



SCHEDULE A

Soil classification, Index and Permeability Test

TEST NO. & DETAILS

1. Particle size distribution (Sieve Analysis)
2. Particle size distribution (Hydrometer Analysis)
3. Moisture content
4. Liquid limit, plastic limit, plasticity index and linear shrinkage
5. Specific gravity of soils
6. Falling/constant head permeability
7. Uniformity coefficient

SCHEDULE B

Soil Compaction and strength

TEST NO & DETAILS

8. Density moisture content ratio (2.5kg rammer) - **MDD/OMC**
9. Density moisture content ratio (4.5kg rammer) - **MDD/OMC**
10. Density moisture content ratio (Vibrating hammer) - **MDD/OMC**
11. Field density determination using sand replacement method
12. Insitu Density from U100 Soil samples
13. Unconfined compression of soil on remoulded sample
14. California bearing ratio (**CBR**): Method of compaction static (4 days soak)
15. California bearing ratio (**CBR**): Method of compaction dynamic (4 days soak)
16. California bearing ratio (**CBR**): Method of compaction dynamic - cement/lime stabilized (7 days cure and 7 days soak)
17. Plate bearing test
18. Organic matter content
19. Sulphate content
20. Chloride content
21. pH value determination
22. Direct shear test for bearing capacity determination
23. Unconsolidated undrained triaxial test
24. Consolidated undrained triaxial test
25. Consolidated drained triaxial test
26. Oedometer (consolidation) drained
27. Oedometer (consolidation) undrained
28. Swell pressure BS standard
29. Swell pressure AASHTO method
30. Soil expansivity
31. Soil conductivity

SCHEDULE C

Rock Strength test

TEST NO & DETAILS

32. Unconfined compressive strength
33. Point load
34. Porosity
35. Specific gravity & water absorption
36. Geochemical Analysis
- 36A. Petrographic analysis

SCHEDULE D

Test for water

TEST NO & DETAILS

- | | | |
|-------------------------|--------------------|-------------------------|
| 37. Full water analysis | - Sodium | - Nitrate |
| - Colour | - Potassium | - Sulphate |
| - Ph | - Total hardness | - Free Carbon Dioxide |
| - Turbidity | - Total Alkalinity | - Total dissolved Solid |
| - Conductivity | - Chloride | |
| - Iron | - Fluoride | |
| - Manganese | - Nitrate | |
| - Calcium | | |

SCHEDULE E

Steel bars

TEST NO & DETAILS

38. Chemical analysis - Carbon content
- Silicon content
- Manganese content
- Sulphur content
- Phosphorus content
39. Physical analysis - Mass per meter run
- % elongation
- Effective cross-sectional area
- Bend
- Rebend
- Yield Stress
- Tensile Strength
- Stress ratio

SCHEDULE F

Cement test

TEST NO & DETAILS

40. Chemical analysis - insoluble residue
- loss of ignition
- Sulphur dioxide
- Chloride content
- Magnesium oxide
41. Physical analysis - Setting time
- Consistency
- W/P Ratio
- Soundness/expansion
- Compressive strength

SCHEDULE G

Aggregate test

TEST NO & DETAILS

42. Particle size distribution
43. Flakiness Index
44. Silt/clay fraction
45. Clay & Friable particles
46. Specific gravity and water absorption
47. Sodium/Magnesium sulphate soundness
48. Aggregate crushing value (ACV)
49. 10% fines value
50. Los Angeles abrasion
51. Aggregate impact value (AIV)
52. Shell content

SCHEDULE H

Bitumen and Road Surface Material Test

TEST NO & DETAILS

53. Marshall mix design
54. Bitumen content mix
55. Bitumen content and sieve analysis
56. Bitumen affinity of aggregates
57. Testing Marshall specimen (set of 3)
58. Total asphalt concrete analysis

SCHEDULE I

Concrete test

TEST NO & DETAILS

59. Compressive strength per cube
60. Slump test
61. Concrete mix design
62. Concrete core cutting and testing
63. Cement content in concrete
64. Concrete block crushing
65. Curo block crushing
66. Kerb stone crushing
67. Paving slabs
68. Channels (small/large)
69. Schmidt hammer (non-destructive) test

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