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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 <u>Purpose and Need</u> Excessive reflective cracking in HBP overlays is a problem encountered in North Dakota. The performance of geogrid reinforcement for HBP overlay needs to be evaluated to see if reflective cracking is prevented. <u>Objective</u> The objective of this study is to determine if geogrid reinforcement, when installed in an asphalt-concrete overlay, will reduce pavement failures caused by excessive reflective cracking. <u>Scope</u> This project will be done on ND Highway 32 in the town of Edinburg. The NDDOT is evaluating these test sections to determine if Stratagrid A-100 will aid in strengthening an asphalt overlay, reduce reflective cracking, and increase the life of the roadway. The test sections will be compared to control sections having no Stratagrid. The HBP was evaluated annually for 4 years. Distresses such as transverse and longitudinal cracking will be used to evaluate the research and control sections. RIDE and rut will also be used to evaluate the research and control sections. <u>Summary</u> PROJECT ST-6-032(017)191 At this point in the evaluation the Stratagrid test section has less distresses reflecting through the overlay than the corresponding control section. The experimental section has approximately 66% less cracking than the control section. PROJECT NH-4-002(046)130 At this point in the evaluation the Stratagrid test section has approximately the same amount of cracks reflecting through the HBP overlay as the west control section. The east control section has approximately three more transverse cracks reflecting through the HBP overlay than the test section. If the two 600-foot control sections are combined, an average of ten transverse cracks are present. The presence of an average of ten transverse cracks over the eight transverse cracks found in the test section is not significant. <u>Recommendation</u> The performance of Stratagrid A-100 geogrid material as an aid in strengthening an asphalt overlay is questionable. In project ST-6-032(017)191 the test section is experiencing less cracking than the corresponding control section, however, it is not known for sure whether the use of Stratagrid A-100 was the reason for this. In project NH-4-002(046)130 there was no significant improvement in the Stratagrid test section. With the inconsistency of the results it is my opinion that Stratagrid A-100 not be recommended for use on North Dakota projects.			
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