| **Item #** | | **Review Item** | **Yes** | **No** | **N/A** | |
| --- | --- | --- | --- | --- | --- | --- |
|  | **General** | | | | | |
|  | NCDOT Certified Laboratory Technician signature and number affixed to results? | |  |  | |  |
|  | **One-Dimensional Consolidation Properties of Soils (AASHTO T 216)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | AASHTO classification with Group Index | |  |  | |  |
|  | Liquid Limit | |  |  | |  |
|  | Plasticity Index | |  |  | |  |
|  | Minus 2.00 mm (No. 10 Sieve) Fraction (Soil Mortar) coarse sand, fine sand, silt, clay equals 100 percent | |  |  | |  |
|  | Percent retained No. 4 sieve | |  |  | |  |
|  | Percent passing No. 10 sieve | |  |  | |  |
|  | Percent passing No. 40 sieve | |  |  | |  |
|  | Percent passing No. 200 sieve | |  |  | |  |
|  | Specific gravity of soil | |  |  | |  |
|  | Initial and final moisture content of specimen | |  |  | |  |
|  | Initial and final dry weight of specimen | |  |  | |  |
|  | Initial and final void ratio of specimen | |  |  | |  |
|  | Initial and final degree of saturation of specimen | |  |  | |  |
|  | List of dial readings for each load | |  |  | |  |
|  | Typical load increments are 0, 0.250, 0.500, 1.000, 2.000, 4.000, 8.000, 16.000 TSF, these recommended increments should be adjusted as necessary by the Engineer requesting the testing based on the soil and proposed construction. | |  |  | |  |
|  | Graph of percent change in height vs. log of pressure | |  |  | |  |
|  | Rebound curve starting at one load past the estimate pre-consolidated pressure | |  |  | |  |
|  | Rebound curve should contain 3 unloading points and 3 reloading points | |  |  | |  |
|  | Graph of load vs. coefficient of consolidation | |  |  | |  |
|  | **Unconsolidated Undrained Compressive Strength of Cohesive Soil in Triaxial Compression**  **(AASHTO T 296)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | AASHTO classification with Group Index | |  |  | |  |
|  | Liquid Limit | |  |  | |  |
|  | Plasticity Index | |  |  | |  |
|  | Minus 2.00 mm (No. 10 Sieve) Fraction (Soil Mortar) coarse sand, fine sand, silt, clay equals 100 percent | |  |  | |  |
|  | Percent retained No. 4 sieve | |  |  | |  |
|  | Percent passing No. 10 sieve | |  |  | |  |
|  | Percent passing No. 40 sieve | |  |  | |  |
|  | Percent passing No. 200 sieve | |  |  | |  |
|  | Specific gravity of soil | |  |  | |  |
|  | Initial and final water content | |  |  | |  |
|  | Initial and final void ratio | |  |  | |  |
|  | Initial and final dry unit weight | |  |  | |  |
|  | Degree of saturation | |  |  | |  |
|  | Initial and final height of specimen | |  |  | |  |
|  | Initial and final diameter of specimen | |  |  | |  |
|  | Total back pressure: without pore pressure measurements | |  |  | |  |
|  | Total back pressure with pore pressure at the end of saturation | |  |  | |  |
|  | Effective consolidation stress | |  |  | |  |
|  | Time to 50 percent primary consolidation | |  |  | |  |
|  | Failure criterion used | |  |  | |  |
|  | All incremental stress ratio data | |  |  | |  |
|  | Failure sketches of photographs for each sample | |  |  | |  |
|  | **Remolded Unconsolidated Undrained Compressive Strength of Cohesive Soils in Triaxial Compression (AASHTO T 296)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | AASHTO classification with Group Index | |  |  | |  |
|  | Liquid Limit | |  |  | |  |
|  | Plasticity Index | |  |  | |  |
|  | Minus 2.00 mm (No. 10 Sieve) Fraction (Soil Mortar) coarse sand, fine sand, silt, clay equals 100 percent | |  |  | |  |
|  | Percent retained No. 4 sieve | |  |  | |  |
|  | Percent passing No. 10 sieve | |  |  | |  |
|  | Percent passing No. 40 sieve | |  |  | |  |
|  | Percent passing No. 200 sieve | |  |  | |  |
|  | Specific gravity of soil | |  |  | |  |
|  | Initial and final moisture content | |  |  | |  |
|  | Initial and final void ratio | |  |  | |  |
|  | Initial and final dry unit weight | |  |  | |  |
|  | Degree of saturation | |  |  | |  |
|  | Initial and final height of specimen | |  |  | |  |
|  | Initial and final diameter of specimen | |  |  | |  |
|  | Total back pressure: without pore pressure measurements | |  |  | |  |
|  | Total back pressure with pore pressure at the end of saturation | |  |  | |  |
|  | Effective consolidation stress | |  |  | |  |
|  | Time to 50 percent primary consolidation | |  |  | |  |
|  | Failure criterion used | |  |  | |  |
|  | All incremental stress ratio data | |  |  | |  |
|  | Failure sketches of photographs for each sample | |  |  | |  |
