absolute number and share of working age (16-64 years) population over the last decade. In 2018, people of working age accounted for 63% compared to 65% in 2009. People of retirement age have grown in absolute and proportional terms, from 17% of the population in 2009 to 20% in 2018. This is in line with the broad trends nationally.

3.06 Population retention is expected to be a challenge for East Ayrshire in the future. It is forecast to fall by 3% by 2041, equivalent to over 3,700 people, and in contrast to a 5% forecast growth in Scotland's population. In East Ayrshire, current trends are expected to continue to 2041, with a further decline in people of working age and growth in people of retirement age. The overall decline in East Ayrshire is expected to be less steep than the forecasts for North and South Ayrshire.

3.07 Ayrshire as a whole is a relatively self-contained region. With the East Ayrshire population having remained stable, any movement is broadly evenly split between incomers and leavers, with incomers and leavers tending to come from, or move to, elsewhere in Ayrshire (South and North) or Glasgow City.

3.08 East Ayrshire also faces the challenge of a relatively low level of qualifications amongst its population, in comparison to Scotland as a whole. In 2018, 37% of East Ayrshire's working age population was qualified to degree level compared to 44% nationally. Also, 12% had no qualifications compared to 10% in Scotland.

#### Demographics – implications for the Bellfield Interchange

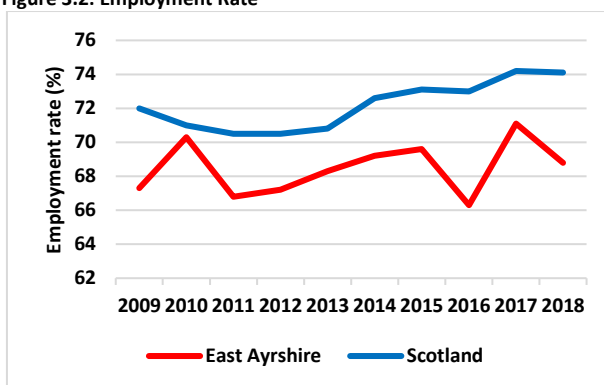
3.09 A declining working age population will mean a smaller labour pool for potential employers at any future commercial/economic development at Bellfield to recruit from. Similarly, a less qualified population may have implications for employers looking to recruit for roles that require qualifications and higher skills levels. However, Bellfield's good transport connections to Glasgow in the north (M77) and Ayr in the South (A77) will widen the recruitment pool to people living outside of East Ayrshire.



### Labour Market

3.10 East Ayrshire’s employment rate is below the national rate. In 2018, East Ayrshire had an employment rate of 69%, lower than 74% for Scotland as a whole. The rate has lagged below the national level for the last decade, as shown at Figure 3.2.

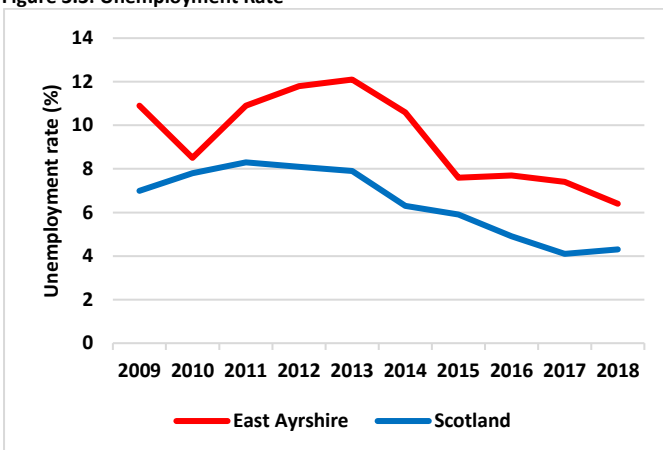
Figure 3.2: Employment Rate



Source: Annual Population Survey, NOMIS

3.11 Over the last decade East Ayrshire has had a higher level of unemployment than nationally. As shown at Figure 3.3, East Ayrshire’s unemployment rate was 6.4% in 2018, greater than Scotland’s rate of 4.3%. However, since 2013, the unemployment rate in East Ayrshire has been falling and the gap with the national rate has been slowly narrowing. This could point to a slight tightening of the East Ayrshire labour market.

Figure 3.3: Unemployment Rate



Source: Annual Population Survey, NOMIS

3.12 One of the most significant socio-economic challenges facing East Ayrshire is a relatively high level of economic inactivity amongst its population. These are people who are neither employed nor seeking employment. The economic inactivity rate was 27% in East Ayrshire in 2018, substantially higher than 23% for Scotland as a whole, and has gradually increased over the last decade while it has remained steady nationally. This equates to around 20,000 of East Ayrshire’s working age population



being economically inactive. The area's high inactivity rate is primarily driven by people who suffer from long-term illness<sup>1</sup>.

3.13 There is a different mix of skilled roles and occupations in East Ayrshire than in Scotland as a whole. The area has a higher share of skilled trade occupations than Scotland (15% vs 11%), a lower share of low-skilled, elementary and operative roles (15% vs 18%) and more director and manger roles (10% vs 9%). However, East Ayrshire has a smaller share of professional occupations, the most common occupational role, when compared to the rest of Scotland (17% vs 21%). These professional occupations tend to be higher skilled and higher paid roles.

3.14 East Ayrshire has a higher rate of part-time jobs than nationally. In 2017, 37% of employees worked part-time in East Ayrshire, compared to 34% across Scotland. This may have implications for income levels for those employed in the area.

3.15 In 2018, the average full-time earnings of an East Ayrshire resident was £29,800 which was slightly above the Scottish average of £29,200. The residents' earnings level was higher than the average full-time earning of an East Ayrshire job which was £28,400. This reflects the fact that some people living in East Ayrshire travel outside the area to work and access higher paid jobs, for example in Glasgow City. This is supported by travel to work data which shows a net outflow of workers from East Ayrshire. While an estimated 11,000 people commute into East Ayrshire each day, primarily coming from elsewhere in the Ayrshire region (North and South), up to 20,000 residents commute *out* of the local area each day, particularly to the nearby employment hubs of Glasgow City and South Ayrshire.

#### **Labour Market – implications for the Bellfield Interchange**

3.16 Despite a relatively poor performing labour market, East Ayrshire's unemployment rate has been falling in recent years, narrowing the gap with Scotland. Any employment generated at Bellfield will help to support this trend. However, employers may find the high inactivity rate combined with a falling unemployment rate means the pool of available labour is more limited. The evidence shows that many residents commute out of the area for higher paid jobs. Quality employment at Bellfield could perhaps be an attractive option for these workers.

#### **Key Sectors**

3.17 There has been strong growth in East Ayrshire's business base in recent years. In 2018, East Ayrshire had 3,185 registered businesses and this number has grown by 17% over the past five years, slightly faster than the picture nationally (16%). The business base in East Ayrshire is dominated by micro businesses employing fewer than 10 people. Micro businesses account for a slightly greater share of East Ayrshire's base than nationally (89% vs 88%).

3.18 Agriculture, retail and professional services are the largest business sectors in East Ayrshire, accounting for 43% of the total business base. Although this is similar to the picture nationally, East Ayrshire is over-presented in businesses in the lower-value agriculture and retail sectors, given the prevalence of farming and town

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<sup>1</sup> Annual Population Survey.



centres in the area, and is under-represented in the higher-value professional services sector.

- 3.19 The growth in jobs in East Ayrshire is matching growth for Scotland as a whole. There were 43,000 jobs in East Ayrshire in 2017. This had grown by 1% since 2015, in line with national job growth. As shown in Table 3.1, the top employing sectors in East Ayrshire are health (10,000), retail (6,000) and business administration (3,500). These are similar to the top employing sectors in Scotland, and together account for almost half (45%) of all the jobs in East Ayrshire.
- 3.20 Manufacturing and engineering are growing sectors in the area, with key companies such as Brodies Engineering and Mahle Engineering. The sector is supported and represented the Ayrshire Engineering Alliance.
- 3.21 When compared to Scotland, employment in East Ayrshire is typically concentrated in lower-value sectors. East Ayrshire is significantly over-represented in health employment (23% vs 16% in Scotland, see Table 3.1), likely due in part to the large number of jobs at Crosshouse Hospital near Kilmarnock. Agriculture, utilities and public sector jobs are also more concentrated in East Ayrshire than the national position. In contrast, the local area is under-represented in jobs in higher-value sectors such as professional services, finance and ICT.

**Table 3.1: Employment by sector in East Ayrshire and Scotland (2017)**

Sector	East Ayrshire (no. of jobs)	East Ayrshire (% of all jobs)	Scotland (% of all jobs)
Human health	10,000	23%	16%
Wholesale and retail	6,000	14%	14%
Business administration	3,500	8%	8%
Public administration	3,250	8%	6%
Manufacturing	3,000	7%	7%
Accommodation	3,000	7%	8%
Education	2,500	6%	8%
Construction	2,100	5%	6%
Agriculture	1,900	4%	3%
Professional services	1,900	4%	7%



Sector	East Ayrshire (no. of jobs)	East Ayrshire (% of all jobs)	Scotland (% of all jobs)
Transport	1,600	4%	4%
Arts and entertainment	1,300	3%	3%
Other sectors	2,800	7%	12%
<b>Total</b>	<b>43,000</b>	<b>100%</b>	<b>100%</b>

Source: Business Register and Employment Survey

### Key Sectors – implications for the Bellfield Interchange

3.22 The strong business base growth experienced in East Ayrshire in recent years might suggest it is becoming easier for businesses to start-up in or relocate to the area and that they are encouraged and supported to do so. The land around Bellfield Interchange would present an opportunity to attract further inward investors to the area, rather than displacing existing activity from elsewhere in East Ayrshire.

3.23 East Ayrshire has strengths in the health, agriculture and retail sectors and emerging strengths in manufacturing and engineering. Bellfield Interchange can therefore look to build upon these existing strengths. However, the area has a relatively low concentration of higher-value professional service jobs. Development at Bellfield Interchange could attract more of these types of businesses and jobs to East Ayrshire and contribute to the local economy.

### Ayrshire Growth Deal

3.24 The Ayrshire Growth Deal (AGD) was agreed with the Scottish and UK Governments in March 2019, and is estimated to be worth £251.5 million<sup>2</sup>. The deal is expected to unlock private investment worth up to £300 million and create up to 7,000 new jobs in the region. It is anticipated that the deal will be delivered over a 15 year period.

3.25 The AGD presents a once in a generation opportunity to transform the economic prospects of the area. The long term plan is to attract new business, support existing companies to expand, create more jobs and bring new opportunities to the area.

3.26 The Head of Terms Agreement consists of eight key priorities to generate inclusive economic growth across the Ayrshire region<sup>3</sup>. Some of the most transformational projects specifically relating to East Ayrshire are detailed below.

3.27 Most significantly for East Ayrshire, the deal has committed to a significant **economic infrastructure programme**. The AGD allocates £9m of support to the HALO

<sup>2</sup> <https://www.gov.uk/government/news/ayrshire-growth-deal-agreed>

<sup>3</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/784363/AGD - Heads of Terms - February 2019 - Agreed Final.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784363/AGD_-_Heads_of_Terms_-_February_2019_-_Agreed_Final.pdf)



Kilmarnock transformational regeneration project, alongside Diageo's donation of land and project development funding of £2m towards the re-establishing of the 23 acre former Johnnie Walker whisky bottling site as a key centre of employment in Kilmarnock and to the wider benefit of Ayrshire. The HALO project will look to create a Hub which will stimulate entrepreneurship and support collaboration between new and existing businesses to drive the Ayrshire economy.

- 3.28 The £16m Ayrshire Engineering Park will provide expansion and development of Moorfield Industrial Park in Kilmarnock will create up to 15,000 sq m of serviced and high-quality business space, with a range of unit sizes to support the manufacturing and light engineering sectors in Ayrshire.
- 3.29 Significant investment (£23.5m) has been earmarked to deliver the Ayrshire Manufacturing Investment Corridor (AMIC), which will establish a new national asset in Kilmarnock which will build on Ayrshire's proud history of manufacturing. This will include a Food & Drink Centre of Excellence to support innovation. This is a particular strength of East Ayrshire, with notable producers such as Dunlop Dairy, Braehead Foods and Caledonian Bottlers and the sector being supported by Ayrshire Food Network, Ayrshire Larder and the Ayrshire Farmers' Cooperative.
- 3.30 Cumnock will be the base for the National Energy Research Demonstrator (NERD), a key project within the **energy, circular economy and environment programme**. The AGD will support an investment of £24.5 million on the NERD project. The aim of this project is that through research and design, it will overcome a range of technical challenges that currently prevents the harnessing of local, but intermittent, energy generation, and its storage and subsequent transmission onto the grid during periods of high demand. This project will provide solutions to energy supply and storage challenges in non-urban locations, with Cumnock providing a unique location to investigate a wide mix of solutions due to its particular geography, landscape and the way the land has been exploited in the past for mining. The NERD will design, develop and construct a local electricity distribution network while utilising existing grid infrastructure, so that the area becomes effectively energy 'self-sufficient'. Partners in the project include Strathclyde University, British Geological Survey, University of Glasgow and Scottish Power Energy Networks.
- 3.31 The AGD will also focus on digital technology to support growth. Investment of up to £3 million will provide key digital infrastructure, regional digital hubs and 4G infill, which will ensure the economic benefits of the AGD benefit all Ayrshire citizens and help to create inclusive growth across the region. This will ensure that Ayrshire has the digital infrastructure, skills and ambition which is critical to future growth and participation in the economy. Enhanced digital infrastructure will help attract global businesses and make Ayrshire a world-class, digitally connected region that is much more attractive to investors across many elements of the digital economy.
- 3.32 In relation to skills and inclusion, the AGD will tackle inequality through growing local talent, creating new connections with the world and providing new opportunities and routes into employment for people across the region. Up to £8.5 million will be invested on a new Regional Skills and Inclusion Programme, which will ensure that businesses and communities throughout Ayrshire are given the opportunity to engage with and benefit from the opportunities arising from the investments delivered through the AGD. Key to this will be an all-Ayrshire model of delivery which offers community engagement, pre-employability support, recruitment, in-work interventions and employability services; with links to employers to tailor



investments to demand, and priority given to those struggling to maintain secure and meaningful work.

