1. EXECUTIVE SUMMARY

1.1. This paper outlines the current method of non-chemical weed removal and the ongoing work to understand and improve on the current process for the public highway.

2. RECOMMENDATIONS

2.1. The Committee is requested to review and comment on the contents of the report.

3. BACKGROUND

3.1. Introduction

Hammersmith & Fulham Council is the first council in London to halt the use of potentially harmful sprays in parks and open spaces. Spraying of glyphosate stopped in June 2016 and moved to a non-chemical weed removal service. Reasons for introducing non-chemical spraying was to create a bio diversity as well as protecting London’s habitat against any long term chemical effect containing glyphosate.
Since April 2017, we have been using hot water system of removal, covering 244 Km pavement and 618 hectares of open space. The hot water treatment is applied three times a year on our pavements and the dead weeds are then manually removed.

This method involves using a hot water, low pressure applicator, directed at the base of the weeds. The water is transported using a short, low wheelbase vehicle (operated by Serco subcontractors Weedfree).

The positives of moving to chemical free alternatives are:

- No residual chemical effects on the soil and environment. Can also be used near watercourses.
- Hammersmith & Fulham is seen as a leader in alternative weed treatment by a lot of other local authorities; officers have been contacted by authorities as far afield as Wales and Scotland.
- The remaining uncertainty over the licencing of Glyphosate means if it ever is banned Hammersmith & Fulham will not be thrown into a saturated market where everyone is bidding for a limited number of available machines
- Meets the council’s green agenda

3.2 Challenges

The hot water application doesn’t kill the root or remove weeds. Removal is therefore done manually by sweepers on their cleansing day between applications. Unfortunately, when weather conditions give rise to rapid weed growth, the sweepers are limited to the amount which can be removed manually on the day of sweep in conjunction with the rest of their work.

Last year the Council received several complaints in relation to weeds and this was because the technology used was new which meant the weeding contractors were learning about the rates of application and the resources needed to cover the area. The optimum frequency of treatment and will take some time to determine as we experience varying seasonal weather but we can see from complaint trends that this has improved. This year, the treatment has been quicker with a reduction of a 12 week cycle to an 8 week treatment cycle and manual removal by the sweepers.

The table below shows the annual comparative numbers of enquiries received. Council Officers have been proactively reporting areas of weed growth so manual removal can be targeted quickly before enquiries arise. This seems to have been met with success as the number of enquiries are lower this year.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>May</td>
<td>50</td>
<td>15</td>
</tr>
</tbody>
</table>
June | 69 | 34
July | 95 | 24

3.3 Our findings

Our experience over the first year of application has found:

- Seasonal variations affect growth, causing the weeds to react differently each year. This year, the growth expected in June/July, came in April/May. The hot weather then restricted growth and we expect are more rapid growth towards the end of the season.

- Growing season is lengthening Originally April-September; now April – end of October. Milder winters are having less of an impact on suppressing weeds.

- The type of pavement affects the type of weeds and growth which would impact how we treat different areas. e.g. high footfall areas and repaved areas have very few weeds, cobbles are generally grassy but are easily tackled with hot water

- The more applications, the weaker the root becomes and the rate of growth reduces year on year. In the second year, the weeds are much smaller.

- Woody growth requires manual removal in a similar way to glyphosate but they are more challenging to remove as the hot water can’t break these types of plants down.

- An increase in tree basal shoots which require manual pruning and impacts on the treeworks team.

3.4 Next Steps

Based on the information from 2017 We’ve issued an innovation challenge to contractors to come up with new and effective methods of removal and are continuing to work closely with current providers.

As a result:

- An additional treatment crew have been added to complete the next cycle of treatments quicker

- The scheduled gap between application cycles has been removed so they will start again immediately at the end of a cycle

- A complaint squad react to complaints to clear the worst areas ahead of steam treatment.
Combination trials are currently being undertaken to give comparative results in different streets:

- steam method with immediate manual removal;
- steam method with routine manual removal within 7 days according to usual street cleansing regime
- steam method combined with mechanical removal such as strimming

We will undertake a comparison between the effectiveness of foam vs steam.

We have developed a way of rating weed growth in a similar way as we do for litter and detritus

Weed growth and complaints are being mapped to develop smarter ways of treating

A photographic record is being kept understanding how treatment frequency may have to alter according to weather conditions and surface type

Serco are creating an app to record and weed growth

We’ve implemented improved reporting of tree (basal) shoots to the Arboriculture team

An Innovation challenge has been issued to contractors to come up with better means of treatment and equipment.

Regular four weekly meetings have been scheduled to examine results of the trails so we can inform our approach going forward

A fourth application will be considered to maintain momentum if mild weather continues later in the year.

If members receive complaints they should be sent to the cleaner greener mailbox so we can action.

We are investigating other approached for getting rid of woody plants such as the electric lance and chemical free alternatives to treating Japanese knotweed.

4. EQUALITY IMPLICATIONS

4.1. None
5. LEGAL IMPLICATIONS

5.1. None

6. FINANCIAL IMPLICATIONS

6.1 No additional financial implications.

7. IMPLICATIONS FOR BUSINESS

7.1. None

8. COMMERCIAL IMPLICATIONS

8.1. None

9. IT IMPLICATIONS

9.1. None

10. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

None

LIST OF APPENDICES

None