

REPORT TO:	ENVIROMENTAL AND DEVELOPMENT SERVICES	AGENDA ITEM: 7
DATE OF MEETING:	21 SEPTEMBER 2023	CATEGORY: RECOMMENDED
REPORT FROM:	STRATEGIC DIRECTOR (SERVICE DELIVERY)	OPEN
MEMBERS' CONTACT POINT:	CHRISTOPHER WORMAN PARKS AND GREEN SPACES MANAGER chris.worman@southderbyshire.gov.uk	DOC:
SUBJECT:	WOODVILLE LINK ROAD BIODIVERSITY NET GAIN PROJECT – PROGRESS UPDATE	
WARD (S) AFFECTED:	ALL WARDS	TERMS OF REFERENCE: (EDS)

1.0 Recommendations

1.1 That the Committee acknowledges the progress of the Woodville Link Road Biodiversity Net Gain project during 2022 and the outstanding works to be completed.

2.0 Purpose of the Report

2.1 To provide a summary of progress during 2022 on the Woodville Link Road Biodiversity Net Gain project and justification for changes from the original works specification.

2.2 To provide a summary of, and recommendations for, outstanding works.

3.0 Executive Summary

3.1 As part of the Woodville Link Road scheme, the Council offered three of its sites for biodiversity improvements to offset the biodiversity impact of the scheme. This was agreed by Committee and a monetary contribution of £147, 000 was paid to the Council by County to implement the improvements and manage and monitor the sites for a period of 32 years.

3.2 The three green space sites chosen for the improvements were:

- Site 1 – Sandholes, Midway
- Site 2 – Unnamed grassland, George Street, Church Gresley (now called 'Old Hall Meadow')
- Site 3 - Birch Plantations surrounding Salts Meadow (Swadlincote Woodlands)

- 3.3 A Biodiversity Net Gain report was produced in June 2020 by Derbyshire Wildlife Trust to support the project and outlines the work specifications – see Appendix 1.
- 3.4 The relevant committee report approving the project in August 2020 is provided in Appendix 2.
- 3.5 There was a delay to the implementation of the project due to the ongoing Covid pandemic.
- 3.6 The project has in 2022 been led by the Council's new Biodiversity Officer. The 2022 project work was tendered to three contracting companies, subsequently awarded to Heaths Contractors (a local firm).
- 3.7 This report sets out the work completed to date for each site, constraints encountered and changes to the original work specification by DWT and outstanding works which are still to be completed with recommendations.

4.0 Site 1 – Sandholes, Midway

Works Proposed (DWT Report)

- 4.1 Sow wildflower seeds over existing grassland area - 2ha.
- 4.2 Subsequently mow grassland once annually removing all grass arisings (>32 years).
- 4.3 Monitor success of improvements, report (over the 32-year period).

Works Completed 2022

- 4.4 Sowing of wildflower seeds over existing grassland area – approx. 0.6ha.

Communications

- 4.5 Approximately a week prior to works starting, a release was issued on the Council's social media outlets with a link to the Council's website explaining the works.
- 4.6 Signs were also installed on the site to provide users and residents information on the upcoming works.
- 4.7 The Parks and Green Spaces department are not aware of any comments or questions submitted to the Council in respect of works.

Changes to DWT Works Specification

- 4.8 Approximately 0.6ha of the 2ha Sandholes site was sown with wildflowers in October 2022.
- 4.9 As Sandholes is a well-used area of public open space, it was decided that a phased approach to sowing would be more acceptable to the public due to reduced levels of ground disturbance and subsequent wildflower development, in comparison to sowing across the whole site in a single operation. Additionally, this approach allows for the success of each phase of sowing to be evaluated and changes made in subsequent

sowing years, as necessary. The justification for the phased approach is further set out below.