|  | **Consolidated Undrained Triaxial Compression Test for Cohesive Soils (ASTM D4767)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | AASHTO classification with Group Index | |  |  | |  |
|  | Liquid Limit | |  |  | |  |
|  | Plasticity Index | |  |  | |  |
|  | Minus 2.00 mm (No. 10 Sieve) Fraction (Soil Mortar) coarse sand, fine sand, silt, clay equals 100 percent | |  |  | |  |
|  | Percent retained No. 4 sieve | |  |  | |  |
|  | Percent passing No. 10 sieve | |  |  | |  |
|  | Percent passing No. 40 sieve | |  |  | |  |
|  | Percent passing No. 200 sieve | |  |  | |  |
|  | Specific gravity of soil | |  |  | |  |
|  | Initial and final moisture content | |  |  | |  |
|  | Initial and final void ratio | |  |  | |  |
|  | Initial and final dry unit weight | |  |  | |  |
|  | Degree of saturation | |  |  | |  |
|  | Initial and final height of specimen | |  |  | |  |
|  | Total back pressure | |  |  | |  |
|  | Pore pressure at the end of saturation | |  |  | |  |
|  | Effective consolidated stress | |  |  | |  |
|  | Time to 50 percent primary consolidation | |  |  | |  |
|  | Failure criterion used | |  |  | |  |
|  | All incremental stress data | |  |  | |  |
|  | Failure Sketches or photographs for each sample | |  |  | |  |
|  | **Remolded Consolidated Undrained Triaxial Compression Test on Cohesive Soils (ASTM D4767)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | AASHTO classification with Group Index | |  |  | |  |
|  | Liquid Limit | |  |  | |  |
|  | Plasticity Index | |  |  | |  |
|  | Minus 2.00 mm (No. 10 Sieve) Fraction (Soil Mortar) coarse sand, fine sand, silt, clay equals 100 percent | |  |  | |  |
|  | Percent retained No. 4 sieve | |  |  | |  |
|  | Percent passing No. 10 sieve | |  |  | |  |
|  | Percent passing No. 40 sieve | |  |  | |  |
|  | Percent passing No. 200 sieve | |  |  | |  |
|  | Specific gravity of soil | |  |  | |  |
|  | Initial and final moisture content | |  |  | |  |
|  | Initial and final void ratio | |  |  | |  |
|  | Initial and final dry unit weight | |  |  | |  |
|  | Degree of saturation | |  |  | |  |
|  | Initial and final height of specimen | |  |  | |  |
|  | Initial and final diameter of specimen | |  |  | |  |
|  | Total back pressure | |  |  | |  |
|  | Pore pressure at the end of saturation | |  |  | |  |
|  | Effective consolidated stress | |  |  | |  |
|  | Time to 50 percent primary consolidation | |  |  | |  |
|  | Failure criterion used | |  |  | |  |
|  | All incremental stress data | |  |  | |  |
|  | Failure Sketches or photographs for each sample | |  |  | |  |
|  | **Unconfined Compressive Strength of Cohesive Soil (AASHTO T 208)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | AASHTO classification with Group Index | |  |  | |  |
|  | Liquid Limit | |  |  | |  |
|  | Plasticity Index | |  |  | |  |
|  | Minus 2.00 mm (No. 10 Sieve) Fraction (Soil Mortar) coarse sand, fine sand, silt, clay equals 100 percent | |  |  | |  |
|  | Percent retained No. 4 sieve | |  |  | |  |
|  | Percent passing No. 10 sieve | |  |  | |  |
|  | Percent passing No. 40 sieve | |  |  | |  |
|  | Percent passing No. 200 sieve | |  |  | |  |
|  | Specific gravity of soil | |  |  | |  |
|  | Initial and final moisture content | |  |  | |  |
|  | Initial and final void ratio | |  |  | |  |
|  | Initial and final dry unit weight | |  |  | |  |
|  | Degree of saturation | |  |  | |  |
|  | Average height and diameter of specimen | |  |  | |  |
|  | Failure sketch or photograph of sample | |  |  | |  |
|  | Graph of load vs strain | |  |  | |  |
|  | **Permeability of Granular Soils (Constant Head) (AASHTO T 215)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | Graph of grain size curve | |  |  | |  |
|  | Curve of velocity vs. hydraulic gradient | |  |  | |  |
|  | **Minimum Laboratory Soil Resistivity (AASHTO T 288)** | | | | | |
|  | Sample Number | |  |  | |  |
|  | Boring identification | |  |  | |  |
|  | Alignment | |  |  | |  |
|  | Northing | |  |  | |  |
|  | Easting | |  |  | |  |
|  | Depth interval of sample | |  |  | |  |
|  | Minimum soil resistivity value | |  |  | |  |

*For items marked* ***No****, provide comments or action items in the table below.*

| **Item #** | **Comments and Action Items** |
| --- | --- |
| Click to edit. | Click to edit. |

|  |
| --- |
| **This checklist may not be comprehensive to every project. All items may not be applicable for smaller projects. It is the responsibility of the reviewer to ensure that all necessary information has been provided and an adequate review performed.** |

|  |  |  |  |
| --- | --- | --- | --- |
| **QC Reviewer Name:** | Click to edit. | **Date:** | Click to edit. |
| **QC Reviewer (Signature):** |  | | |