



Report of the Director of Place

Economy, Environment and Infrastructure PDC – 17 December 2020

Green Infrastructure Strategy

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| Purpose: | The Strategy will be reported to Cabinet on the 13 th February 2021 seeking adoption. The PDC's views are invited. |
| Policy Framework: | The Strategy is designed to support the Local Development Plan (LDP) Policy ER 2 Strategic Green Infrastructure Network and emerging Supplementary Planning Guidance on Green Infrastructure. The strategy contributes to the Council's duties under the Well-being of Future Generations (Wales) Act 2015, Environment (Wales) Act 2016 and will support the application of the Statutory SuDS Standard 2019. It also delivers one of the steps in the Council's well-being objective: Maintaining and enhancing Swansea's natural resources and biodiversity and, the Swansea Public Service Board's Working with Nature Objective. |
| Consultation: | The process to produce the Strategy included engagement with relevant Council stakeholders from the public, private and 3 rd sector and residents, visitors and users of the Swansea Central Area during the development of the draft strategy followed by a 5 week consultation on the draft strategy. |
| Recommendation(s): | It is recommended that: 1) The Strategy is approved for adoption. |
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1. Introduction

- 1.1 We know from the Landmark report by the UN Intergovernmental Panel on Climate Change (IPCC), that by 2050 the Swansea Central Area will have periods of intense heavy rainfall, droughts, and rising temperatures. Failure to adapt to and mitigate for climate change is no longer an option if we are to provide an economically prosperous hub for the Swansea Bay City Region. Environmental sustainability is the basis for a resilient and prosperous Swansea. The benefits and cost-effectiveness of green infrastructure (GI) are now well documented. The regeneration currently underway in the Swansea Central Area provides a perfect opportunity to design in multi-beneficial GI improvements to help ensure we have a city centre fit for the future.
- 1.2 During 2019 the Council's Natural Environment Section worked in collaboration with Natural Resources Wales (NRW) and Green Infrastructure Consultancy (a leading expert with a proven track record in the green infrastructure industry) to develop a draft Swansea Central Area Green Infrastructure Strategy; *Swansea Central Area – Regenerating our City for Wellbeing and Wildlife* (Appendix A), including a Green Space Factor tool. The Strategy is designed to realise the green infrastructure aims of the Swansea Central Area Regeneration Framework and ensure the city centre benefits from strategically planned green infrastructure enhancements in both the planning of new development and the refurbishment of existing buildings and public spaces.
- 1.3 The strategy sets out the benefits and cost-effectiveness of green infrastructure i.e. reduced flood risk, summer cooling, cleaner air and water, reductions in noise, better mental and physical health, gains in biodiversity, reduced CO₂ emissions and energy costs and a strengthened economy. It will enable the Council and stakeholders to take an informed and joined up approach to maximising these benefits and will create investor confidence in green infrastructure in the city centre.

2. Strategy Development

- 2.1 To ensure and enhance the quality and variety of GI in development across Swansea Central Area the strategy provides a strategic approach by:
- demonstrating the environmental, social, economic and cultural benefits of improving and enhancing GI,
 - identifying opportunity areas and technologies/techniques for enhancing GI in new and existing development,
 - influencing strategic investment in GI based on its multiple benefits,
 - providing guidance and a tool to enable simple and reliable assessments of GI in new and existing development.

- 2.2 The Strategy is designed to provide an evidenced and clear overall strategy for multifunctional GI which performs individually and collectively, physically and visually, ensuring the Council maximise the city centre's potential and its environmental resilience. It sets out a vision for the central area of Swansea to be much greener, creating green spaces which deliver resilience, prosperity, health, well-being and happiness. The intention is to double the amount of green infrastructure (with the exception of open water) within 10 years, to create a distinctive destination city with a high quality environment which is more liveable, better adapted to climate change and better for people and wildlife.
- 2.3 The strategy includes a Swansea Central Area Green Space Factor (GSF) tool, designed to measure the permeability of the different types of surfaces when planning a new development / refurbishment. The tool scores surface cover types for their permeability and quality in terms of multiple benefits. Similar GSF tools have been widely used since the 1990's, including in Greater London, the North West Region and Southampton.
- 2.4 Whilst use of the tool is not mandatory the Strategy states that NRW and the Council intends to apply the tool to their development proposals and expects and encourages all developers within the central area to use the tool to inform and improve their schemes as part of the pre-application process.

