

1. Report No. MR 1997-01	2. Report Date January 2009	3. Contract No. N/A	4. Project No.
5. Title and Subtitle <b>Practice of Unsealed Joints in New Portland Cement Concrete Pavements</b>		6. Report Type <a href="#">Click on link to open report</a>	7. Project No.
		Work Plan <input type="checkbox"/>	8. Project No.
		Construction <input type="checkbox"/>	9. Project No.
		Evaluation <input type="checkbox"/>	10. Project No.
Final <input checked="" type="checkbox"/>			
11. Author(s)/Principle Investigator(s)			
12. Performing Organization Name and Address NDDOT M+R <input checked="" type="checkbox"/> North Dakota DOT NDDOT OTHER* <input type="checkbox"/> Materials and Research Division NDSU <input type="checkbox"/> 300 Airport Road UND <input type="checkbox"/> Bismarck ND 58504-6005 UGPTI <input type="checkbox"/> OTHER* <input type="checkbox"/> *see supplementary notes		13. Sponsoring Agency Name and Address North Dakota DOT Materials and Research Division 300 Airport Road Bismarck ND 58504-6005	
14. Supplementary Notes			
15. Abstract <p><b>Objective</b>          The objective of this study is to determine if joint sealants are necessary for the performance and longevity of the pavement structure.</p> <p><b>Scope</b>          NDDOT will evaluate the unsealed joint test sections every other year for approximately 10 years. Items that will be monitored and evaluated are:</p> <ul style="list-style-type: none"> <li>➤ Distress at the joints.</li> <li>➤ Ride.</li> <li>➤ The amount of non-compressible material in the joints.</li> <li>➤ If the incompressible material is being filtered through the joint into the drainage system.</li> </ul> <p><b>Summary</b>          From the results of the test sections we would not recommend unsealed longitudinal and transverse joints. Visual observations showed a higher percentage of spalling in the sealed test section with some spall repair conducted to address the worst areas. The department has recently decided to install fewer drainable base sections which would increase the value of the sealed joints. The sealed joints would reduce the amount of water intrusion into the pavement and base section.</p>			
16. Key Words Concrete Joint Sealant	17. Distribution Statement No restrictions. This document is available by clicking this link:  North Dakota Department of Transportation Materials and Research Division: 300 Airport Road Bismarck ND 58504-6005 Office: (701) 328-6900 Fax: (701) 328-0310		18. No. of Pages 48
			19. File type/Size PDF