Appendix 1

Alternative Options for Weed Control

September 2023

1.0 Background

- 1.1 Wirral Council is responsible for the removal and monitoring of weed removal in public areas. Currently this is achieved via a contract to spray glyphosate up to three times per year in all wards of the borough between May and October each year.
- 1.2 Wirral Council did make the commitment, on 15 July 2019, to phase out the use of Glyphosate and reduce the amount used until a viable and affordable alternative is found. This led to an immediate reduction in the use of glyphosate in Wirral's parks, open spaces, and beaches.
- 1.3 Since the resolution of 2019, officers have been exploring alternative weed control methods. Following COVID, in March 2021 a working group made up of officers from a range of service areas considered several methods for weed control including Glyphosate, Acetic Acid (Vinegar Based), Foam (Heat) & Community involvement via hand weeding.
- 1.4 In September 2021 the outcome of these investigations was reported to the Environment, Climate Emergency and Transport Committee, at that time the conclusion was that there was currently no available alternative to a weed control contract that offered both the same effectiveness and comparable cost to Glyphosate. The Committee therefore agreed that a contract for one year with the option to extend for a further year if required. The Committee did ask officers to continue to explore alternative options for weed control. The Committee was particularly interested that officers develop an 'in house' service that could provide the weed control service and address several other issues, such as alleyway clearances.
- 1.5 Further trials of mechanical weed removal have been undertaken in several areas, in particular alleyways. The use of machinery does produce quicker visible results than relying on chemical spraying and street cleaning. This method also has the added benefit of not being dependent on the weather and therefore provides an all-year-round option for weed control; were as weed spraying cannot take place in high winds or in the wet limiting its use. In considering a chemical alternative the Council has explored the use of a product called Nomix Dual. Nomix Dual is a product that reduces the Glyphosate usage by 53%. The residual element of Nomix Dual has provided longer lasting control and reduced overall weed population in treated areas. Local authorities that have adopted this product do report good results, at least comparable to the use of Glyphosate.
- 1.6 Moving forward officers would wish to create an alternative approach to weed control and this report sets out the current options available bearing in mind the objectives, constraints, risks, and opportunities that are relevant at this time.

2.0 Key Drivers for change

- 2.1 Objectives for Weed Removal
 - Respect the environment.
 - Maintain a safe and serviceable highway network.
 - Deliver a customer focused, quality service.
 - Deliver value for money.

Based on these objectives the following Critical Success Factors have been identified: -

- Strategic aligns with the Councils Strategic aims.
- Sustainable adheres to the Council climate commitments.
- Affordable delivered within the budget agreed by the Council.
- 2.2 Constraints for Weed Removal
 - Funding/finances
 - Political acceptability
 - Practicality of Glyphosate alternatives
- 2.3 Dependencies
 - Current street cleaning schedules as agreed between Wirral Council and its contractor.
 - Weather can affect weed control operations, poor weather (wet and wind) can prevent operations, cold weather reduces the growth of weeds.
- 2.4 Opportunities
 - Potential to reduce Glyphosate usage.
 - Create a more responsive service to address the concerns of residents and elected members.

3.0 Options Appraisal

- 3.1 The following options are currently being considered as alternatives to the current arrangements, described in Option 1 Weed Control Contract which represents the 'Do Nothing' option: -
 - **1** Weed Control Contract (do nothing)
 - 2 Seasonal 'in house' Weed Control with Glyphosate
 - **3** Full Time 'in house' Weed Control with Glyphosate and Machinery
 - 4 Seasonal 'in house' Weed Control with Nomix Dual
 - **5** Full Time 'in house' Weed Control with Nomix Dual and Machinery

Each option is presented with a brief description, their relative strengths and weaknesses and the breakdown of the headline costs associated with each in the following pages.

Option 1: Weed Control Contract (Do Nothing)

Description

A Weed Contract includes provision for all wards in the borough to receiving three treatments per year, Phase 1 May to June, Phase 2 July to August and Phase 3 September to October.

Each treatment consists of chemical 'spot spraying' either by quad bike or on foot. Following treatment, the weeds are allowed to die and then cleared through normal street cleaning operations approximately 3 weeks after spraying.

