PRESERVATION CASE HISTORY A421 BUCKINGHAM BYPASS

A421 BUCKINGHAM BYPASS		
REFERENCE	BUCKINGHAM BYPASS	
BACKGROUND	The site forms part of the A421 Buckingham Bypass which was resurfaced in 1996. At the end of maintenance inspection in 1997 several areas of defects (primarily chip-loss) were instructed to be repaired by Buckinghamshire County council.	
	The contractor obtained permission for the repairs to be carried out using the joint-free Rhinopatch® system, the final part of the process of which is to treat the repaired area with the Rhinophalt® process. The remedials were duly carried out in the Autumn of 1997 on several areas of the carriageway although in recent years many of the areas were repairs were installed have since been completely resurfaced due to general deterioration of the surrounding carriageway.	
	Over the years this site has been incorporated by the BBA as evidence in support of both Rhinopatch® and Rhinophalt® HAPAS accreditation.	
DATE OF COMPLETED APPLICATION	October 1997	
SECTOR	Single carriageway high-speed by-pass	
PAVEMENT SURFACE	30/14 HRA surfacing course with 20mm PCC	
	OUTCOME	
REPORT CONCLUSIONS	1. During the course of annual inspections over a number of years it has been note that the surrounding road surface has gradually deteriorated in terms of chip loss and fines retention. This is in line with the expectations of a 15 year old HRA surface where the 50pen binder will have hardened over time.	
	2. This is not the case on the repaired area which shows full chipping retention and no loss of surface fines.	
	3. This continues to be the case and for this reason the site was offered as evidence of the effectiveness of both Rhinopatch and Rhinophalt when going through HAPAS accreditation in 2004 and 2007 respectively.	
	4. In the case of the Rhinopatch repair the area has remained in as built condition with no break up at the interfaces.	
	5. As part of the Rhinopatch process, Rhinophalt is applied in order to preserve the repair. One of the primary claims of Rhinophalt is that it will prevent aggregate loss from a treated surfacing course as evidenced by the examples discussed in this document.	

	ADDITIONAL INFORMATION	
CONTACTS	Buckingham CC & Associated Asphalt	
SITE SURVEY	Yes	The site is inspected annually
PRE TESTING	Yes	Second Application
TESTING	Yes	Binder extraction, PEN, Softening Point, Vialit Cohesion.
PHOTOGRAPHS	Yes	



2011 – Showing repair in carriageway after 14 years





Treated Un Treated