

Environment & Transport Select Committee
10 January 2013

Surrey Highways – New Carriageway Investment Plan

ANNEX B: PROGRAMME DEVELOPMENT

INTRODUCTION

An engineering assessment of the 4800 km of Surrey County Council highway network confirmed that **17%** of the network is classed as “poor”, where the road surface and/or base has failed with large number of potholes or general defects.

To remedy the situation a specific project (Project Horizon) was instigated to develop a Highway Investment Plan which would enable a minimum of **10%** of the worst roads to be replaced, based upon budget estimates (incorporating projected saving) this delivers a programme of approximately 1200 road schemes.

To ensure the programme content was fair and equitable to all areas of the county, while meeting both local and asset need, a formal process was instigated to develop and deliver the programme, see sections below.

SECTION ONE: PROGRAMME DEVELOPMENT

To ensure parity across the council, the project team was set two clear objectives:

- by the end of the five year investment period, all Districts and Boroughs had to have approximately 10% of their network length replaced as part of the surfacing programme.
- All roads had to be justified on an asset basis, i.e scored as poor or failing by engineering assessment

Using the objectives above, the programme was then developed over 12 month period in five stages.

Stage One: Machine Survey

A machine assessment was undertaken using engineering principles to identify the worst 10% of roads in the county. The engineering machines assessed the texture and resistance of the carriageway, with each road scored according to the council set asset prioritisation policy.

This exercise identified the worst 1000 roads requiring treatment based upon machine survey. The 1000 sites were then validated by a visual inspection, as a result of inspection a number of schemes were removed from programme, e.g. because they were more suitable for surface dressing solution rather than full resurface. Tandridge and Waverley did score slightly higher due to the number of reported potholes and insurance claims received in previous 24 months.

Following visual validation the scheme list below was then produced:

	Total Network Km	Total Network Km to be Replaced as part of programme	% of Network Replaced 2013 - 2018
Elmbridge	402.6	22.45	6%
Epsom	213.8	9.64	5%
Guildford	683.7	77.42	11%
Mole Valley	532.2	51.21	10%
Reigate & Banstead	492.2	41.68	8%
Runnymede	281.2	19.71	7%
Spelthorne	281.4	17.75	6%
Surrey Heath	378.1	37.53	10%
Tandridge	525.5	68.79	13%
Waverley	755.9	85.25	11%
Woking	308.8	24.37	8%
Total	4855.4	455.80	

Stage Two: Public Consultation

An inherent weakness of the machine survey is that due to space constraints the machine cannot survey all roads, for example cul-de-sacs and narrow lanes. To support the machine survey a ten week public consultation process was therefore launched. This was to enable residents to nominate their worst roads that had perhaps been missed through machine survey. The consultation process was completed using both site visits via a road show and online media.

The road show visited 20 locations throughout the council detailed below:

1. Spelthorne General Assembly,	11. Camberley Town Centre
2. Woking Town Centre	12. Epsom Town Centre
3. Godalming, Waverley	13. Walton on Thames
4. Reigate Town Centre	14. Farnham Town Centre
5. Redhill Town Centre	15. Cranleigh Town Centre
6. Egham Town Centre	16. Staines Town Centre
7. Dorking Town Centre	17. Chertsey Town Centre

8. Leatherhead Town Centre	18. Haslemere Town Centre
9. Guildford Town Centre	19. Banstead Town Centre
10. Oxted Town Centre	20. Guildford Vision Event

The road-shows were very well attended, with an average of 80 visitors per event, resulting in over 1,600 residents engaging face to face with the project team.

A website and local press campaign was also undertaken to ensure any residents who could not attend the road-show in person could email the dedicated email address and submit their own road nominations.

Through the road shows and website engagement the team received **987 road nominations** to be included in programme.

These road nominations were then put forward as part of stage three to five below.

Stage Three: Local Committee Engagement

The outputs from stage one (machine survey) and stage two (resident survey) were then presented to each Local Committee for them to provide comment, support and provide any additional roads not captured in the above process.