3.33 The AGD also gives attention to Community Wealth Building. This is an approach to delivering local inclusive growth that focuses on the role of key regional ‘anchor’ institutions such as Councils, health boards, tertiary education bodies and other large employers in supporting and developing the local economy in which they are located – through their role as purchasers, employers, owners of assets, and enablers of wider economic activity. As such a £3 million AGD Community Wealth Building Fund will support inclusive growth and galvanise the regional economy through initiatives which could include:

- Development of local skills pipelines to ‘anchor’ employers
- Development of a local SME supplier base with ‘anchor’ employers
- Increased local procurement spend
- Increased support for local entrepreneurship
- Community Asset Transfers
- Levering of private sector funding to support community business and entrepreneurship

3.34 In relation to transportation, the AGD identifies that Transport Scotland is progressing work on the National Transport Strategy (NTS) review and the Second Transport Projects Review (STPRS2). This work will set the vision, policies and projects for Scotland’s Strategic Transport network for the coming 20 years. As part of this work Transport Scotland is establishing Regional Transport Working Groups, and will take forward discussions with the Ayrshire partners on appropriate working arrangements. Transport Scotland and the recently appointed STPR consultant team will work with the regional group to develop the evidence base around problems and opportunities, define transport planning objectives and undertake regional transport appraisal work. This work will inform the review of emerging NTS policies and the work on STPR2 and ensure that appropriate consideration is given to Ayrshire’s transport infrastructure and the Growth Deal projects when setting the regional and national policy and intervention priorities.

#### **East Ayrshire Council Economic Development Strategy**

3.35 The East Ayrshire Council Economic Development Strategy (EDS)<sup>4</sup> covers the period from 2014 to 2025, and aligns with the national strategy and the local community plan. The EDS provides a vision for strengthening the economic capacity of East Ayrshire and improving its economic future and quality of life. Future development at Bellfield Interchange could contribute meaningfully to achieving this vision by creating or safeguarding high-skilled, quality jobs.

3.36 The EDS identifies the following six key priorities, each accompanied by a set of actions. Investment at Bellfield Interchange is most likely to contribute to priority 2, 5 and 6.

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<sup>4</sup> <https://www.east-ayrshire.gov.uk/Resources/PDF/E/EconomicDevelopmentStrategy2014-2025.pdf>



1. To integrate East Ayrshire with the regional economy
2. To facilitate economic restructuring
3. To improve the vibrancy of our town centres
4. To improve the quality of the tourism on offer
5. To increase economic participation in our communities
6. To accelerate the pace of infrastructure improvements

3.37 The EDS's vision for Kilmarnock is particularly framed around priorities 3 and 6. The plan identifies Kilmarnock as the principle town centre hub in East Ayrshire and focuses on regenerating the town centre by reducing vacancy rates from 21% to 15% and delivering on key projects, including examining access to the river to make it a core destination. The plan also highlights the potential for new industrial or business sites at Meikle Mosside, Rowallan and Moorfield, all in or around Kilmarnock.

#### **East Ayrshire Community Plan**

3.38 The latest East Ayrshire Community Plan<sup>5</sup> was launched in 2015 and runs to 2030. The plan sets out a vision for East Ayrshire to be a place with *“strong, safe and vibrant communities where everyone has a good quality of life and access to opportunities, choices and high quality services which are sustainable, accessible and meet people’s needs.”*

3.39 The plan recognises some of the social challenges faced by East Ayrshire, such as changing demographics and inequalities, and establishes three key areas for actions: economy and skills; safe communities; and wellbeing. Development at Bellfield Interchange will support the economy and skills theme.

#### **‘Celebrate Kilmarnock’**

3.40 ‘Celebrate Kilmarnock’<sup>6</sup> is a town centre action plan which covers the period 2015 to 2020. The framework recognises the challenges of the area, such as vacant shops, while focusing on opportunities for development and prosperity. The action plan has been developed in close collaboration with key stakeholders and through consultation with young people. This has formed the vision for the plan which is *“to establish Kilmarnock as a destination town, enlivening the town centre with activities, events and families from near and far, for all ages, during the day and into the evening.”*

#### **Kilmarnock’s Cultural Quarter**

3.41 The further development of the cultural quarter in Kilmarnock<sup>7</sup> began in 2017 with work to identify realistic and practical ideas. The vision was to take advantage of opportunities presented by the relocation of Kilmarnock Academy and improve the long-term prospects of the Dick Institute and the Palace Theatre complexes.

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<sup>5</sup> <https://www.east-ayrshire.gov.uk/Resources/PDF/C/Community-Plan-2015-2030.pdf>

<sup>6</sup> <https://www.east-ayrshire.gov.uk/Resources/PDF/K/Kilmarnock%20Town%20Centre%20Action%20Plan.pdf>

<sup>7</sup> <https://www.east-ayrshire.gov.uk/PlanningAndTheEnvironment/RegenerationAndTownCentreManagement/Kilmarnocktowncentreregeneration.aspx>





## 4.00 Baseline Site Conditions

### **Introduction**

- 4.01 An assessment of the baseline site constraints has been undertaken to assist in the identification of suitable development parcels within the study area and necessary mitigation required to deliver development at this location.
- 4.02 A plan of the existing Rights of Way and Tree Preservation Orders within the study area is included within Appendix 2. The existing utilities within the study area are shown on the plan contained within Appendix 3.
- 4.03 A detailed baseline review of geotechnical ground conditions, transportation and flood risk has been undertaken. The findings of the baseline review are summarised below.
- 4.04 This section of the report also identifies land ownership within the study area.

### **Geotechnical**

#### **Anticipated Ground Conditions**

##### *Superficial Geology*

- 4.05 The superficial geology beneath the site has been established from the British Geological Survey (BGS) 1:50,000 scale Geological Map, Sheet 22E Kilmarnock, Solid and Drift, 2002 Edition and the BGS GeoIndex Map Viewer. This indicates the site to be predominantly underlain by Glacial Till comprising stiff gravelly Clay and Glaciofluvial Deposits comprising sand and gravel. Alluvium, comprising sand, gravel, silt and clay with some pockets of peat is indicated along the route of the River Irvine. The BGS GeoIndex Map Viewer, indicates a large area of Peat in the south east of the site.

##### *Solid Geology*

- 4.06 The solid geology beneath the site has been established from the British Geological Survey (BGS) 1:50,000 scale Geological Map, Sheet 22E Kilmarnock, Solid, 2003 Edition. It indicates that the site is underlain by the Upper Coal Measure (UCMS) consisting of sandstone, siltstone and mudstone which has been intruded by Early Devonian to Palaeogene dioritic rocks, overlying the Middle Coal Measures (MCMS) containing a cyclic sequence of mudstone, sandstone, seatrock, coal and ironstone which sits directly below the superficial deposits along the southern boundary.

- 4.07 A number of faults cross the site, trending broadly north to south and east to west.

##### *Artificial Ground*

- 4.08 As parts of the land have previously been developed, Made Ground is expected to be present locally.



#### *Ground Gas*

- 4.09 The land around Bellfield Interchange has been identified in BRE211 and UK Radon online maps as being in a non-Radon affected area. Other ground gases associated with the Made Ground, Peat and potential former mine workings may however be present.

#### *Groundwater*

- 4.10 According to the BGS Hydrogeological Map of Scotland (1:625,000 scale), the geological deposits underlying the site are classified as a locally important aquifers in which flow is dominantly in fissures and other discontinuities (h2)

#### **Potential Ground Constraints**

- 4.11 Ground stability constraints are shown on the drawing included within Appendix 4 and discussed further below.

#### *Compressible Ground*

- 4.12 From readily available data some areas of Peat may be present on site and should be investigated to fully ascertain the area and depth of cover. Peat is compressible and can be of low strength. It therefore presents a settlement risk to buildings and can lead to slope stability issues if encountered within cuttings or below the base of embankments. Peat can also be a source of ground gas, and due to its acidic nature can propagate degradation of buried concrete. Development areas should therefore try to avoid areas of peat, or if this is not possible peat should be excavated and managed appropriately in accordance with a Peat Management Plan as approved by SEPA.

#### *Coal Mining*

- 4.13 The site is underlain by coal bearing strata and lies within a coal mining reporting area. A portion of the site, located in the southeast, together with sporadic isolated areas associated with suspected mine shafts, are designated 'Development High Risk' by the Coal Authority.
- 4.14 Historical borehole logs have been obtained from the BGS and indicate likely depth of superficial deposits of between 12m and 20m. Assuming a typical shaft diameter of 1m, and ravelling angle of 45°, a minimum development standoff of 40m around each mineshaft would be recommended. It is recommended that this is confirmed through further investigation prior to the construction of any development.
- 4.15 In addition, two adits are indicated in the south east portion of site at the same location, one bearing 298° and the other 302°.



### **Geotechnical Risks**

- 4.16 The following geotechnical risks have been identified and will require further assessment through additional study and ground investigation.
- Foundation strata of varying composition and strength, with areas of peat and soft alluvial deposits present locally;
  - Potential for excavation arising's proving unsuitable for re-use within the works in their 'as-dug' state and therefore requiring processing or disposal;
  - Unknown ground gas regime and groundwater levels with a potential impact on foundation design and temporary works;
  - Aggressiveness of soils in relation to buried concrete;
  - Recorded and unrecorded mine entries and shallow workings; and
  - Historical quarries.

### **Geotechnical Impact on Potential Development Opportunities**

- 4.17 This baseline assessment of geotechnical conditions has comprised a high-level review of readily available information sources to determine likely ground risks and their impact on potential development layouts.
- 4.18 The study concludes that the areas of peat should be avoided for structural or infrastructure development due to its poor founding characteristics which include low strength, compressibility, stability issues, ground gas generation and buried concrete attack. Wherever possible, masterplan layouts should therefore be developed on the basis that areas of peat are set-aside for landscaping and recreational space only.
- 4.19 Based on the likely thickness of overburden, a nominal development stand-off of 40m has been proposed around mine shafts, which should be avoided for structural development. Roads and car parks could potentially be located over mineshafts, in combination with either infilling or capping of the shafts. More detailed assessment and investigation would be required to confirm actual stand-off distances and the requirements for any infilling and capping of shafts.
- 4.20 Areas defined as "Development High Risk Area" by the Coal Authority, where not related to mineshafts, are likely due to a high probability of shallow mine workings which can present a risk of ground collapse at surface, and ground gas generation. This would require further assessment and investigation, commencing with a specific Coal Mining Risk Assessment, but potentially a programme of remedial works such as consolidation grouting may be required prior to development of these areas.
- 4.21 In addition to flood risk, ground conditions adjacent to the River Irvine are likely to include variable and soft deposits associated with alluvial deposits and should be avoided for development.
- 4.22 The actual ground conditions will require to be confirmed through a comprehensive Desk Study Exercise and a campaign of intrusive ground investigation.



## **Access and Movement**

### **Transportation Context**

- 4.23 A desk-top strategic review of the study area around Bellfield Interchange has been undertaken to assess the potential for future development in terms of the impact of the development on the surrounding transportation network, existing policies and proposals, sustainable transport and delivery of future walking cycling and road improvements. Overall, the study identifies the main transportation constraints associated with developing within the study area.
- 4.24 The study area is rural in nature and, as a result, existing access to the site is limited. Transport facilities are of a reduced supply.
- 4.25 Currently, there is no requirement for extensive access to this area given the existing nature and use of the land, the current provision is appropriate for the existing agricultural land uses. However, development of the area for commercial and/or employment generating use(s) will require physical and operational transport improvements which will need to be policy compliant whilst cost effective.

### **Transport Policy / Summary of Bellfield Interchange – Transport Scotland Appraisal**

- 4.26 In the current adopted LDP 2017, part of the study area is identified as a 'Future Business/ Industrial Growth Area'.
- 4.27 The LDP recognises that the Bellfield Interchange is the most important traffic junction in East Ayrshire, comprising the main entry point to Kilmarnock and its town centre. The LDP highlights that the interchange experiences peak hour queues and delays which could significantly impact on new development after 2025.
- 4.28 In line with the LDP (2017) East Ayrshire Council appointed Amey as consultants to investigate options to improve the operation of the interchange. However, in accordance with the requirements for this Stage 1 Assessment, this study has assumed that all transportation issues associated with the Bellfield Interchange have been resolved and are therefore not a constraint to development.

### **Description of the Study Area and Surrounding Transport Network**

- 4.29 The study area consists of areas of predominantly agricultural land straddling the A76. The A76 is a Trunk Road, running in a south-east / north-west direction through the study area. This creates parcels of land north east and south west of the road. The A76 is subject to the national speed limit and is a single lane carriageway. The large, southern parcel of land within the study area is bound to the west by the southbound slip road for the A77, which is also a Trunk Road. The A77 crosses underneath the interchange running north and south. The land is also bounded by the Kilmarnock to Dumfries (Carlisle) railway line to the east.
- 4.30 Located within the Study area are: the former Kirklandside Hospital (now being demolished), Torrance Lodge Care Home, Riccarton Cemetery, West Mosside Farm, and approximately 15 private residential dwellings. Services are associated with the

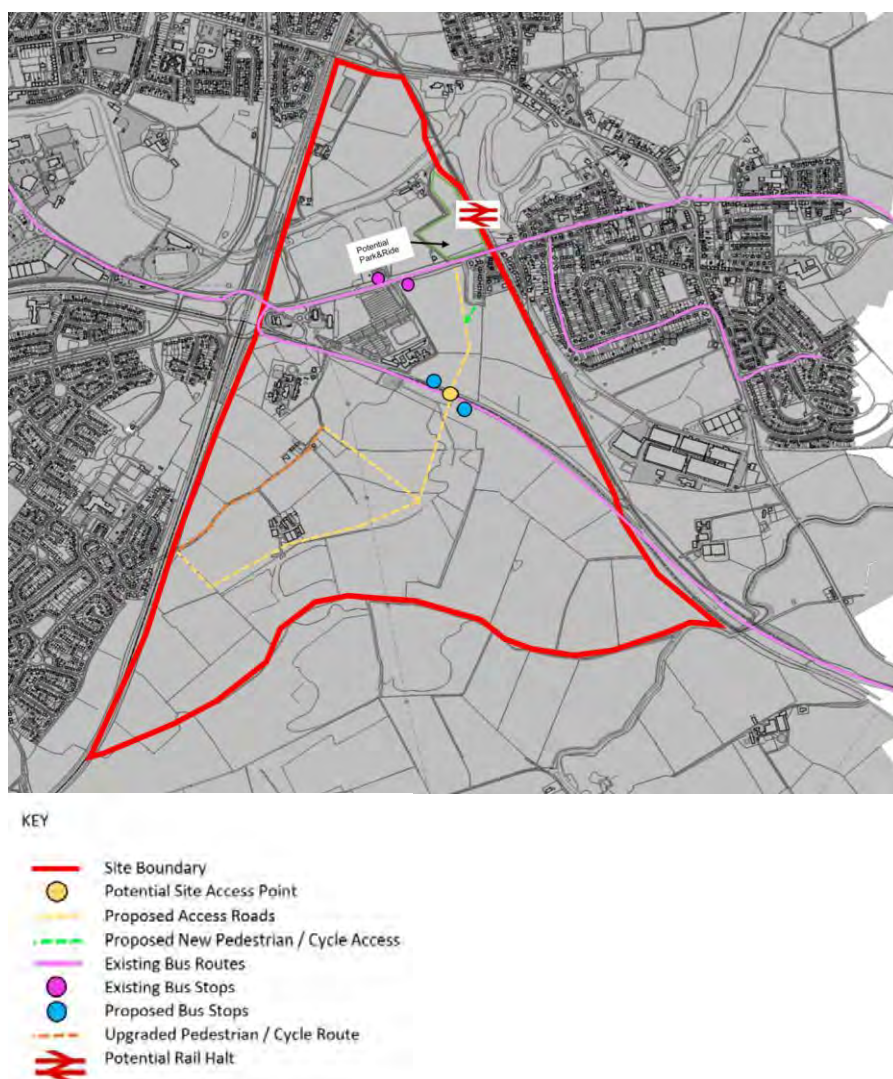


Bellfield Interchange which includes a BP petrol filling station, a McDonalds Restaurant with Drive-Thru and a Travel Lodge Hotel.

