

A.G. Wassenaar

PAVEMENT DESIGN

Inc.

The design of pavements is an ever changing field and one in which A. G. Wassenaar, Inc. excels.

METHODOLOGY:

A. G. Wassenaar, Inc. has designed literally thousands of miles of pavement. From interstate highways to bike paths, arterial roadways to aggregate surfaced rural roads and parking lots of all sizes and configurations, the expertise of methodology selection is critical to the proper design. AASHTO, MGPEC, CDOT, DARWin, as well as local jurisdiction procedures, are known and utilized. New construction, overlay design and reconstruction each require a complete understanding of all methodologies to present appropriate options.

EXPLORATION:

Exploration procedures are partially determined by methodology requirements as well as current "State of the Practice". Methodology requirements are either dictated by the jurisdiction in which the roadway is constructed or by the special needs of the project. "State of the Practice" knowledge is based upon our experience in industry task forces, committees and organizations.

Generally, exploration consists of drilling borings 5 to 10 feet in depth below final subgrade elevation and acquiring subgrade soil samples. Our field technicians log the soils encountered during the drilling process to assist in the accurate presentation of subsurface conditions as they relate to pavement design and performance.

LABORATORY TESTING:

Laboratory testing for pavement design includes:

- Gradation Analysis and Atterberg Limits
- Swell / Consolidation Tests
- R-Value
- Unconfined Compressive Strength
- California Bearing Ratio
- Resilient Modulus (converted)
- Concrete and Asphalt Mix Designs
- Stabilized Subgrade Mix Designs
- Cement Treated Base Course Mix Designs
- Existing Pavement Evaluations
- Full range of pavement materials testing during construction

DESIGN:

Methodology, exploration and laboratory testing are analyzed and an appropriate design is presented with alternatives (as permitted) to allow an economical choice in pavement selection.

Our design considerations include:

- Traffic
- Expansive or Settlement Prone Soils
- Ground Water and Drainage
- Existing Pavement Conditions
- Design Life
- Pavement Material Alternatives
- Construction Requirements
- Maintenance

A pavement structure is no different than any other structure. Proper design, construction materials and maintenance are all necessary in order to achieve a long lasting pavement. A. G. Wassenaar, Inc. has the expertise to assist our Clients in building a long lasting pavement in a cost effective manner.