The effectiveness of each treatment is checked after application, and where weeds are seen not to be dying contractors are called back to apply a further treatment or 'rectification'.

These weed spraying operation cannot take place during high winds or wet weather, limiting its use to between May and October each year.

Areas included within the contract include: -

- Roadside kerbs / pavements, pathways and adopted alleyways, 4,699,426 m2
- Shopping areas, 15,994 m2
- Un-adopted alleyways, 76,000 m2
- Car parks, 104,748 m2

Overall, the current arrangements are effective in terms of what it seeks to achieve, which is to prevent weeds from damaging infrastructure such as roads and pavements.

The current arrangement is however the most cost-effective approach available to the Council.

Strengths	Weaknesses
 Familiarity with process Control via a contract Provides a consistent approach to delivery of the service Proven to be an effective method Most cost-effective option 	 Single point of Contract Management but multiple areas involved in the end-to-end process. Does not reduce our current Glyphosate usage License for Glyphosate runs out in 2025 Seasonal between May and October each year. Operations cannot take place in high winds or wet weather. Difficult to vary a contract to introduce changes (e.g.: innovative technology or methods)
Annual Revenue Costs	£260,000
Capital Costs	£0

Option 2: Seasonal 'in house' Weed Control with Glyphosate

Description

An 'in house' Seasonal Team could be created to carry out weed control. This would use similar methods to those specified in the current Contract, including provision for all wards in the borough to receiving three treatments per year, Phase 1 May to June, Phase 2 July to August and Phase 3 September to October.

Each treatment would consist of chemical 'spot spraying' either by quad bike or on foot. Following treatment, the weeds are allowed to die and then cleared through normal street cleaning operations approximately 3 weeks after spraying. The effectiveness of each treatment would be checked after application, and where weeds are seen not to be dying would be re-treated.

Weed spraying operation cannot take place during high winds or wet weather, limiting its use to between May and October each year. Due to its seasonal nature staff would need to be recruited and trained each season.

This option does give greater opportunities for introducing new methods of working and technologies. This would also provide for a more responsive service.

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Strengths	Weaknesses	
 Familiarity with process Control via direct management Provides a consistent approach to delivery of the service. Proven to be an effective method. Reduces the number of areas involved from the contract approach in the end-to-end process. It would be possible to change processes and take advantage of innovative technologies. Provides the opportunity for a more responsive service. 	 Does not reduce our current Glyphosate usage. License for Glyphosate runs out in 2025. Operations cannot take place in high winds or wet weather. Seasonal between May and October each year. Ongoing staff recruitment, retention, and absenteeism issues for Council Initial Set Up Costs to training staff would be required. Seasonal staff - risk of staff investment and training in October but not returning in March. Capital Investment would be required. Is not as cost-effective as the Contract option. 	
Annual Revenue Costs - Staff (1 FTE Band F, 2 FTE Band E, 6 Band E Seasonals 40 wks) - PPE & Training - Fuel & Supplies - Glyphosate Total per year Capital Costs • Vehicles, Trailers & Spraying Equipment	£236,000 £ 24,000 £ 38,000 £ 39,000 £337,000 £171,600	

Option 3: Full Time 'in house' Weed Control with Glyphosate and Machinery **Description**

An 'in house' Team could be created to carry out weed control. This would use weed spraying using glyphosate for all wards in the borough with each receiving three treatments per year, Phase 1 May to June, Phase 2 July to August and Phase 3 September to October.

Each treatment would consist of chemical 'spot spraying' either by quad bike or on foot. Following treatment, the weeds are allowed to die and then cleared through normal street cleaning operations approximately 3 weeks after spraying. The effectiveness of each treatment would be checked after application, and where weeds are seen not to be dying would be re-treated.

When weed spraying is not possible due to weather machinery could be used allowing for weed control all year. This would particularly assist with the control of weeds in alleyways, were machinery would be initially focused, with the intention to expand its use as the machinery proves its suitability and safety concerns are addressed.