- 4.31 From a review of the current transportation provision in the study area, it is evident that improvements will be required to support any future commercial/employment development in this area. Transport planning policy indicates that pedestrian access should be available to bus and rail provision within 400m and 800m respectively. In addition, access to local amenities should be available at a distance of 1600m.
- 4.32 The proximity of the Bellfield Interchange to the study area somewhat restricts pedestrian and cyclist integration from the Kilmarnock area. Consideration has been given to improving this position with several opportunities existing to improve pedestrian / cyclist and public transport facilities. These opportunities include, creating pedestrian / cyclist linkages to the Site from the existing Bellfield Avenue network thus providing direct links to the area from Hurlford, also upgrading the unclassified road U63 to include shared footway and cycle provision and street lighting, extension of existing bus services and provision of new bus stops in the vicinity of the proposed new access on the A76 and the opportunity of exploring park and ride bus /rail /car share facilities within the site.
- 4.33 The recommended and reviewed transportation infrastructure improvements are detailed on Figure 4.1 and included in Appendix 5. An assessment of potential development options is considered in Section 5 of this Report. A potential identified option for the Bellfield Interchange area is the provision of a rail halt and associated park and ride facility. These proposed facilities have also been identified in the plan below. The location of these facilities is purely indicative at this stage.



Figure 4.1 – Recommended Transportation Infrastructure Improvements Plan



- 4.34 Previous work has been undertaken in relation to the potential for a rail halt at this location. The Hurlford Rail Halt Appraisal was undertaken in 2006. As such the study findings may well be out of date but nevertheless are a useful starting point for this study. The study focused on the feasibility of building a station and the effect on the existing timetable of stopping trains there.
- 4.35 The study findings suggested an alternative position to the previous Hurlford Station (which was located between the railway bridge over the A71 and the junction to sidings which are now out of use) should be considered for the new station. The proposed location is a site immediately north of the A71, where the track gradient is shallower.
- 4.36 With regards to timetables the study found that inserting a stop at Hurlford in the existing (2006) timetable would add 1.5 minutes to the journey time in each direction. Whilst this wouldn't have a severe impact on overall journey times on the route, the addition would be sufficient to cause scheduling conflicts on the single line section beyond Dumfries. It was identified that stops at Hurlford could be added



to 6 of the 9 southbound trains and 8 of the 10 northbound services. To achieve this some retiming of other services would be required.

- 4.37 It was identified however that timetable alterations planned in 2009 would give the opportunity to make provision for stops at Hurlford for all trains on the route.
- 4.38 It is considered in the development options assessed in Section 5 of this report, that there is the potential to provide a relatively large park and ride facility linked to the potential for a new rail halt at this location.
- 4.39 The support of both Network Rail, which owns and manages the infrastructure, and First ScotRail which operates the train services is essential for new station schemes. The support of both operators should be sought at the earliest opportunity to proceed with any proposals for Hurlford. In addition, any case for a new station would need to be made through Transport Scotland in accordance with their evaluation guidance. Transport Scotland's support for a new rail halt at this location should also be obtained at the earliest opportunity.

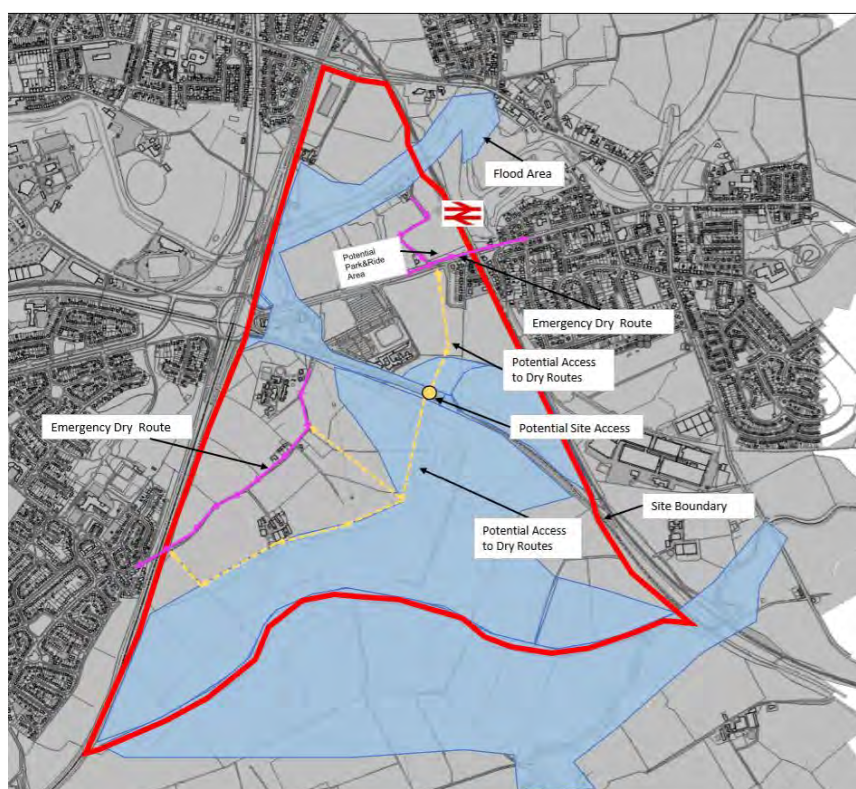
#### **Proposed Infrastructure Improvements / Development Access**

- 4.40 Currently, there is no direct access to the site from the A76, however, the unclassified road U63 forms a ghost island priority junction with the A76 providing access to Kirklandside Road (and the Travelodge to the north). The unclassified road is a single carriageway road allowing two-way operation to the point of the hospital access thereafter it becomes rural and only suitable for one-way operation. It connects to Kilmarnock and crosses the A77 to join with Whatriggs Road, Bellfield, on the western side of the A77. The unclassified road U63 is subject to a 30mph speed limit and has no footways or street lighting. It should also be noted that the road is signed as being unsuitable for heavy goods vehicles.
- 4.41 In considering the access potential for the bulk of the study area the A76 was found to be the only feasible access solution, however, it should be recognised that forming new junctions on the trunk road network are not normally acceptable to TS. Notwithstanding, the case for a new junction will be examined where significant economic growth or regeneration benefits can be demonstrated. It is considered that the development of the land at Bellfield Interchange for commercial and/or employment generating use would comply with these criteria.
- 4.42 It is considered that a roundabout with an inscribed circle diameter (ICD) of approximately 60 metres will provide a combined access solution for the northern and southern land parcels on the A76. The principle of a new access roundabout was presented to Transport Scotland, but they have indicated they are unable to meaningfully comment on the potential roundabout access strategy unless it is combined with a traffic appraisal for the next LDP. This response highlights that context does need to be fully understood by all parties. Notwithstanding this study has been developed within the context of the current adopted (2017) LDP and the AGD Heads of Terms, as detailed above, simply because they have been available to the study team whilst LDP2 remains to be drafted and will unlikely be adopted until the end of 2022 or early 2023.
- 4.43 Generally, Transport Scotland has indicated that at this stage they do have significant concerns relating to the potential impact of any additional sites located within the vicinity of Bellfield.



- 4.44 The A71 Riccarton Road could also provide access opportunities for the northern parcels of the Study area. The position of the roundabout and the Riccarton Road junctions are shown on the Schematic Access Option Plan included within Appendix 5.
- 4.45 Any new junction will require to be designed in accordance with the Design Manual for Roads and Bridges (DMRB) and demonstrate there would be no adverse impact on road safety or operational performance to the satisfaction of Transport Scotland.
- 4.46 Flooding is a key issue for the study area. The flood area extends along the A76 and thereby affects the proposed access strategy, as shown in the Schematic Access Option Plan in Figure 4.2 below and included within Appendix 6. In-line with SEPA policy, it is possible to develop out-with the 1 in 200-year flood extents. To develop (this includes roads, access junctions and buildings) within the 1 in 200-year+climate change extents, a safe and flood-free access/egress route will be required for all areas of the development, as well as the provision of compensatory storage and the incorporation of appropriate mitigation measures, all to be agreed by SEPA.

Figure 4.2 – Proposed Access Strategy Plan



- 4.47 Delivering a new access junction in the flood area will require a compensatory storage scheme to be developed and agreed with SEPA. The scheme would also have to take account of any level changes required to deliver the compliant access design.
- 4.48 SEPA's consultation response on the development proposals has indicated that they would prefer development, including access roads, to be completely out-with the





functional floodplain. Where this situation is unavoidable SEPA would be willing to consider the construction of access roads in the functional floodplain. However SEPA has indicated that, in these instances the new roads should be designed as close to the existing ground levels as possible to avoid a loss of floodplain storage and minimise the change to water conveyance and flow paths. It should be noted that it will be very difficult to design a DMRB compliant access roundabout without altering any ground levels.

- 4.49 Furthermore, any roads crossing through the flood extents require to be flood design compliant which will have an overall cost impact on the road design. SEPA's preference is for bridges or structures that allow floodplain passage. SEPA have stated in their response that they would object to any aspect of a development (including access roads) that may cause an increased flood risk elsewhere.
- 4.50 Consideration may have to be given to diverting the line of the Scottish Water, water main to support delivery of the internal access roads on the southern parcels of the site.
- 4.51 In line with SEPA's requirements a potential flood-free access/egress emergency dry route exists for both the northern and southern sites as indicated on the Schematic Access Option Plan included in Appendix 6. All internal development roads will require to connect into these routes.
- 4.52 For the northern parcel of the study area the dry route would be the A71 Riccarton Road where it is likely that provision of a priority-controlled junction from the site onto the A71 would be sufficient. The appropriate junction form would be determined at the detailed study stage but may require a ghost island configuration.
- 4.53 The proposed route serving the southern area is the unclassified road U63 which is currently a single lane road and signed as being unsuitable for HGV movements. To ensure flexibility of development, options and consideration would be required to upgrade the road and potentially strengthening of the overbridge if this is the constraint for HGV movements. If strengthening works are not possible then it is unlikely that the southern part of the study area could be developed for Industrial, Storage or Distribution Classes and may be more suited to Class 4 Business Uses.

The transportation baseline review is summarised as follows: -

- The planning context is provided by the current LDP (2017) and AGD (Heads of Terms);
- A roundabout on the A76 provides the obvious access opportunity to both the northern and southern parcels of land;
- Transport Scotland has responded advising they are unable to comment on any AGD proposals as they relate to the operation of the Bellfield Interchange until such time as the impact of the next LDP site allocations are also known but the next LDP will not be available until late 2022 or early 2023;
- Generally, Transport Scotland have indicated that at this stage they do have significant concerns relating to the potential impact of any additional sites located within the vicinity of Bellfield;
- The A76 lies within the flood area; SEPA's preference is for development including access roads to be completely out-with the functional floodplain;
- Where the above situation is unavoidable SEPA would be willing to consider the construction of access roads in the functional floodplain, however, in



these instances the new roads should be designed as close to the existing ground levels as possible to avoid a loss of floodplain storage and to minimise the change to flood water conveyance and flow paths. It should be noted that it will be very difficult to design a DMRB compliant access roundabout without altering any ground levels;

- Any roads within the flood extents will require to be flood design compliant which will have a cost impact on the overall road design. SEPA's preference is for bridges or structures to maintain the flow of the floodplain;
- Whilst a potential flood-free access/ egress routes exists for both sites the current road widths may limit the development options for the Site. This will be discussed with East Ayrshire Council Road Alliance;
- The A71 Riccarton Road could serve as a dry route for the northern part of the Study area. It is likely that a priority junction could be formed;
- The unclassified road U63 could serve as a dry emergency route for the southern site, however, it will require upgrading to ensure it is suitable for all vehicle types. This is likely to include strengthening of the overbridge if this is the constraint for HGV movements;
- The southern part of the study area is unlikely to be suitable for Industrial, Storage or Distribution Classes and may be more suited to Class 4 Business Uses;
- Additional pedestrian / cyclist linkages to the Site could be created from the existing Bellfield Avenue network;
- Development at Bellfield Interchange presents an opportunity to enhance the green network;
- Upgrade the unclassified road U63 to include shared footway and cycle provision and street lighting;
- Provision of new bus stops in the vicinity of the new access on the A76 will be necessary;
- An earlier study (2006) of the masterplan area considered the potential for a new rail station at Hurlford on the Glasgow - Barrhead, Kilmarnock and Carlisle route. The study findings suggested an alternative position to the previous Hurlford Station should be considered for the new station;
- With regards to timetabling the study found that inserting a stop at Hurlford in the existing (2006) timetable would add 1.5 minutes to the journey time in each direction. Whilst this wouldn't have a severe impact on overall journey times on the route, the addition would be sufficient to cause scheduling conflicts on the single line section beyond Dumfries. It was identified that stops at Hurlford could be added to 6 of the 9 southbound trains and 8 of the 10 northbound services. To achieve this some retiming of other services would be required;
- It was identified that timetable alterations planned in 2009 would give the opportunity to make provision for stops at Hurlford in all trains on the route;
- An opportunity exists to explore park and ride bus /rail /car share facilities within the northern parcel of the site;
- A more detailed assessment will be required to fully understand the expected transportation effects of the study area once the development land uses are defined; and
- Given SEPAS's response, a detailed design exercise will be required to establish whether a DMRB compliant access roundabout can be delivered without altering the existing ground levels.