- 4.10 The original DWT specification to utilise a chain harrow to break up the sward and allow for better seed-soil contact and reduce competition from grasses was ineffective, as was the use of a spike harrow. Despite harrowing the sward in several different directions repeatedly, both harrow types resulted in minimal effect to the sward surface.
- 4.11 The alternatives were to use a power harrow or spray off the required sowing areas with herbicide.
- 4.12 Whilst a power harrow would have broken up the sward to allow for good soil-seed contact, this would have caused significant disturbance to the soil surface and greatly increased the potential for injurious weeds to develop and outcompete the wildflowers in the spring.
- 4.13 Therefore, it was decided that herbicide treatments to prevent competition from grasses and a disc-overseeder to drill seeds directly but shallowly into the soil was the preferred option to maximise the potential for successful wildflower germination. The contractor had noted better results with this method on other sites which would also cause minimal disturbance to the soil surface and therefore the potential for injurious weeds to develop.
- 4.14 Due to utilising a disc-overseeder, the wildflowers had to be sown in linear strips. The location of these strips are marked on a plan in Appendix 3, which is additionally intended to act as a guide for the sowing of wildflowers in subsequent years.
- 4.15 The DWT wildflower seed specification was changed through advice from Naturescape Seeds Ltd (based in Nottinghamshire), to a seed mix more suitable to the specific conditions of the site which would maximise the potential of germination success and long-term wildflower vitality. The Biodiversity Officer undertook soil samples of the site and provided Naturescape with existing species-lists, site conditions and photographs to allow a bespoke neutral-soil seed mix to be developed. A bespoke acid-soil seed mix was also developed for part of the northern area of the site, this unique habitat type was not identified in the original DWT report. The wildflower seed specifications are provided in Appendix 5.

Outstanding Works

- 4.16 Sow remaining wildflowers, in a phased approach (approx. 1.4ha).
- 4.17 Mow grassland once annually removing all grass arisings (>32 years).
- 4.18 Monitor success of improvements, report (over the 32-year period).

Recommendations

- 4.19 Sowing of wildflowers should be undertaken in the autumn only. Important annual wildflower species (i.e. hay rattle) require winter frosts for spring germination.
- 4.20 The development of wildflowers should be monitored during spring and summer 2023 in the sowing strips, with any injurious weeds removed wherever possible should these persist.

- 4.21 The use of other ground preparation measures inclusive of herbicide could be utilised, such as power harrowing and re-trailing chain or spike harrow, which may not have been successful in 2022 due to the summer drought and hardness of the land. Observations from the monitoring of wildflower development in 2023 may also guide changes to the future approach.
- 4.22 The wildflower planting plan provided in Appendix 3 should be utilised to guide subsequent wildflower sowing. It is recommended as a minimum that wildflower sowing is phased over two more years (i.e. 2023 and 2024) to reduce ground disturbance and allow for changes and alterations to the approach.
- 4.23 It may be advisable in subsequent sowing years to add a range of native grass species to the sowing mix particularly if the herbicide preparation approach is continued, as the supplied mixes are 100% wildflower (seed bags are stored in the Parks office). Naturescape Ltd would be able to provide advice on grass species mix and percentages.
- 4.24 The mowing of the grass sward and removal of arisings should be undertaken prior to sowing of wildflowers. All monitoring data should be appropriately recorded and saved for future reporting. Monitoring could be undertaken by volunteers.

5.0 Site 2 – Old Hall Meadow, George Street, Church Gresley

Works Proposed (DWT Report)

- 5.1 Sow wildflower seeds over existing grassland area – 1.3ha.
- 5.2 Subsequently mow grassland once annually removing all grass arisings (>32 years).
- 5.3 Monitor success of improvements, report (over the 32-year period).

Works Completed 2022

- 5.4 Sowing of wildflower seeds over existing grassland area – approx. 0.5ha.

Communications

- 5.5 The communications plan as previously outlined was utilised for both the Sandholes and Old Hall Meadow sites.

Changes to Works Specification

- 5.6 For the reasons described for the Sandholes site, the phased herbicide application and disc-overseeding approach was utilised for the wildflower sowing at Old Hall Meadow. A bespoke wildflower seed mix was also developed for Old Hall Meadow with Naturescape Ltd.
- 5.7 A wildflower planting plan is provided in Appendix 4 for Old Hall Meadow and the seed mix specification is outlined in Appendix 5.

Outstanding Works

- 5.8 Sow remaining wildflowers in a phased approach (approx. 0.8 ha).
- 5.9 Mow grassland once annually removing all grass arisings (>32 years).
- 5.10 Monitor success of improvements, report (over the 32-year period).

Recommendations

- 5.11 The recommendations set out the Sandholes site should be utilised for Old Hall Meadow.
- 5.12 It should be noted that the chain harrowing specification as outlined in the DWT report is highly unlikely to be effective at Old Hall Meadow irrespective of seasonal hardness of ground, due to the large and extensive grass tussocks present.

