

TECHNICAL REPORT TITLE PAGE

1. REPORT NO. MLR-90-5	2. REPORT DATE February 1992
3. TITLE AND SUBTITLE Laboratory Evaluation of Polymer and Multi-Grade Asphalt Binders	4. TYPE OF REPORT & PERIOD COVERED Final Report February 1992
5. AUTHOR(S) Roderick W. Monroe Bituminous Engineer	6. PERFORMING ORGANIZATION ADDRESS Iowa Department of Transportation Materials Department 800 Lincoln Way Ames, Iowa 50010
7. ACKNOWLEDGEMENT OF COOPERATING ORGANIZATIONS	
8. ABSTRACT <p>A number of claims have been made that polymer modified asphalt cements, multi-grade asphalt cements, and other modifications of the liquid asphalt will prevent rutting and other deterioration of asphalt mixes, thereby, extending the service life of asphalt pavements.</p> <p>This laboratory study evaluates regular AC-20 asphalt cement, PAC-30 polymer modified asphalt cement and AC-10-30 multi-grade asphalt cement. PAC-30 was also evaluated with 15% Gilsonite and 15% Witcurb in a 75% crushed stone - 25% sand mix.</p> <p>These mixtures were evaluated for all Marshall properties along with indirect tensile, resilient modulus, and creep resistance.</p>	
9. KEY WORDS Polymers, Asphalt Cement, Asphalt Concrete, Asphalt Stabilizers	10. NO. OF PAGES 30