## **Flood Risk**

### **Watercourses and Water Features**

- 4.54 OS mapping indicates that several watercourses and water features are located within and around the site boundary.
- 4.55 The River Irvine forms the northern boundary of the site and is the main watercourse in the area. The River Irvine approaches the site from the east, conveying flow in a westerly direction toward the coastal waters of Irvine Bay, approximately 23km downstream of the site. A weir is present on this watercourse, adjacent to the site, approximately 160m upstream of the A77 bridge crossing.
- 4.56 The Cessnock Water, a tributary to the River Irvine, is located at the south-eastern corner of the wider development boundary. The Cessnock Water approaches the site from the south and conveys flow in a north-easterly direction, passing through several bridge crossings and culverts on its course. Several unnamed drainage ditches located within the southern portion of the wider development boundary discharge to the Cessnock Water at the south-eastern corner of the site at NGR: 245486, 635397.
- 4.57 Toward the centre of the site, a network of drainage ditches flow toward a culvert which conveys flows beneath the A76 and A71 carriageways in a north-westerly direction. Flows are then conveyed in an open channel toward an outfall on the River Irvine located at NGR: 244189, 636779.
- 4.58 Several areas towards the centre of the expanded development site are also noted as marsh, which suggests saturated soils in the area. Extents of marsh noted on OS mapping generally accord with areas of peat noted on BGS Geindex, as previously described.
- 4.59 There are no further open channel watercourses or water features noted within the vicinity of the site.
- 4.60 The flood risk constraints are shown on the plan included within Appendix 7.

### **Existing Drainage Infrastructure**

- 4.61 It is understood that a combined sewer is located toward the centre of the site which serves the Bellfield Interchange Services, former Kirklandside Hospital, Torrance Lodge and the wider area beyond the eastern boundary of the site. Flows from this combined sewer are thought to be conveyed in a westerly direction toward the Meadowhead Wastewater Treatment Works (WWTW) located approximately 10km west of the site at NGR: 233801, 635898. Several water supply pipes are also understood to be located within the site boundary, with a water main located within the A77 carriageway. However, formal Scottish Water asset plans require to be obtained to confirm the presence of public drainage infrastructure in the site vicinity.
- 4.62 Although flood risk from the water supply network is not included within this assessment, a review of the Scottish Water asset plans indicates that an existing high-pressure water pipeline is present within the site, positioned in a north-south



orientation. Scottish Water have confirmed that there is a 20m stand-off distance either side of this pipeline. Therefore, this may impose implications on future development proposals for the site and siting of buildings. Scottish Water have advised certain development can take place within this area, such as green space, car parking etc.

### Consultations

- 4.63 Consultations were undertaken with the relevant statutory authorities regarding any relevant flood risk and drainage information available for the site. Consultees included:
- Scottish Environmental Protection Agency (SEPA);
  - East Ayrshire Council (EAC);
  - Transport Scotland (TS); and
  - Scottish Water (SW).
- 4.64 SEPA is the flood warning authority in Scotland and is responsible for monitoring river levels, rainfall, tidal predictions and weather forecasts across Scotland to predict the likelihood and timing of flooding. SEPA also has a strategic role in managing flood risk and has a duty to provide flood risk advice to Planning Authorities when consulted in relation to applications for development where the Planning Authority considers there may be a risk of flooding.
- 4.65 A review of information available via SEPA online at: <http://map.sepa.org.uk/floodmap/map.htm> was carried out. Mapping of fluvial, coastal, pluvial and groundwater flood risk as well as potentially vulnerable areas was examined.
- 4.66 The SEPA flood map indicates that a large proportion of the site and wider development boundary are located within an area considered to have a “high” risk of fluvial flooding, associated with the Cessnock Water and River Irvine. The SEPA flood maps also indicate several pockets are at “High” risk of surface water flooding, understood to be associated with topographical low points within the site boundary. The site is also located within a Potentially Vulnerable Area (PVA 12/06: River Irvine and Annick Water catchments), associated with a combination of fluvial, coastal and surface water flood risk.
- 4.67 SEPA were consulted regarding the flood risk and drainage requirements of the site, in addition to any recorded incidences of flooding within the site vicinity. In their formal response, SEPA advised that the area has been subject to detailed hydraulic modelling as part of the Irvine Valley Flood Study (IVFS), which identified significant areas at risk of flooding for the Cessnock Water and River Irvine. SEPA advised that contact should be made with the roads department of East Ayrshire Council to obtain further information on flood risk and copies of the IVFS. With regards to assessment of flood risk, SEPA advised that their new guidance ‘Climate Change Allowances for Flood Risk Assessment in Land Use Planning (2019) should be used, which recommends a climate change allowance of 44% for fluvial flood risk and 55% for surface water flood risk in this particular area. Additionally, SEPA noted 9 incidences of flooding have been recorded in the area between 1994 and 2014, with 6 incidences recorded in 2012.
- 4.68 SEPA were also requested to provide additional advice regarding potential development within the functional floodplain, with particular reference made to the



LDP allocation located immediately adjacent to the Bellfield Interchange. SEPA were asked to confirm whether development within this LDP area would be permitted. In their response, SEPA made reference to Scottish Planning Policy, which states that “the planning system should prevent development which would have a significant probability of being affected by flooding or would increase the probability of flooding elsewhere”. As such, SEPA stated that built development should not take place on the functional floodplain.

- 4.69 SEPA were also asked to comment on the appropriateness of compensatory storage as a means of mitigation to allow the construction of access roads within the floodplain, for areas outwith the LDP. Once again, SEPA reiterated that their preference is for development in the functional floodplain to be completely avoided, including access roads. However, where this is unavoidable, SEPA would consider construction of access roads within the floodplain on the basis that they are designed to remain as close to existing ground levels as possible, which avoids the loss of floodplain storage.
- 4.70 Finally, SEPA were asked to define ‘exceptional circumstances’ with regards to the appropriateness of compensatory storage, as detailed in SEPA’s Technical Flood Risk Guidance for Stakeholders (2019). SEPA stated that their Technical Flood Risk Guidance document reflects the requirements of Scottish Planning Policy (Para 265) where ‘exceptional circumstances’ refers to land raising and it is for the planning authority to determine what circumstances are acceptable. In the exceptional circumstances that land raising is acceptable, then compensatory storage must be provided. However, where proposals intend to raise areas that have been established as undeveloped floodplain to facilitate development, SEPA would consider this unacceptable, even if provision of compensatory storage is included.
- 4.71 Under the terms of the Flood Prevention (Scotland) Act 1961, the Flood Prevention and Land Drainage (Scotland) Act 1997, and the Flood Risk Management (Scotland) Act 2009, EAC, as designated Flood Prevention Authority, has specific responsibilities, powers and duties in relation to flood prevention matters. This includes the role of implementing controls to ensure development proposals have adequate surface water runoff and flood prevention controls.
- 4.72 EAC were consulted with regards to the drainage and flooding requirements for the development and records of flooding within close proximity to the site, in addition to any flood studies/flood modelling which may be available for the area. In their formal response, EAC advised that queries of this nature should be forwarded to the Ayrshire Roads Alliance (ARA), who act as flood prevention authority on behalf of EAC. Correspondence with the ARA provided copies of flood mapping relevant to the site extracted from the IVFS. The ARA advised that the inundation patterns presented on these flood maps have been witnessed during recent events which not only inundated the site but also closed the A77 carriageway. The source of this flooding was understood to have originated from the Cessnock Water, where floodwaters breached the left bank and traversed across agricultural land east of Kirklandside Hospital toward a low point at the A76 culvert. Floodwaters then backed-up, overtopped the A76 carriageway and were conveyed westward toward the Bellfield Interchange. The ARA provided a flood routing diagram for this particular event, in addition to a local newspaper clipping from 1932 which documented similar flood extents to the more recent events in Kilmarnock. The ARA also recommended submitting an information request to Transport Scotland to obtain further information on the A77 culvert.



- 4.73 Transport Scotland were contacted to obtain further information on the A77 culvert, as advised by the ARA. In their formal response, TS provided location details for the culvert including a flood management plan for the Cessnock Water at the A76, which details previous flood events associated with this watercourse. The plan includes flood extent mapping and medium-term mitigation measures to minimise the impact of flooding from this source.
- 4.74 Scottish Water were contacted to obtain information on any recorded incidences of flooding from the drainage system in the site vicinity. In their formal response, SW confirmed that they hold a total of 14 sewer related customer contacts in the 'KA1 5' postal code area, received between 2003 and 2018. Of the 14 contacts, 8 contacts were shown to come under the service request type 'sewer flooding', which may suggest capacity issues within the existing system. As part of their response, SW advised that they cannot provide any information on surface water flooding, as have no record of known flooding incidents which have been attributed to surface water sewer incapacity in the area.

#### **Flood Risk Summary**

- 4.75 Based on the information available to date, the development site is considered to be at "little to no" risk of flooding from coastal and artificial sources and is considered to be at "Low" risk of flooding from infrastructure sources.
- 4.76 The online SEPA Flood Maps indicates that a large proportion of the site and wider development boundary is located within an area considered to be at "high" risk of fluvial flooding, associated with the Cessnock Water and River Irvine. The SEPA flood maps also indicate several pockets are at "high" risk of surface water flooding, understood to be associated with topographical low points within the site boundary. Correspondence with EAC, the ARA, SEPA and TS has confirmed that fluvial flooding is common and widespread in this area, and issues have been identified with an on-site culvert. During extreme events, floodwaters originating from the Cessnock Water traverse the site in a north-westerly direction, spilling into the local network of small ditches, which convey floodwaters towards the A76 culvert. Due to the culvert's limited capacity, floodwaters back-up and eventually overtop the A76 carriageway. Modelled flood extents, undertaken as part of the IVFS, align with recorded historical flood outlines and generally accord with flood extents shown on SEPA flood mapping.
- 4.77 As such, a large proportion of the site is considered to be at "high" risk of fluvial flooding and appropriate mitigation measures are required to ensure the safety of users in areas considered to be developable. Developable areas are defined as parcels of land located out-with the functional floodplain (1 in 200-year flood extents) which have a safe and flood-free access/egress route to ground above the design flood level (1 in 200-year plus climate change event).
- 4.78 However, review of East Ayrshire Council's adopted LDP indicates that an area of land immediately east of the Bellfield Interchange has been allocated as a 'Business/Industrial Growth Area'. Such uses are classified as a 'Least Vulnerable Use' under the SEPA Land Use Vulnerability Classification. Developments considered as Least Vulnerable Uses may be suitable for development within the functional floodplain ("medium" to "high" risk – 1 in 200 year flood extents) where the principle of the development on the site has been established in an up-to-date adopted



development plan and flood risk issues were given due consideration as part of the preparation process and SEPA's assessment of risk has not changed in the interim. However, as previously mentioned, SEPA were consulted with regard to the appropriateness of development within the floodplain and stated that built development should not take place on the functional floodplain. It should be noted that the preparation of the adopted LDP was robustly consulted on during preparation and SEPA was consulted at this stage. The LDP was also independently Examined by Scottish Ministers and the identification of the land at Bellfield Interchange as a Future Growth Area was supported.

- 4.79 Although modelled flood extents have been provided for the site and surrounding area, SEPA's guidance on the use of appropriate climate change allowances has been updated since the IVFS was undertaken in 2017. Based on SEPA's latest guidance (released April 2019), a climate change allowance of 44% should be used for fluvial flood risk assessment at this particular site. As such, further consultation should be undertaken with SEPA and EAC to confirm the most appropriate method of determining fluvial flood extents during the climate change scenario.
- 4.80 Due to the nature of the local geology in addition to the site's proximity to local watercourses, further investigation is required to determine groundwater levels within the site area and to inform appropriate mitigation measures, where deemed necessary. Further investigation into groundwater levels is required to determine the risk of flooding and what areas around the Bellfield Interchange are impacted.
- 4.81 To provide protection to the development, and unless otherwise confirmed by SEPA, all proposed buildings require to be located out-with the functional floodplain (1 in 200-year flood extents associated with fluvial sources), with finished floor levels (FFLs) set to a minimum of 600mm above the adjacent 1 in 200-year event plus climate change flood level. Over and above this minimum level, and throughout all remaining development areas, FFLs should generally be set a minimum of 150mm above the adjacent, external ground levels. The proposals will also require to demonstrate that a safe, flood-free emergency access/egress route can be provided for each developable area. It should be noted that the existing A76 culvert may require to be upsized to accommodate the development proposals and ensure compliance with current best practice guidance.
- 4.82 Where development within the floodplain is considered acceptable, compensatory storage will likely be required to mitigate the impact of displaced floodwaters within and around the site boundary. Specific requirements should be confirmed with SEPA as the development proposals are progressed to ensure compensatory storage can be implemented effectively, where necessary.
- 4.83 In order to comply with local planning policy and best practice guidance, suitable drainage measures should be incorporated to ensure that the development remains protected from flooding from pluvial sources up to the 1 in 200-year flood event plus climate change, which would reduce the risk of surface water flooding to "Low" within the site boundary. With regards to SEPA's latest guidance, appropriate climate change allowances for pluvial flood risk equate to 55% for this particular area. It should be noted that any proposed SuDS features require to be located out-with the functional floodplain, in-line with local planning policy and best practice guidance.



4.84 Where a risk of groundwater flooding is identified, appropriate mitigation measures could include the use of flood resilient and resistant materials in the lower levels of the building as a precautionary measure. Furthermore, appropriate measures should also be taken during the construction period of the development, particularly in relation to excavations, to prevent damage to equipment or a delay in the construction timeline due to groundwater ingress.

4.85 Assuming the afore-mentioned mitigation measures are incorporated into the design, flood risk associated with fluvial, pluvial and groundwater sources would be considered to reduce to “Low” within the developable areas of the site.