Councillors were provided opportunity to comment and challenge produced lists

Stage Four: Officer Validation

The draft programme including machine sites, resident nomination and local committee nominations were then provided to programme team, local area team and inspectors to provide further validation. This removed schemes which were already planned for delivery in 2012/13, and also added schemes gathered from constant resident complaints or continual defects via potholes that had not been originally identified

Stage Five: Site Inspection

All schemes and data provided in stage one to five was then collated into single programme and all sites had visual inspection by trained engineer. This final inspection was used to develop final programme detailed in **Appendix One**. (N.B Appendix still under construction and will not be available until mid January)

This resulted in a number of schemes being removed for example if road did not warrant full reconstruction and only required limited treatment, e.g. surface dressing or was on private road, see **Appendix Two**. (N.B Appendix still under construction and will not be available until mid January)

SECTION TWO: PROGRAMME RESOURCE MANAGEMENT

To maximise resource and cost efficiency the programme has been segmented into five specific work streams. Following a full tender exercise three Specialist Contractors have been awarded (via the SCC/May Gurney Partnership) for each work stream. See table below:

Work stream	Marshalls	Aggregate Industries	Tarmac	Colas / Stabilised Pavements
Surfacing Works To replace road base and surface with high volume road asphalt	Year 1 – 5 1 x Gang working 12 months per annum	Year 1 – 5 2x Gangs working 6 months per annum (Apr – Nov)	Year 1 – 5 1 x Gang working 12 months per annum	
Patching & Haunching Works	Year 1 – 5 1 x Gang working 5 months per annum (Apr – Aug)	n/a		
Civil Works To replace drainage, iron work and deliver new road re-surface	Year 1 1 x Gang working 8 months per annum (Apr to Jan) Year 2 2 x Gang working 8 months per annum (Apr to Jan) Year 3-4 3 x Gang working 8 months per annum (Apr to Jan) Year 5 2 x Gang working 8 months per annum (Apr to Jan)	n/a		
Concrete Base & Surfacing Specific works to repair/replace concrete roads		Year 2 - 3 1 x Gang working 6 months per annum		
Concrete Base & HRA Specific works to replace concrete roads which have Hot Rolled Asphalt		Year 3 1 x Gang working 6 months per annum		
HRA Only Works to replace existing Hot Rolled Asphalt	Year 3-4 1 x Gang working 6 months per annum	n/a		
Recycling In-Situ To replace road material with deep or shallow recycled material				Year 2 - 5 2x gang working 3 months per annum (May – Jul)

The programme division of work will play to the strengths of each specialist. Marshall Surfacing has the capacity to carry out a large amount of civil works whereas Aggregate Industries prefer purely resurfacing. As a further improvement the programme will also be delivered using principle below:

- Creating a separate work stream for Hot Rolled Asphalt surfacing. This is due to the specific plant required for laying HRA, with HRA delivered in the milder months of the year, due to material type and longer durations in laying.
- Combining overlay, major surfacing and resurfacing as a work type, as the plant required is the same, and there is no impact on the specialists in moving between one and another.
- Grouping all night works in a district together so that a gang can finish the normal programmed work within normal hours, then switch to a nightshift on a Monday, complete the programme of night work and then switch back to a dayshift on a Monday. This reduces the downtime caused by moving between nightshift and dayshift. Carrying out the night works in the summer months due to higher temperatures.
- The available resource of each Specialist was also taken into consideration. Marshall Surfacing for example, indicated that they could run a maximum of 5 civil gangs. The programme ensures that this is not exceeded.
- The Patching and Haunching work, which is allocated to Marshall Surfacing, has been programmed to be carried out during April/May/June/July of each year.
- All concrete roads have been moved to year 2, to enable effective design solution to be developed.

SECTION THREE: PROGRAMME TIMESCALES

Subject to cabinet approval of programme, the project team will in February use the programme resource plan in section two to develop dates for each scheme, this will confirm:

- Expected month for year 1 schemes
- Expected quarter for year 2 schemes
- Expected year for all remaining schemes

The Draft Programme will be developed to ensure that all districts and boroughs receive surfacing work from year one of the programme.

The Draft Programme will then be submitted to the March Local Committee for comment, to advise any specific scheme they would like to be brought forward. Not all requests will be able to be accommodated due to resource constraints, but the project team will work to ensure any critical comments are captured as part of programme.

Following programme approval, the communication plan detailed in Annex One will be implemented and programme communicated to wider stakeholders.