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Evaluation of a Permeable Asphalt Stabilized Base Beneath an Asphalt Pavement			Work Plan ☐ Construction☐	8. Project No. 9. Project No.
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*see supplementary notes				
14. Supplementary Notes				
15. Abstract Purpose and Need The normal practice to correct cracking, rutting, and patching is to mill and overlay or to reconstruct the section. There is need to determine if one rehabilitation method outperforms the other.				
<u>Objective</u>				
The objective of this study is to determine if a permeable asphalt stabilized base can be as effective as other established methods in preventing alligator and transverse cracking, rutting, and patching.				
<u>Scope</u>				
The scope of this study is to compare the performance of an asphalt roadway constructed with a permeable asphalt stabilized base (PASB) with edge drains to the three sections: dense Graded Base (DGB) with Edge drains, Dense Graded Base (DGB) without Edge drains, and Mill and Overlay. The project will visually evaluate the distresses in the pavement for a period of five-years on a annual basis. The project was located in Grand Forks County on US Highway 2. The test sections are located in reference miles 320 and 321 of the west bound lane and in reference miles 319 and 325 of the east bound lane.				
<u>Summary</u>				
The drainage system in the dense grade base and PASB sections is working. This is evidenced by water lines as seen from the video inspection of the edge drains. The Pavetech distress report indicates that the overall ride rating is in the good to excellent category for both directions of US Highway 2 from mile point 319 to mile point 327. However, there are four 100-foot sections in the westbound lanes where distress scores fall into the poor category. These scores may account for "roughness" felt when the project was evaluated. There were also seven 100-foot sections over the entire project where the scores were in the fair category. These may also explain the "roughness" in the roadway. Another factor, which may influence the observed ride, would be the amount of cracking in the sections. At this time the milled and overlaid eastbound roadway has 25.4 and 37.9 cracks per 1000 feet at MP 319 and MP 325 respectively, the PASB test section has 22.9 cracks per 1000 feet, the dense graded base with edge drains section has 19.7 cracks per 1000 feet, and the dense graded base without edge drains has 14.8 cracks per 1000 feet. The average rut from the Pavetech distress report was less than 0.19 inches, which is in the good to excellent category.				
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