4.86 ARA provided updated flood modelling data in March 2020. East Ayrshire Council has instructed Waterman Group to assess this updated data and to provide a stand-alone assessment of the drainage capacity and flood water movement within the study area. The purpose of this additional assessment is to provide a robust analysis and understanding of the flood risk at this location and mitigation required. The stand-alone assessment will include commentary on the provision of a flood water storage area as a potential mitigation measure and the technical and financial feasibility of this potential solution.

#### **Baseline Site Constraints Summary**

4.87 Appendix 8 contains a map showing all identified existing site constraints. This constraints map has been utilised to identify the potential development options detailed in Section 5 of this Report. Appendix 9 identifies the scale of potential developable areas, taking account of the identified site constraints.

#### **Land ownership**

4.88 An initial assessment of land ownership has been undertaken based on publicly available information available on Scotland’s Land Information Service website ([www.scotlis.ros.gov.uk](http://www.scotlis.ros.gov.uk)). This is not a complete picture of all land ownership within the study area and the information may also not be reflective of recent transactions.





## 5.00 Assessment of Development Options

### Introduction

5.01 The scope of this Stage 1 Assessment is to focus on commercial development opportunities for the land at Bellfield Interchange. The following potential development options have been identified as suitable commercial/community uses for this location:

1. General Business and Industry
2. Advanced Manufacturing
3. Energy Related Industries
4. Roadside Services
5. Transportation
6. Community Uses
7. Tourism

5.02 This section of the report will assess the current market position and market demand for each of the above potential development options. The options will be assessed as a stand-alone proposal or if the proposed use could be brought forward as part of a mixed-use development.

5.03 For each option considered, a summary table of the resulting economic benefits has been included. Consideration is given to the economic benefits of each option in terms of job creation, market demand, strategic fit with East Ayrshire Council’s economic strategy, local community benefits and potential for inclusive economic growth. The potential for economic benefits are rated as being high, medium or low.

### **Option 1: General Business and Industry**

5.04 The East Ayrshire Local Development Plan (LDP) 2017 specifically identifies the land at Bellfield Interchange as a future growth area. Paragraph 5.1.12 of the LDP details that:

*“...This is a highly visible strategic location adjacent to the Bellfield Interchange, a significant entry point into Kilmarnock where the M77/A77 meet the A71 and A76. It is envisaged that new business and industrial development at this location will assist to consolidate the M77 Investment Corridor and will greatly assist in helping to strengthen and diversify the economy of Kilmarnock and will further develop linked with Prestwick Airport.”*

5.05 Schedule 3 of the LDP allocates the following sites within Kilmarnock for business and industrial use:

Site Reference	Site Address	Site Size (hectares)	Council Ownership
152B	Meiklewood/Mosside	43.28	



Site Reference	Site Address	Site Size (hectares)	Council Ownership
153B	Rowallan Business Park	27.34	
158B	Moorfield Park	28.92	Partially
160B	Moorfield Park (Phase 3)	18.84	
159B	Moorfield South	20.55	Partially
322B	Bonnyton Industrial Estate	9.78	Partially
323B	Glenfield Industrial Estate	14.09	Partially
324B	Glacier Vanderveil	8.65	

5.06 Schedule 3 of the LDP also identifies sites in Council ownership. Where it has been identified that the Council has partial ownership, the schedule does not specify what units/areas of land are within Council ownership.

5.07 The overall supply of general business/industrial units within Kilmarnock is typically provided within the following Estates/Industrial Parks:

- Glencairn Industrial Estate
- Moorfield Industrial Estate
- Moorfield North Industrial Park
- Bonnyton Industrial Estate
- Rowallan Business Park
- Loreny Industrial Estate
- Forge Street Industrial Estate, West Langlands Street
- Townholm Business Park
- Individual industrial units surrounding Western Road
- Individual industrial units surrounding Bentinck Street

5.08 Within the existing Estates/Industrial Parks identified above, there are only a total of eighteen units available to let, all individual units below 3,315<sup>2</sup> ft. Moorfield North Industrial Park and Rowallan Business Park, Kilmarnock are the only Estates which have been established within the last 25 years. The land at Micklewood/Mossie has not been developed despite its allocation for employment use in the previous two Local Plans.

5.09 All of the existing Estates typically provide units up to 10,000<sup>2</sup> ft in size, with the exception of Moorfield North Industrial Park which is strategically planned for units in excess of 10,000<sup>2</sup> ft and a small provision for larger scale units within Bonnyton Industrial Estate and Rowallan Business Park. There is currently no further scope to expand at these existing Estates to create further accommodation to meet the demand.

5.10 In May 2013, Ryden prepared a Review of Land Supply for Business and Industry in East Ayrshire to guide the preparation of the now adopted LDP and economic



strategy. As this Review was undertaken circa 6 years ago it does not provide a current assessment of the business and industrial markets in Kilmarnock.

- 5.11 At the time of preparing this Assessment, there are no vacant industrial or business units being marketed within Kilmarnock for sale upon a vacant possession basis. There are only eighteen industrial units being marketed available to let ranging in size from 533<sup>2</sup> ft to 3,315<sup>2</sup> ft with no current units available in excess of 3,315<sup>2</sup> ft.
- 5.12 Of the units that are currently being marketed, they are generally of a small to medium sized scale, are older in age and poor to average physical condition.
- 5.13 Industrial units in East Ayrshire are generally in poor physical condition. The area competes with Irvine in North Ayrshire for inward investors, particularly the i3 biotech campus which provides accommodation ranging from 1,000<sup>2</sup> ft to 10,000<sup>2</sup> ft. The demand from occupiers is for modern, quality space (e.g. with reception area, meeting spaces, etc.) which is close to major transport routes, such as the A77.
- 5.14 East Ayrshire Council's Economic Development Department has indicated that there is demand for larger scale units (circa 4,000<sup>2</sup> ft to 25,000<sup>2</sup> ft). There is an overall unsatisfied demand for general business/industrial units within Kilmarnock and the wider East Ayrshire area. Due to lack of available units, it is noted that a high degree of demand is now being satisfied within North Ayrshire and South Ayrshire. The lack of available units of all scales is resulting in investment and employment opportunities leaking to surrounding authority areas.
- 5.15 East Ayrshire is a preferred location for a number of occupiers due to the strong transport network connections to the motorway network and proximity to Glasgow. This has been evident at Moorfield North Industrial Park. The new build accommodation created at this location over the last 10 years under Phase 1 has resulted in five companies relocating to this Industrial Park to develop their own purpose-built facilities, fit for their business expansion.
- 5.16 Phase 2 of Moorfield North Industrial Park has been promoted and supported by East Ayrshire Council and three larger scale buildings have been created. This has provided accommodation for four independent companies and is currently fully occupied.
- 5.17 There are currently available plots for development within Phase 1 of Moorfield North Industrial Park, with five remaining plots being openly marketed for sale. It is understood that there is significant interest in the remaining plots at Phase 2. This demonstrates a strong demand for industrial accommodation within Kilmarnock and in particular for new build accommodation.
- 5.18 All of the new build development which has taken place in recent times has tended to be of a larger scale with units in excess of 15,000<sup>2</sup> ft. From general property enquiries Graham + Sibbald has received and from discussions with East Ayrshire Council's Economic Development Department, it is noted that there continues to be unsatisfied demand. The majority of occupiers would prefer the accommodation to be built and available for immediate occupation rather than serviced land. This again is causing migration of occupation to out-with East Ayrshire.
- 5.19 Over the past 12 months there have been no sales of general business/industrial units within the Kilmarnock area on a vacant possession basis for occupation,



however there have been eleven lettings of varying sized units for occupation ranging between 658<sup>2</sup> ft to 29,064<sup>2</sup> ft and comprising a total occupied floor space of 93,558<sup>2</sup> ft and average unit size of 8,505<sup>2</sup> ft.

5.20 The split of unit sizes taken up in the demand over the past 12 months can be summarised:

Size Range of Units	Number of Letting Transactions
Up to 2,000 <sup>2</sup> ft	5
2,001 <sup>2</sup> ft to 5,000 <sup>2</sup> ft	1
5,001 <sup>2</sup> ft to 10,000 <sup>2</sup> ft	2
Above 10,000 <sup>2</sup> ft	3
<b>Total</b>	<b>11</b>

5.21 There is established demand for business and industrial units within Kilmarnock. There is demand for modern, high-quality accommodation of a range of scales, in particular larger units of over 5,000<sup>2</sup> ft and above.

5.22 The development of business and industrial accommodation at Bellfield Interchange would be entirely in-keeping with the allocation as a future growth area in the adopted 2017 LDP. This use would also fully support the aspirations of the Economic Development Strategy and Community Plan.

5.23 This would meet established demand and would retain economic growth within East Ayrshire and prevent any further leakage to neighbouring Local Authorities. The provision of a range of scale of units would allow East Ayrshire Council to support business growth and retain current business as their operations expand and accommodation requirements change.

5.24 The encouragement of expansion of existing businesses and attraction of new occupiers to Kilmarnock will in turn create employment opportunities and will have in-direct benefits to the wider community, in terms of increased expenditure at local shops and food and drink establishments.

**Option 1: Economic Benefits Summary**

Job potential	Medium
Demand	High
Strategic fit	High
Local community benefits	Medium
Inclusive growth potential	Medium

**Option 2: Advanced Manufacturing**



- 5.25 As part of the Ayrshire Growth Deal, Kilmarnock has been identified as the preferred location to deliver the Ayrshire Manufacturing Investment Corridor (AMIC). This will establish a new innovation centre to support the growth of the advanced manufacturing sector. This will focus on food and drink innovation with a specific emphasis on dairy.
- 5.26 The Scottish Government published 'A Manufacturing Future for Scotland' in February 2016. This sets out the economic importance of the manufacturing industry in Scotland and provides an eight-point manufacturing action plan (MAP) to help achieve an expanding, export-driven Scottish economy. The manufacturing industry employ around 190,000 people in Scotland and account for more than half of both exports and research & development expenditure, but only 10% of Gross Value Added.
- 5.27 Ryden was commissioned by Scottish Enterprise to build on the MAP and to research the industrial property context for the action plan. Ryden's report found that the stock of premises was generally built by the public sector circa 30 -50 years ago, is ageing and may exceed its design life during the action plan period. Current development activity is particularly low and is impacted by market failure and lack of financial viability. Market evidence has identified existing latent demand from industrial occupiers unable to find suitable modern premises. Property obsolescence in terms of age and functionality may deter investment and growth. This is compounded by increasing energy performance and 'green' requirements.
- 5.28 In August 2017, Ryden was appointed by East, North and South Ayrshire Council's to undertake a Property Market Assessment in relation to the Ayrshire Growth Deal. This Assessment included a review of the land at Bellfield that is proposed for the development of the Ayrshire Manufacturing Investment Corridor (AMIC). This location has been selected due to its strategic location adjacent to the A77, A76 and A71 interchange providing links to Glasgow, Ayr/Prestwick, Irvine and Dumfries. AMIC proposals include business startup units, managed workspace, a range of industrial units and a Manufacturing Centre of Excellence. This is aimed at encouraging new companies to start and grow, as well as allowing existing businesses to expand. Around 40,000 sq.m. of space is anticipated to be delivered over the medium to long term, with the first construction phase of start-up units and Centre of Excellence being delivered by 2024 and 2026 respectively, and the managed workspace in 2025. The remaining industrial space will be completed between 2029 and 2031.
- 5.29 The Assessment prepared by Ryden stated that although a site for the project has been identified at Kirklandside Hospital, this is a long term project and the land is not yet allocated for business and industrial uses. Consultation undertaken as part of the preparation of this Assessment noted that Bellfield is out of centre and therefore less suited to service uses. Smaller Service units would be better located nearer Kilmarnock Town Centre.
- 5.30 As detailed under Option 1: General Business and Industry, East Ayrshire has been successful at attracting services industry and still has market demand, but no suitable space. Accommodation needs to be developed first to attract inward occupier demand, as this type of investment generally requires immediately available space and is less willing to wait for new build. Speculative space is therefore important for attracting inward investment.



5.31 A first draft Outline Business Case was prepared for the AMIC in May 2018. A second draft of OBC was submitted in February 2020 and feedback has been received from Scottish Government whilst feedback from UK Government is awaited. The business case includes a proposed food and drink innovation centre, which will have an initial focus on dairy. The innovation centre will include research and development facilities open for use by all companies (based within and out-with the AMIC), which will support product development and innovation.

5.32 The added value of the AMIC is the units for start-up companies who are growing and in need of medium-sized space, for example 10,000<sup>2</sup> ft. or larger, which is currently in short supply in East Ayrshire. These high growth potential tenants will also have access to local and regional business support organisations, such as East Ayrshire Council’s beReady programme, Business Gateway and Scottish Enterprise.

5.33 The AMIC will also have links to Ayrshire College, SRUC and University of Strathclyde, in terms of teaching and recruitment opportunities, which will contribute to inclusive growth. The project would also complement the Borderlands Growth Deal, which includes support for rural innovation, and specifically a Dairy Innovation Centre to be based in Dumfries and Galloway to maximise the value of the region’s dairy sector. This is one step earlier in the food and drink supply chain, and has the potential to also help increase capacity in East Ayrshire’s dairy sector.

5.34 The delivery of the AMIC at Bellfield will provide a range of facilities to attract and retain businesses in East Ayrshire. This will include startup units, larger manufacturing units, innovation centre and research & development facilities. The AMIC could also provide training and education facilities and will make East Ayrshire a centre of excellence for the food and drink industry. Once established, this proposal has the potential to encourage other associated industries and uses to Bellfield e.g. food & drink tourism related uses, hotel etc.

**Option 2: Economic Benefits Summary**

Job potential	High
Demand	Medium-high
Strategic fit	High
Local community benefits	Medium-High
Inclusive growth potential	High

**Option 3: Energy Related Industries**

5.35 It has been established in Option 1 and 2 above that there is demand for business and industrial units within East Ayrshire. The expansion of such demand beyond general business and industrial and manufacturing and into other sectors (such as energy related industries), has been considered as part of this Options Assessment.

5.36 The NERD (National Energy Research and Demonstrator project), a key energy-related project as part of the Ayrshire Growth Deal, is currently at the Outline Business Case stage and awaiting Scottish Government and UK Government feedback. The NERD will be located at Cumnock, and, as such, any energy related demand will be driven towards this location.

