

## Amenity Weed Control Alternatives & Thanet Project

#### Al Mason LanGuard Ltd.





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# First thoughts

- Perspective
- Why LanGuard?

LanGuard VM

**Thanet Project?** 

Contractors

- Company ethos
- Horizon scanning
- Previous trials
  experience
- Previous nonherbicide experience
- Crystal Ball!



# **Project Conception**

- Future need to protect groundwater resources by decreasing inputs of pesticides (Water Framework Directive etc.)
- Legislation posing threats on how we control weeds on hard surfaces (Sustainable Use Directive – under review)
- Lack of UK research into no chemical and integrated weed control on hard surfaces
- EMR involved with research project studying amenity pesticide application in Europe
- EMR keen to undertake UK project into amenity herbicide use. Links between KCC & EMR – KCC willing to be the host for the project





## **Project Objectives**



- To develop new weed control specifications and test the effectiveness of no herbicide and integrated weed management
- Measure weed growth and identify weed species
- Determine herbicide losses to the wider environment
- Determine economic and environmental cost benefit analysis
- Develop and demonstrate guidelines for no chemical control/integrated control
- Obtain feedback from stakeholders



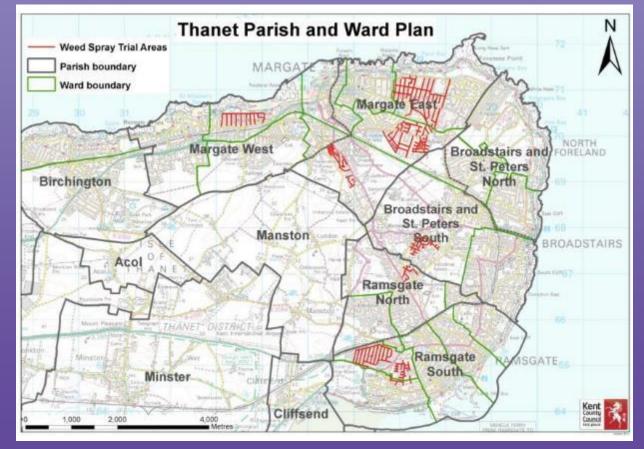
#### Location





#### Plots

#### Trial Area covers 8.5% of the roads in Thanet or approx. 38km





#### Treatments

- Herbicide only two treatments
  - 1. April and May
  - 2. August and September
- Integrated
  - Originally one programmed glyphosate application
  - combined with non-chemical methods
- No herbicide
  - Thermal & mechanical treatments only





#### Options











#### Weediness Scale - Initial

#### APPENDIX 3

Weed Level Scale criteria for asphalt (see examples below) Score each criterion separately and add together to determine the overall score and weed level class

Criteria				
Height (mm)	Weed diameter or length (mm)	Score	Level	Description
<10	<50	2	1	No noticeable weeds
10-75	50-100	3-4	2	Occasional small weeds
75-150	100-150	5-6	3	Patchy weed growth with some flowering weeds
150-200	150-200	7-8	4	Numerous weeds, many flowering, view annoys or irritates public
200=300	200-300	9-10	5	Numerous large weeds, risk to slip or trip
>300	>300	11-12	6	Numerous large weeds, many tall and flowering, causing obstruction



# Challenges

- Speed of operations
- Limitations of techniques more frequent treatment required in non-chemical areas
- Surface types
- Edges and obstacles
- Pre-existing weed problem and detritus
- Determining an acceptable level of weeds













# Changes





- Integrated treatment modified to allow flexible targeted use of glyphosate but not exceeding 50% of Herbicide treatment
- Weediness scale tweaked to tolerate larger & more numerous weeds
- Cooperative approach between client & contractor
- Zone excluded Zone 7
- New techniques investigated



# Weediness Scale -Update

Criteria					
Height (mm)	Weed diameter or length (mm)	Joint coverage (%)	Score	Level	Description
<10	<50	<10	<3	1	No noticeable weeds
10-50	50-100	0-20	4-6	2	Occasional small weeds
50-100	100-150	20-30	7-9	3	Patchy weed growth with some flowering weeds
100-150	150-200	30-40	10-12	4	Numerous weeds, many flowering, view annoys or irritates public
150-200	200-300	40-50	13-15	5	Numerous large weeds, risk to slip or trip
>200	>300	>50	16-18	6	Numerous large weeds, many tall and flowering, causing obstruction





## Hot Foam

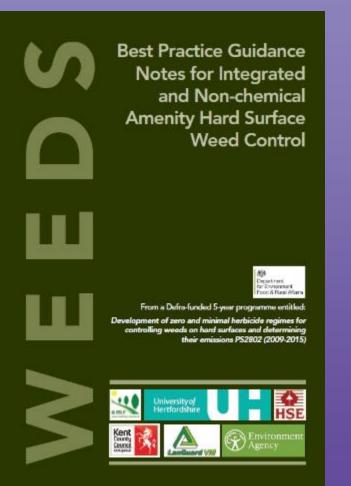
- Improved accessibility, similar to herbicide treatment
- Improved productivity by a factor of 3
- Improved Health & Safety
- Aided integrated approach
- Effective control of top growth & annuals
- Rapidly developed for Amenity use







#### Results



- Best Practice
  Guidance
- Costs
  - Integrated x2
  - Non-Chemical x8
- Weediness standards
- Design standards



#### Thanet outcomes

- Great client interest
- Integrated approach
- Financial realities
- Little uptake







#### Future

- Costs
- Glyphosate?
- New options
  - Chemical
  - Non-Chemical
- Changed priorities
- Europe?



#### Questions?