Having a permanent team would reduce the risk of having to retrain staff as they would be retained all year. This option does give greater opportunities for introducing new methods of working and technologies. This would also provide for a more responsive service

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Strengths	Weaknesses	
 Familiarity with process Control via direct management Provides a consistent approach to delivery of the service. Proven to be an effective method. Reduces the number of areas involved from the contract approach in the end- to-end process. The need for ongoing recruitment and retraining is reduced. Operations can take place throughout the year even in poor weather. It would be possible to change processes and take advantage of innovative technologies. Provides the opportunity for a more responsive service. 	 Does not significantly reduce our current Glyphosate usage. License for Glyphosate runs out in 2025. Initial Set Up Costs to training staff would be required. Capital Investment would be required both for spraying and for machinery. Is not as cost-effective as the Contract option. 	
Initial Revenue Set Up Costs - (PPE & Training)	£24,000	
Annual Revenue Costs - Staff (1 FTE Band F, 8 FTE Band E) - Fuel & Supplies - Glyphosate Total per year Capital Costs - Vehicles, Trailers & Spraying Equipment	£278,000 £ 43,000 £ 39,000 £360,000 £171,600	
- Weed Machines	£100,000 each	

Option 4: Seasonal 'in house' Weed Control with Nomix Dual

Description

An 'in house' Seasonal Team could be created to carry out weed control. This would use similar methods to those specified in the current Contract using Nomix Dual (which contains 53% less Glyphosate), including provision for all wards in the borough to receiving three treatments per year, Phase 1 May to June, Phase 2 July to August and Phase 3 September to October.

Each treatment would consist of chemical 'spot spraying' either by quad bike or on foot. Following treatment, the weeds are allowed to die and then cleared through normal street cleaning operations approximately 3 weeks after spraying. The effectiveness of each treatment would be checked after application, and where weeds are seen not to be dying would be re-treated.

Weed spraying operation cannot take place during high winds or wet weather, limiting its use to between May and October each year.

Due to its seasonal nature staff would need to be recruited and trained each season.

This option does give greater opportunities for introducing new methods of working and technologies. This would also provide for a more responsive service.

Strongthe	
 Strengths Does reduce our current Glyphosate usage by at least 53% Familiarity with process Control via direct management Provides a consistent approach to delivery of the 	 Weaknesses License for Glyphosate runs out in 2025. Operations cannot take place in high winds or wet weather. Seasonal between May and October each year.
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Annual Revenue Costs - Staff (1 FTE Band F, 2 FTE Band E, 6 Band E Seasonals 40 wks) - PPE & Training - Fuel & Supplies	£236,000 £ 24,000 £ 38,000
- Nomix Total per year Capital Costs Vehicles, Trailers & Spraying Equipment	£ 58,000 £356,000 £178,600

Option 5: Full Time 'in house' Weed Control with Nomix Dual and Machinery **Description**

An 'in house' Team could be created to carry out weed control. This would use similar methods to those specified in the current Contract using Nomix Dual (which contains 53% less Glyphosate), including provision for all wards in the borough to receiving three treatments per year, Phase 1 May to June, Phase 2 July to August and Phase 3 September to October.

Each treatment would consist of chemical 'spot spraying' either by quad bike or on foot. Following treatment, the weeds are allowed to die and then cleared through normal street cleaning operations approximately 3 weeks after spraying. The effectiveness of each treatment would be checked after application, and where weeds are seen not to be dying would be re-treated.

When weed spraying is not possible due to weather machinery could be used allowing for weed control all year. This would particularly assist with the control of weeds in alleyways, were machinery would be initially focused, with the intention to expand its use as the machinery proves its suitability and safety concerns are addressed.

Having a permanent team would reduce the risk of having to retrain staff as they would be retained all year. This option does give greater opportunities for introducing new methods of working and technologies. This would also provide for a more responsive service

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Initial Revenue Set Up Costs	
- (PPE & Training)	£24,000
Annual Revenue Costs	0070 000
- Staff (1 FTE Band F, 8 FTE Band E)	£278,000
- Fuel & Supplies	£ 43,000
- Nomix	£ 58,000
Total per year	£379,000
Capital Costs	
- Vehicles, Trailers & Spraying Equipment	£178,600
- Weed Machines	£100,000 each