5.37 Although the employment potential of this option is high, the location of energy related industries at Bellfield would not be in-keeping with the strategic objectives



of the East Ayrshire Economic Strategy or Ayrshire Growth Deal. Therefore, this option has been discounted.

**Option 3: Economic Benefits Summary**

Job potential	High
Demand	Low-Medium
Strategic fit	Low
Local community benefits	Medium
Inclusive growth potential	Low-Medium

**Option 4: Roadside Services**

5.38 There are existing roadside services at Bellfield Interchange which are accessed from the A76 and A71. The site is in the ownership of MFG and comprises of a BP Petrol Filling Station, Travelodge Hotel and McDonalds drive thru.

5.39 Drive thru restaurants is an expending market and is moving beyond the traditional McDonalds and KFC units with Costa and Starbucks expanding their drive thru offer. Other potential operators in the market place include Krispy Kreme, Tim Horton’s and Denny’s. Greggs is also expanding into drive thru units.

5.40 Land availability adjacent to the existing services is restricted due to the adjacent cemetery. However, there could be the potential for an additional drive thru unit at this location to capitalise on the existing services.

5.41 Visit Scotland’s Hotel Occupancy Statistics (2018) detail that occupancy levels in Ayrshire and Arran are at 69%, which is slightly below the national average of 71%. There may be potential for another hotel to be accommodated at Bellfield Interchange. It is considered that this is unlikely to be located adjacent to the existing roadside services due to land availability restrictions and current Travelodge offer. Instead, a hotel could form part of the AMIC proposals and in particular support the research and development/training and development aspects of this proposal, which will draw people from Scotland and beyond to Kilmarnock. The potential for additional hotel facilities is discussed further in Option 6: Tourism.

5.42 There is currently no truck stop in Kilmarnock and market evidence and discussions with the Council’s Economic Development Department has identified demand for such a facility. Due to land availability, it is considered that this could not be accommodated adjacent to the existing services and would instead be best located to the south of the A76. As this would be separate from the existing services, it is considered that this use could also be supported by an amenity building to provide a rest area and services for drivers. This could include a small retail and food and drink offer. This would be of a scale that would not compete with the Town Centre and would purely service driver requirements.

**Option 4: Economic Benefits Summary**

Job potential	Low
Demand	Medium-High
Strategic fit	Low
Local community benefits	Medium
Inclusive growth potential	Low

**Option 5: Community Uses**



- 5.43 There are currently a range of community uses located at the Bellfield Interchange area. This includes a Torrance Lodge Care Home and the cemetery to the east of the roadside services and north of the A76. The former Kirklandside Hospital is located to the south of the A76.
- 5.44 As part of the preparation of this Stage 1 Development Options Assessment, discussions were undertaken with NHS Ayrshire & Arran and East Ayrshire Council's Health and Social Care Partnership.
- 5.45 Kirklandside Hospital is surplus to NHS Ayrshire & Arran's current requirements and is currently in the process of being demolished.
- 5.46 NHS Ayrshire & Arran, the three health and social care partnerships, local authorities, third and independent sector organisations and the Scottish Ambulance Service currently provide health and social care services locally. The 'Caring for Ayrshire' transformation programme, is about all parties working together to improve the health and wellbeing of the people of Ayrshire and Arran. The aim is to focus resources in ways that allow the best services to be provided as close to home as possible. This will ensure locally-based services continue to provide routine community and hospital care. More specialist services will be delivered in regional and in some instances national centres.
- 5.47 Main hospital provision in Ayrshire is currently located on the University Hospital Crosshouse and University Hospital Ayr sites. These hospitals are supported by a network of community facilities and GP practices.
- 5.48 In terms of sports and leisure uses, the supply of recreational land and facilities within Kilmarnock and the surrounding area is currently well met. At the time of preparing this Assessment, there are existing sports facilities available for sale and to let including the former Ayrshire College Campus at Townholm and the former Kilmarnock Football Club Gymnasium, Rugby Road, both of which are available for sale or to let and have been marketed for a period of time with little interest.
- 5.49 There are a number of small gymnasiums and personal training facilities which have established around the town over recent years and it is understood that the market has now reached a point of saturation whereby there are sufficient facilities to meet all demand when compared to the demographics and population. In addition to these existing facilities there is a large former retail unit currently available on Fowlds Street, which is directly located within Kilmarnock town centre and suitable for a number of sports of leisure type uses. There are current sporting and leisure facilities based on Queens Drive with a private gym and the Ayrshire Athletics Arena together with the Galleon Leisure Centre situated within Titchfield Street.
- 5.50 A public swimming pool is incorporated within the Galleon Leisure Centre, Titchfield Street, Kilmarnock and is understood to be entirely adequate to service the needs of the location at the current time with no further demand for alternative or private facilities. Other leisure uses such as cinemas, ten pin bowling etc. are all well provided for within Kilmarnock town centre and on Queens Drive with a relatively modern Odeon Cinema which again provided the necessary facilities for the town and there are no other requirements in this regard at the current time.





- 5.51 Kilmarnock Football club has in recent years undertaken several studies to identify suitable land to create additional training facilities by way of grass pitches and associated indoor and outdoor training facilities. We are aware that following this study various upgrading changes have been undertaken at Rugby Park in order to accommodate this additional demand. However, should additional opportunities exist at Bellfield in the future this may be of interest the Football Club, subject to further discussion and negotiation.
- 5.52 Market evidence and discussions with East Ayrshire Council's Economic Development Department has indicated minimal demand for sports and leisure use. There is minimal market demand for large units to accommodate such uses as trampolining parks etc. Local and national planning policy encourages such footfall generating uses into Kilmarnock Town Centre. The location of such a use at Bellfield would be contrary to planning policy and the strategy for Kilmarnock Town Centre.
- 5.53 The purpose of the identification of the development opportunities at Bellfield Interchange is to identify a strategy for growth that will inform the Local Development Plan process. Bellfield Interchange is situated in a highly accessible location with strong links to the motorway network in Scotland. There is a requirement to consider longer term opportunities and changes in service provision. It is therefore considered that community use should be incorporated into any masterplan prepared for Bellfield interchange to give flexibility for future requirements e.g. recreational facilities, expansion of cemetery, allotments, future care uses etc.
- 5.54 The socio-economic benefits from the community option will be dependent on the type of facilities provided.

#### **Option 6: Tourism**

- 5.55 The East Ayrshire Tourism Action Plan was prepared in 2017 and identifies the food and drink sector as a key area of focus. As detailed in Option 2 above, it is considered that any tourism use at this location would be linked to the proposals as part of the AMIC. This will ensure that any tourism development does not compete with other tourism facilities and accommodation in Kilmarnock and generally within East Ayrshire and does not draw footfall generation away from the Town Centre.
- 5.56 Scotland's hotel market saw record investment volumes of £902m in 2018 – a fourfold increase on 2017's figures. International parties remaining the most dominant investor group, representing over 75% of the market share.
- 5.57 The tourism option at Bellfield Interchange would focus on the food and drink sector and could include a hotel and/or a visitor/conference centre.
- 5.58 Other tourism offers can be discounted at this stage, for example capitalising on North Ayrshire's proposed marine tourism expansion, given the location of Bellfield. Also, a creative industries-related tourism offer should be discounted given the existence of a creative cluster in Kilmarnock town centre. Any competing site would be inappropriate.
- 5.59 Given that food and drink is a key strength of East Ayrshire, a food and drink visitor centre combined with the AMIC could potentially be an economically strong option. One other option could be to support business tourism in East Ayrshire through a



conference facility. Currently the largest conference facility in East Ayrshire is the Park Hotel located at Rugby Park, Kilmarnock which has a number of function suites available to host meetings and functions with capacity between 1-500 delegates. In addition, the Fenwick Hotel, Fenwick similarly has capacity for 30-100 delegates within the function facilities available.

**Option 6: Economic Benefits Summary**

Job potential	Medium
Demand	Low-Medium
Strategic fit	Medium
Local community benefits	Medium-High
Inclusive growth potential	Medium

**Option 7: Transportation**

- 5.60 There is an opportunity to provide transportation infrastructure at Bellfield Interchange, which would address known requirements and clearly link this area with Kilmarnock Town Centre.
- 5.61 As discussed in Option 4: Roadside Services, there is currently no truck stop facility within Kilmarnock. The provision of such a facility at Bellfield would have indirect economic benefits for the Kilmarnock area by encouraging drivers to stop and rest in Kilmarnock and use local services rather than continuing their journey to Glasgow or Dumfries & Galloway.
- 5.62 Another option would be to provide a park and ride facility at Bellfield and this would be linked to Kilmarnock and the surrounding area by local bus services. This could be linked to a proposed rail halt to the east of the site to connect to the existing railway line.
- 5.63 To fully explore this option, discussions would need to be linked to the work currently undertaken by AMEY in relation to capacity at Bellfield Interchange. Detailed discussions would also need to be undertaken with Network Rail and bus services operators.

**Option 7: Economic Benefits Summary**

Job potential	Low
Demand	Low-Medium
Strategic fit	Low-Medium
Local community benefits	Medium
Inclusive growth potential	Medium



## 6.00 Funding and Delivery Opportunities

6.01 There are a number of funding and delivery options available for a large scale masterplanned development such as the potential development at the Bellfield Interchange area.

6.02 It is considered that a large part of the funding for a proposed development will be realised from the Ayrshire Growth Deal (AGD). The AGD funding allocations for projects within East Ayrshire are outlined in Section 3 of this report. This section of the report details additional finance and funding packages and other arrangements that may be available to East Ayrshire Council to deliver development at this location. This may not be an exhaustive list of all potential funding options available to East Ayrshire Council. Consideration has been given to:

- UK Government funding
- Scottish Government funding
- Other Public Sector funding bodies
- Joint Venture Partnerships
- Property Investors and Developers

### **UK Government Funding**

#### *Public Works Loan Board (PWLB)*

6.03 The UK Government provides the opportunity for Local Authorities to obtain a loan, mainly for large scale capital projects, directly from the Public Works Loan Board (PWLB). The PWLB is a statutory body that issues loans to Local Authorities from the National Loans Fund, operating within a policy framework as set out by HM Treasury. The PWLB's interest rates are determined by HM Treasury in accordance with the National Loans Act. The PWLB is a non-discretionary lender and therefore it is not part of its arrangements to require information and the reasons for or circumstances surrounding loan applications or borrowing activity, however affordability does require to be satisfied and full approvals for the proposed development must be in place before loan applications can be made.

### **Scottish Government Funding**

#### *The Regeneration Capital Grant Fund (RCGF)*

6.04 The Scottish Government can provide capital investment for regeneration and the majority of funding packages focuses upon specific regeneration strategies to develop the economic potential of Scotland's communities. The Regeneration Capital Grant Fund (RCGF) is delivered in partnership with COSLA and Local Government, and supports local development regeneration projects that involve local communities, helping to support and create jobs and build sustainable communities.

6.05 RCGF invites applications for specific projects which are considered by the Regeneration Capital Grant Fund investment panel. These applications are not restricted by geography, size or type of project, however applicants require to demonstrate that their project fits with the aims and objectives of the Fund, can



demonstrate clear regeneration outcomes in line with the Fund's strategy for achieving a sustainable future, and are in accordance with local area regeneration plans. The Fund is available to local authorities individually, either through Urban Regeneration Companies (URCs) or other Special Purpose Vehicles (SPVs). RCGF applications require a case-based proposal which demonstrates market failure and primarily focuses on areas that suffer from high levels of deprivation and disadvantage. Projects must demonstrate clear community involvement and that the proposals will enable large scale transformational change with strong regeneration outcomes to be obtained locally.

#### *Scottish Partnership for Regeneration in Urban Centres (SPRUCE)*

6.06 The Scottish Government also operates the Scottish Partnership for Regeneration in Urban Centres (SPRUCE). SPRUCE is a fund that offers loans and equity investments to revenue generating infrastructure and energy efficient projects to support regeneration in eligible Local Authority areas throughout Scotland.

6.07 SPRUCE again requires Local Authorities to demonstrate that there is a case for market failure. This funding source can be utilised by the Local Authority in conjunction with other joint venture partners. As part of the infrastructure delivered through SPRUCE funding, all contractors are required to include the provision of community benefits as part of the public procurement process. The aim is to ensure that appointed contractors provide jobs and training opportunities for local people as part of the delivery of the masterplanned infrastructure.

#### *Vacant and Derelict Land Fund (VDLF)*

6.08 The Vacant and Derelict Land Fund (VDLF) is in place to tackle the long-term vacant and derelict land issues throughout Scotland and has an objective to stimulate economic growth, create jobs, promote environmental justice and improve quality of life and support communities to flourish and tackle inequalities. The VDLF provides funding to specific Local Authority areas where high levels of vacant and derelict land and high levels of deprivation have been identified. Whilst this is a potential source of funds available, at the current time it is understood the Local Authorities which have been approved funding to date include Glasgow, North Lanarkshire, South Lanarkshire, North Ayrshire and Fife.

#### **Other Public Sector Funding Bodies**

6.09 Consideration has been given to all of the known potential funding opportunities for such developments and principally these are available through the UK and Scottish Governments or alternatively joint venture partnerships. Graham + Sibbald is not aware of any other significant public sector funding bodies which would contribute funds to the development opportunities being considered at Bellfield Interchange.

#### **Joint Venture Partnerships**

6.10 Joint Venture Partnerships between the public and private sector for the delivery of development, land reclamation or infrastructure provision has proven to be successful in the past and it is anticipated that the opportunity would exist within the Bellfield Interchange proposals for a Special Purchase Vehicle (SPV) to be considered in order to fulfil the development proposals. Given the size of the proposed development area at the current time, it is not envisaged that a full Urban



Regeneration Company (URC) would be established, however an appropriate SPV could be established to capitalise on profitable regeneration opportunities within East Ayrshire. This would allow commercial development projects to be tackled where there is established market failure and could operate across a mixed-use sector of commercial and community uses. This would allow sustainable regeneration and long-term economic benefits through focused development proposals where, following the creation of the infrastructure, the private sector developers could also continue to promote the development of individual buildings and projects throughout the masterplanned area.

