



MIDDLETON ON SEA ASSOCIATION (MOSA)

STRATEGY FOR ESTATE ROAD MAINTENANCE

Aim

The intention of this paper is to develop a long-term strategy to address the issue of road maintenance and resurfacing across the whole of the "Sea Lane Estate".

Introduction

All the roads, verges, roundabouts and Twittens (Pedestrian access paths linking estate roads) on the "Coldicott" Estates, i.e., Sea Way, Sea Close, Old Point, Merry End and The Byway, together with the Sea Lane Estate, i.e., South Walk, East Close and West Close, were transferred by deeds from the original developers to MOSA (the Association), which also holds the "benefit of the Covenants" of the Sea Lane Estate.

The Deeds and Covenants are vested in Trustees appointed by the Association. (See 5 b and Rules, Section 12 of the MOSA Constitution).

The Private Roads (and the associated Twittens) are therefore owned and managed by the Association for the benefit of residents and their visitors.

Each Road has its own Road Representative and, in some cases, a Road Committee, who are responsible for the management and the condition of their specific roads in conjunction with the needs and standards of all the other roads on the Estate.

Regular road assessments will be undertaken by MOSA and residents will then have the opportunity to consider the outcome and decide on an appropriate way forward.

The costs of road repairs and maintenance is met by annual contributions from all residents of the estate and set by their local representatives, after local road consultation, and coordinated through the Association.

It should be noted that Sea Lane is an adopted road owned by West Sussex County Council and as such is not covered by this strategy.

Road Resurfacing or Maintenance Options

Generally, the main reasons for resurfacing public highways are structural problems, cracking and or potholing leading to an uneven road surface, and loss of skid resistance, as a result of the wearing of the top surface of the road.

With the estate roads skid resistance is not a major concern, due to the low speeds, and structural problems are not significant and are confined to small areas. Inevitably over time the roads do acquire a tired look, because of continued patching by utility companies carrying out work, either renewing residents service connections or repairing leaks.

Historically, there would appear to have been resurfacing work approximately every 20 years, coinciding with when the road funds had sufficient funds accrued.

There are 2 types of resurfacing which have been carried out on the estate roads historically.

- a) Surface Dressing or
- b) Selective Planing off and Machine overlay.

Surface Dressing

In this method, a heated bitumen 'binder' (hot tar) is sprayed from the back of a tanker and then loose chippings are spread over the hot surface and rolled in using a rubber-tired roller. The road can be used more or less immediately, however loose chippings are present on the surface and continue to be so until the road is reswept some days later.

The bitumen coating reseals in small cracks in the road surface and the chippings restore some skid resistance. Due to the nature of the laying method the new surface will just follow any undulations in the old road surface. This is the cheaper of the 2 options and is favoured by local authorities due to the cost and speed of laying.

The 'messy' surface, present for days after the treatment, and the susceptibility to melting in hot weather will not necessarily be of concern to the local authority but is more of an issue on our roads due to the amount of pedestrian traffic. There is also no improvement to the profiling of the road as the new surface just follows the undulations of the original surface.

Selective Planing and Machine Overlaying

With this method a new surface layer (recommendations are based on a 30 mm thickness) is applied over the old. To ensure that the new surface matches the junctions with driveways etc, some of the old surface is 'planed' off using a road planer.

The overlay material which forms the new surface is known by a number of different proprietary names, such as SMA (Stone Mastic Asphalt) with a 10mm nominal size stone chipping. The material is made in special plants by mixing the specified amounts of stone and a bitumen binder and heating to a high temperature.

Examples

On the estate there are examples of both methods as the most recent resurfacing treatments.

Surface Dressing

- South Walk, East Close, West Close in 2005
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Overlay

- Old Point in 1999
- Merry End in 2014
- Sea Way in 2000

Comparison of the 2 options

a) Surface Dressing

The benefits of Surface Dressing compared to overlay are:

- Lowest cost option

b) Overlay

The benefits of overlay compared to surface dressing are:

- Higher quality finished appearance.
 - Less prone to melting as the Bitumen used in the mix has a higher melting point than that used in surface dressing.
 - Harder wearing and more resilient
 - A more level surface is produced.
 - 50% longer lasting; in theory.
 - Less mess, particularly immediately after the work is carried out and before the loose chippings are swept off.
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- The only downside is the relative cost compared to surface dressing

MOSA Roads Strategy

The strategy for the long-term maintenance or replacement of the Estate roads is as follows:

1. MOSA will provide a detailed individual road condition assessment to identify potential repair/replacement timescales.
2. MOSA will monitor and liaise with organisations who may have an impact on road surfaces, eg., BT, broadband, electricity, sewerage, water and gas companies.
3. Based on the above, residents and their Road Representatives will, in conjunction with the Association, develop an appropriate and individual road maintenance/repair/replacement option based on the information in 1 and 2 above.

4. In conjunction with road representatives, MOSA will develop financial impact options for residents to consider.
5. Residents must then consider those financial options and develop a funding mechanism to cover their roads future costs, taking account of accrued road "savings".
6. In conjunction with road representatives, MOSA will coordinate all projects across the estate.

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