



INDIANA DEPARTMENT OF TRANSPORTATION

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Surface Treatment Projects

Pavement Improvement Projects include the following project work types; *Microsurface Surface Treatment, Thin HMA Overlay Surface Treatment, Ultrathin Bonded Wearing Course Surface Treatment and Patch and Rehab Pavement*. Below are the geotechnical investigation guidelines for these projects:

Pavement Coring

Pavement cores shall be taken at the frequency described in Section 304-13.03 of the IDM:

- One core per lane per mile in a staggered pattern
- At select joints with distress
- In Existing widened areas where it is obvious there is a different pavement structure than the mainline
- At cracks to determine top-down or bottom-up cracking
- At predominant distress locations
- If shoulders are to be used for MOT purposes, they should be cored at a frequency of every two miles

The overall coring program shall be designed such as to fully characterize the pavement section throughout the project limits in the most thorough yet economical manner. Core reports shall be created for each core taken containing a detailed description of the core along with photographs of the core and the location at which the core was taken. A compilation report shall also be prepared summarizing findings and including a summary table in the attached format and file structure. Prior to creating the proposed coring location plan the appropriate District Pavement Engineer should be contacted for potential additional guidance on coring locations and special testing.

Soil Borings

Soil borings shall be completed at a minimum spacing of two per mile, approximately 2640 ft, in a staggered pattern. The staggering shall be per bound, as an example; northbound – southbound – northbound such that there is one boring per lane per mile. On four lane-divided highways, borings shall only be completed in the driving lane. Borings shall only be completed within the passing lane if there is an area of special concern within that lane. Sampling shall consist of three continuous split spoon samples.

Geotechnical Recommendations

The geotechnical report shall include the following items:

- Description of existing subsurface conditions including observed groundwater conditions
- Pavement Design Parameters (as indicated in the table below)
- Evaluation of Planned Pavement Treatment
- Boring Logs

- Pavement Core Reports
- Summary Table of Pavement Cores
- Lab Testing Reports

Soil Parameters for Pavement Design	
Percent Passing #200	
LL	
PL	
PI	
Soil Classification	