- 6.11 In respect of the Bellfield Interchange area, this would allow East Ayrshire Council to promote the land assembly and to facilitate the regeneration plans of the masterplanned area to ensure full commercial and economic benefits, thereafter engaging with the private sector to increase investment into East Ayrshire through joint venture projects and creation of commercial premises for advanced manufacturing, community uses and other commercial uses.
- 6.12 One specific example of a SPV model which has been successful in Scotland is the Fusion Assets Ltd model which has been operated and developed by North Lanarkshire Council within a number of sites throughout the North Lanarkshire area. This has been utilised to deliver a range of successful projects creating long-term investment opportunities which can create income that can then be re-invested into other regeneration and economic development projects within the area. Fusion Assets has benefited from numerous successful developments. An example of a project delivered under this SPV model was the acquisition of an 18-acre plot of land and the delivery of a development known as Link Park, Newhouse, to create a major new manufacturing, distribution and logistics development. Fusion Assets Ltd completed a package of advanced infrastructure works to provide new access roads, site platforming and servicing following a grant award from the Scottish Government's Capital Regeneration Fund. Thereafter, a joint venture partnership was developed to obtain detailed planning approval for the first phase of development which consists of 81,000 sq ft of new build Class 4 (business), 5 (general industrial) and 6 (storage and distribution) floorspace.
- 6.13 Other successful developments undertaken by the joint venture SPV company include a smaller site of 3.15 acres which was undeveloped within the grounds of a former research facility at Chapelhall, adjacent to one of the former Enterprise Zone sites. However, market failure and development viability constraints at this site were established due to the requirement for advanced infrastructure works to address ground conditions and accessibility issues. Fusion Assets Ltd undertook a package of enabling advanced infrastructure works to address the ground conditions and accessibility constraints to create a fully serviced development in order that the joint venture partner could thereafter obtain planning approval and implement a further 41,000 sq ft of new build Class 4 (business) and 5 (general industrial) floorspace.
- 6.14 Fusion Assets, through a joint venture partnership with CBC Ltd, secured loan funding from SPRUCE for the development of a smaller 3-acre vacant site within the existing Dundyan Industrial Estate, Coatbridge. In this instance there was established market failure and following the provision of funds, the joint venture partnership successfully provided an additional 44,000 sq ft of new build industrial space across three separate blocks, which were subsequently let and sold upon completion.



6.15

In respect of the proposals for the Bellfield Interchange development, it is considered that the most suitable delivery mechanism to maximise the funding and deliver the most appropriate development for the area will be based upon the Ayrshire Growth Deal, where it is considered that a large part of the funding will be realised. This could be supplemented by the Regeneration Capital Grant Fund (RCGF), subject to the successful applications in respect of these funds. Graham + Sibbald is of the opinion that these will be the two principal sources of potential funding, which could be supplemented thereafter by way of a smaller-scale joint venture partnership working in delivering individual properties with SPV partners. It is likely that any joint venture partnership would require East Ayrshire Council to bring forward a masterplan for the site, undertake land assembly and implement the necessary infrastructure to allow development at this location to be delivered.



## 7 Summary and Recommendations

- 7.01 Graham + Sibbald (G+S) has been appointed by East Ayrshire Council to undertake a Stage 1 Assessment of potential development options for land adjacent to Bellfield Interchange, Kilmarnock.
- 7.02 The purpose of this Stage 1 Assessment is to identify site constraints and mitigation measures required to support development and to identify development options that would support economic growth and job creation within East Ayrshire.
- 7.03 The Bellfield Interchange is recognised in the adopted East Ayrshire Local Development Plan 2017 (LDP) and by the Scottish Government as being a strategically important transport hub and one of the main gateways to Kilmarnock. East Ayrshire Council recognises the development potential around this area and wishes to capitalise on the potential to support economic growth.
- 7.04 The East Ayrshire Local Development Plan (LDP) was adopted in April 2017. The LDP identifies the land to the East of Bellfield Interchange as an area for future growth, specifically for business and industrial expansion.
- 7.05 The Ayrshire Growth Deal (AGD) was agreed with the Scottish and UK Governments in March 2019, and is estimated to be worth £251.5 million<sup>8</sup>. The deal is expected to unlock private investment worth up to £300 million and create up to 7,000 new jobs in the region. It is anticipated that the deal will be delivered over a 15 year period.
- 7.06 The AGD presents a once in a generation opportunity to transform the economic prospects of the area. The long term plan is to attract new business, support existing companies to expand, create more jobs and bring new opportunities to the area.
- 7.07 The AGD identifies a number of specific projects for the Kilmarnock area. These include the HALO transformational regeneration project which will re-establish the former Johnnie Walker whisky bottling site as a key centre of employment. This will create a Hub which will stimulate entrepreneurship and support collaboration between new and existing businesses to drive the Ayrshire economy.
- 7.08 £16m will be invested to expand and develop Moorfield Industrial Park in Kilmarnock. This will create up to 15,000 sq. m of serviced and high-quality business space to support manufacturing and light industry sectors.
- 7.09 A significant investment of £23.5m has been identified to deliver the Ayrshire Manufacturing Investment Corridor (AMIC) which will establish a new national asset in Kilmarnock. This will include the establishment a Centre of Excellence to support the creation of new businesses in the advanced manufacturing sector. A new innovation centre will be delivered in partnership with Strathclyde University. This will create a Hub facility within the AMIC and will specifically focus on food and drink innovation.
- 7.10 An assessment of site constraints has been undertaken to assist in the identification of suitable parcels of land within the study area and necessary mitigation to deliver

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<sup>8</sup> <https://www.gov.uk/government/news/ayrshire-growth-deal-agreed>



development. Appendix 8 provides a plan showing the overall constraints impacting the study area. Appendix 9 shows the potential developable areas of land that are relatively free of constraints.

7.11 A review of landownership has also been undertaken and this is based on publicly available information and does not provide a complete picture of all ownership within the study area.

7.12 This Stage 1 Assessment also includes a review of potential development options that could be delivered at the site. The following development options have been considered in terms of market demand, compliance with strategic objectives and delivery of socio-economic benefits:

1. General Business and Industry
2. Advanced Manufacturing
3. Energy Related Industries
4. Roadside Services
5. Transportation
6. Community Uses
7. Tourism

7.13 The Stage 1 Assessment also provide a review of potential funding options available to East Ayrshire Council, in addition to funding secured through the Ayrshire Growth Deal.

#### **Summary of Findings**

7.14 The land around and to the south of the former Kirklandside Hospital is relatively free of physical constraints and represents the greatest opportunity for development. This area of land extends to approximately 39.25 ha.

7.15 The site is currently accessed via an unclassified road from the A76. This is a single carriageway road allowing two-way operation to the point of the hospital access. Thereafter it becomes rural and only suitable for one-way operation.

7.16 Site access is the key constraint to the delivery of development on this parcel of land. East Ayrshire Council has commissioned Waterman Group to undertake a stand-alone access study to examine the potential of the existing unclassified road junction onto the A76. They have also been asked to assess the feasibility of providing a new roundabout some distance south of the Bellfield Interchange on the A76 and whether an access from the A71 (west of the railway bridge) could be constructed to open up the land between the A71 and A76 roads. This will determine the scale of development that can be accommodated on this parcel of land.

7.17 Other potential development parcels have been identified to the east of Riccarton Cemetery (8.15 ha) and to the north of Riccarton Road (3.17ha). There are also two parcels of land to the north of the study area extending to 3.84 ha and 7.23 ha. The key constraints in relation to the development of these parcels of land is again access and further investigation is likely to be required to determine potential access options and development capacity.

7.18 A review of land ownership has been undertaken based on publicly available information and does not provide a complete picture of ownership. It is





recommended that a land ownership report is prepared to identify all landowners within the study area and any other legal rights such as wayleaves and servitudes.

- 7.19 The above development parcels of land have been identified on the basis that they are relatively clear of physical site constraints. A significant proportion of the study area is currently identified as being at risk of flooding. Further investigation into existing flood risk may identify additional development capacity within the study area. Ayrshire Roads Alliance (ARA) provided updated flood modelling information in March 2020. East Ayrshire Council has commissioned Waterman Group to undertake a stand-alone assessment of drainage capacity and flood water movement within the study area. This will be prepared in consultation with ARA and SEPA. The study will also assess if the creation of a storage area would mitigate existing flood risk and if this mitigation option is technically and financially feasible.
- 7.20 In terms of potential development options, it is considered that the land at Bellfield Interchange could accommodate the Innovation Centre associated with the Ayrshire Manufacturing Investment Corridor (AMIC). The site is strategically placed to attract companies involved in this sector to East Ayrshire. The delivery of the AMIC at this location would meet the strategic vision for Ayrshire and would also be in accordance with the Local Development Plan (LDP) allocation of this area for future growth.
- 7.21 The location of this facility within the former Kirklandside Hospital site would appear to be an appropriate location. As detailed above the site is relatively free from physical constraints, is of a suitable scale and would re-develop an existing brownfield site. As detailed above, further investigation into the existing access junction capacity is required to identify if this scale of development can be accommodated at this location.
- 7.22 It is assumed that as the Full Business Case for the AMIC develops, the area of land required for this use will be known. This will assist in identification of the most appropriate location. If this use is to be located at Bellfield Interchange, the development of an indicative layout for the AMIC will allow a masterplan to be prepared for the Bellfield Interchange study area. This would identify the most appropriate location within the study area for the AMIC and allow identification of further available land to support additional uses.
- 7.23 There is identified demand for business and industrial units within East Ayrshire. The delivery of these uses on land immediately east of the Bellfield Interchange would accord with the LDP allocation and strategic vision. This could be linked to the delivery of the AMIC. The identification of land required for the AMIC will allow an assessment of additional available land within the study area to support general business and industrial use.
- 7.24 Energy related uses were considered as part of the assessment of development options. The NERD project is being delivered at Cumnock and the delivery of energy related uses at Bellfield Interchange would compete with this project and would not be in-keeping with the strategic vision. This use has therefore been discounted as a potential development option.
- 7.25 There is the potential to expand on the existing roadside services at Bellfield Interchange. The land in this area is however is constrained due to proximity to the



cemetery. It is likely that any additional future roadside service use because of this constraint would be of a relatively small scale.

- 7.26 It has been identified that the land study area at Bellfield Interchange is potentially suitable for the community use, however any development for such a use would have to be driven by a specific identified requirement rather than on a speculative basis.
- 7.27 It has also been identified that the study area at Bellfield Interchange is potentially suitable for tourism related uses such as a hotel associated with the AMIC.
- 7.28 The study area would also be suitable for a new rail halt and park and ride, particularly if the wider area is development for AMIC, general business & industrial and community uses. However, it should be noted that much but not all of the land around the existing railway line is identified at being at risk of flooding. There is also a risk of peat and identified mineshafts being evident in some areas adjacent to the railway track. If this option is to be further explored then further investigation into food risk and ground conditions will be required.
- 7.29 This Stage 1 Assessment provides an overview of potential site constraints and identifies potential development options and parcels of land with development potential. Further investigation is required in relation to landownership, site access and flood risk. The delivery of a rail halt/park and ride is likely to also require further investigation into ground condition and coal risk.
- 7.30 It is considered that the AMIC could be accommodated within the study area. It is recommended that an indicative layout is prepared for this use to identify the land requirements. It is then recommended that an indicative masterplan is prepared for the study area it shows the mix of uses that could be accommodated within the study area.

### **Key Recommendations**

- 7.31 The following key recommendations have been identified within this Stage 1 Assessment to progress development options for the study area at Bellfield Interchange:
- Undertake a detailed review of land ownership within the study area to identify all relevant land owners;
  - Undertake a Flood Risk and Drainage Capacity Assessment to fully determine the extent of flood risk as a constraint on development opportunities, identify potential mitigation and associated costs;
  - Align this report with the Full Business Case for the Ayrshire Manufacturing Investment Corridor (AMIC) to determine scale of land required to accommodate this proposal and most appropriate location;
  - The former Kirklandside Hospital and land to the South has been identified as a key development site. It is recommended that an Access Study is undertaken to assess the capacity of the junction at the A76 and existing access road to the former hospital site. This will determine the scale of development that can be accommodated at this location and any junction improvements required;
  - A potential opportunity for a rail halt and park & ride has been identified in this Stage 1 Assessment. It is recommended that further investigation is



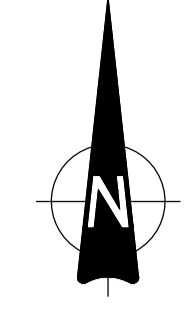
undertaken in relation to the flood risk and ground conditions around the railway line to determine the feasibility of this development option;

- It is recommended that an overall masterplan is prepared for the Bellfield Interchange Study area to show the development opportunity sites identified in this Stage 1 Assessment and acceptable uses. This can then be incorporated into the emerging Local Development Plan 2;
- It is recommended that a Development Brief is prepared specifically for the Kirklandside Hospital site and surrounding land to incorporate the findings of this Stage 1 Assessment, the Full Business Case for the AMIC and the findings of the Flood Risk and Drainage Capacity Assessment and the Access Study. A Development Brief would outline the acceptable uses/scale of development for this development opportunity site and include a more detailed masterplan for this area.



