| **Item #** | **Review Item** | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
|  | **General** | | | |
|  | NCDOT Certified Laboratory Technician signature and number affixed to results? |  |  |  |
|  | **California Bearing Ratio (AASHTO T 193)** | | | |
|  | 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 |  |  |  |
|  | Moisture content before and after soaking to the nearest 0.1 percent |  |  |  |
|  | Specific Gravity of soil |  |  |  |
|  | Dry density before and after soaking |  |  |  |
|  | Graph of dry density vs. water content |  |  |  |
|  | CBR at 0.1 and 0.2-inch penetration |  |  |  |
|  | T99 or T 180 Compaction (Standard or Modified Compaction Effort) |  |  |  |
|  | Percent Swell |  |  |  |
|  | **Moisture-Density Relations of Soils using a 5.5 lb Rammer and a 12-in. Drop / Standard Proctor Compaction Test (AASHTO T 99)** | | | |
|  | 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 |  |  |  |
|  | Method used (A, B, C, or D) |  |  |  |
|  | 4 points to define the moisture-density relationship |  |  |  |
|  | Graph of dry density vs. water content |  |  |  |
|  | **Moisture-Density Relations of Soils using a 10 lb Rammer and a 18 in. Drop / Modified Proctor Compaction Test (AASHTO T 180 NCMod)** | | | |
|  | Sample Number |  |  |  |
|  | Boring identification |  |  |  |
|  | Alignment |  |  |  |
|  | Northing |  |  |  |
|  | Easting |  |  |  |
|  | Depth interval of sample |  |  |  |
|  | Percent passing 1-1/2-inch sieve |  |  |  |
|  | Percent passing 1-inch sieve |  |  |  |
|  | Percent passing 1/2-inch sieve |  |  |  |
|  | Percent passing No. 4 sieve |  |  |  |
|  | Percent passing No. 10 sieve |  |  |  |
|  | Percent passing No. 40 sieve |  |  |  |
|  | Percent passing No. 200 sieve |  |  |  |
|  | Specific gravity of material tested |  |  |  |
|  | Method used (A, B, C, or D) |  |  |  |
|  | 4 points to define the moisture-density relationship |  |  |  |
|  | Graph of dry density vs. water content |  |  |  |
|  | **Specific Gravity of Soils (AASHTO T 100)** | | | |
|  | Sample Number |  |  |  |
|  | Boring identification |  |  |  |
|  | Alignment |  |  |  |
|  | Northing |  |  |  |
|  | Easting |  |  |  |
|  | Depth interval of sample |  |  |  |
|  | Specific gravity of soil |  |  |  |
|  | **Compressive Strength of Molded Soil-Cement Cylinders (ASTM D1633)** | | | |
|  | 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 |  |  |  |
|  | T 134 Method used (A or B) |  |  |  |
|  | 4 points to define the moisture-density relationship of mixture |  |  |  |
|  | Graph of dry density vs. water content for the mixture |  |  |  |
|  | Specimen dimensions |  |  |  |
|  | Percent cement |  |  |  |
|  | Unit weight of specimen |  |  |  |
|  | Compressive strength |  |  |  |
|  | Moisture content to the nearest 0.1 percent |  |  |  |
|  | **Unconfined Compressive Strength of Compacted Soil-Lime Mixtures (ASTM D5102)** | | | |
|  | 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 |  |  |  |
|  | T 99 Method used (A, B, C, or D) |  |  |  |
|  | 4 points to define the moisture-density relationship of mixture |  |  |  |
|  | Graph of dry density vs. water content for the mixture |  |  |  |
|  | Specimen dimensions |  |  |  |
|  | Percent lime |  |  |  |
|  | Unit weight of specimen |  |  |  |
|  | Compressive strength |  |  |  |
|  | Moisture content to the nearest 0.1 percent |  |  |  |

*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):** |  | | |