6.0 Site 3 – Birch Plantations, Salts Meadow, Swadlincote Woodlands

Works Proposed (DWT Report)

- 6.1 Woodland thinning, wildflower and bulb planting, tree and shrub planting – 1.2ha.
- 6.2 On-going woodland management, 5-year coppice cycle (>32 years).
- 6.3 Monitor success of improvements, report (over the 32-year period).

Works Completed 2022

- 6.4 Woodland thinning, wildflower and bulb planting, tree and shrub planting – 1.2ha.

Works Overview

- 6.5 The woodland thinning was undertaken by a local contractor in late-winter 2021 in accordance with the DWT specifications.
- 6.6 The wildflower and bulb planting were subsequently undertaken by the Council's Parks and Green Spaces department and The Conservation Volunteers in December 2021.
- 6.7 A range of woodland wildflowers and bulbs were planted – the planting stock supplied by Naturescape Ltd is listed in Appendix 6. The planting glades were surveyed by the Biodiversity and Park Life Officer in spring 2022 – over 2000 bluebells were in full flower amongst a range of other woodland plants.
- 6.8 The planting glades were subsequently cleared of long grasses and self-set trees by The Conservation Volunteers in September 2022, to promote new woodland wildflower in the spring of 2023.
- 6.9 Over 200 trees and shrubs were planted in the woodland by The Conservation Volunteers in December 2022 – the planting stock supplied by Coles Ltd is listed in Appendix 6. This was the lower end of the DWT specification (200-400 trees) but was felt sufficient for the planting areas available.

Outstanding Works

- 6.10 On-going woodland management, 5-year coppice cycle (>32 years).
- 6.11 Monitor success of improvements, report (over the 32-year period).

Recommendations

- 6.12 The wildflower glades will need to be cut and cleared of vegetation once every year in the autumn to promote new wildflower growth each spring. The glades have been added to the Council's register of grasslands sites requiring annual management.
- 6.13 Planted trees and shrubs should be checked annually with weeds suitably suppressed ideally through clearance by volunteers or as a last resort by herbicide applications. Any dead trees or shrubs should be replaced to specification. Guards should be removed and recycled once trees and shrubs have established i.e. after 4-5 years.
- 6.14 On-going woodland management i.e. coppicing could be undertaken by volunteers in accordance with the DWT specifications.
- 6.15 All monitoring data should be appropriately recorded and saved for future reporting. Monitoring could be undertaken by volunteers.

7.0 Financial Implications

- 7.1 The Woodville Link Road Biodiversity Net Gain project has been funded through contributions from County therefore there are no financial implications directly arising from the report.

8.0 Corporate Implications

Employment Implications

- 8.1 There are no employment implications arising from this report.

Legal Implications

- 8.2 The project contributes to Council's 'Biodiversity Duty' under the Environment Act 2021 to 'conserve' and 'enhance' biodiversity.

Corporate Plan Implications

- 8.3 The project contributes to the Corporate Plan Priorities and Key Aims including:

Our Environment

- a. Improve the environment of the district
 - i. Enhance biodiversity across the district
- b. Enhance the attractiveness of South Derbyshire
 - i. Improve public spaces to create an environment for people to enjoy

9.0 Risk Impact

9.1 The project was a condition of planning consent for the Woodville Link Road scheme, therefore by implementing and continuing project works the requirements of the condition will be met.

10.0 Community Impact

10.1 The project will provide a positive contribution to local communities through investment in green spaces, making the green spaces more attractive to visit and increasing opportunities for the public to connect with nature and improve well-being.

11.0 Equality and Diversity Impact

11.1 None known.

12.0 Social Value Impact

12.1 See Community Impact.

13.0 Environmental Sustainability

13.1 Grass arisings cut from the sites prior to sowing were delivered to a local farmer for winter silage. A local contractor was utilised to undertake the wildflower sowing works. Naturescape Ltd (Nottinghamshire) and Coles Nurseries (Leicestershire) supplied wildflower seeds and trees/shrubs – most of the stock is grown and developed on their sites.

Attached:

Appendix 1: DWT Report Woodville Link Road BNG
Appendix 2: Committee Report Woodville Link Road BNG
Appendix 3: Sandholes Wildflower Sowing Plan 2022
Appendix 4: Old Hall Meadow Wildflower Sowing Plan 2022
Appendix 5: Wildflower Sowing Mixtures
Appendix 6: Woodland Planting Lists

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