- 2.5 The strategy's vision:

A city with high quality multi-functional green infrastructure delivers resilience, prosperity, nature, health, well-being and happiness to the citizens and visitors of Swansea.

was developed following significant stakeholder engagement, including workshops for colleagues from the private, public and 3rd sector (including PSB partners), along with internal sessions with officers and members including the Economy and Infrastructure Policy Development Committee. 634 face to face conversations were held with members of the public across 10 locations in the Swansea Central Area. Sessions with the 4 primary schools within the catchment were held along with stakeholder meetings with 6 local groups including residents and local interest groups, and social media engagement using #citynature / #naturynyddinas.

- 2.6 These conversations demonstrated an overwhelming desire for more nature in the city, with stakeholders talking about the contribution nature makes to their personal, mental and physical wellbeing and to their desire to live, work and visit the city centre. Swansea workers, residents and visitors wanted a greener, healthier city with less hard surfaces. A city which provides space for wildlife bringing people joy, and an

improved visitor and trading experience. A destination and liveable city which can adapt to and mitigate for climate change.

- 2.7 The draft strategy went out to public consultation between 22nd November 2019 and the 31st December 2019. The consultation process included an online survey and consultation events held at the 4 primary schools within the catchment area and in Swansea Central Library. 45 survey and one email response were received, along with comments from consultation sessions held with the 4 primary schools in the catchment area and members of the public in Swansea Central library. Professional stakeholders were consulted via the survey, and the draft was circulated internally to relevant Heads of Service for comment and a corporate workshop held on the 16th December 2019.
- 2.8 Overall the strategy was very well received. Over three quarters (79%) of survey respondents agreed with the strategy's vision, and over three quarters of survey respondents supported the strategic objectives. The comments and actions from the public surveys, email and school and Library session are all summarised in Appendix B.
- 2.9 The Strategy reflects the comments and suggestions from the consultation. In light of these comments the strategic objectives have been reviewed and revised to include SMART objectives which clearly reflect each component of the vision. The targets from the draft strategy have been reworked to form a suite of Performance Indicators supported by two targets: increasing canopy cover to 20 - 25% by 2044 and doubling terrestrial GI from 13% to 26% by 2030. These figures were based on latest available research and recommendations and considered to be appropriately ambitious given the physical constraints of a highly urbanised area.
- 2.10 A number of comments from the surveys referred to GI improvements at locations outside the Swansea Central Area. These will be addressed during the development of the County Wide GI Strategy, the engagement stage of which will recommence once covid restrictions have been lifted enabling face to face public engagement.

3. Using the Strategy Corporately

- 3.1. Swansea Council has a strong commitment to reducing and adapting to the effects of climate change. As demonstrated in its Climate Change Declaration, the corporate objective: Maintaining and enhancing Swansea's natural resources and biodiversity and, the Swansea Public Service Board's Working with Nature Objective. The inclusion of GI is an effective way for the Council to deliver against these commitments whilst also complying with the requirements of national and local drainage, planning and environmental legislation.
- 3.2 The scoping and development of the Strategy has been overseen by a cross cutting disciplinary steering group including Strategic Planning,

Nature Conservation, Regeneration, Landscape and Development Management teams within the Planning and City Regeneration Service, and colleagues from Drainage and Parks Services within the Place Directorate.