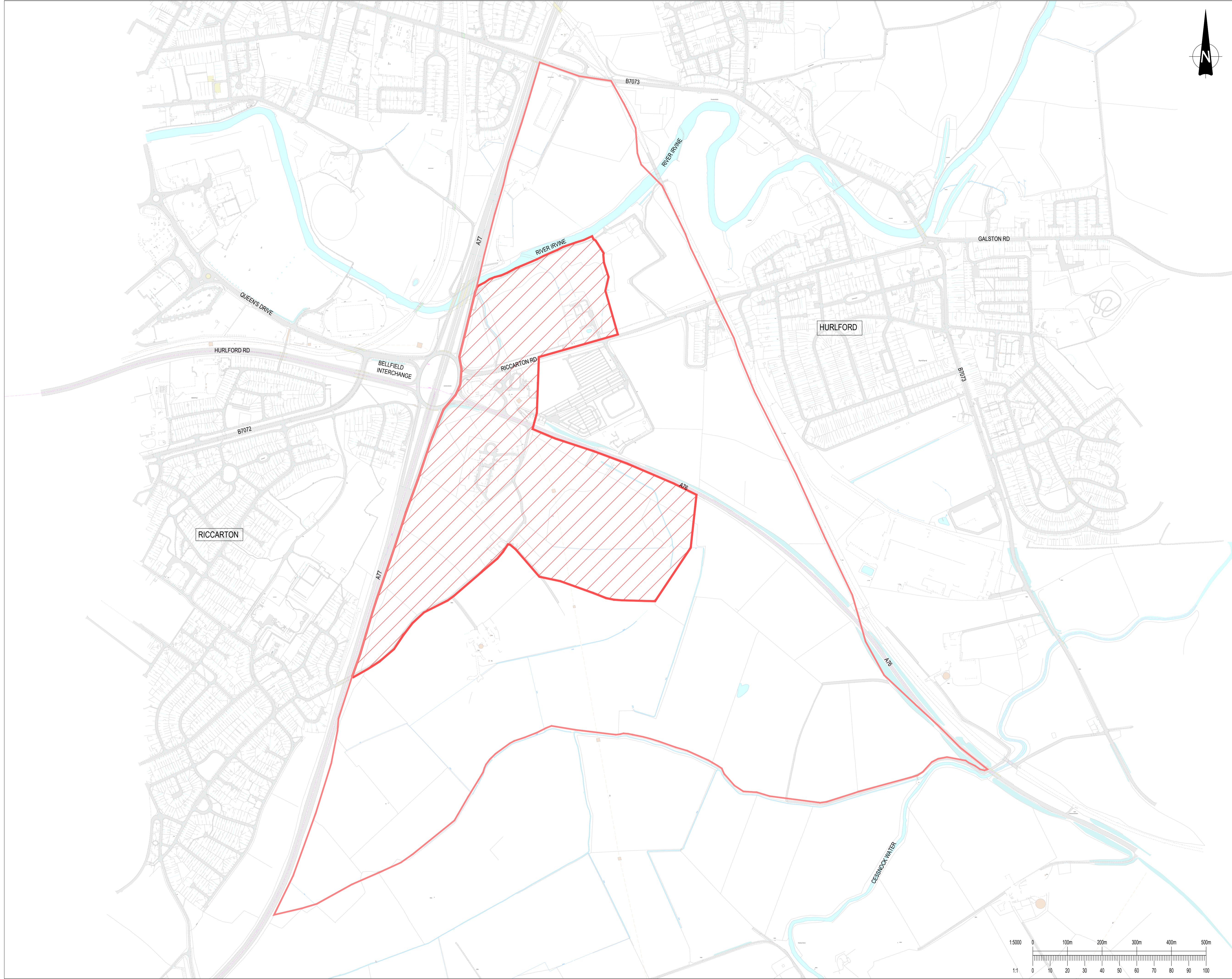
## Appendix 1: Study Area and Local Development Plan Allocation

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**GENERAL NOTES**

- LEGEND:
- STUDY AREA
  - LOCAL DEVELOPMENT PLAN ALLOCATION



Rev	Date	Description	By
P01	29.08.19	ISSUED FOR INFORMATION	RD

Amendments

Project  
**BELLFIELD INTERCHANGE, KILMARNOCK**

Title  
**LOCAL DEVELOPMENT PLAN ALLOCATION**

Client  
**EAST AYRSHIRE COUNCIL**

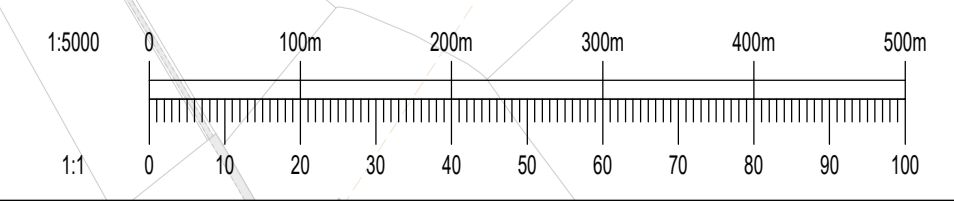


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Status  
**PRELIMINARY**

Designed By	RD	Checked By	HS	Waterman Ref	WIE15839
Drawn By	RD	Date	28.08.19	Scales @ A1	1:5000

Project - Originator - Volume - Level - Type - Role - Number	Revision
15839-WIE-ZZ-XX-DR-C-90100	P01



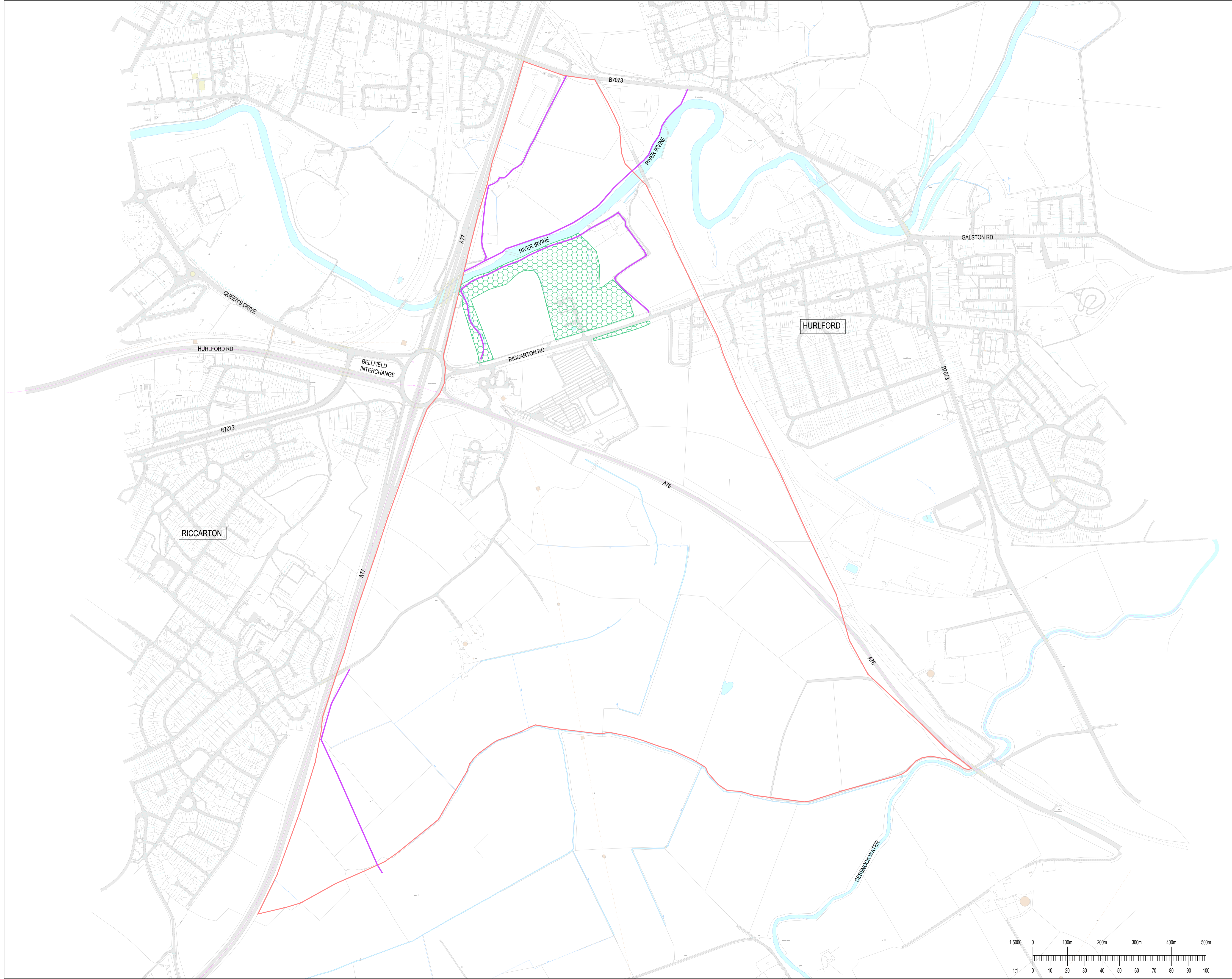


## Appendix 2: Rights of Way and Tree Preservation Order

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**GENERAL NOTES**

- LEGEND:
- STUDY AREA
  - AREAS OF TREE PRESERVATION ORDERS
  - RIGHTS OF WAY



Rev	Date	Description	By
P01	29.08.19	ISSUED FOR INFORMATION	RD

Amendments			
Project	BELLFIELD INTERCHANGE, KILMARNOCK		

**RIGHTS OF WAY AND TREE PRESERVATION ORDER CONSTRAINTS**

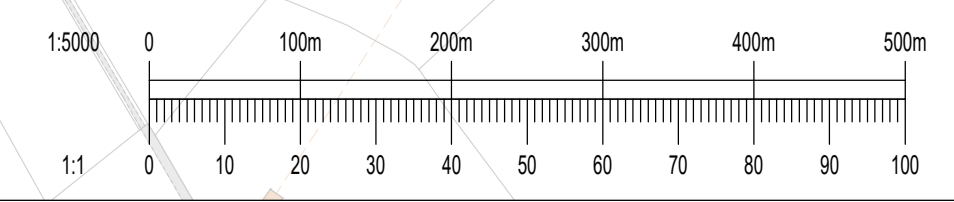
Client: EAST AYRSHIRE COUNCIL



Status: **PRELIMINARY**

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Drawn By	RD	Date	28.08.19	Scales @ A1	1:5000

Project - Originator - Volume - Level - Type - Role - Number	Revision
15839-WIE-ZZ-XX-DR-C-77100	P01



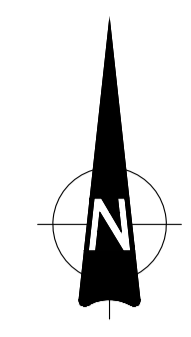


## Appendix 3: Utilities Constraints



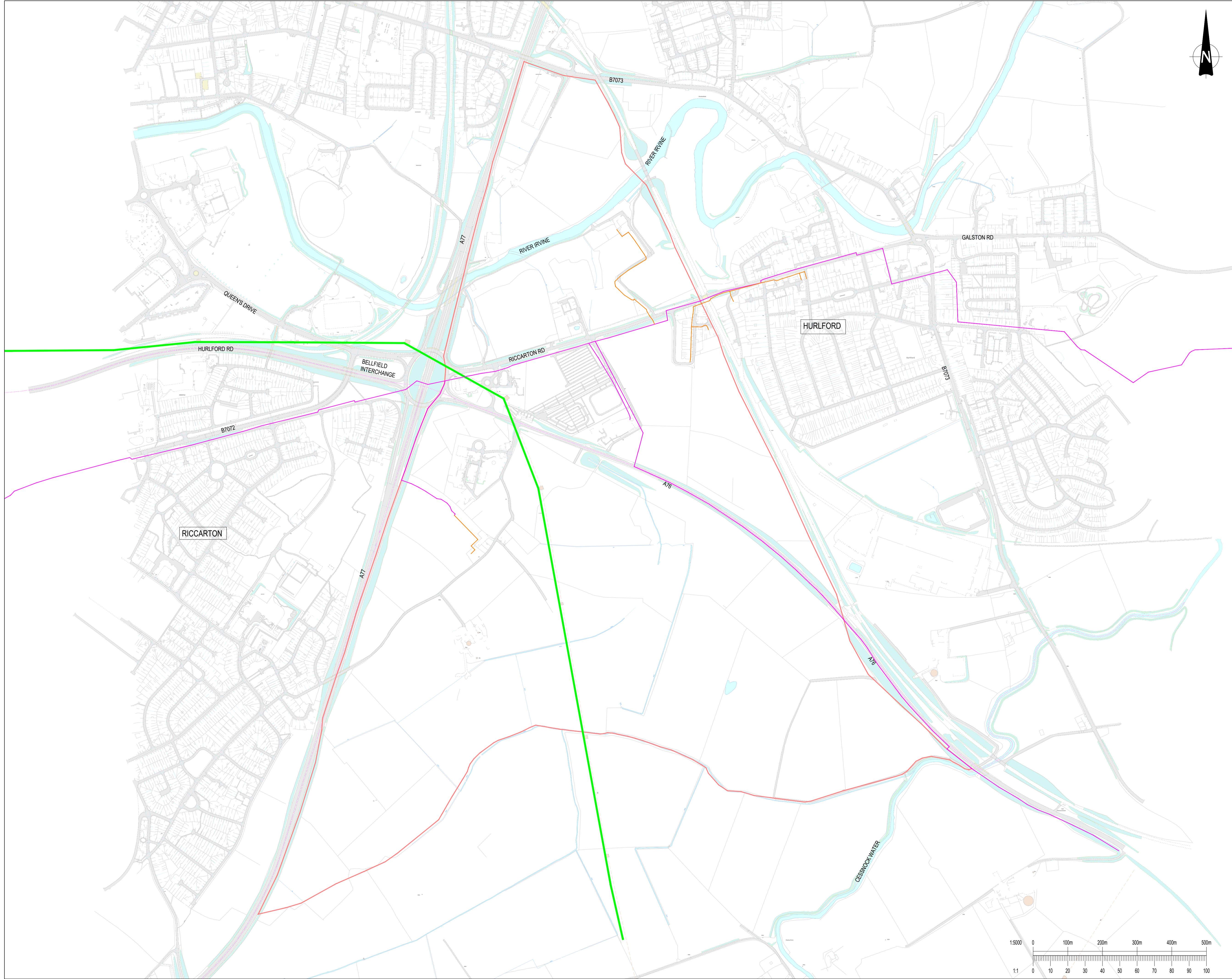
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### GENERAL NOTES

- LEGEND:
- STUDY AREA
  - OVERHEAD POWER LINES
  - INTERMEDIATE PRESSURE GAS PIPE
  - LOW PRESSURE GAS PIPE



Rev	Date	Description	By
P01	28.08.19	ISSUED FOR INFORMATION	RD

Amendments

Project  
**BELLFIELD INTERCHANGE, KILMARNOCK**

Title  
**UTILITIES CONSTRAINTS**

Client  
**EAST AYRSHIRE COUNCIL**

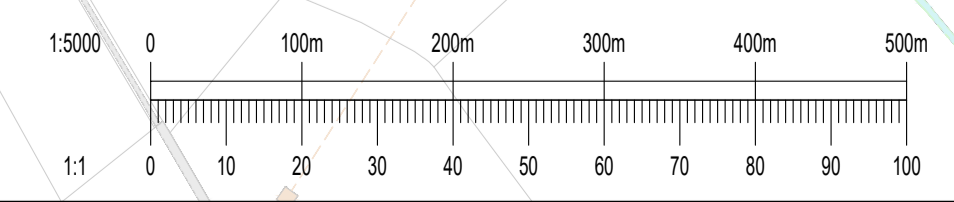


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Status  
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15839-WIE-ZZ-XX-DR-C-96100	P01



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## Appendix 4: Ground Stability Constraints