

HR-300 Iowa Development of Roller Compacted Concrete

Key Words: Roller Compacted Concrete, PCC

ABSTRACT

Roller compacted concrete (RCC) is a zero slump portland cement concrete mixture that has been used since the early 1970's in massive concrete structures. Iowa Highway Research Board project HR-300 was established to determine if this type mix could be used to pave roads on the Iowa road system. Manatt's Inc. of Brooklyn, Iowa agreed to pave an 800 ft. x 22 ft. x 10 in. section of RCC pavement in their Ames construction yard. This report discusses the construction of the test slab and interprets test results conducted during and after construction.

It was observed that RCC can be placed with conventional asphalt paving equipment. However, there are several problems with RCC paving which must be resolved before RCC can become a viable paving alternative on Iowa's roadway system.