- 3.3 For corporate asset development, implementation of the strategy will have short and long term implications. The shift to the inclusion of GI in Council projects has the potential to have a short term effect on the costs of ongoing projects if not properly designed in. However, for future, longer term projects evidence shows that costs can be mitigated against by considering existing GI assets and interventions from the outset of a project. For example, recent Welsh Government analysis of the evidence for sustainable urban drainage (SuDS) concludes that the overall costs of well-designed good quality landscaped SuDS solutions are always less than those of conventional solutions, and in most cases the overall operational costs and maintenance costs are also lower. When piloting the GI Strategy and GSF Tool on 71/ 72 the Kingsway the design has been able to incorporate significant GI technologies within the design process.
- 3.4 There are numerous long term benefits of upfront investment in GI. For example the iTrees study of Swansea River Tawe catchment area (2015) concluded that trees in the catchment intercept an estimated 252 million tonnes of water (equivalent to an estimated £333,900 in sewage charges avoided), removed an estimated 136 tonnes of airborne pollutants (worth more than £715, 500 in damage costs), and an estimated 3,000 tonnes of carbon (estimated to be worth £671,000) from the atmosphere per year, worth and stored an estimated 102,000 tonnes of carbon (estimated to be worth £23.1 million). Other benefits include reducing surface water run off and localised flooding, creating habitats for wildlife, improving mental and physical health and wellbeing and child development, saving energy costs, increasing property values and inward investment, and protecting that investment from the impacts of climate change. Covid 19 has highlighted the importance of access to high quality greenspace for people's mental and physical health.
- 3.5 The Regeneration Team plan to use the Strategy to advise current and future phases of the Swansea Central Area regeneration programme. The Strategy has been aligned to the Swansea Central Area Regeneration Framework (SCARF) to reflect this. Regeneration and Development Management will also be encouraging partners and developers to use the strategy and tool as a simple and effective means of demonstrating compliance with legislation.
- 3.6 The issues of future maintenance and the need for training in the use of the GSF tool and implementing new GI infrastructure are fully recognised and reflected in the strategic objectives in the Strategy and will be addressed through bespoke training for teams on specific issues as required, and more widely through local professional

development events, working with communities to identify innovative ways to maintain GI, promoting and sharing good practice.

- 3.7 Corporate and partner cross-disciplinary collaboration will be key to delivering quality multi-beneficial GI which will tackle the causes and effects of biodiversity loss and climate change. The progress and success of the strategy will be monitored as part of the Council's Section 6 Duty under the Environment Act, the Council's Wellbeing objective: Maintaining and enhancing Swansea's natural resources and biodiversity and through the Swansea Public Service Board Local Wellbeing Plan and the Climate Change Programme Board where GI has been identified as one of the 8 themes for the achievement of zero carbon and the climate emergency response.
- 3.8 The collaborative stakeholder approach taken through the development of the strategy has meant that whilst in development the objectives and principles are already influencing developments locally and nationally. For example, successful engagement and partnership working with Welsh Government catalysed the development and delivery of a £5 million GI grant fund delivering capital GI schemes in the current financial year in urban centres across Wales, 4 of which are in the Swansea Central Area. The Strategy has also created local and national radio, television and broadsheet interest and media coverage.

4. Wellbeing of Future Generations Act

- 4.1 The sustainable development principle and the ways of working have been central to the development of this strategy from its conception, as outlined in Appendix C.

5. Equality and Engagement Implications

- 5.1 The Council is subject to the Public Sector Equality Duty (Wales) and must, in the exercise of their functions, have due regard to the need to:
- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act.
 - Advance equality of opportunity between people who share a protected characteristic and those who do not.
 - Foster good relations between people who share a protected characteristic and those who do not.

Our Equality Impact Assessment process ensures that we have paid due regard to the above.

- 5.2 The Strategy is part of the delivery of the Council's Corporate Plan and the Swansea Local Well-being Plan both of which have undergone full EIA's. As a strategy focusing on the natural environment it will not directly impact on any of the relevant protected groups. However by enhancing and improving the natural environment the strategy will

contribute to all the Wellbeing of Future Generation Act's 7 well-being goals and therefore indirectly contribute to the overall improvement of wellbeing for all Swansea residents including the relevant protected groups, by contributing to improving social, environmental, economic and cultural well-being.

6. Financial Implications

- 6.1 Acceptance of this strategy will further embed and reinforce the wider GI obligations and requirements on the authority as set out in the LDP and WBFGA. In the short term there would be potential for additional costs to current projects that have not had GI adequately designed in from the outset, however this would be offset in the longer term by the savings that better use of GI would bring to future projects.

Acceptance of the report does not mean that additional resources will be made available and it should be assumed that future spending needs will need to be contained within existing budget provision and furthermore also have full and due regard to the likely heavily constrained resources available to the authority in future.

7. Legal Implications

- 7.1 The Council must comply with the statutory obligations for biodiversity and natural resource management contained in the Well Being of Future Generations Act 2015 and the Environment (Wales) Act 2016 as detailed in this report.

Appendices: These will be included within the report.

Appendix A Swansea Central Area: Regenerating Our City for Wellbeing and Wildlife

Appendix B Consultation Report

Appendix C Assessment of the Strategy's contribution to the Well-being of Future Generations Act's wellbeing goals and application of the ways of working.

Appendix D EIA Screening Form